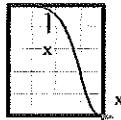


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WISCONSIN RETIREMENT SYSTEM



19th Annual Actuarial Valuations
of Retired Lives
December 31, 2001

Gabriel, Roeder, Smith & Company



Actuaries and Consultants

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GABRIEL, ROEDER, SMITH & COMPANY

Consultants & Actuaries

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March 4, 2002

Employee Trust Funds Board
Madison, Wisconsin

Ladies and Gentlemen:

The results of the 19th 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, 2001. Actuarial assumptions used in the valuation are summarized in the Appendix.

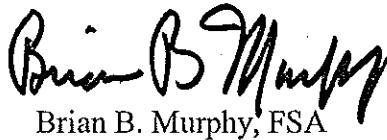
The results of the valuation may be briefly summarized as follows (\$ millions).

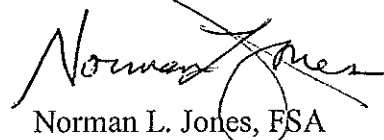
	Fixed	Variable
Number of Annuitants	112,142	28,314
Annual Amount	\$ 2,048.6	\$ 424.4
Fund Balance	21,979.7	3,901.8
Actuarial Reserve	21,283.6	4,547.4
Ratio	1.033	0.858

Based upon these results, fixed annuities were increased by 3.3% effective April, 2002 and variable annuities were decreased by 14%.

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

Respectfully submitted,
GABRIEL, ROEDER, SMITH & COMPANY


Brian B. Murphy, FSA


Norman L. Jones, FSA

BBM/lr

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 exceed the assumed rate, the extra funds are placed in a supplemental reserve. When investment earnings are less than the assumed rate, the deficit must be made up in order to ensure solvency of the fund.

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, when they arise, is described below.

Fixed Annuity Division. If the supplemental reserve is at least 2% of fixed annuity liabilities, fixed annuity increases (dividends) may be granted. 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, 2000	\$20,517.8	\$19,405.3	1.057
Closing Adjustments	(2.1)	0.0	
Variable Terminations	24.0	24.0	
2001 Dividend: 5.7%	0.0	1,022.7	
Beginning Balance January 1, 2001	20,539.7	20,452.0	1.004
Increases			
Reserve Transfers	1,813.8	1,813.8	
Regular Interest	1,018.0	1,018.0	
Additional Earnings	611.5	0.0	
Addition to Contingency/Data Reserve	0.0	22.4	
Experience Study	0.0	0.0	
Other	0.0	0.0	
Total Increases	3,443.3	2,854.2	
Decreases			
Annuities & Lump Sums	2,000.3	2,000.3	
Credit Reestablishments	3.0	3.0	
Releases from Contingency/Data Reserve	0.0	0.0	
Experience Study	0.0	0.0	
Other	0.0	19.3	
Total Decreases	2,003.3	2,022.6	
Ending Balance December 31, 2001	\$21,979.7	\$21,283.6	1.033

The ending liability balance includes data and contingency reserves of \$252.8 million. Also, a \$6 million special reserve that had been held for Special Investment Performance Dividend (SIPD) lump sum payments, was released to the Fixed Annuity Reserve at the end of calendar year 2001.

RESERVE TRANSFER RECOMMENDATION
DECEMBER 31, 2001

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 \$1,909,888,911. Adjustments to prior transfers, relating to estimated annuities for which final computations have now been made, totaled \$(96,136,741). Reserve transfers are distributed as follows:

Group	Regular Transfer	Adjustment to Prior Transfer	Total Transfer
General	\$1,706,771,733	\$(85,531,895)	\$1,621,239,838
Protective with Social Security	142,199,310	(7,812,262)	134,387,048
Protective without Social Security	42,121,143	(1,976,059)	40,145,084
Executive & Elected	18,796,725	(816,525)	17,980,200
Totals	\$1,909,888,911	\$(96,136,741)	\$1,813,752,170

The "Adjustment to Prior Transfer" is higher than is normally seen, and in the opposite direction. This is, in fact, a delayed effect of Act 11 that will be reversed next year. Consequently, it will be necessary to adjust the liabilities in the 2001 Active and Inactive Valuations by a corresponding amount. The reserve transfer and liabilities for a large number of estimated annuities are based on pre-Act 11 benefit calculations.

Accordingly, we recommend that \$1,813,752,170 be transferred to the fixed annuity reserve, and that a reserve be held in the Active and Inactive Liabilities in the amount of \$96,136,741. The results in this report assume that this transfer has been made, and that the reserve will be held.

**DISCUSSION OF DIVIDEND
DECEMBER 31, 2001**

The Fixed Annuity Fund Balance, \$21,979.7 million, exceeded the actuarial present value of fixed annuities and reserves, \$21,283.6 million, by \$696.1 million or 3.3% of the actuarial present value (APV) of fixed annuity payments. The primary sources of the 3.3% are:

	<u>% of APV</u>
1. Published earnings rate	8.4%
2. Adjustment to relate earnings to average fixed annuity balance	(0.4)%
3. Earnings rate based on average balance	8.0%
4. Expected dividend before adjustments: 1.08/1.05-1	-2.9%
5. Adjustment to relate average liability to ending liability	0.0%
6. Carryover from last year due to timing of dividend and accounting adjustments	0.4%
7. Adjustments to contingency reserve and data reserve	(0.1)%
8. Experience Study	0.0%
9. Experience and other Act 11 effects	0.1%
10. Computed dividend rate: (4) + (5) + (6) + (7) + (8) + (9)	3.3%

In accordance with the Administrative Code, ETF 20.25 and Section 40.27(2) Wisconsin Statutes (see page 26), the 3.3% was allocated to a dividend effective April, 2002.

For annuities with an effective date in 2001, the dividend will be prorated based on the number of months retired. If the pro-ration results in an adjustment of less than 1%, no dividend is payable.

