



Wisconsin Retirement System

27th Annual Actuarial Valuations
December 31, 2007

June 2008

GRS

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Funding Objectives

- ◆ Intergenerational equity with respect to plan costs
- ◆ Stable or increasing ratio of Assets to Liabilities
- ◆ Stable pattern of contribution rates



What's Needed to Meet Objectives?

- ◆ Reasonable forecasts of resources and obligations (i.e., good assumptions)
- ◆ Level % of payroll funding method
- ◆ Funding discipline
- ◆ Sound investment program



Funding Method

- ◆ “Frozen Initial Liability Method” in which normal cost is pooled, but each employer is separately responsible for its own unfunded liability
- ◆ Actuarial Gains and Losses affect the pooled normal cost not the unfunded liability as in most plans
- ◆ Pooled Normal Cost contains a component related to accumulated unamortized past Gains and Losses
- ◆ That component is called the Experience Amortization Reserve or “EAR”

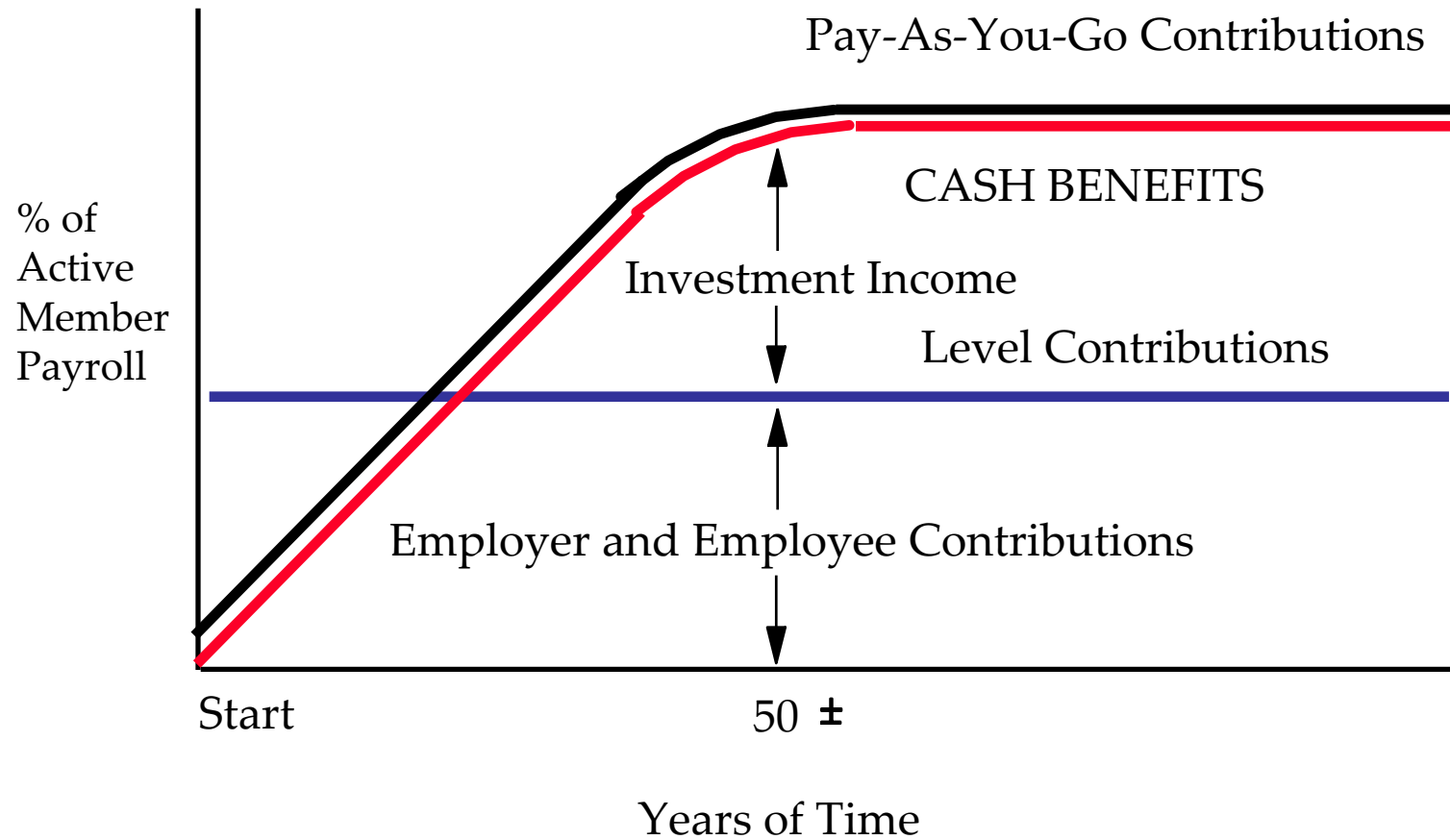


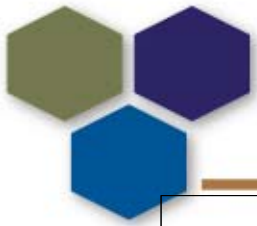
Funding Method

- ◆ Most of the Normal Cost is amortized over the future working lifetime of the active employees
- ◆ The EAR is amortized separately over a variable period and is used as a smoothing mechanism

