



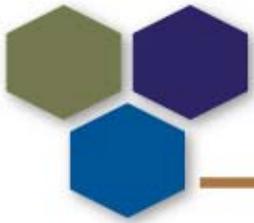
Wisconsin Retirement System

24th Annual Actuarial
Valuation of Retired Lives
December 31, 2006

GRS

Gabriel Roeder Smith & Company
Consultants & Actuaries
www.gabrielroeder.com

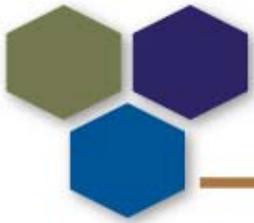
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Operation of the System

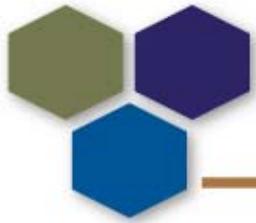
Separate reserves are maintained for core and variable annuities. Each year, the actuary compares reserve balances with the present value of annuities being paid within each fund.

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



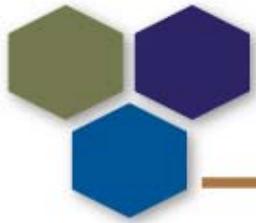
Operation of the System

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



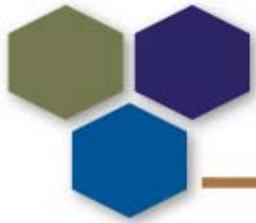
Smoothing Mechanisms

It is undesirable for a retiree to experience wide swings in monthly benefits from year to year, particularly if the swings are downward. This possibility is mitigated in the Core division by the asset smoothing process, as well as by the portfolio mix.



Smoothing Mechanisms

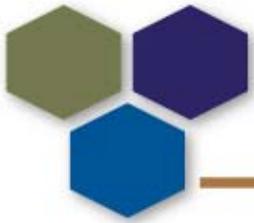
The variable fund is marked to market each year and subject to wide swings. The “dropping fractions of a percent” in terms of the gain that is distributed is a form of smoothing. However, the magnitude of the gains and losses is such that this has very little practical effect as a smoothing mechanism.



Summary of Results – December 31, 2006

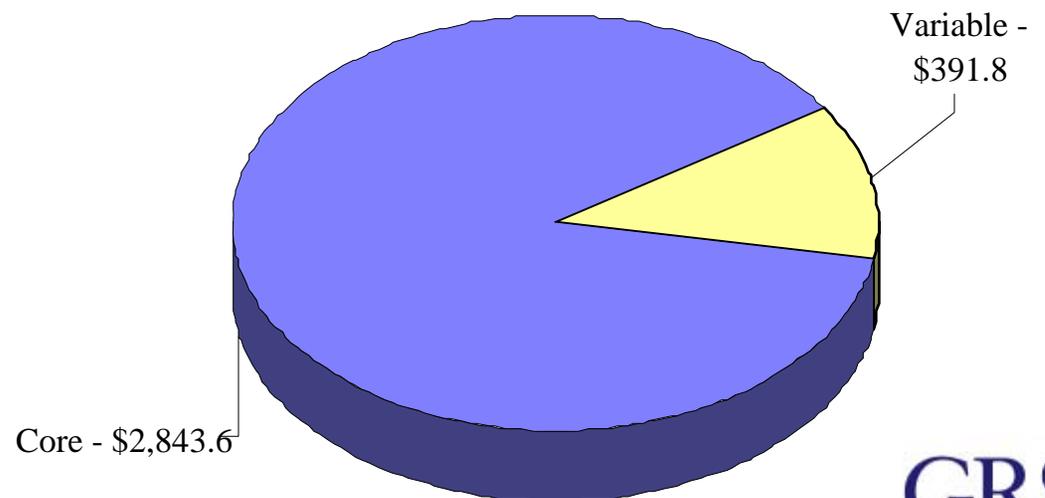
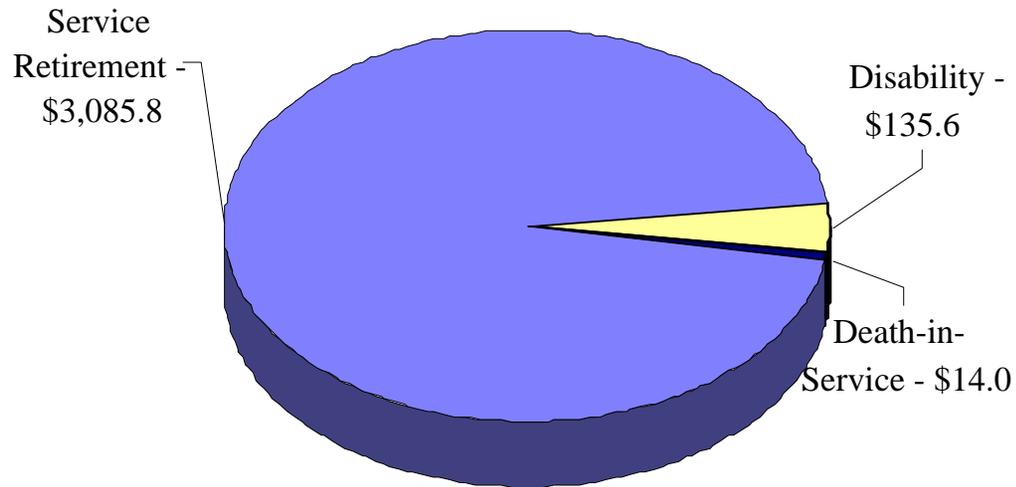
\$ Millions

