
WISCONSIN RETIREMENT SYSTEM



23rd Annual Actuarial Valuations
of Retired Lives
December 31, 2005

GRS

Gabriel Roeder Smith & Company

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March 9, 2006

Employee Trust Funds Board
Madison, Wisconsin

Ladies and Gentlemen:

The results of the **23rd annual actuarial valuation of fixed and variable annuities** being paid from the Wisconsin Retirement System are presented in this report. The valuation was based upon data, furnished by the WRS staff, concerning Fund assets and individual annuitants and beneficiaries.

The date of this valuation was **December 31, 2005**. Actuarial assumptions used in the valuation are summarized in the Appendix.

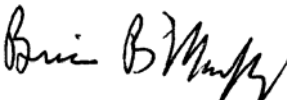
The results of the valuation may be briefly summarized as follows (\$ millions).


	Fixed	Variable
Number of Annuitants	131,674	31,499
Annual Amount	\$ 2,691.4	\$ 376.5
Fund Balance	28,575.3	4,092.7
Actuarial Reserve	28,359.7	3,970.7
Ratio	1.008	1.031


Based upon these results, fixed annuities were increased by 0.8% effective April, 2006 and variable annuities were increased by 3%.

The cooperation of the Secretary and his staff in gathering materials for this valuation is acknowledged with appreciation.

Respectfully submitted,


Brian B. Murphy, FSA


Norman L. Jones, FSA


Mark Buis, ASA

BBM/NLJ/MB:dm

SECTION A

Operation of the System

OPERATION OF THE RETIREMENT SYSTEM

Each year, as of December 31, an actuarial valuation of the liability for retired persons receiving benefits from the Wisconsin Retirement System is conducted. The purpose of the valuation is to determine the actuarial present value of future benefit payments on behalf of current retired lives. This present value is the “actuarial reserve”. Theoretically, if an amount of money equal to the actuarial present value were invested at a yield equal to the valuation interest rate, the initial amount plus the continuing investment income would provide exactly the right amount of money to pay the annuities of all current retired persons and their beneficiaries for the rest of their lives. The fund would decrease each year, and would become zero many decades in the future when the last annuitant dies.

The above is a “closed group” description of the operation of the annuity reserve fund. But the fund is really an “open group”. The size of the fund does not actually decrease because each year more benefits are added to the rolls than are removed, and fresh money is transferred into the annuity reserve fund to finance the benefits of the new annuitants. (The actuary calculates the reserve transfers for new annuitants each year as a by-product of the actuarial valuation.)

According to theory, the fund will eventually reach a state when the number of people entering (retiring) each year is approximately equal to the number of people exiting (dying) each year. When this mature state is reached, the amount of money in the fund will remain approximately level in constant dollars from year to year. Each year the reserve transfers of the new annuitants plus investment earnings on the whole fund (total money in) will be approximately equal to the benefit payments (total money out). The only source of growth in assets would be the result of the effects of inflation. The dollars in the fund would increase, but the “real” value of the fund would not change.

There are at least two factors that cause the actual operation to be different from the theoretical operation described above. The first is that annuitants may have longer or shorter lifetimes than expected. In recognition of this, the actuary monitors mortality experience of the retirement system and recommends a new mortality table when appropriate. The second factor is that actual investment earnings are rarely equal to the assumed rate. When investment earnings differ from the assumed rate, the difference, positive or negative, is recorded in a supplemental reserve.

OPERATION OF THE RETIREMENT SYSTEM (CONCLUDED)

The Wisconsin Retirement System maintains separate reserves for fixed and variable annuities. Each year, the actuary determines the actuarial reserve for fixed and variable annuities separately. WRS' practice with respect to the use of supplemental reserves is described below.

Fixed Annuity Division. If the supplemental reserve is positive and is at least 0.5% of fixed annuity liabilities, fixed annuity increases (dividends) may be granted. If the supplemental reserve is negative and is equal to or greater than 0.5% of fixed annuity liabilities in absolute value, prior fixed annuity dividends are reduced by an aggregate amount equal to the shortfall. Increases or decreases become effective in April following the December 31 valuation.

Variable Annuity Division. If the supplemental reserve is at least 2% of variable annuity liabilities, substantially all of the reserve (dropping fractions of a percent) is used to increase or decrease variable annuities for the ensuing year. Increases or decreases become effective in April following the December 31 valuation.

SECTION B

Fixed Annuities

FIXED ANNUITY DIVISION
DEVELOPMENT OF ASSETS AND LIABILITIES

	\$ Millions		Ratio
	Assets	Liabilities	
Ending Balance December 31, 2004	\$26,920.0	\$26,232.2	1.026
Closing Adjustments	(3.2)	0.0	
Variable Terminations	62.1	62.1	
2005 Dividend: 2.6%	0.0	637.6	
Beginning Balance January 1, 2005	26,978.9	26,931.9	1.002
Increases			
Reserve Transfers	2,577.2	2,577.2	
Regular Interest	1,344.9	1,344.9	
Additional Earnings	323.3	0.0	
Addition to Contingency/Data Reserve	0.0	102.5	
Experience Study	0.0	0.0	
Other	0.0	52.2	
Total Increases	4,245.4	4,076.8	
Decreases			
Annuities & Lump Sums	2,645.0	2,645.0	
Credit Re-establishments	4.0	4.0	
Releases from Contingency/Data Reserve	0.0	0.0	
Experience Study	0.0	0.0	
Other	0.0	0.0	
Total Decreases	2,649.0	2,649.0	
Ending Balance December 31, 2005	\$28,575.3	\$28,359.7	1.008

The ending liability balance includes data and contingency reserves of \$336.8 million.

RESERVE TRANSFER RECOMMENDATION
DECEMBER 31, 2005

Amounts to be transferred from the Employer Reserve and the Employee Reserve to the Annuity Reserve to cover liabilities for new annuities are computed as the first step in the annual actuarial valuation. The actuarial present value at time of retirement of fixed annuities reported as new since the last actuarial valuation is \$2,485,553,239. Adjustments to prior transfers, relating to estimated annuities for which final computations have now been made, totaled \$91,605,802. Reserve transfers are distributed as follows:

Group	Regular Transfer	Adjustment to Prior Transfer	Total Transfer
General	\$2,241,546,522	\$79,208,183	\$2,320,754,705
Protective with Social Security	162,979,433	8,488,706	171,468,139
Protective without Social Security	56,851,515	3,446,639	60,298,154
Executive & Elected	24,175,769	462,274	24,638,043
Totals	\$2,485,553,239	\$91,605,802	\$2,577,159,041

Accordingly, we recommend that \$2,577,159,041 be transferred to the Fixed Annuity Reserve. The results in this report assume that this transfer has been made.

DISCUSSION OF DIVIDEND DECEMBER 31, 2005

The Fixed Annuity Fund Balance, \$28,575.2 million, exceeded the actuarial present value of fixed annuities and reserves, \$28,359.7 million, by \$215.6 million or 0.8% of the actuarial present value (APV) of fixed annuity payments. The primary sources of the 0.8% are:

	% of APV
1. Published earnings rate	6.50%
2. Adjustment to relate earnings to average fixed annuity balance	(0.31)%
3. Earnings rate based on average balance	6.19%
4. Expected dividend before adjustments: 1.0619/1.05-1	1.13%
5. Adjustment to relate average asset to ending liability	0.01%
6. Carryover from last year due to timing of dividend accounting adjustments, and rounding	0.17%
7. Adjustments to contingency reserve and data reserve	(0.36)%
8. Experience Study	0.00%
9. Experience and other effects	(0.19)%
10. Statutory adjustment to round to nearest one-tenth percent	0.04%
11. Computed dividend rate: (4) + (5) + (6) + (7) + (8) + (9) + (10)	0.8%

In accordance with the Administrative Code, ETF 20.25 and Section 40.27(2) Wisconsin Statutes (see page 27), the 0.8% was allocated to a dividend effective April, 2006.