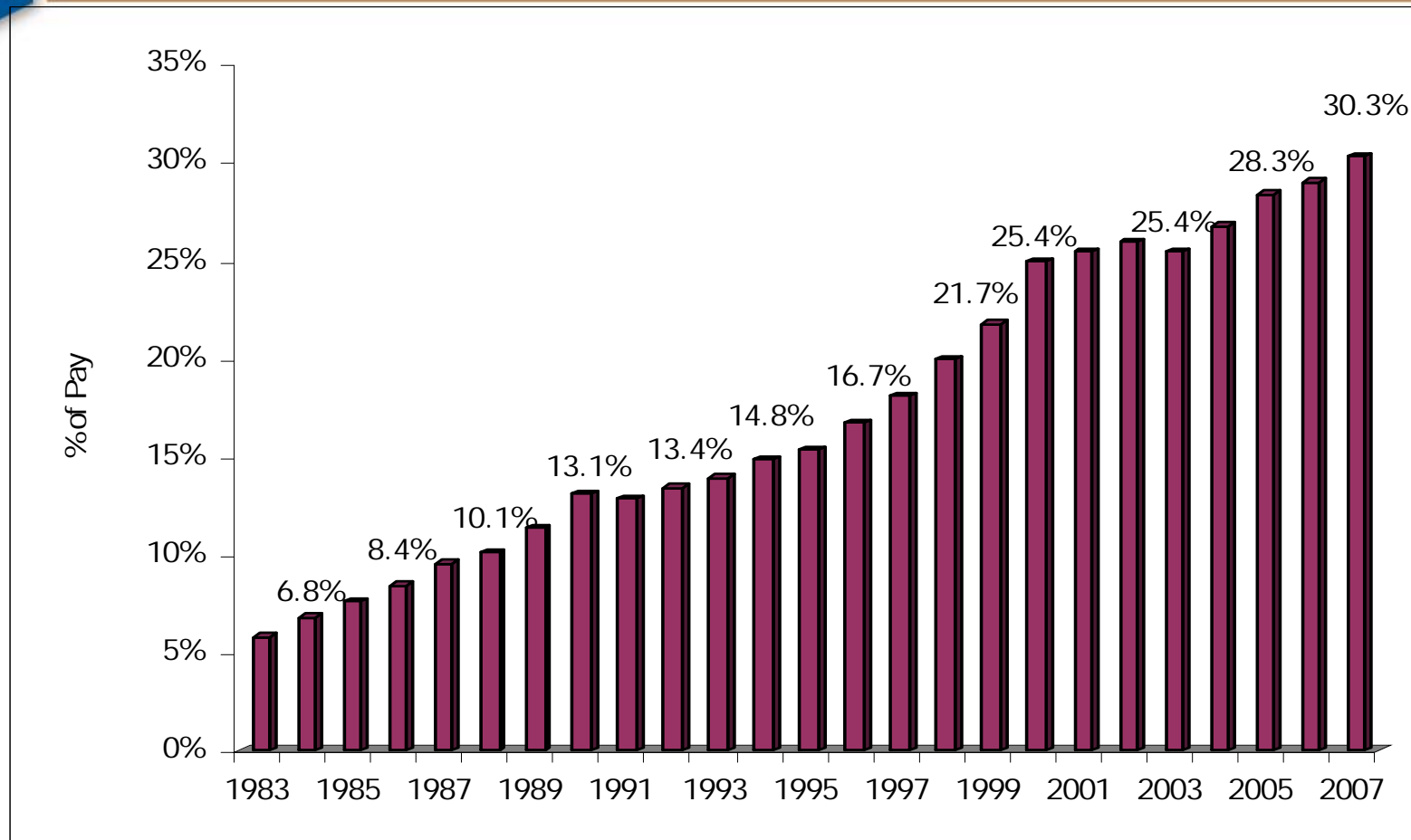


Financing Diagram





Annuities as a % of Payroll



Annuities are expected to continue to increase as a percent of payroll for several more decades. Increases will be paid from income from Retirement System assets.