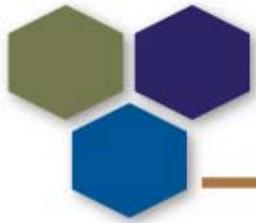
	Core	Variable
Number of Annuitants	137,117	32,683
Annual Amount	\$ 2,843.6	\$ 391.8
Fund Balance	31,180.5	4,594.2
Actuarial Reserve	30,273.9	4,145.2
Ratio	1.03	1.108



Annuities Being Paid by Type

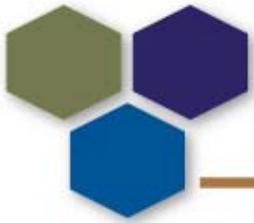
\$ Millions



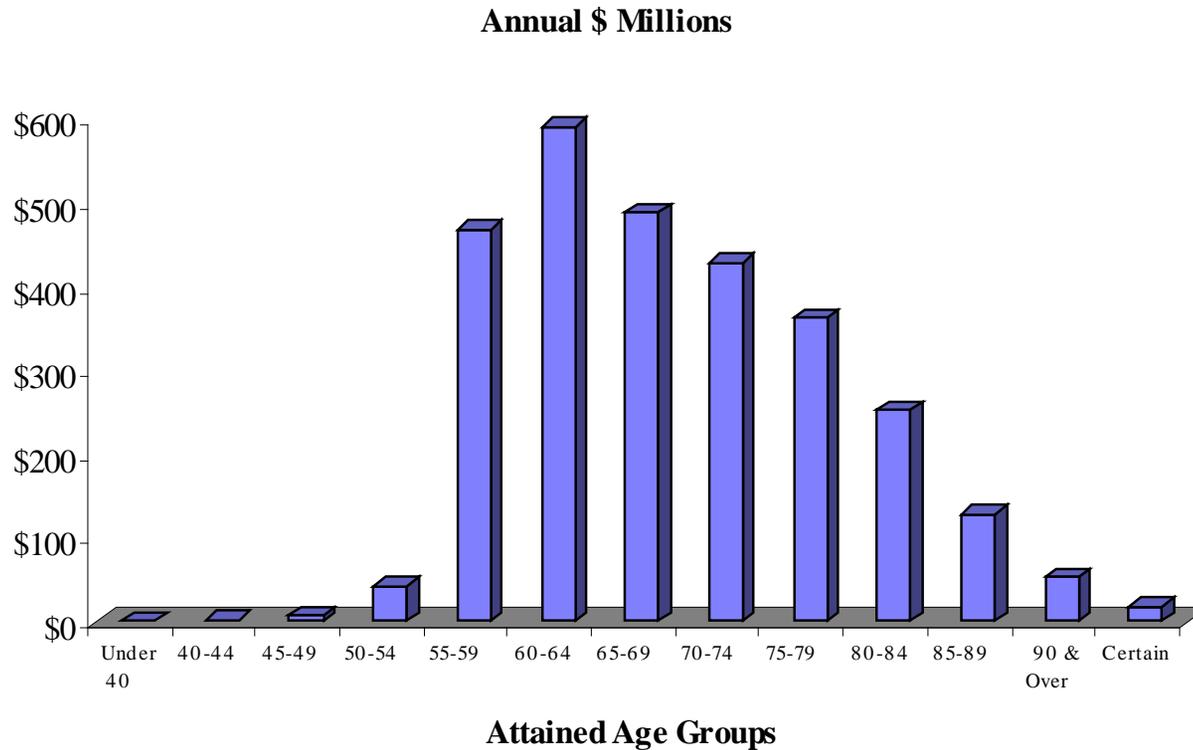


Primary Sources of Dividend

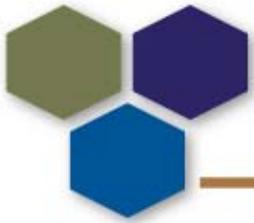
	<u>% of APV</u>
1. Published earnings rate	9.80%
2. Adjustment to relate earnings to average fixed annuity balance	<u>(0.46)%</u>
3. Earnings rate based on average balance	9.34%
4. Expected dividend before adjustments: 1.0934/1.05-1	4.13%
5. Adjustment to relate average asset to ending liability	(0.03)%
6. Carryover from last year due to timing of dividend accounting adjustments and rounding	0.00%
7. Adjustments to contingency reserve and data reserve	(0.52)%
8. Experience Study	(0.53)%
9. Experience and other effects	(0.06)%
10. Statutory adjustment to round to nearest one-tenth percent	<u>0.01%</u>
11. Computed dividend rate: (4) + (5) + (6) + (7) + (8) + (9) + (10)	3.0%