**TRANSFERS TO ANNUITY RESERVE
TO FINANCE FIXED ANNUITIES APPROVED IN 2001
TABULATED BY TYPE OF ANNUITY AND OPTION**

Code	Type of Benefit	Number	Annual Amount	Transfer
REGULAR RETIREMENT				
1	Straight Life	832	\$12,236,540	\$164,002,724
2	5 Year Certain & Life	812	11,777,762	160,480,821
4	15 Year Certain & Life	1,626	22,833,103	325,247,110
7	Joint and 75%	1,015	17,803,966	267,011,965
9	Joint and 75% on First Death	503	9,544,984	138,796,915
11	Joint and 100%	598	9,175,171	142,397,411
12	Joint and 100% & 15 Year Certain	1,828	29,688,008	468,912,312
13	Temporary to Age 62*	1	35,788,596	149,866,819
21	Certain Only*	2	320,740	2,131,488
40	Mandatory & 15 Year Certain	9	39,176	479,673
41	Mandatory & Certain for Life Expectancy	2	62,034	691,561
42	Voluntary & Certain for Life Expectancy	26	253,558	2,557,546
Total Regular		7,254	149,523,638	1,822,576,345
Average Age at Retirement		59.3 Years		
DISABILITY RETIREMENT				
1	Straight Life	0	0	0
2	5 Year Certain & Life	0	0	0
4	15 Year Certain & Life	2	22,507	288,342
7	Joint and 75%	0	0	0
9	Joint and 75% on First Death	3	0	0
11	Joint and 100%	3	54,368	915,383
12	Joint and 100% & 15 Year Certain	101	1,982,872	32,177,130
17	5 Years Certain & Life or Survivor	33	636,827	7,623,581
21	Certain Only*	0	8,927	24,187
24	Straight Life	25	441,310	5,553,991
25	15 Year Certain & Life	63	1,104,244	14,377,623
26	Joint & 75 %	21	366,888	5,338,535
27	Joint & 100%	45	813,169	13,080,892
28	Joint & 75% on First Death	6	127,364	1,474,330
Total Disability		302	5,558,476	80,853,994
Average Age at Retirement		52.3 Years		
DEATH-IN-SERVICE BENEFITS				
1	Straight Life	7	41,760	638,371
2	5 Year Certain & Life	7	82,693	1,014,782
4	15 Year Certain & Life	33	244,802	3,830,398
13	Temporary to Age 62*	0	139,245	615,516
21	Certain Only*	0	0	0
42	Voluntary & Certain for Life Expectancy	6	36,816	359,505
Total Death-in-Service		53	545,316	6,458,572
Average Age at Retirement		55.3 Years		
GRAND TOTAL		7,609	\$155,627,430	\$1,909,888,911

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

FIXED ANNUITIES BEING PAID DECEMBER 31, 2001
TABULATED BY TYPE OF ANNUITY AND OPTION

Code	Type of Benefit	Number	Amount	Value
REGULAR RETIREMENT				
1	Straight Life	14,334	\$211,328,984	\$2,106,193,407
2	5 Year Certain & Life	17,521	247,348,950	2,282,883,380
3	10 Year Certain & Life	923	12,970,545	66,313,870
4	15 Year Certain & Life	25,876	387,343,940	3,673,182,230
5	Joint and 50%	260	4,001,157	22,658,381
6	Joint and 50% and 15 Year Certain	55	609,615	2,749,386
7	Joint and 75%	12,316	246,614,291	3,014,577,038
8	Joint and 75% Integrated	147	2,701,638	23,357,393
9	Joint and 75% on First Death	10,578	259,012,169	2,897,217,282
10	Joint and 75% & 10 Year Certain	59	793,476	3,473,209
11	Joint and 100%	8,020	139,051,513	1,699,606,001
12	Joint and 100% & 15 Year Certain	13,143	242,557,188	3,386,747,658
13	Temporary to Age 62*	2	147,326,580	401,373,941
14	5 Year Certain & Life Integrated	597	3,353,718	20,215,272
15	15 Year Certain & Life Integrated	353	6,648,305	41,375,818
20	Cash Refund Annuity	2	4,960	22,947
21	Certain Only*	6	2,990,769	14,267,375
22	Joint and \$600	1	1,183	8,396
25	15 Year Certain & Life & Survivor	2	18,408	229,743
40	Mandatory and Certain for 15 Years	29	175,122	1,945,563
41	Mandatory & Certain for Life Expectancy	20	265,854	2,429,915
42	Voluntary & Certain for Life Expectancy	120	1,690,745	15,132,364
99	Joint and 66-2/3% Original Amount	546	3,733,031	25,546,218
99	Joint and 66-2/3% Dividends	0	10,316,289	68,916,409
Total Regular		104,910	\$1,930,858,430	\$19,770,423,196

(Concluded on next page)

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

FIXED ANNUITIES BEING PAID DECEMBER 31, 2001
TABULATED BY TYPE OF ANNUITY AND OPTION
(CONCLUDED)

Code	Type of Benefit	Number	Annual Amount	Present Value
DISABILITY RETIREMENT				
1	Straight Life	10	\$104,750	\$1,002,395
2	5 Year Certain & Life *	2	21,171	212,532
3	10 Year Certain & Life *	0	0	0
4	15 Year Certain & Life	8	126,526	1,546,467
7	Joint and 75% *	1	22,209	260,891
9	Joint and 100%	1	16,299	250,532
11	Joint and 100%	11	220,648	3,339,818
12	Joint and 100% & 15 Year Certain	1,181	21,108,371	304,924,081
17	5 Year Certain & Life or Survivor	853	15,765,928	112,465,185
18	Cash Refund Annuity	246	3,042,396	12,848,155
21	Certain Only	0	40,479	139,873
23	Joint and \$600	8	49,811	113,592
24	Straight Life	558	11,751,091	112,856,434
25	15 Year Certain & Life or Survivor	1,188	22,776,930	221,668,495
26	Straight Life & Joint & 75%	465	9,048,756	105,461,352
27	Straight Life & Joint & 100%	1,180	19,895,162	259,343,239
28	Joint & 75% on First Death	231	4,575,541	37,478,012
99	Joint & 66-2/3% Original Amount	66	245,970	1,666,606
99	Joint & 66-2/3% Dividends	0	748,781	5,049,895
Total Disability		6,009	109,560,819	1,180,627,554
DEATH-IN-SERVICE BENEFITS				
1	Straight Life	283	1,698,717	17,372,929
2	5 Year Certain & Life	108	1,171,945	12,380,860
4	15 Year Certain & Life	580	3,943,226	42,603,070
7	Joint and 75%	1	37,957	278,297
12	Joint and 100% & 15 Year Certain	3	10,231	169,794
13	Temporary to Age 62*	0	692,573	2,862,101
14	5 Year Certain & Life Integrated	213	219,381	1,276,482
15	15 Year Certain & Life Integrated	2	44,758	342,806
17	5 Year Certain & Life or Survivor	1	3,029	20,740
21	Certain Only*	6	88,577	195,045
22	Joint and \$600	1	3,992	16,309
23	Joint and \$600	0	0	0
42	Voluntary & Certain for Life Expec	22	196,217	1,461,016
99	Joint & 66-2/3% Original Amount	3	25,059	228,240
99	Joint & 66-2/3% Dividends	0	58,197	523,024
Total Death-in-Service		1,223	\$8,193,859	\$79,730,713
GRAND TOTAL		112,142	\$2,048,613,108	\$21,030,781,463