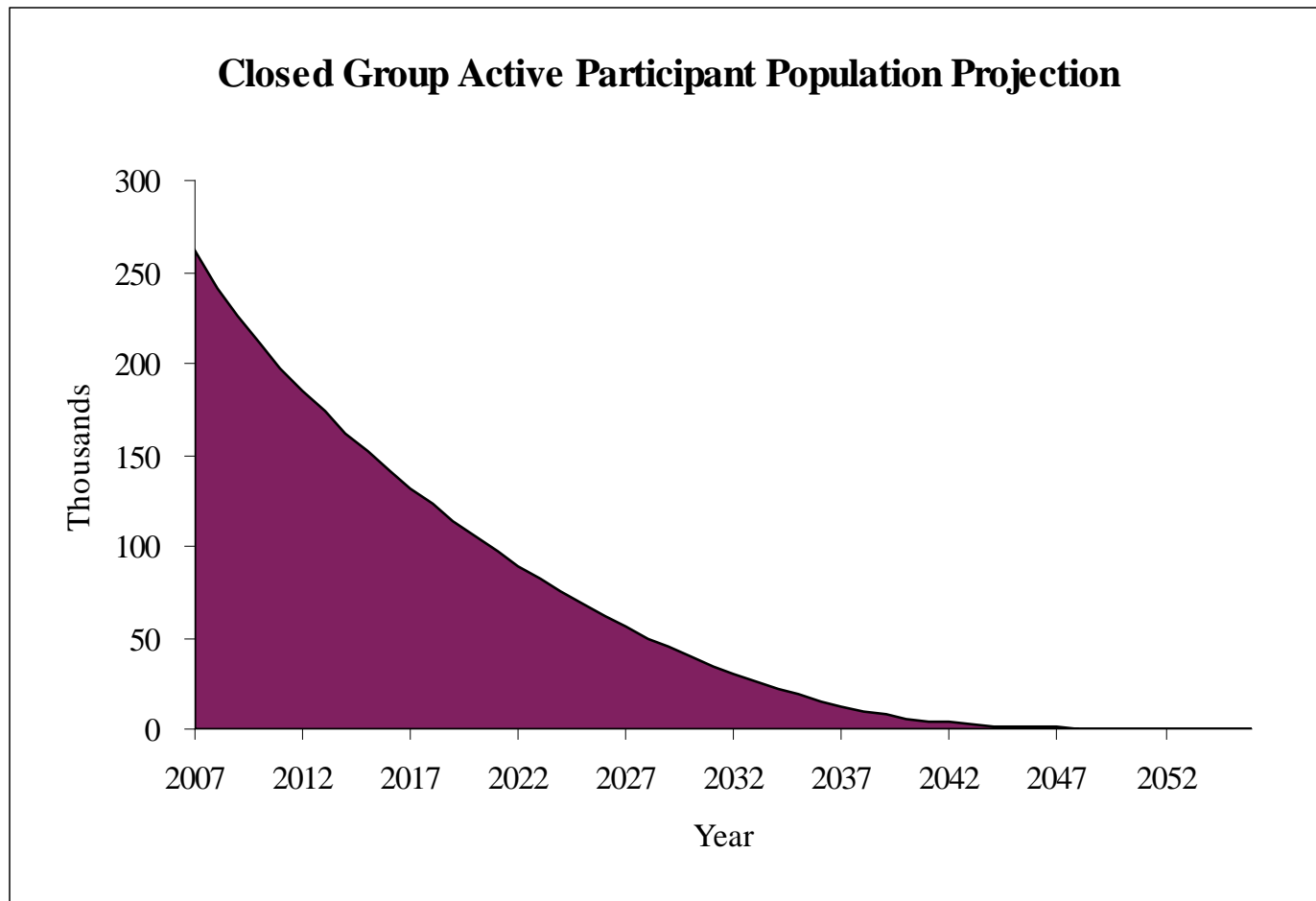


Active Participants

Valuation Group	Number	Annual Earnings (\$Millions)	Group Averages			
			Earnings	Age	Years of Service	Contribs.
General	237,124	\$10,277.9	\$43,344	45.9	11.8	\$54,865
Executive Group & Elected Officials	1,427	94.6	66,320	54.4	13.1	89,599
Protective Occupation with Social Security	19,757	1,035.6	52,419	39.8	11.8	55,686
Protective Occupation without Social Security	2,695	173.7	64,449	41.0	14.1	87,919
Total Active Participants	261,003	\$11,581.8	\$44,374	45.5	11.8	\$55,459
Prior Year	260,302	\$11,170.3	\$42,913	45.4	11.8	\$52,286



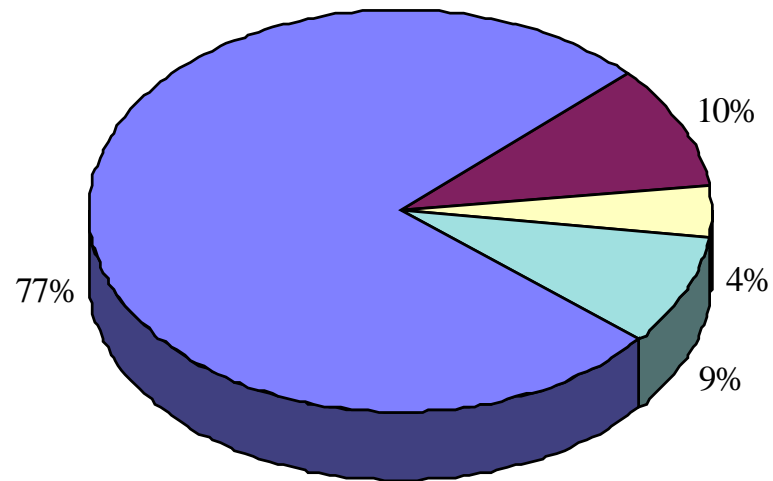
Closed Group Active Participant Population Projection