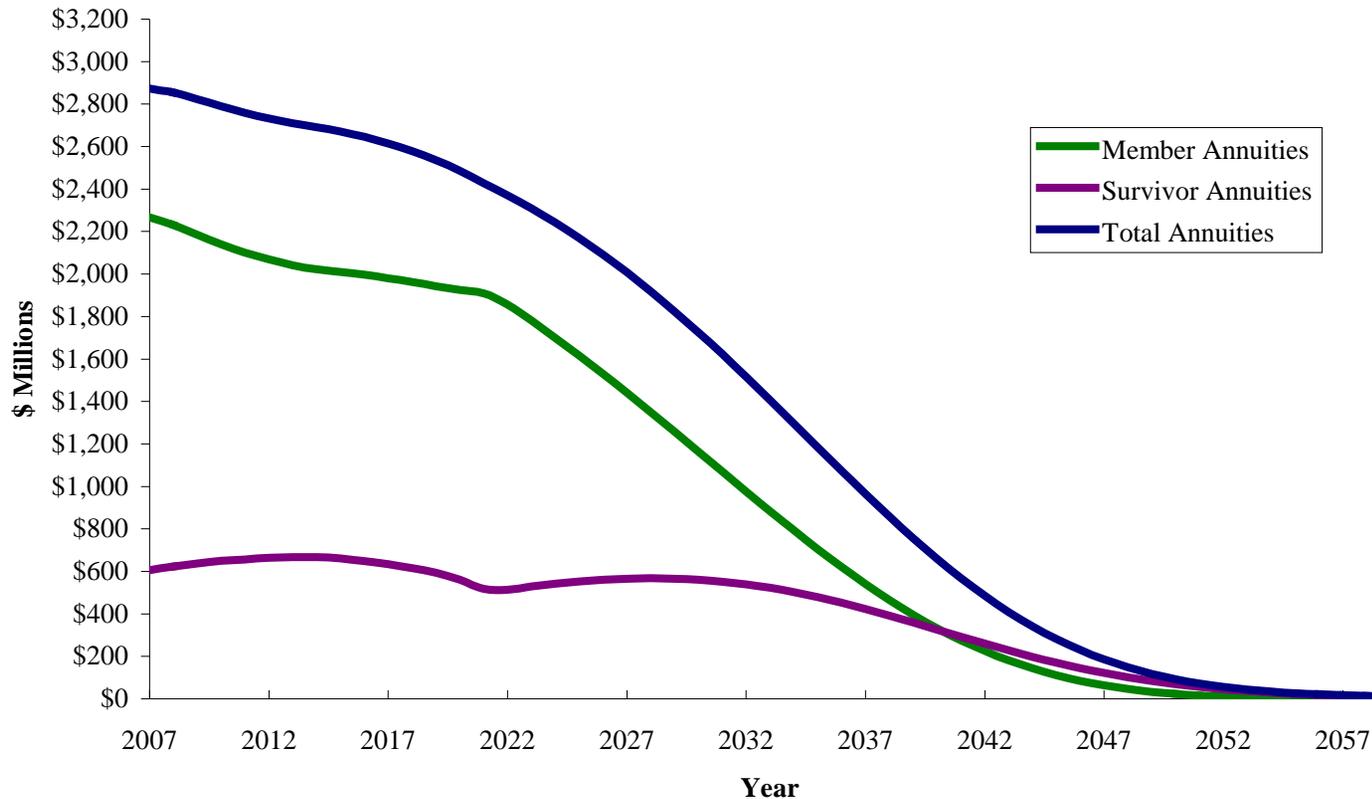
Core Annuities Being Paid



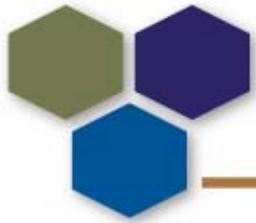
Average age	- at retirement	59.7 years
	- now (12/31/2006)	70.3 years
Average service at retirement		22.9 years



Projected Future Core Annuities

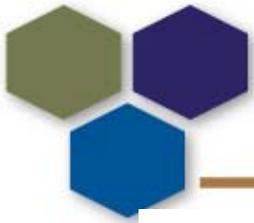


Total Future Payments	\$73.4 billion
From Present Assets	31.2
From Investment Return	42.2