**TRANSFERS TO ANNUITY RESERVE
TO FINANCE FIXED ANNUITIES APPROVED IN 2005
TABULATED BY TYPE OF ANNUITY AND OPTION**

Code	Type of Benefit	Number	Annual Amount	Transfer
REGULAR RETIREMENT				
1	Straight Life	1,019	\$ 17,470,585	\$ 236,474,190
2	5-Year Certain & Life	857	15,943,243	213,532,306
4	15-Year Certain & Life	1,653	27,910,487	400,308,497
7	Joint and 75%	939	20,805,926	313,965,371
9	Joint and 75% on First Death	490	11,629,471	166,697,901
11	Joint and 100%	671	12,744,682	194,880,134
12	Joint and 100% & 15-Year Certain	2,190	44,723,756	706,524,258
13	Temporary to Age 62*	0	46,178,938	190,073,204
21	Certain Only*	0	278,302	1,684,182
40	Mandatory & 15-Year Certain	25	179,278	2,190,017
41	Mandatory & Certain for Life Expectancy	0	0	0
42	Voluntary & Certain for Life Expectancy	0	0	0
Total Regular		7,844	197,864,668	2,426,330,060
Average Age at Retirement		59.4 Years		
DISABILITY RETIREMENT				
1	Straight Life	0	0	0
2	5-Year Certain & Life	1	6,065	62,297
4	15-Year Certain & Life	0	0	0
7	Joint and 75%	0	1,230	18,069
9	Joint and 75% on First Death	0	0	0
11	Joint and 100%	0	0	0
12	Joint and 100% & 15-Year Certain	64	1,385,123	22,269,568
17	5-Years Certain & Life or Survivor	7	129,414	1,638,014
21	Certain Only*	0	0	0
24	Straight Life	17	389,146	5,273,859
25	15-Year Certain & Life	30	777,449	10,362,856
26	Joint & 75 %	13	221,231	3,274,093
27	Joint & 100%	15	284,404	4,545,001
28	Joint & 75% on First Death	3	66,546	839,100
Total Disability		150	3,260,608	48,282,857
Average Age at Retirement		53.6 Years		
DEATH-IN-SERVICE BENEFITS				
1	Straight Life	6	140,795	2,020,068
2	5-Year Certain & Life	3	36,853	476,859
4	15-Year Certain & Life	49	521,426	7,718,809
13	Temporary to Age 62*	0	133,120	724,586
21	Certain Only*	0	0	0
42	Voluntary & Certain for Life Expectancy	0	0	0
Total Death-in-Service		58	832,194	10,940,322
Average Age at Retirement		53.3 Years		
GRAND TOTAL		8,052	\$201,957,470	\$2,485,553,239

* Many annuities in this category were additional annuities. The number counts are included elsewhere.

FIXED ANNUITIES BEING PAID DECEMBER 31, 2005
TABULATED BY TYPE OF ANNUITY AND OPTION

Code	Type of Benefit	Number	Amount	Value
REGULAR RETIREMENT				
1	Straight Life	16,567	\$ 275,990,471	\$ 2,760,508,771
2	5-Year Certain & Life	18,137	296,497,606	2,802,291,733
3	10-Year Certain & Life	596	8,925,598	38,104,891
4	15-Year Certain & Life	28,604	476,280,251	4,718,589,135
5	Joint and 50%	181	3,093,847	15,261,416
6	Joint and 50% and 15-Year Certain	31	295,618	1,269,553
7	Joint and 75%	15,298	337,082,633	4,042,157,162
8	Joint and 75% Integrated	133	2,651,531	19,706,931
9	Joint and 75% on First Death	12,035	314,980,454	3,352,140,659
10	Joint and 75% & 10-Year Certain	25	338,433	1,278,067
11	Joint and 100%	10,215	192,257,897	2,310,183,970
12	Joint and 100% & 15-Year Certain	20,806	418,265,768	5,757,010,727
13	Temporary to Age 62*	1	202,624,714	562,997,445
14	5-Year Certain & Life Integrated	413	2,536,598	13,005,672
15	15-Year Certain & Life Integrated	260	5,451,704	29,537,299
20	Cash Refund Annuity	0	0	0
21	Certain Only*	8	3,718,498	17,145,135
22	Joint and \$600	0	0	0
25	15-Year Certain & Life & Survivor	0	0	0
40	Mandatory and Certain for 15 Years	107	616,512	6,421,780
41	Mandatory & Certain for Life Expectancy	15	226,479	1,537,608
42	Voluntary & Certain for Life Expectancy	124	1,822,039	12,746,785
99	Joint and 66-2/3% Original Amount	389	2,844,778	16,280,961
99	Joint and 66-2/3% Dividends	0	8,490,307	47,342,999
Total Regular		123,945	\$2,554,991,736	\$26,525,518,699

* Many annuities in this category were additional annuities. The number counts are included elsewhere.

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FIXED ANNUITIES BEING PAID DECEMBER 31, 2005
TABULATED BY TYPE OF ANNUITY AND OPTION
(CONCLUDED)

Code	Type of Benefit	Number	Annual Amount	Present Value
DISABILITY RETIREMENT				
1	Straight Life	6	\$ 29,274	\$ 206,759
2	5-Year Certain & Life *	1	11,856	110,843
3	10-Year Certain & Life *	0	0	0
4	15-Year Certain & Life	0	9,060	90,265
7	Joint and 75% *	0	3,461	40,017
9	Joint and 100%	0	0	0
11	Joint and 100%	0	10,425	64,712
12	Joint and 100% & 15-Year Certain	1,499	28,169,407	392,733,064
17	5-Year Certain & Life or Survivor	749	15,337,323	121,972,309
18	Cash Refund Annuity	152	2,214,214	8,939,883
21	Certain Only	0	10,282	43,893
23	Joint and \$600	4	3,477	15,779
24	Straight Life	620	14,134,138	141,227,131
25	15-Year Certain & Life or Survivor	1,274	26,210,250	267,270,365
26	Straight Life & Joint & 75%	520	10,345,398	118,236,838
27	Straight Life & Joint & 100%	1,293	22,522,135	278,686,480
28	Joint & 75% on First Death	249	4,935,898	42,641,172
99	Joint & 66-2/3% Original Amount	48	177,074	1,016,508
99	Joint & 66-2/3% Dividends	0	616,275	3,528,099
Total Disability		6,415	124,739,947	1,376,824,117
DEATH-IN-SERVICE BENEFITS				
1	Straight Life	278	2,268,118	23,618,000
2	5-Year Certain & Life	130	1,570,770	16,502,690
4	15-Year Certain & Life	718	6,220,946	72,775,058
7	Joint and 75%	1	40,792	243,835
12	Joint and 100% & 15-Year Certain	3	10,995	175,005
13	Temporary to Age 62*	0	979,491	3,860,529
14	5-Year Certain & Life Integrated	155	162,438	848,667
15	15-Year Certain & Life Integrated	2	48,101	302,634
17	5-Year Certain & Life or Survivor	1	3,255	18,873
21	Certain Only*	2	19,881	97,912
22	Joint and \$600	0	0	0
23	Joint and \$600	0	0	0
42	Voluntary & Certain for Life Expec	21	235,677	1,397,062
99	Joint & 66-2/3% Original Amount	3	25,060	192,777
99	Joint & 66-2/3% Dividends	0	64,415	488,139
Total Death-in-Service		1,314	\$ 11,649,939	\$ 120,521,181
GRAND TOTAL		131,674	\$2,691,381,622	\$28,022,863,997

* Many annuities in this category were additional annuities. The number counts are included elsewhere.