Expected Terminations from Active Employment for Current Active Participants

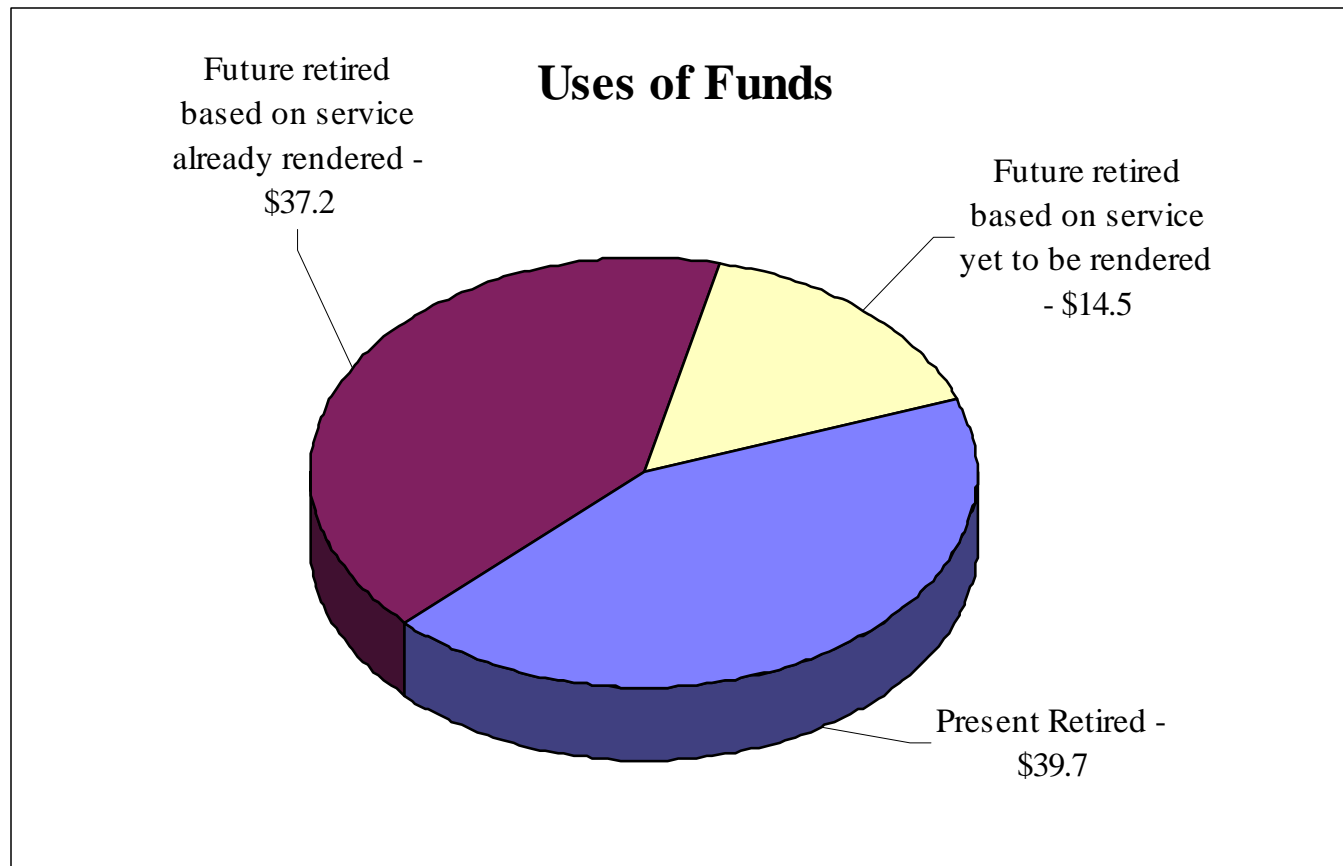
Closed Group Active Participant Population Projection