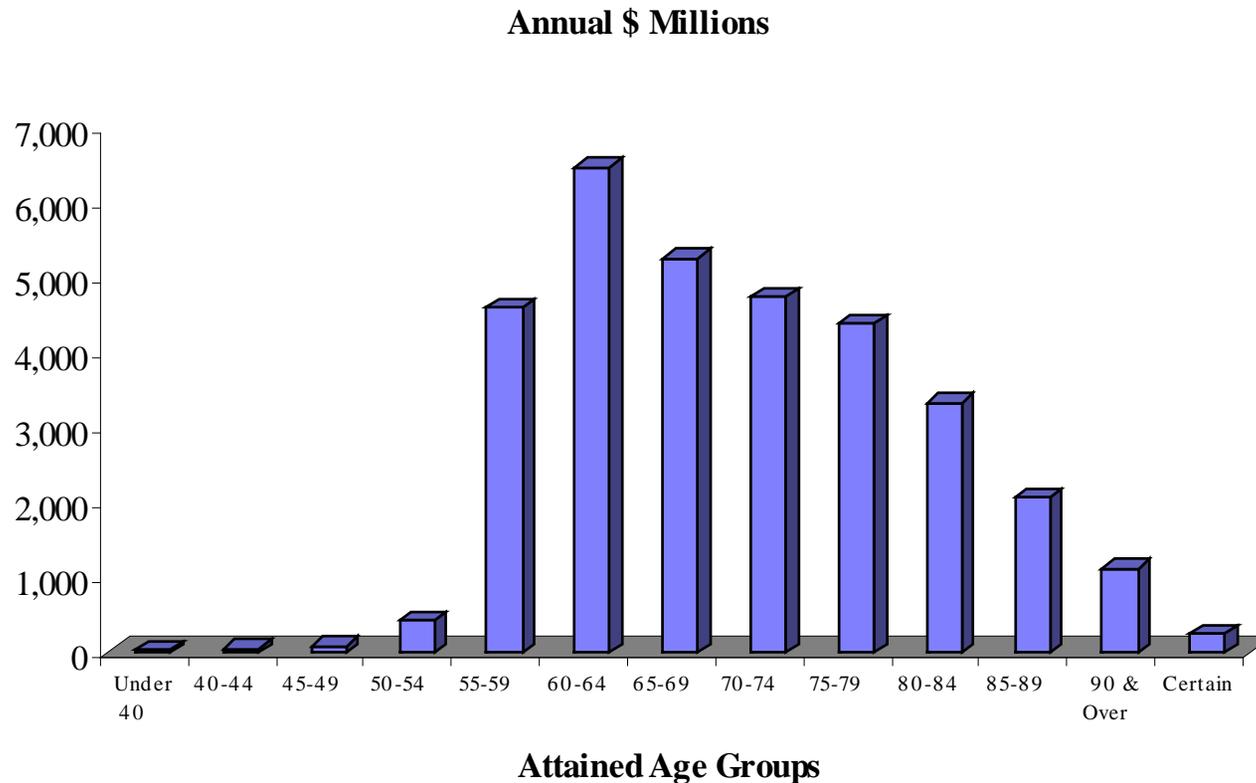


Primary Sources of 10.0% Variable Increase

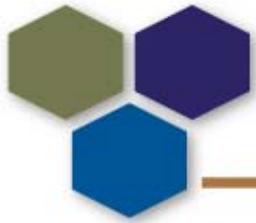
	<u>% of APV</u>
1. Published earnings rate based on beginning of year balances	18.0%
2. Adjustment to relate earnings to average variable annuity fund balance	<u>(0.3)%</u>
3. Earnings rate based on average balance	17.7%
4. Expected change before adjustments: 1.177/1.05-1	12.1%
5. Adjustment to relate 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	(0.5)%
8. Experience Study	(0.5)%
9. Experience and other effects	(0.3)%
10. Statutory adjustment to truncate to whole percent	<u>(0.8)%</u>
11. Variable annuity change: (4)+(5)+(6)+(7)+(8)+(9)+(10)	10.0%



Variable Annuities Being Paid

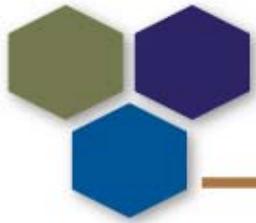


Average age	- at retirement	59.3 years
	- now (12/31/2006)	70.2 years
Average service at retirement		25.1 years



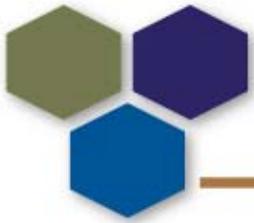
Comparative Statement - Core

Valuation Date	Number	\$ Millions				Change in	
		Annual Annuities	Fund Balance	Actuarial Reserve	Ratio	Annuities	CPI
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 %
2006	137,117	2,843.6	31,180.5	30,273.9	1.030	3.0 %	2.6 %
24-Year Average						5.4 %	3.1 %
10-Year Average						4.8 %	2.5 %



Comparative Statement - Variable

Valuation Date	Number	\$ Millions				Ratio	Change in	
		Annual Annuities	Fund Balance	Actuarial Reserve	Annuities		CPI	
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 %	
2006	32,683	391.8	4,594.2	4,145.2	1.108	10.0 %	2.6 %	
24-Year Average						6.1 %	3.1 %	
10-Year Average						3.1 %	2.5 %	



Additional Comments

- ◆ Average Life Expectancy has increased over the last 10 years

	Life Expectancy for 70 year old	
	Males	Females
1996	13.4	17.3
2006	14.5	17.8

- ◆ For each month of added longevity, the dividend is decreased by about 0.25%. This translates into approximately \$5 per month for the average annuitant.
- ◆ However, improved longevity means members are receiving benefits for a longer period of time.