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

**FIXED ANNUITIES BEING PAID DECEMBER 31, 2001
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	10	\$50,622	1	\$13,761	11	\$64,383
20-24	0	0	7	34,442	7	39,459	14	73,901
25-29	1	5,127	13	111,148	1	1,156	15	117,431
30-34	2	5,768	13	155,425	4	18,855	19	180,048
35-39	10	133,908	72	974,127	11	41,273	93	1,149,308
40-44	17	133,717	154	2,519,478	28	99,987	199	2,753,182
45-49	46	494,872	361	6,801,804	23	122,518	430	7,419,194
50-54	984	23,534,986	719	14,575,176	52	474,330	1,755	38,584,492
55-59	11,855	286,103,004	931	19,617,276	100	1,059,607	12,886	306,779,887
60-64	17,476	371,307,995	1,007	19,867,492	119	1,121,057	18,602	392,296,544
65-69	19,562	360,835,457	907	17,764,849	137	1,075,326	20,606	379,675,632
70-74	18,341	339,006,004	799	13,256,728	167	1,299,589	19,307	353,562,321
75-79	14,919	263,117,804	568	8,642,529	163	975,712	15,650	272,736,045
80-84	10,885	163,537,739	293	3,719,927	163	771,167	11,341	168,028,833
85-89	6,337	75,089,187	114	1,142,777	129	484,146	6,580	76,716,110
90-94	2,613	24,351,785	38	269,899	77	330,533	2,728	24,952,217
95 & Up	784	5,536,846	3	16,626	21	118,616	808	5,672,088
Certain Only*	1,078	17,664,231	0	40,494	20	146,767	1,098	17,851,492
Totals	104,910	\$1,930,858,430	6,009	\$109,560,819	1,223	\$8,193,859	112,142	\$2,048,613,108

Average
Age at retirement 60.8
Attained age 71.1

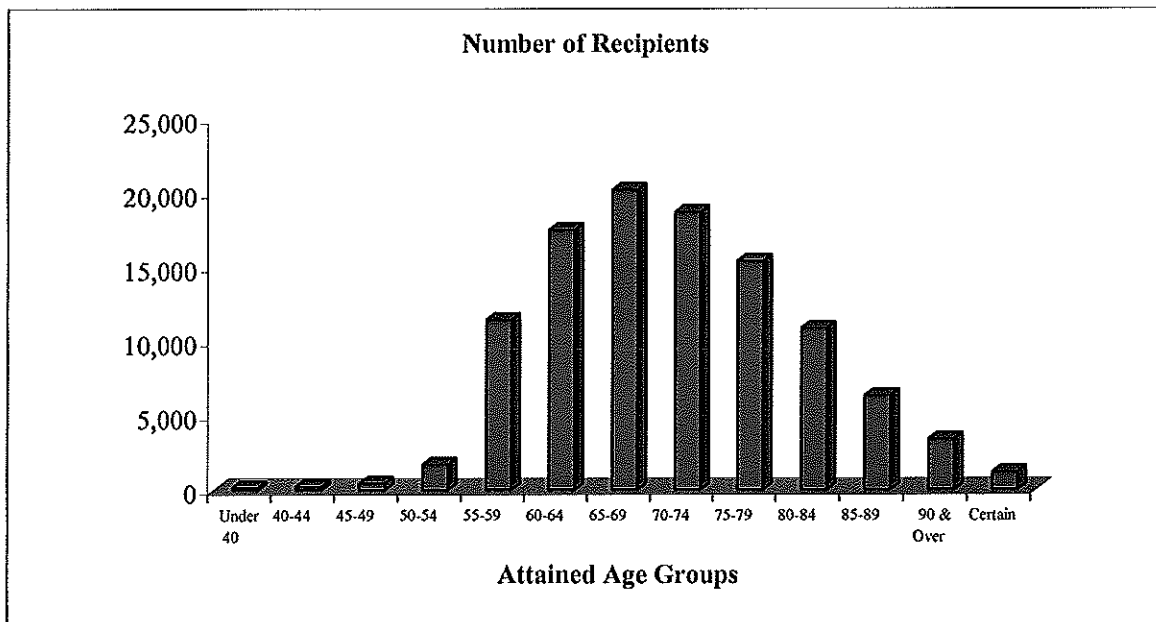
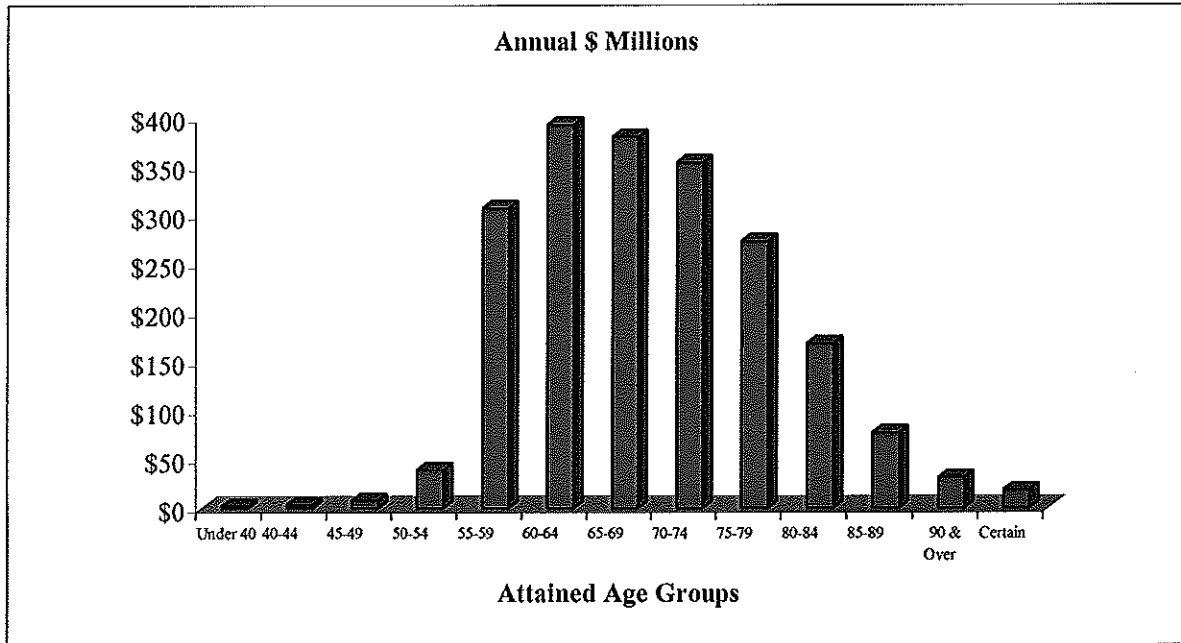
50.4
72.3