■ Retirements ■ Separations ■ Death and Disabilities ■ Deferred Retirements



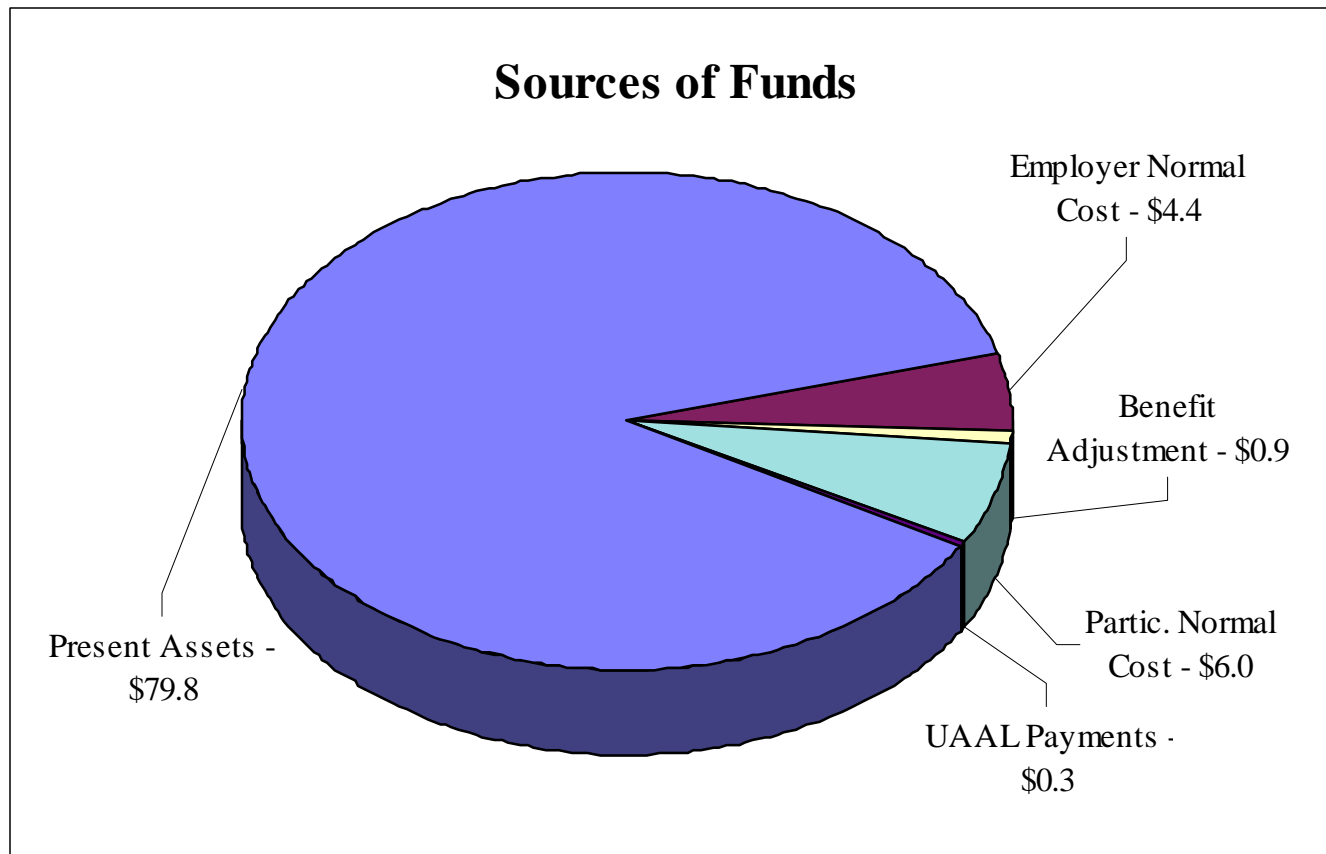
\$91.4 Billion* of Benefit Promises to Present Active and Retired Members