FIXED ANNUITIES BEING PAID DECEMBER 31, 2005
TABULATED BY ATTAINED AGES

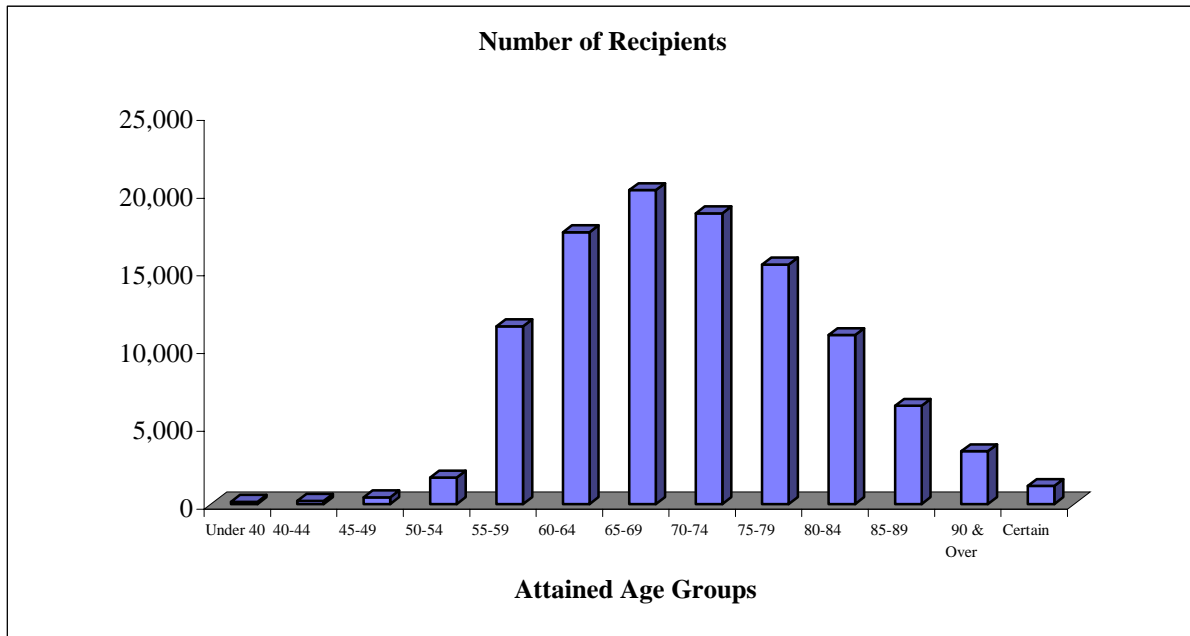
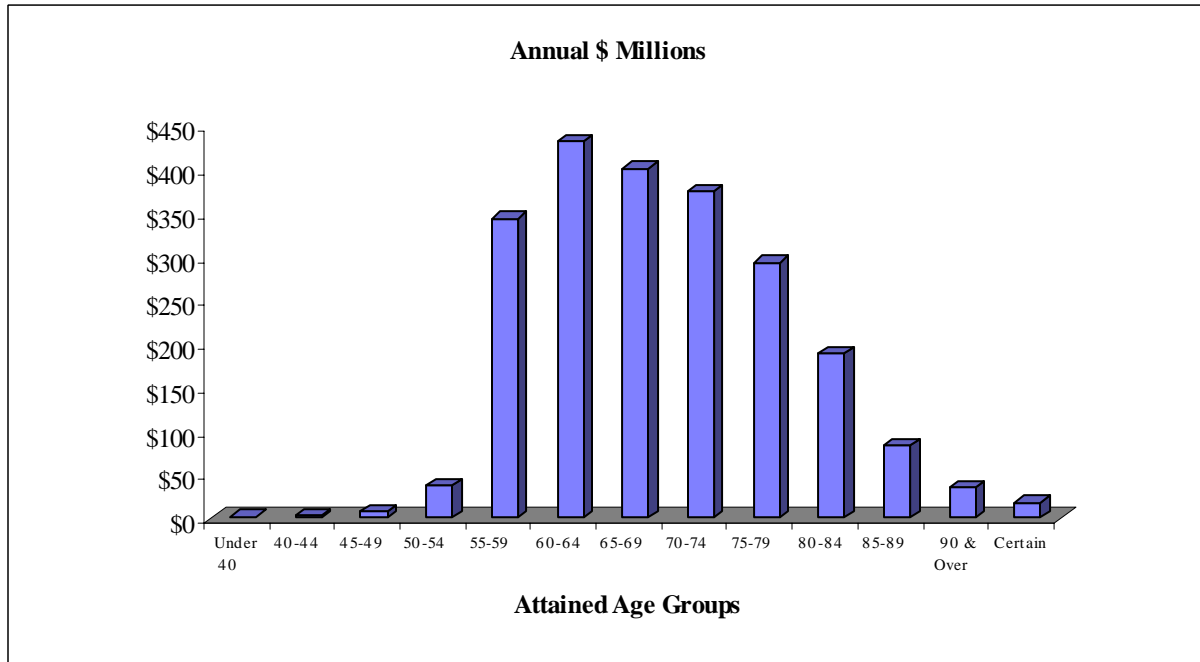
Attained Ages	Regular		Disability		Death-in-Service		Totals	
	No.	Annual Amount	No.	Annual Amount	No.	Annual Amount	No.	Annual Amount
Under 20	0	\$ 0	6	\$ 31,806	10	\$ 65,512	16	\$ 97,318
20-24	0	0	8	36,856	6	41,052	14	77,908
25-29	0	0	8	65,409	14	85,803	22	151,212
30-34	1	12,962	22	177,512	9	38,540	32	229,014
35-39	9	56,973	37	543,497	16	131,091	62	731,561
40-44	19	217,406	124	2,146,947	19	135,572	162	2,499,925
45-49	87	856,543	298	5,595,893	48	292,767	433	6,745,203
50-54	1,026	25,806,660	716	14,878,501	59	639,720	1,801	41,324,881
55-59	15,842	428,513,284	1,128	24,397,555	126	1,795,301	17,096	454,706,140
60-64	22,801	514,744,063	1,075	22,341,956	160	2,121,428	24,036	539,207,447
65-69	22,836	441,353,742	978	20,168,340	147	1,358,707	23,961	462,880,789
70-74	20,043	400,539,876	809	15,428,700	139	1,260,091	20,991	417,228,667
75-79	16,679	331,965,958	612	10,401,643	167	1,432,891	17,458	343,800,492
80-84	12,352	234,322,847	388	5,905,495	145	921,572	12,885	241,149,914
85-89	7,230	113,235,406	155	2,177,091	127	608,477	7,512	116,020,974
90-94	3,105	38,221,243	45	390,980	70	345,744	3,220	38,957,967
95& Up	878	8,251,160	6	41,487	24	157,860	908	8,450,507
Certain Only*	1,037	16,893,613	0	10,279	28	217,811	1,065	17,121,703
Totals	123,945	\$2,554,991,736	6,415	\$124,739,947	1,314	\$11,649,939	131,674	\$2,691,381,622

Averages in Years

Age at retirement	60.2	52.1	50.4	59.7
Attained age	70.6	64.4	69.9	70.4
Service at retirement	23.2	17.9	21.0	22.9