52.5
64.1

60.3
70.8

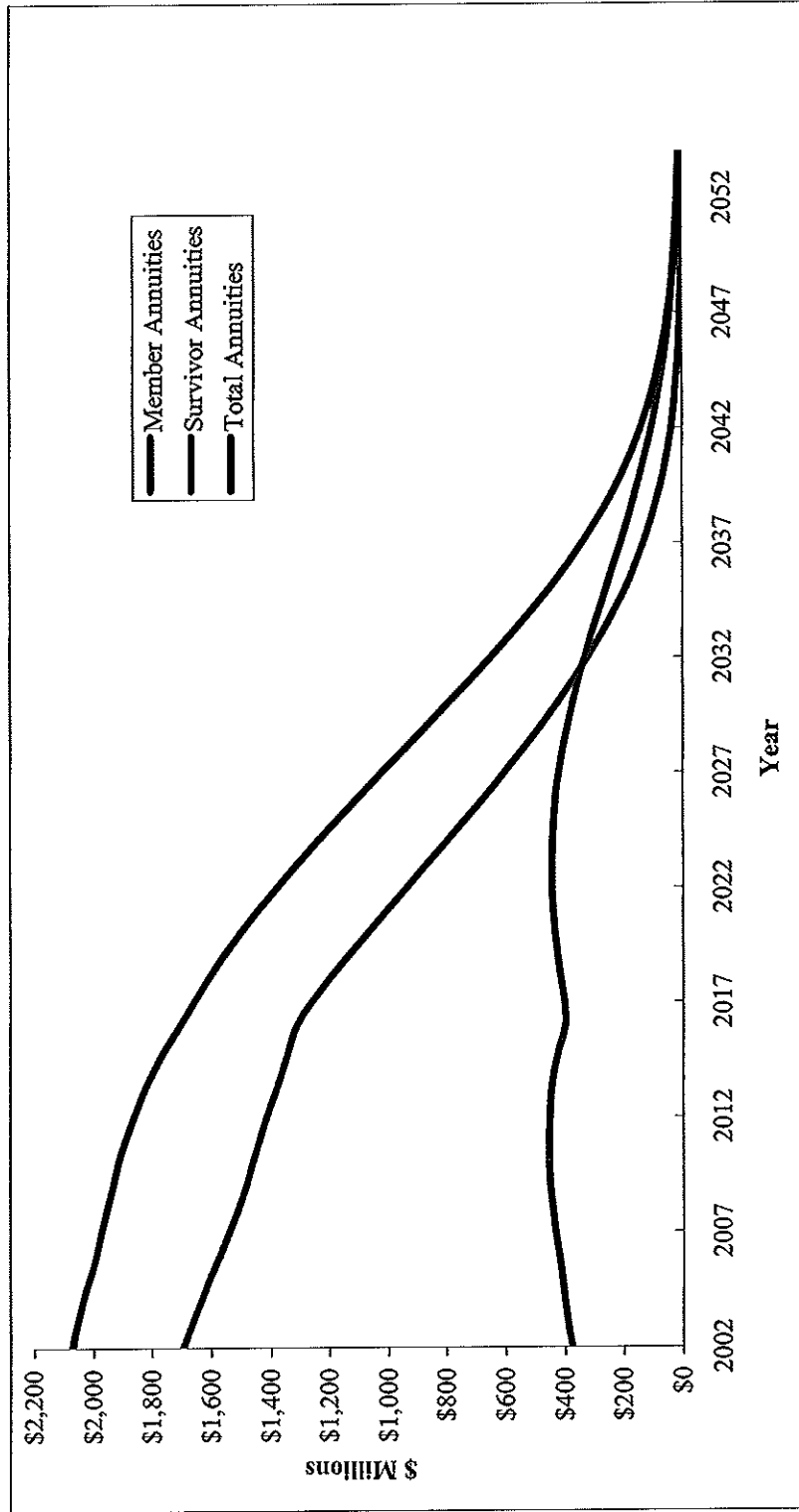
* Certain only category consists of continuations of 5, 10 and 15 year certain and life annuities to beneficiaries of deceased annuitants, and all option 21 annuities.

