



Michigan Public School Employees Retirement System

Pension Actuarial Valuation Results
as of September 30, 2010

GRS

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Actuarial Valuation Process

Member Data

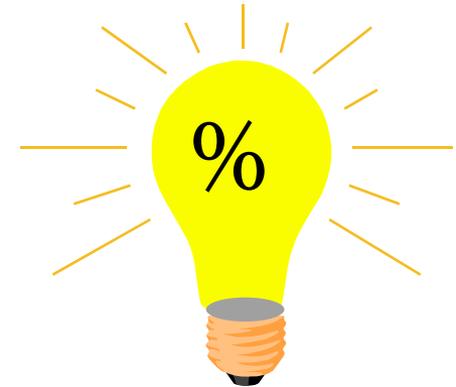
Financial Data



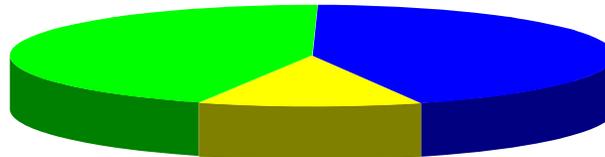
**Actuarial
Valuation**

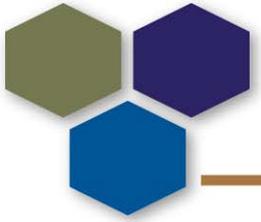
Actuarial Assumptions

Plan Provisions



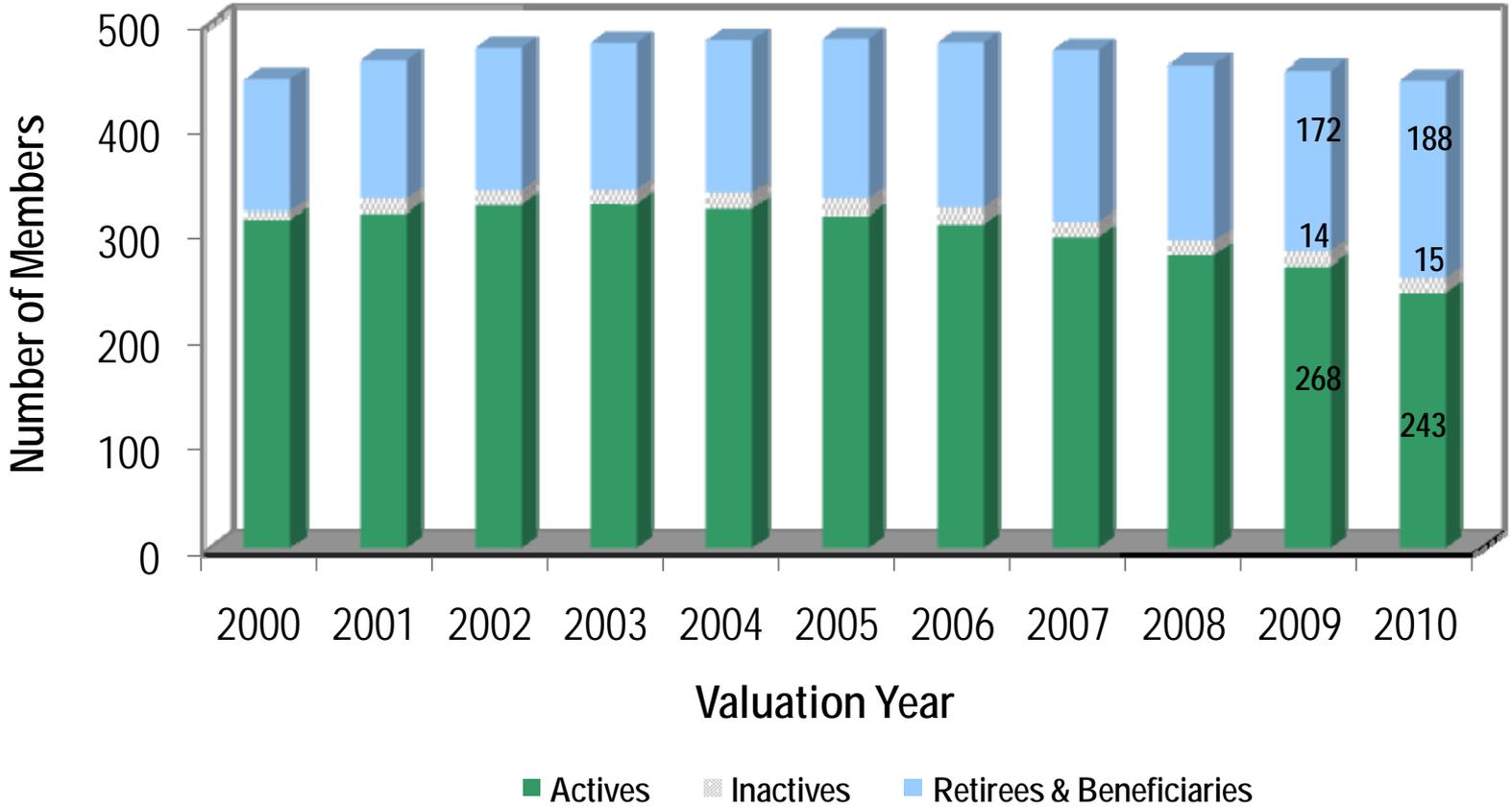
Actuarial Cost Method

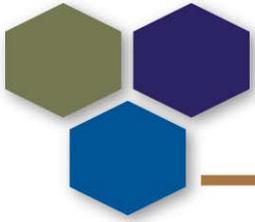




Membership Data

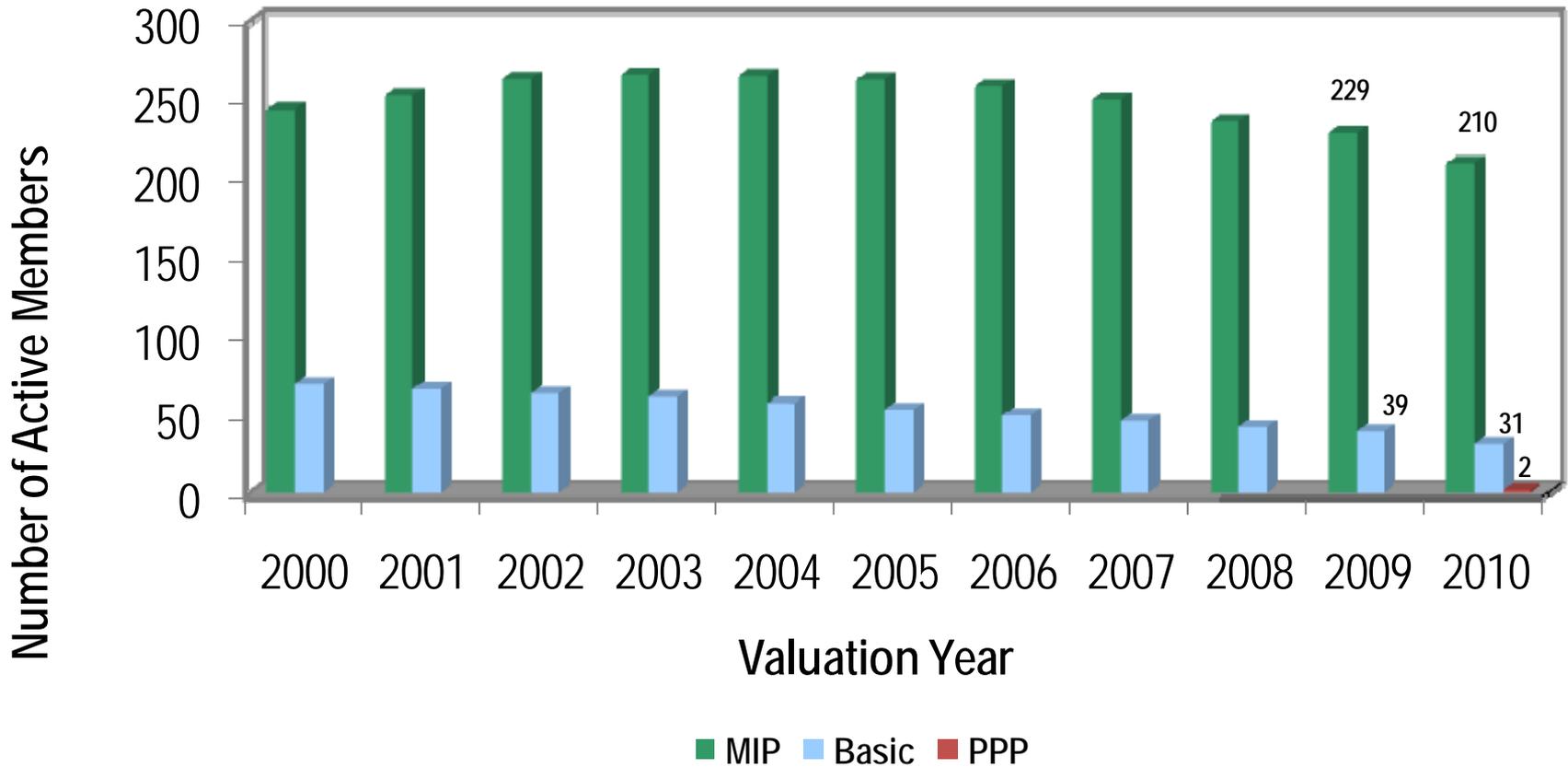
(Counts in Thousands)