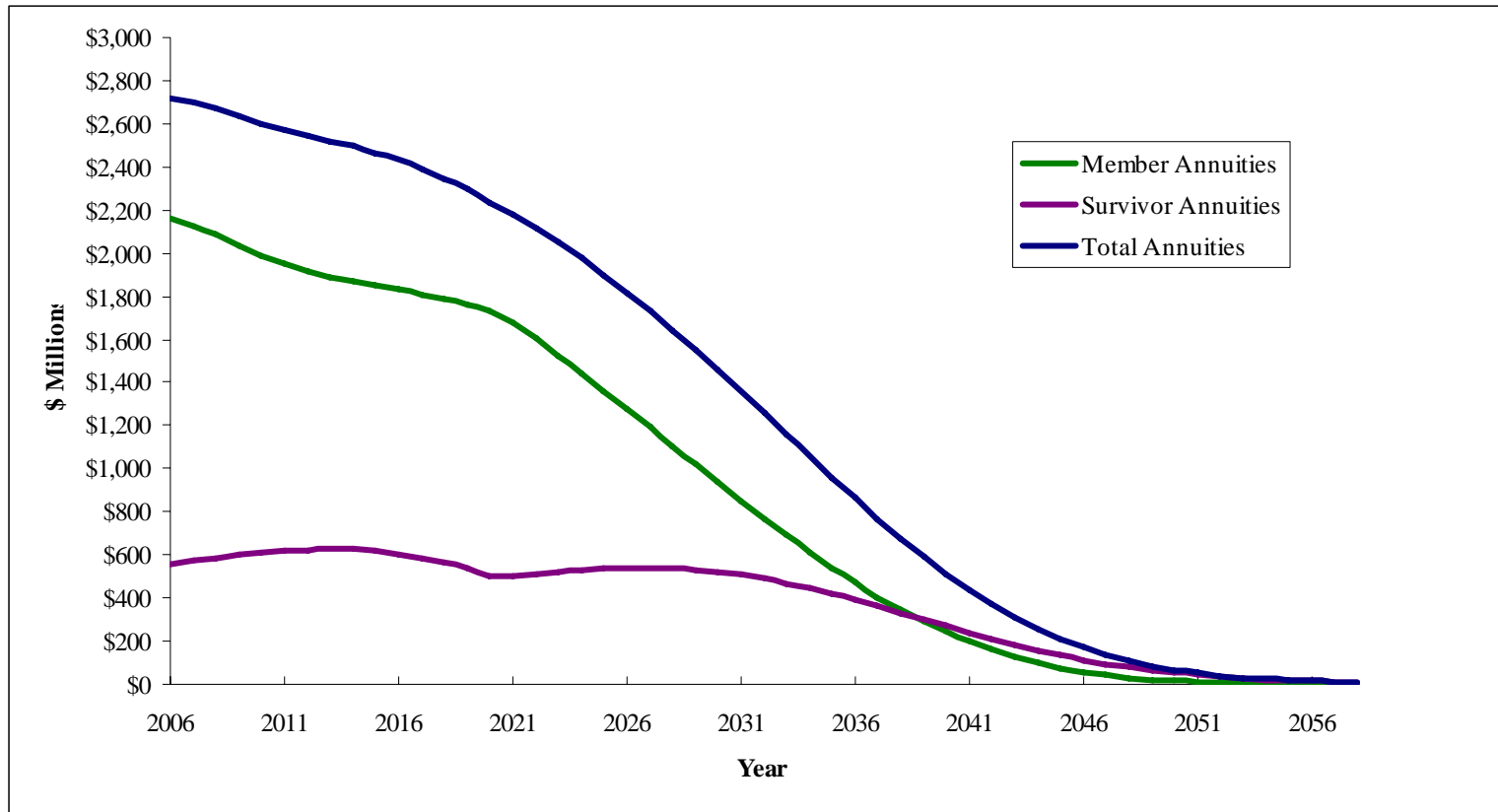
* Certain only category consists of continuations of 5, 10 and 15-year certain and life annuities to beneficiaries of deceased annuitants, and all option 21 annuities.

FIXED ANNUITIES BEING PAID BY ATTAINED AGE* DECEMBER 31, 2005



* Includes regular and disability retirees and survivor beneficiaries. The "certain" category includes annuities paid for a fixed period which is not dependent upon the age of the recipient.

**PROJECTED FUTURE FIXED ANNUITY PAYMENTS
ON BEHALF OF PRESENT RETIRED LIVES
INCLUDING FUTURE DIVIDENDS**



Total Future Payments	\$	67.6 billion
From Present Assets		28.6
From Investment Return		39.0

SECTION C

Variable Annuities

**VARIABLE ANNUITY DIVISION
DEVELOPMENT OF ASSETS AND LIABILITIES**

	\$ Millions		Ratio
	Assets	Liabilities	
Ending Balance December 31, 2004	\$3,909.9	\$3,654.5	1.070
Closing Adjustments	(3.1)	0.0	
Variable Terminations	(62.1)	(62.1)	
2005 Adjustment:7%	0.0	250.9	
Beginning Balance January 1, 2005	3,844.7	3,843.3	1.000
Increases			
Reserve Transfers	280.3	280.3	
Regular Interest	190.0	190.0	
Additional Earnings	147.9	0.0	
Addition to Contingency/Data Reserve	0.0	13.9	
Experience Study	0.0	0.0	
Other	0.0	13.4	
Total Increases	618.2	497.6	
Decreases			
Annuities & Lump Sums	369.2	369.2	
Credit Re-establishments	1.0	1.0	
Release from Contingency/Data Reserve	0.0	0.0	
Experience Study	0.0	0.0	
Other	0.0	0.0	
Total Decreases	370.2	370.2	
Ending Balance December 31, 2005	\$4,092.7	\$3,970.7	1.031

The ending liability balance includes contingency reserves of \$39.3 million.

RESERVE TRANSFER RECOMMENDATION
DECEMBER 31, 2005

Amounts to be transferred from the Employer Reserve and the Employee Reserve to the Annuity Reserve to cover liabilities for new annuities are computed as the first step in the annual actuarial valuation. The actuarial present value at time of retirement of variable annuities reported as new since the last actuarial valuation is \$274,313,891. Adjustments to prior transfers, relating to estimated annuities for which final computations have now been made, totaled \$6,033,242. Reserve transfers were distributed as follows:

Group	Regular Transfer	Adjustment to Prior Transfer	Total Transfer
General	\$255,377,624	\$5,054,349	\$260,431,973
Protective with Social Security	10,398,262	691,986	11,090,248
Protective Without Social Security	4,155,147	201,140	4,356,287
Executive & Elected	4,382,858	85,767	4,468,625
Totals	\$274,313,891	\$6,033,242	\$280,347,133

Accordingly, we recommend that \$280,347,133 be transferred to the Variable Annuity Reserve. The results in this report assume that this transfer has been made.