FIXED ANNUITIES BEING PAID BY ATTAINED AGE* DECEMBER 31, 2001



* 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	\$ 51,639 million
From Present Assets	21,980
From Investment Return	29,659

SECTION C



Variable Annuities

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

	\$ Millions		Ratio
	Assets	Liabilities	
Ending Balance December 31, 2000	\$4,211.4	\$4,749.3	0.887
Closing Adjustments	(4.4)	0.0	
Variable Terminations	(24.0)	(24.0)	
2001 Adjustment:-11%	0.0	(519.6)	
Beginning Balance January 1, 2001	4,183.0	4,205.7	0.995
Increases			
Reserve Transfers	536.8	536.8	
Regular Interest	212.9	212.9	
Additional earnings	(598.9)	0.0	
Addition to Contingency/Data Reserve	0.0	0.0	
Experience Study	0.0	0.0	
Other	0.0	25.9	
Total Increases	150.8	775.6	
Decreases			
Annuities & Lump Sums	430.9	430.9	
Credit Reestablishments	1.0	1.0	
Release from Contingency/Data Reserve	0.0	2.0	
Experience Study	0.0	0.0	
Other	0.1	0.0	
Total Decreases	432.0	433.9	
Ending Balance December 31, 2001	\$3,901.8	\$4,547.4	0.858

The ending liability balance includes contingency reserves of \$45 million.

RESERVE TRANSFER RECOMMENDATION
DECEMBER 31, 2001

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 \$520,161,222. Adjustments to prior transfers, relating to estimated annuities for which final computations have now been made, totaled \$16,605,292. Reserve transfers were distributed as follows:

Group	Regular Transfer	Adjustment to Prior Transfer	Total Transfer
General	\$480,972,533	\$11,665,333	\$492,637,866
Protective with Social Security	20,918,222	2,882,572	23,800,794
Protective Without Social Security	10,416,114	1,947,504	12,363,618
Executive & Elected	7,854,353	109,883	7,964,236
Totals	\$520,161,222	\$16,605,292	\$536,766,514

Accordingly, we recommend that \$536,766,514 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, 2001**

Variable Annuity Reserves, \$3,901.8 million, exceeded the actuarial present value of variable annuities, \$4,547.4 million, by \$(645.6) million as of December 31, 2001 or (14)% of the actuarial present value (APV) of variable annuity payments. In accordance with Section 40.28(2) of the Wisconsin statutes (see page 26), variable annuities will be decreased by 14% effective April, 2002. The primary sources of the (14)% are as follows:

	<u>% of APV</u>
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	(9.1)%
4. Expected change before adjustments: 0.909/1.05-1	(13.4)%
5. Adjustment to relate average liability to ending liability	0.2%
6. Carryover from last year due to timing of distribution, accounting adjustments, and truncation	(0.5)%
7. Adjustments to contingency reserve	0.0%
8. Experience Study	0.0%
9. Experience and Miscellaneous	(0.5)%
10. Statutory adjustment to truncate to whole percent	0.2%
11. Variable annuity change: (4)+(5)+(6)+(7)+(8)+(9)+(10)	(14.0)%

**TRANSFERS TO ANNUITY RESERVE
TO FINANCE VARIABLE ANNUITIES APPROVED IN 2001
TABULATED BY TYPE OF ANNUITY AND OPTION**

Code	Type of Benefit	Number	Annual Amount	Transfer
REGULAR RETIREMENT				
1	Straight Life	163	\$2,801,444	\$36,866,407
2	5 Year Certain & Life	161	2,781,050	38,380,975
4	15 Year Certain & Life	357	6,084,201	86,171,202
7	Joint and 75%	261	5,211,604	77,452,375
9	Joint and 75% on First Death	177	4,150,139	59,934,278
11	Joint and 100%	142	2,662,374	40,723,591
12	Joint and 100% & 15 Year Certain	480	8,927,943	140,494,897
13	Temporary to Age 62*	1	7,445,522	32,573,095
21	Certain Only*	1	260,865	1,884,332
40	Mandatory & Certain for Life Expec	0	0	0
41	Mandatory & Certain for Life Expec	0	0	0
42	Voluntary & Certain for Life Expec	1	24,593	233,819
Total Regular		1,744	40,349,735	514,714,971
Average Age at Retirement		58.6 Years		
DISABILITY RETIREMENT				
11	Joint and 100%	1	17,142	261,077
12	Joint and 100% & 15 Year Certain	13	165,967	2,631,709
17	5 Years Certain & Life or Survivor	2	6,956	67,005
21	Certain Only*	0	0	0
24	Straight Life	1	9,215	127,227
25	15 Year Certain & Life	7	65,882	827,162
26	Joint & 75 %	4	11,849	167,598
27	Joint & 100%	5	7,572	123,565
28	Joint & 75% on First Death	0	0	0
Total Disability		33	284,583	4,205,343
Average Age at Retirement		52.4 Years		
DEATH-IN-SERVICE BENEFITS				
1	Straight Life	2	21,779	346,097
2	5 Year Certain & Life	2	16,837	243,299
4	15 Year Certain & Life	8	39,586	568,778
13	Temporary to Age 62*	0	17,607	82,734
21	Certain Only*	0	0	0
42	Voluntary & Certain for Life Expec	0	0	0
Total Death-in-Service		12	95,809	1,240,908
Average Age at Retirement		56.3 Years		
GRAND TOTAL		1,789	\$40,730,127	\$520,161,222

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

VARIABLE ANNUITIES BEING PAID DECEMBER 31, 2001
TABULATED BY TYPE OF ANNUITY AND OPTION

Code	Type of Benefit	Number	Annual Amount	Present Value
REGULAR RETIREMENT				
1	Straight Life	3,231	\$41,721,486	\$408,491,240
2	5 Year Certain & Life	3,841	42,034,375	388,533,017
3	10 Year Certain & Life	252	2,386,149	11,647,749
4	15 Year Certain & Life	5,749	69,549,996	683,610,847
5	Joint and 50%	149	1,537,859	8,774,009
6	Joint and 50% and 15 Year Certain	44	425,959	2,062,430
7	Joint and 75%	3,550	55,933,369	693,307,739
8	Joint and 75% Integrated	49	343,393	3,021,531
9	Joint and 75% on First Death	3,782	72,339,241	809,577,000
10	Joint and 75% & 10 Year Certain	32	357,263	1,645,264
11	Joint and 100%	2,215	32,365,020	389,045,706
12	Joint and 100% & 15 Year Certain	3,703	63,188,187	881,319,982
13	Temporary to Age 62*	2	26,750,492	77,579,347
14	5 Year Certain & Life Integrated	168	559,360	3,316,630
15	15 Year Certain & Life Integrated	95	652,581	3,945,363
21	Certain Only*	2	1,763,199	8,454,506
25	15 Year Certain & Life or Survivor	1	2,376	13,200
40	Mandatory & Certain for 15 years	5	61,642	703,400
41	Mandatory & Certain for Life Expec	3	25,526	253,116
42	Voluntary & Certain for Life Expec	17	459,637	4,001,888
Total Regular		26,890	\$412,457,110	\$4,379,303,964