* Present value of future benefits; all divisions combined



Sources of Funds for Financing \$91.4 Billion* of Benefit Promises



* *Present value of future benefits; all divisions combined*



Summary of December 31, 2007 Valuation Results

	General Participants		Executives & Elected Officials	
	2009	2008	2009	2008
Employer Normal Cost	4.5%	4.6%	8.5%	8.5%
Benefit Adjustment Contribution	0.9%	1.0%	0.0%	0.0%
Participant Normal Cost	5.0%	5.0%	3.0%	3.0%
Total Normal Cost	10.4%	10.6%	11.5%	11.5%
Unfunded Actuarial Accrued Liability (UAAL)	0.2%	0.2%	0.0%	0.1%
WRS Average Total	10.6%	10.8%	11.5%	11.6%



Summary of December 31, 2007 Valuation Results

	Protective Occupation			
	With Soc. Sec.		Without Soc. Sec.	
	2009	2008	2009	2008
Employer Normal Cost	8.1%	8.2%	10.6%	10.8%
Benefit Adjustment Contribution	0.0%	0.0%	0.0%	0.0%
Participant Normal Cost	5.0%	5.1%	3.2%	3.4%
Total Normal Cost	13.1%	13.3%	13.8%	14.2%
Unfunded Actuarial Accrued Liability (UAAL)	0.1%	0.1%	0.3%	0.4%
WRS Average Total	13.2%	13.4%	14.1%	14.6%