DISCUSSION OF VARIABLE ANNUITY CHANGE DECEMBER 31, 2005

Variable Annuity Reserves, \$4,092.8 million, exceeded the actuarial present value of variable annuities, \$3,970.7 million, by \$122.0 million as of December 31, 2005 or 3% of the actuarial present value (APV) of variable annuity payments. In accordance with Section 40.28(2) of the Wisconsin statutes (see page 27), variable annuities will be increased by 3% effective April, 2006. The primary sources of the 3% are as follows:

	% of APV
1. Published earnings rate based on beginning of year balances	9.0%
2. Adjustment to relate earnings to average variable annuity fund balance	(0.1)%
3. Earnings rate based on average balance	8.9%
4. Expected change before adjustments: 1.089/1.05-1	3.7%
5. Adjustment to relate average asset to ending liability	0.0%
6. Carryover from last year due to timing of distribution, accounting adjustments, and truncation	0.0%
7. Adjustments to contingency reserve	(0.4)%
8. Experience Study	0.0%
9. Experience and other effects	(0.2)%
10. Statutory adjustment to truncate to whole percent	(0.1)%
11. Variable annuity change: (4)+(5)+(6)+(7)+(8)+(9)+(10)	3.0%

**TRANSFERS TO ANNUITY RESERVE
TO FINANCE VARIABLE ANNUITIES APPROVED IN 2005
TABULATED BY TYPE OF ANNUITY AND OPTION**

Code	Type of Benefit	Number	Annual Amount	Transfer
REGULAR RETIREMENT				
1	Straight Life	226	\$ 1,634,445	\$ 21,606,522
2	5-Year Certain & Life	204	1,774,849	23,343,475
4	15-Year Certain & Life	427	3,164,280	45,223,210
7	Joint and 75%	251	2,149,426	32,352,567
9	Joint and 75% on First Death	146	1,937,195	26,817,143
11	Joint and 100%	160	1,429,517	21,690,912
12	Joint and 100% & 15-Year Certain	614	5,218,152	81,765,493
13	Temporary to Age 62*	0	4,331,010	17,942,610
21	Certain Only*	0	60,991	388,376
40	Mandatory & Certain for Life Expec	3	8,513	100,900
41	Mandatory & Certain for Life Expec	0	0	0
42	Voluntary & Certain for Life Expec	0	0	0
Total Regular		2,031	21,708,378	271,231,208
Average Age at Retirement		59.4 Years		
DISABILITY RETIREMENT				
11	Joint and 100%	0	0	0
12	Joint and 100% & 15-Year Certain	23	78,502	1,235,329
17	5-Year Certain & Life or Survivor	2	942	12,209
21	Certain Only*	0	0	0
24	Straight Life	4	9,520	136,708
25	15-Year Certain & Life	14	30,642	417,322
26	Joint & 75 %	2	13,023	196,365
27	Joint & 100%	3	2,036	33,145
28	Joint & 75% on First Death	1	658	9,020
Total Disability		49	135,323	2,040,098
Average Age at Retirement		53.2 Years		
DEATH-IN-SERVICE BENEFITS				
1	Straight Life	0	0	0
2	5-Year Certain & Life	1	1,051	13,176
4	15-Year Certain & Life	16	67,545	967,089
13	Temporary to Age 62*	0	8,106	62,320
21	Certain Only*	0	0	0
42	Voluntary & Certain for Life Expec	0	0	0
Total Death-in-Service		17	76,702	1,042,585
Average Age at Retirement		52.4 Years		
GRAND TOTAL		2,097	\$21,920,403	\$274,313,891

* Many annuities in this category were additional annuities. The number counts are included elsewhere.

VARIABLE ANNUITIES BEING PAID DECEMBER 31, 2005
TABULATED BY TYPE OF ANNUITY AND OPTION

Code	Type of Benefit	Number	Annual Amount	Present Value
REGULAR RETIREMENT				
1	Straight Life	3,523	\$ 37,369,143	\$ 356,838,713
2	5-Year Certain & Life	3,760	35,439,870	326,637,346
3	10-Year Certain & Life	155	1,178,131	4,901,093
4	15-Year Certain & Life	6,197	60,559,904	603,610,407
5	Joint and 50%	100	840,925	4,056,388
6	Joint and 50% and 15-Year Certain	25	173,969	815,067
7	Joint and 75%	4,038	49,453,288	588,809,369
8	Joint and 75% Integrated	42	258,922	1,945,605
9	Joint and 75% on First Death	3,902	60,244,408	631,322,070
10	Joint and 75% & 10-Year Certain	15	125,248	481,795
11	Joint and 100%	2,556	29,302,984	338,263,772
12	Joint and 100% & 15-Year Certain	5,427	66,706,564	903,472,645
13	Temporary to Age 62*	0	23,226,301	62,051,940
14	5-Year Certain & Life Integrated	119	340,859	1,709,841
15	15-Year Certain & Life Integrated	65	368,200	1,940,781
21	Certain Only*	2	1,089,281	5,058,002
25	15-Year Certain & Life or Survivor	0	0	0
40	Mandatory & Certain for 15 years	14	123,084	1,258,545
41	Mandatory & Certain for Life Expec	3	18,494	137,475
42	Voluntary & Certain for Life Expec	14	253,766	1,576,287
Total Regular		29,957	\$367,073,341	\$3,834,887,141

* Many annuities in this category were additional annuities. The number counts are included elsewhere.

(Concluded on next page)

VARIABLE ANNUITIES BEING PAID DECEMBER 31, 2005
TABULATED BY TYPE OF ANNUITY AND OPTION
(CONCLUDED)

Code	Type of Benefit	Number	Annual Amount	Present Value
DISABILITY RETIREMENT				
1	Straight Life	2	\$ 3,037	\$ 20,355
2	5-Year Certain & Life*	0	0	0
4	15-Year Certain & Life	0	0	0
7	Joint and 75% *	0	104	1,349
11	Joint and 100%	0	10,869	67,467
12	Joint and 100% & 15-Year Certain	274	1,889,839	24,905,352
17	5-Year Certain & Life or Survivor	148	785,834	5,659,382
18	Cash Refund Annuity	35	107,979	306,460
21	Certain Only*	0	0	0
24	Straight Life	101	620,939	5,193,630
25	15-Year Certain & Life or Survivor	203	1,218,352	11,703,663
26	Straight Life & Joint & 75%	114	890,754	9,388,565
27	Straight Life & Joint & 100%	249	1,485,379	17,356,104
28	Joint & 75% on First Death	62	432,386	3,510,831
Total Disability		1,188	\$ 7,445,472	\$ 78,113,158
DEATH-IN-SERVICE BENEFITS				
1	Straight Life	56	\$ 347,650	\$ 3,168,138
2	5-Year Certain & Life	36	279,228	2,712,648
4	15-Year Certain & Life	221	1,191,697	11,607,503
13	Temporary to Age 62*	0	106,162	414,952
14	5-Year Certain & Life Integrated	36	33,939	181,874
21	Certain Only*	1	9,615	66,027
42	Voluntary & Certain for Life Expec	4	34,427	220,661
Total Death-in-Service		354	\$ 2,002,718	\$ 18,371,803
GRAND TOTAL		31,499	\$376,521,531	\$3,931,372,102

* Many annuities in this category were additional annuities. The number counts are included elsewhere.