(concluded on next page)

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

VARIABLE ANNUITIES BEING PAID DECEMBER 31, 2001
TABULATED BY TYPE OF ANNUITY AND OPTION
(CONCLUDED)

Code	Type of Benefit	Number	Annual Amount	Present Value
DISABILITY RETIREMENT				
1	Straight Life	3	\$17,541	\$141,331
2	5 Year Certain & Life*	0	0	0
4	15 Year Certain & Life	0	0	0
7	Joint and 75%*	0	96	1,077
11	Joint and 100%	1	28,201	322,070
12	Joint and 100% & 15 Year Certain	198	2,226,930	31,273,800
17	5 Year Certain & Life or Survivor	170	1,131,066	7,610,864
18	Cash Refund Annuity	56	185,510	596,139
21	Certain Only*	0	24,543	68,231
24	Straight Life	88	713,086	5,650,568
25	15 Year Certain & Life or Survivor	173	1,566,637	14,119,694
26	Straight Life & Joint & 75%	101	1,061,592	11,787,192
27	Straight Life & Joint & 100%	241	1,987,663	24,656,985
28	Joint & 75% on First Death	59	566,313	4,703,398
Total Disability		1,090	9,509,178	100,931,349
DEATH-IN-SERVICE BENEFITS				
1	Straight Life	55	432,684	4,075,756
2	5 Year Certain & Life	33	342,231	3,664,154
4	15 Year Certain & Life	192	1,360,173	12,996,612
13	Temporary to Age 62*	0	166,587	612,841
14	5 Year Certain & Life Integrated	49	59,016	342,942
21	Certain Only*	4	100,043	397,945
42	Voluntary & Certain for Life Expec	1	10,360	73,940
Total Death-in-Service		334	2,471,094	22,164,190
GRAND TOTAL		28,314	\$424,437,382	\$4,502,399,503

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

**VARIABLE ANNUITIES BEING PAID DECEMBER 31, 2001
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	\$24,133	0	\$0	2	\$24,133
30-34	0	0	2	11,265	0	0	2	11,265
35-39	5	98,609	7	20,805	2	2,188	14	121,602
40-44	5	35,013	15	57,298	5	4,816	25	97,127
45-49	12	95,376	27	140,929	5	20,127	44	256,432
50-54	242	4,776,596	86	760,779	12	87,464	340	5,624,839
55-59	3,364	72,904,666	168	1,981,904	29	289,580	3,561	75,176,150
60-64	4,216	79,135,305	193	2,001,825	30	363,193	4,439	81,500,323
65-69	4,745	74,897,175	198	1,796,848	31	314,516	4,974	77,008,539
70-74	4,729	69,895,309	169	1,379,890	42	249,443	4,940	71,524,642
75-79	4,008	52,089,782	128	800,899	54	307,310	4,190	53,197,991
80-84	2,817	31,526,267	69	410,285	52	351,993	2,938	32,288,545
85-89	1,674	15,928,188	17	66,337	38	158,941	1,729	16,153,466
90-94	662	5,548,264	6	22,436	15	91,446	683	5,662,146
95 & Up	173	1,422,329	0	0	8	90,280	181	1,512,609
Certain Only*	238	4,104,231	3	33,545	11	139,797	252	4,277,573
Totals	26,890	\$412,457,110	1,090	\$9,509,178	334	\$2,471,094	28,314	\$424,437,382