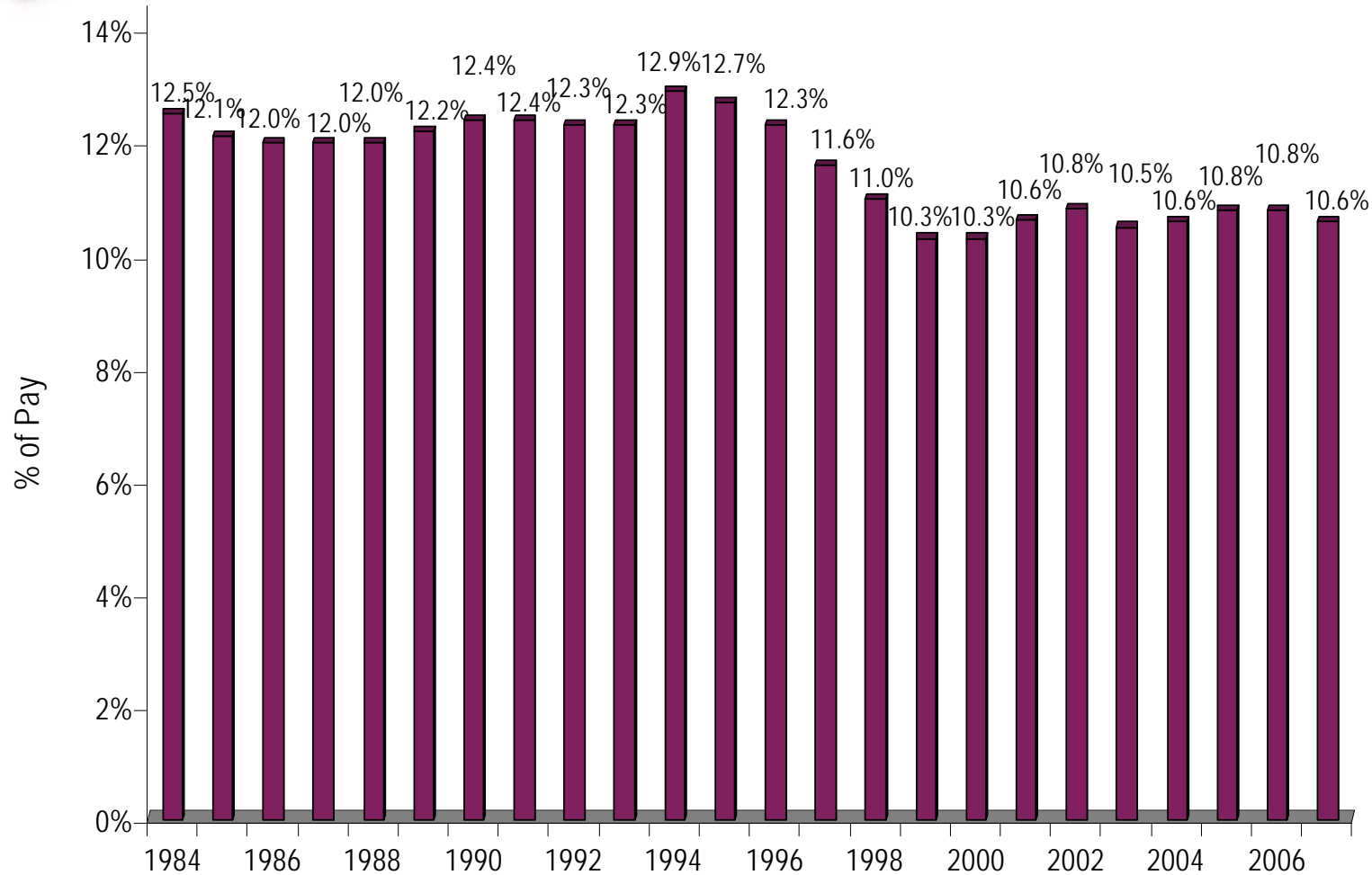


Comparative Statement of Contribution Rates

Valuation 12/31	General	Exec. & Elected	Protective with Soc. Sec.	Protective without Soc. Sec.
1983	11.5 %	17.4 %	18.1 %	27.8 %
1988	12.0 %	17.4 %	18.1 %	24.9 %
1993	12.3 %	17.6 %	17.1 %	23.2 %
1998	11.0 %	14.7 %	12.1 %	17.7 %
2003	10.5 %	11.2 %	13.0 %	14.6 %
2004	10.6 %	11.4 %	13.2 %	14.4 %
2005	10.8 %	11.6 %	13.4 %	14.6 %
2006	10.8 %	11.6 %	13.4 %	14.6 %
2007	10.6 %	11.5 %	13.2 %	14.1 %



Contribution Rate History (General)