VARIABLE ANNUITIES BEING PAID DECEMBER 31, 2005
TABULATED BY ATTAINED AGES

Attained Ages	Regular		Disability		Death-in-Service		Totals	
	No.	Annual Amount	No.	Annual Amount	No.	Annual Amount	No.	Annual Amount
25-29	0	\$ 0	2	\$ 2,040	2	\$ 4,565	4	\$ 6,605
30-34	0	0	5	34,006	5	6,833	10	40,839
35-39	3	18,410	8	19,603	1	2,123	12	40,136
40-44	3	35,611	24	20,635	6	4,533	33	60,779
45-49	21	78,735	43	100,131	14	27,543	78	206,409
50-54	248	2,115,142	121	382,022	17	70,222	386	2,567,386
55-59	4,366	55,867,647	198	1,234,878	32	184,639	4,596	57,287,164
60-64	5,551	74,003,017	192	1,726,217	39	332,803	5,782	76,062,037
65-69	4,782	62,786,109	167	1,340,530	34	243,022	4,983	64,369,661
70-74	4,586	59,452,921	176	1,146,310	28	229,195	4,790	60,828,426
75-79	4,143	50,814,403	116	753,421	43	198,220	4,302	51,766,044
80-84	3,156	34,109,011	83	427,087	46	224,513	3,285	34,760,611
85-89	1,846	16,873,437	42	232,011	42	227,148	1,930	17,332,596
90-94	825	6,688,771	8	19,012	22	104,544	855	6,812,327
95& Up	203	1,364,585	0	0	6	62,617	209	1,427,202
Certain Only*	224	2,865,542	3	7,569	17	80,198	244	2,953,309
Totals	29,957	\$367,073,341	1,188	\$7,445,472	354	\$2,002,718	31,499	\$376,521,531

Averages in Years

Age at retirement	59.8	52.6	51.7	59.5
Attained age	70.5	65.6	70.9	70.3
Service at retirement	25.4	20.7	22.9	25.2

* Certain only category consists of continuations of 5, 10 and 15-year certain and life annuities to beneficiaries of deceased annuitants, and all option 21 annuities.

SECTION D

Comparative Statements

**FIXED ANNUITIES
COMPARATIVE STATEMENT
1983 THROUGH 2005**

Year	Number	\$ Millions			Ratio	Change in	
		Annual Annuities	Fund Balance	Actuarial Reserve		Annuities	CPI
1983	57,770	\$ 177.7	\$ 1,830.3	\$ 1,738.3	1.053	5.0 %	3.8 %
1984	60,302	214.3	2,255.5	2,120.3	1.064	6.0 %	4.0 %
1985	62,953	257.6	2,758.2	2,561.0	1.077	7.2 %	3.8 %
1986	65,425	303.5	3,256.9	3,021.2	1.078	7.6 %	1.1 %
1987	67,688	366.9	3,833.7	3,594.6	1.067	6.7 %	4.4 %
1988	70,017	420.6	4,319.6	4,150.9	1.041	4.1 %	4.4 %
1989	73,232	488.7	5,487.4	4,928.1	1.113	11.3 %	4.6 %
1990	77,666	611.3	6,443.8	6,219.1	1.036	3.6 %	6.2 %
1991	79,465	660.4	7,137.8	6,711.3	1.063	6.3 %	3.0 %
1992	81,508	732.3	7,782.4	7,456.6	1.044	4.4 %	3.0 %
1993	83,836	801.7	8,608.2	8,205.3	1.049	4.9 %	2.7 %
1994	86,214	882.2	9,286.2	9,029.6	1.028	2.8 %	2.7 %
1995	88,998	955.8	10,351.7	9,804.1	1.056	5.6 %	2.6 %
1996	92,198	1,065.8	11,699.8	10,977.1	1.066	6.6 %	3.3 %
1997	95,128	1,188.4	13,185.1	12,240.4	1.077	7.7 %	1.7 %
1998	99,112	1,349.5	14,951.8	13,943.0	1.072	7.2 %	1.6 %
1999	102,817	1,513.8	16,857.8	15,687.2	1.075	17.1 %*	2.7 %
2000	107,425	1,867.0	20,517.8	19,405.3	1.057	5.7 %	3.4 %
2001	112,142	2,048.6	21,979.7	21,283.6	1.033	3.3 %	1.6 %
2002	116,289	2,226.6	23,142.4	23,202.9	0.997	0.0 %	2.4 %
2003	121,582	2,364.7	25,071.9	24,724.0	1.014	1.4 %	1.9 %
2004	126,211	2,500.3	26,920.0	26,232.2	1.026	2.6 %	3.3 %
2005	131,674	2,691.4	28,575.3	28,359.7	1.008	0.8 %	3.4 %
23-Year Average						5.5 %	3.1 %
10-Year Average						5.1 %	2.5 %

* Including 10.6% Act 11 transfer.

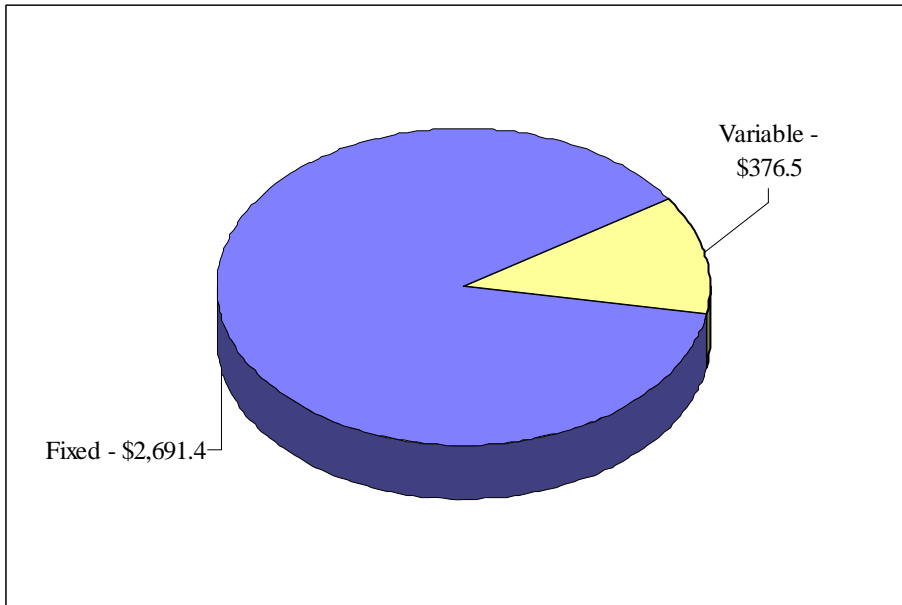
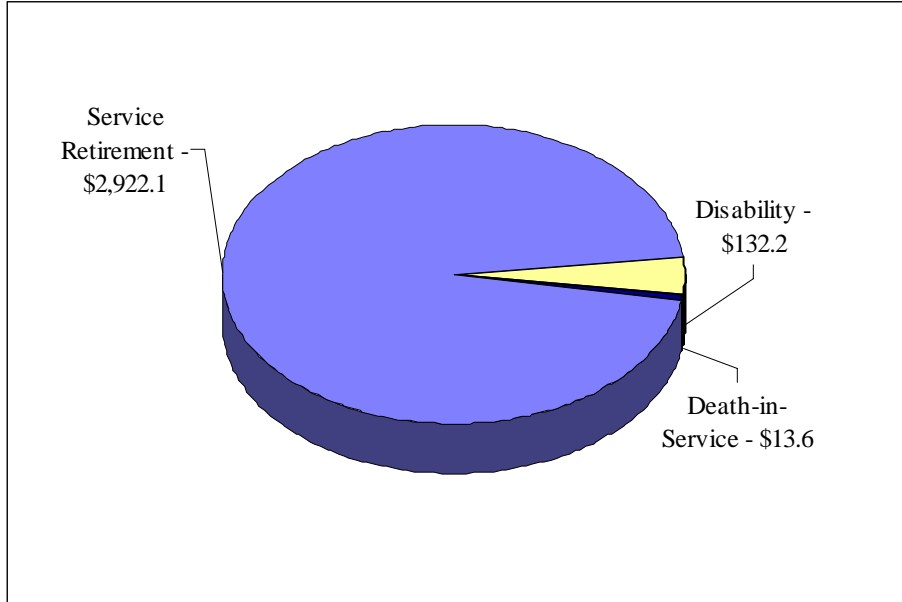
**VARIABLE ANNUITIES
COMPARATIVE STATEMENT
1983 THROUGH 2005**