Average

Age at retirement

60.4

Attained age

71.1

53.5

52.6

60.1

66.9

73.8

71.0

* 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

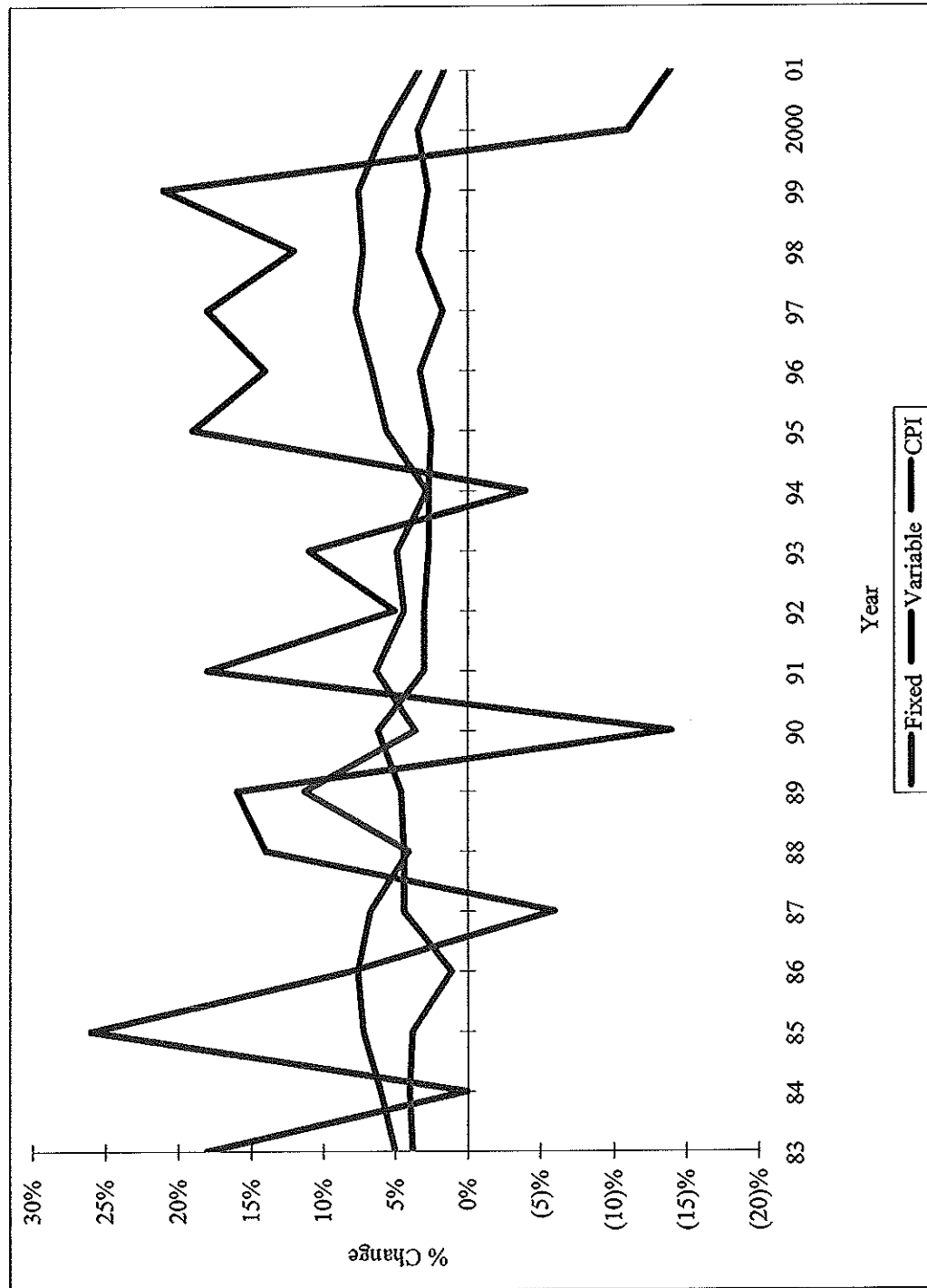


Comparative Statements

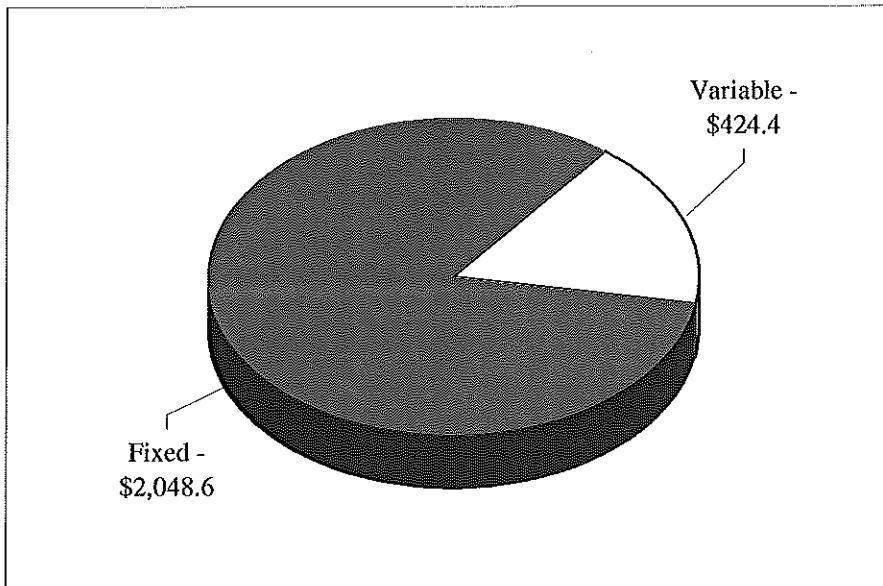
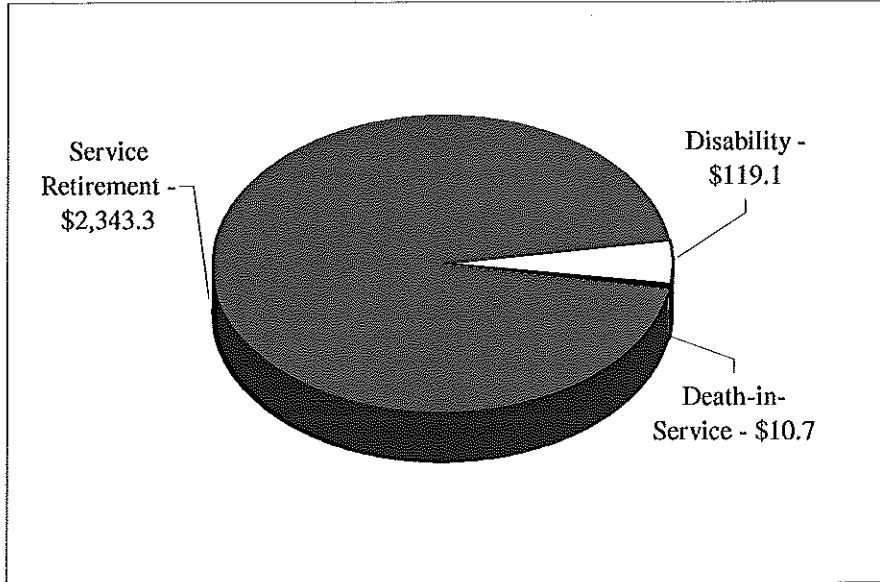
COMPARATIVE STATEMENT

Year	Number	\$ Millions			Ratio	Change in	
		Annual Annuities	Fund Balance	Actuarial Reserve		Annuities	CPI
FIXED ANNUITIES							
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	7.5 %	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 %
19 Year Average						6.0 %	3.2 %
10 Year Average						5.6 %	2.5 %
VARIABLE ANNUITIES							
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 %
19 Year Average						7.2 %	3.2 %
10 Year Average						6.4 %	2.5 %