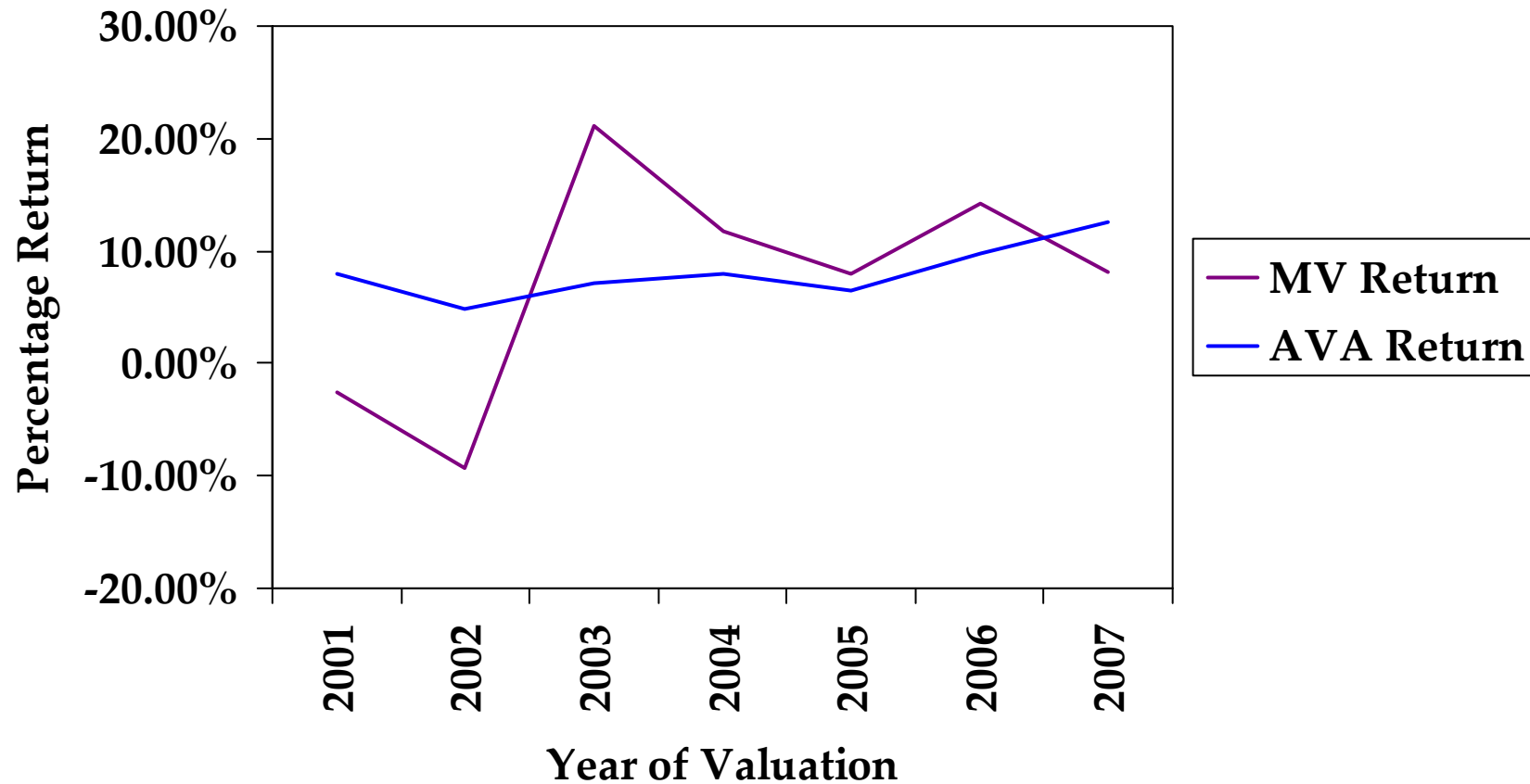


Core Investment Trust: Market Recognition Account (\$ Millions)

	<u>2007</u>	<u>2008</u>
Beginning Market Value	\$ 75,891	
Ending Market Value	80,352	
Total Investment Return	6,369	
Amount for immediate recog.	5,307	-
Amount for phase-in	1,061	-
MRA recognition	3,223	1,881
Total Recognized Return	\$ 8,530	\$ 1,881
Ending Funding Value	75,618	
Difference between MV and FV	4,734	2,852
Recognized Rate of Return	12.5%	
Market Rate of Return	8.1%	



Market Value Return vs. Actuarial Value Return





Concluding Comments

- ◆ Normal Cost contributions decreased for all valuation groups (except Executive & Elected) due to favorable investment performance
- ◆ Core investment return was above the assumed level of 7.8% and has exceeded the assumed rate for each of the last 5 years
- ◆ WRS continues to operate in accordance with principles of level percent of payroll financing