Year	Number	\$ Millions				Change in	
		Annual Annuities	Fund Balance	Actuarial Reserve	Ratio	Annuities	CPI
1983	13,598	\$ 25.9	\$ 289.4	\$ 245.0	1.181	18.0 %	3.8 %
1984	14,520	34.2	329.2	327.5	1.005	0.0 %	4.0 %
1985	15,529	38.0	463.1	366.6	1.263	26.0 %	3.8 %
1986	16,276	51.8	538.7	498.6	1.080	8.0 %	1.1 %
1987	17,084	60.4	548.8	584.2	0.939	(6.0)%	4.4 %
1988	17,779	61.4	682.6	594.0	1.149	14.0 %	4.4 %
1989	18,502	75.9	878.1	756.5	1.161	16.0 %	4.6 %
1990	19,922	101.0	868.6	1,013.4	0.857	(14.0)%	6.2 %
1991	20,538	91.5	1,101.3	929.7	1.184	18.0 %	3.0 %
1992	20,968	112.6	1,208.6	1,147.4	1.053	5.0 %	3.0 %
1993	21,623	123.7	1,407.9	1,268.6	1.110	11.0 %	2.7 %
1994	22,248	144.6	1,418.0	1,487.0	0.954	(4.0)%	2.7 %
1995	22,978	150.2	1,854.2	1,556.0	1.192	19.0 %	2.6 %
1996	23,725	189.8	2,264.9	1,976.7	1.146	14.0 %	3.3 %
1997	24,462	228.2	2,800.0	2,371.5	1.181	18.0 %	1.7 %
1998	25,424	289.5	3,400.5	3,035.5	1.120	12.0 %	1.6 %
1999	26,257	345.8	4,432.9	3,659.1	1.212	21.0 %	2.7 %
2000	27,321	445.3	4,211.4	4,749.3	0.887	(11.0)%	3.4 %
2001	28,314	424.4	3,901.8	4,547.4	0.858	(14.0)%	1.6 %
2002	28,662	374.0	2,899.3	3,999.1	0.726	(27.0)%	2.4 %
2003	29,496	273.3	3,635.9	2,892.2	1.257	25.0 %	1.9 %
2004	30,270	346.0	3,909.9	3,654.5	1.070	7.0 %	3.3 %
2005	31,499	376.5	4,092.7	3,970.7	1.031	3.0 %	3.4 %
23-Year Average						6.0 %	3.1 %
10-Year Average						3.4 %	2.5 %

HISTORY OF % CHANGES IN ANNUITIES AND CPI



ANNUITIES BEING PAID BY TYPE
DECEMBER 31, 2005
\$ MILLIONS



ANNUITIES BEING PAID DECEMBER 31, 2005
TABULATED BY YEAR OF RETIREMENT
(\$1,000S ANNUALLY)

Year Ret'd	Fixed Annuities			Variable Annuities				Avg. Total Annuity	
	No.	Initial	Increases	Total	No.	Initial	Increases		Total
2005	8,023	\$ 199,754	\$ 0	\$ 199,754	2,096	\$ 21,806	\$ 0	\$ 21,806	\$27,615
2004	7,679	179,337	2,499	181,836	1,907	19,040	1,291	20,331	26,327
2003	7,820	182,383	6,168	188,551	1,770	15,838	5,345	21,183	26,820
2002	7,385	157,976	6,345	164,321	1,616	21,332	(497)	20,835	25,072
2001	7,538	150,678	8,870	159,548	1,764	31,813	(5,093)	26,720	24,710
2000	7,595	139,633	15,172	154,805	1,609	34,992	(8,840)	26,152	23,826
1999	6,532	100,017	28,881	128,898	1,375	24,006	(2,300)	21,706	23,056
1998	6,499	89,803	33,848	123,651	1,377	20,259	257	20,516	22,183
1997	5,551	74,305	35,744	110,049	1,197	14,878	2,917	17,795	23,030
1996	5,628	72,619	42,430	115,049	1,227	13,117	4,731	17,848	23,614
1995	5,193	63,747	43,127	106,874	1,143	9,894	6,129	16,023	23,666
1994	4,719	55,270	40,944	96,214	1,121	9,652	5,376	15,028	23,573
1993	4,492	48,630	39,581	88,211	1,086	7,621	5,538	13,159	22,567
1992	3,934	40,694	36,341	77,035	939	6,287	5,117	11,404	22,480
1991	3,690	35,545	35,459	71,004	896	5,006	5,698	10,704	22,143
1990	5,716	59,714	65,003	124,717	1,516	9,662	8,126	17,788	24,931
1989	4,509	46,105	57,425	103,530	1,102	6,083	6,909	12,992	25,842
1988	3,629	29,998	42,220	72,218	931	4,122	5,909	10,031	22,664
1987	3,324	25,071	39,560	64,631	874	3,684	4,750	8,434	21,981
1986	3,137	22,684	40,611	63,295	820	3,233	4,754	7,987	22,723
1985	2,960	21,964	43,908	65,872	767	2,265	4,783	7,048	24,635
1984	2,473	17,204	37,296	54,500	711	2,066	4,367	6,433	24,639
1983	2,270	11,936	27,931	39,867	632	1,586	4,232	5,818	20,125
1982	1,833	8,053	21,017	29,070	500	961	3,083	4,044	18,065
1981	1,664	6,149	17,286	23,435	428	724	2,305	3,029	15,904
1980	1,353	4,487	13,074	17,561	382	533	2,177	2,710	14,982
1979	1,063	3,414	10,648	14,062	291	313	1,449	1,762	14,886
1978	968	2,782	8,859	11,641	288	284	1,415	1,699	13,781
1977	912	2,463	8,036	10,499	286	300	1,421	1,721	13,399
1976	767	1,913	6,385	8,298	215	163	809	972	12,086
1975	600	1,426	4,830	6,256	165	117	699	816	11,787
1974	509	1,186	4,072	5,258	135	108	574	682	11,670
1973	383	816	2,784	3,600	104	91	428	519	10,753
1972	307	483	1,725	2,208	67	59	253	312	8,209
1971	174	247	890	1,137	42	28	126	154	7,424
1970	157	223	753	976	30	17	95	112	6,931
1969	118	161	572	733	31	17	75	92	6,994
1968	91	109	372	481	15	13	54	67	6,023
1967	83	87	319	406	13	5	23	28	5,225
1966	63	55	209	264	11	6	29	35	4,735
Prior	333	222	850	1,072	20	5	30	35	3,220
Total	131,674	\$1,859,343	\$832,044	\$2,691,387	31,499	\$291,986	84,544	\$376,530	\$23,299

**COMPARISON OF ACTUAL TO EXPECTED DEATHS AMONG RETIRED LIVES
(NORMAL RETIREMENT ONLY)
DURING 2005**

Age	Male Deaths			Female Deaths			Total Deaths		
	Actual	Expected	Exposure	Actual	Expected	Exposure	Actual	Expected	Exposure
30-34						2			2
35-39			1			7			8
40-44						21			21
45-49			20			85			105
50-54	1	2	769			398	1	2	1,167
55-59	42	43	7,674	21	20	7,591	63	63	15,265
60-64	67	95	11,090	39	50	11,209	106	145	22,299
65-69	109	163	10,638	83	89	11,833	192	252	22,471
70-74	212	259	9,326	130	152	10,416	342	411	19,742
75-79	320	355	7,616	196	260	9,179	516	615	16,795
80-84	331	405	5,064	320	371	7,415	651	776	12,479
85-89	335	315	2,507	395	423	4,986	730	738	7,493
90-94	167	157	853	335	342	2,390	502	499	3,243
95-99	56	40	156	167	172	718	223	212	874
100&Up	3	4	12	56	50	135	59	54	147
Totals	1,643	1,838	55,726	1,742	1,929	66,385	3,385	3,767	122,111
Average Ages	79.9	78.7	69.4	84.3	83.8	71.5	82.2	81.3	70.5

SECTION E

Appendix

ACTUARIAL ASSUMPTIONS USED IN RETIRED LIFE ACTUARIAL VALUATION

The interest rate used in the valuation was 5.0% a year, compounded yearly, as provided in Section 40.02 of the Wisconsin Statutes. The mortality table used in the valuation was the Wisconsin Projected Experience Mortality Table-2002, as adopted by the Board in connection with the 2000-2002 Experience Study. In addition, retired life liabilities in the valuations contain a reserve for mortality improvement. The reserve level used in this valuation was 1.0%.