HISTORY OF % CHANGES IN ANNUITIES AND CPI



ANNUITIES BEING PAID BY TYPE
DECEMBER 31, 2001
\$ MILLIONS



ANNUITIES BEING PAID DECEMBER 31, 2001
TABULATED BY YEAR OF RETIREMENT
(\$1,000'S ANNUALLY)

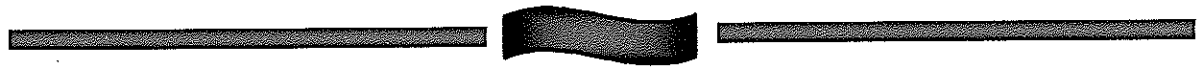
Year Ret'd	Fixed Annuities				Variable Annuities				Avg. Total Annuity
	No.	Initial	Increases	Total	No.	Initial	Increases	Total	
2001	7,114	\$147,271	\$0	\$147,271	1,698	\$39,020	\$0	\$39,020	\$26,186
2000	7,710	149,295	4,936	154,231	1,797	42,020	-4,622	37,398	24,855
1999	6,615	115,517	22,677	138,194	1,502	29,798	2,290	32,088	25,742
1998	6,586	104,979	30,125	135,104	1,541	25,640	5,283	30,923	25,209
1997	5,670	84,308	32,486	116,794	1,319	18,296	7,781	26,077	25,198
1996	5,737	78,704	37,766	116,470	1,334	15,280	9,486	24,766	24,618
1995	5,305	67,641	38,364	106,005	1,256	11,398	10,588	21,986	24,127
1994	4,812	56,993	35,775	92,768	1,199	10,613	9,066	19,679	23,368
1993	4,638	50,086	34,847	84,933	1,162	8,451	8,938	17,389	22,063
1992	4,092	41,865	32,359	74,224	1,034	7,159	8,305	15,464	21,918
1991	3,883	36,754	32,051	68,805	1,004	5,639	8,727	14,366	21,419
1990	6,264	64,024	61,266	125,290	1,734	11,257	13,433	24,690	23,943
1989	5,029	50,196	55,320	105,516	1,284	7,135	11,007	18,142	24,589
1988	4,227	33,747	42,339	76,086	1,111	4,996	9,480	14,476	21,425
1987	3,890	28,646	40,734	69,380	1,066	4,488	7,748	12,236	20,981
1986	3,588	25,756	41,595	67,351	979	3,919	7,613	11,532	21,985
1985	3,492	25,519	46,042	71,561	934	2,810	7,606	10,416	23,475
1984	2,954	20,256	39,912	60,168	852	2,509	6,796	9,305	23,518
1983	2,842	14,523	31,115	45,638	807	2,041	6,891	8,932	19,201
1982	2,336	10,104	24,196	34,300	637	1,253	5,019	6,272	17,368
1981	2,255	8,136	20,949	29,085	591	1,002	3,983	4,985	15,108
1980	1,853	6,126	16,623	22,749	537	804	4,095	4,899	14,921
1979	1,549	4,965	14,206	19,171	424	508	2,902	3,410	14,578
1978	1,466	4,204	12,414	16,618	445	476	2,891	3,367	13,632
1977	1,503	4,034	12,101	16,135	455	478	2,789	3,267	12,909
1976	1,267	3,350	10,097	13,447	353	324	1,958	2,282	12,414
1975	1,030	2,479	7,693	10,172	280	212	1,533	1,745	11,569
1974	930	2,227	7,000	9,227	240	194	1,274	1,468	11,500
1973	764	1,653	5,215	6,868	220	190	1,103	1,293	10,681
1972	585	984	3,183	4,167	138	131	690	821	8,526
1971	397	578	1,906	2,484	95	79	428	507	7,533
1970	329	526	1,675	2,201	72	59	329	388	7,868
1969	259	350	1,154	1,504	70	51	270	321	7,046
1968	204	233	779	1,012	45	36	177	213	6,003
1967	170	177	593	770	30	16	102	118	5,224
1966	139	128	441	569	27	11	70	81	4,678
1965	108	106	371	477	7	4	23	27	4,665
1964	105	65	236	301	16	5	38	43	3,275
1963	87	77	268	345	7	2	13	15	4,148
1962	53	43	155	198	5	1	12	13	3,979
Prior	305	235	789	1,024	7	2	15	17	3,359
Total	112,142	\$1,246,860	\$801,753	\$2,048,613	28,314	\$258,307	\$166,130	\$424,437	\$22,053

**COMPARISON OF ACTUAL TO EXPECTED DEATHS AMONG RETIRED LIVES
(NORMAL RETIREMENT ONLY)
DURING 2001**

Age	Male Deaths		Female Deaths		Total Deaths				
	Actual	Expected	Actual	Expected	Actual	Expected			
25-29									
30-34									
35-39									
40-44									
45-49									
50-54									
55-59									
60-64									
65-69									
70-74									
75-79									
80-84									
85-89									
90-94									
95-99									
100&Up									
Totals	1,472	1,681	48,178	1,697	1,708	55,008	3,169	3,389	103,186

Average									
Ages	79.5	78.5	69.5	84.1	83.9	72.5	84.1	81.0	71.0

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-96, as originally adopted by the Board in connection with the 1994-1996 Experience Study, and continued following the 1997-1999 Experience Study. In addition, retired life liabilities in the valuations contain a small allowance for future mortality improvement that is gradually increased to 1% prior to the triennial experience study. The reserve level used in this valuation was 1%.

SINGLE LIFE RETIREMENT VALUES

Wisconsin Projected Experience Table - 96 with 5% Interest

Sample Attained Ages	Present Value of \$1 Monthly for Life		Future Life Expectancy (years)	
	Males	Females	Males	Females
40	\$203.49	\$213.51	39.7	45.1
45	193.18	205.50	34.9	40.3
50	180.98	195.63	30.2	35.4
55	166.76	183.57	25.7	30.7
60	150.13	168.96	21.4	26.1
65	131.03	151.77	17.3	21.6
70	110.56	131.92	13.5	17.3
75	90.31	110.50	10.3	13.4
80	70.75	89.29	7.6	10.1
85	54.29	69.03	5.5	7.3

The values shown above are for non-disabled participants. For disabled participants, twelve years is added to the age before computing the value.

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 2% 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."