SINGLE LIFE RETIREMENT VALUES

Wisconsin Projected Experience Table - 2002 with 5% Interest

Sample Attained Ages	Present Value of \$1 Monthly for Life		Future Life Expectancy (years)	
	Males	Females	Males	Females
40	\$204.60	\$213.51	40.3	45.1
45	194.52	205.50	35.5	40.3
50	182.57	195.63	30.8	35.4
55	168.60	183.57	26.3	30.7
60	152.23	168.96	21.9	26.1
65	133.38	151.77	17.8	21.6
70	113.07	131.92	14.0	17.3
75	92.87	110.50	10.7	13.4
80	73.24	89.29	7.9	10.1
85	56.59	69.03	5.8	7.3

The values shown above are for non-disabled participants. Sample values for disabled participants are as follows:

Sample Attained Ages	Present Value of \$1 Monthly for Life		Future Life Expectancy (years)	
	Males	Females	Males	Females
40	\$183.98	\$195.34	31.3	35.6
45	169.92	183.77	26.7	30.9
50	154.02	169.96	22.4	26.4
55	136.46	153.62	18.3	22.0
60	116.83	134.58	14.5	17.7
65	95.34	113.44	11.0	13.8
70	73.99	90.47	8.0	10.2
75	55.14	68.00	5.6	7.2
80	38.40	48.81	3.7	4.9
85	26.03	33.04	2.4	3.1

POST-RETIREMENT ADJUSTMENTS

FIXED ANNUITIES - 40.27(2)

“FIXED ANNUITY RESERVE SURPLUS DISTRIBUTIONS. Surpluses in the fixed annuity reserve established under s. 40.04(6) and (7) shall be distributed by the board if the distribution will result in at least a 0.5% increase in the amount of annuities in force, on recommendation of the actuary, as follows:

(a) The distributions shall be expressed as percentage increases in the amount of the monthly annuity in force, including prior distributions of surpluses but not including any amount paid from funds other than the fixed annuity reserve fund, preceding the effective date of the distribution. For purposes of this subsection, annuities in force include any disability annuity suspended because the earnings limitation had been exceeded by that annuitant in that year.

(b) Prorated percentages based on the annuity effective date may be applied to annuities with effective dates during the calendar year preceding the effective date of the distribution, as provided by rule, but no other distinction may be made among the various types of annuities payable from the fixed annuity reserve.

(c) The distributions shall not be offset against any other benefit being received but shall be paid in full, nor shall any other benefit being received be reduced by the distributions. The annuity reserve surplus distributions authorized under this subsection may be revoked by the board in part or in total as to future payments upon recommendation of the actuary if a deficit occurs in the fixed annuity reserves.”

VARIABLE ANNUITIES - 40.28(2)

“Whenever the balance in the variable annuity reserve, as of December 31 of any year, exceeds or is less than the then present value of all variable annuities in force, determined in accordance with the rate of interest and approved actuarial tables then in effect, by at least 2% of the present value of all variable annuities in force, the amount of each variable annuity payment shall be proportionately increased or decreased, disregarding fractional percentages, and effective on a date determined by rule, so as to reduce the variance between the balance of the variable annuity reserve and the present value of variable annuities to less than one percent.”

NARRATIVE REGARDING THE DEVELOPMENT OF DIVIDEND AND VARIABLE ANNUITY CHANGES SHOWN ON PAGES 6 AND 15

1. Published Earnings Rate

The earnings rate published by DETF is funds' earnings credits expressed as a percentage of the beginning year balance adjusted for benefit payments and reserve transfers.

2. Adjustment to Relate Earnings to Averaged Fixed Annuity Balance

Item 3 below minus Item 1 above.

3. Earnings Rate Based on Average Balance

This is similar to the published earnings rate except that the rate is determined as a percentage of the average balance during the year instead of the adjusted beginning of year balance.

4. Expected Dividend (Variable Change) before Adjustments

The relative difference in fund growth based on actual versus the 5% assumed earnings rates.

5. Adjustment to Relate Average Asset to Ending Liability

The final dividend/variable change is calculated based on the end of year assets divided by the end of year liabilities. Since the calculations in items 3 and 4 are based on average (approximately mid-year) balances, this adjustment is needed so that the final rate will be based on end of year liabilities.

6. Carryover from Last Year Due to Timing of Distribution and Accounting Adjustments (and Truncation for Variable Annuity)

The dividend or variable rate changes are made effective April 1 of each year. This adjustment takes into account the fact that the prior year dividend/variable increase was in effect for less than a full year as well as any accounting adjustments made to the asset value at the beginning of the year. This adjustment also carries over any truncated or rounded amounts from the prior year.

7. Adjustments to Contingency Reserve and Data Reserve

Currently there is a reserve for incomplete data for the dividend calculation of 0.2% and a mortality improvement reserve for both the dividend and variable calculations that starts at 0.4% and grades to 1% over a 3-year experience period. The adjustment is equal to the amount held in reserve for the current year less the amount held in reserve for the prior year expressed as a percent of the end of year liability. This reserve is accumulated to reflect the fact that over time, mortality rates tend to improve. By increasing reserves gradually each year, instead of all at once every three years, the effect on dividends and variable increases will also be more gradual.

NARRATIVE REGARDING THE DEVELOPMENT OF DIVIDEND AND VARIABLE ANNUITY CHANGES SHOWN ON PAGES 6 AND 15

8. Experience Study

A study is conducted for WRS every three years to analyze the assumptions that are made in the valuation versus the experience that actually occurred. If the results of the study show material changes in experience, WRS generally adopts a new set of assumptions. When assumptions are changed, this item displays the effect of the change on the dividend/variable rate calculation.

9. Experience and Other Effects

After making all other known adjustments, this is the remainder of all other experience. Changes here are primarily attributable to mortality experience and, generally to a lesser extent, on any data adjustments.

10. Statutory Adjustment to Round/Truncate

By statute, the dividend rate is calculated to the nearest one-tenth of a percent. For the variable annuity change, the rate is truncated to a whole percent. This is the adjustment made from the calculated dividend/variable annuity rate change without rounding/truncation to the statutory rate.

11. Computed Dividend Rate/Variable Annuity Change.

This is the end of year asset value divided by the end of year liability. It is reconciled to the published earnings rate (Item 1) by making the adjustments in items 4 through 10.

March 9, 2006

Mr. David Stella
Wisconsin Department of Employee Trust Funds
P.O. Box 7931
Madison, Wisconsin 53707

Re: Retired Life Actuarial Valuation

Dear Dave:

Enclosed are 75 copies of the report of the December 31, 2005 Retired Life Actuarial Valuation.

Sincerely,

A handwritten signature in black ink that reads "Mark Buis". The signature is written in a cursive, slightly slanted style.

Mark Buis

MB:dm
Enclosures