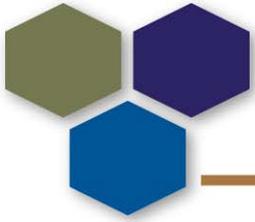




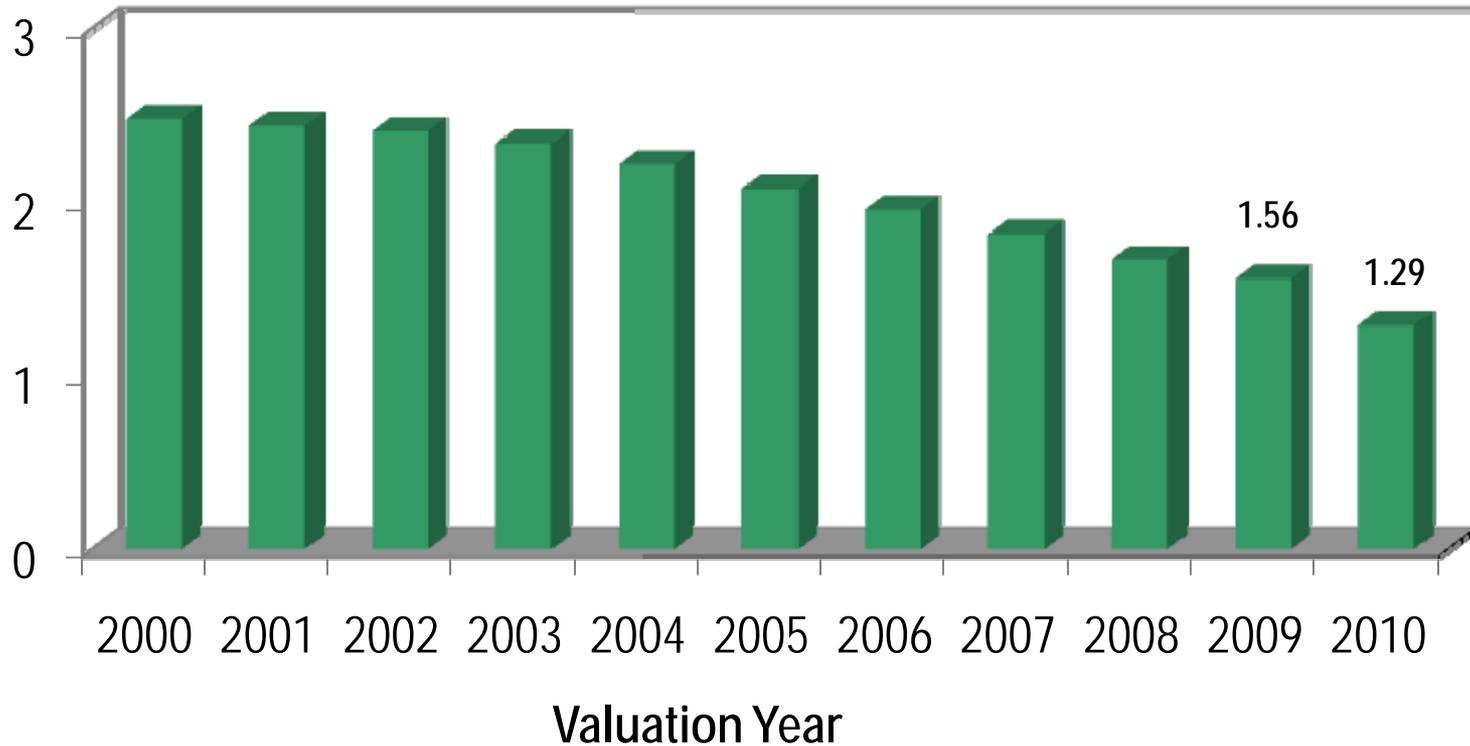
Active Members by Plan

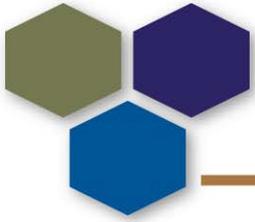
(Counts in Thousands)



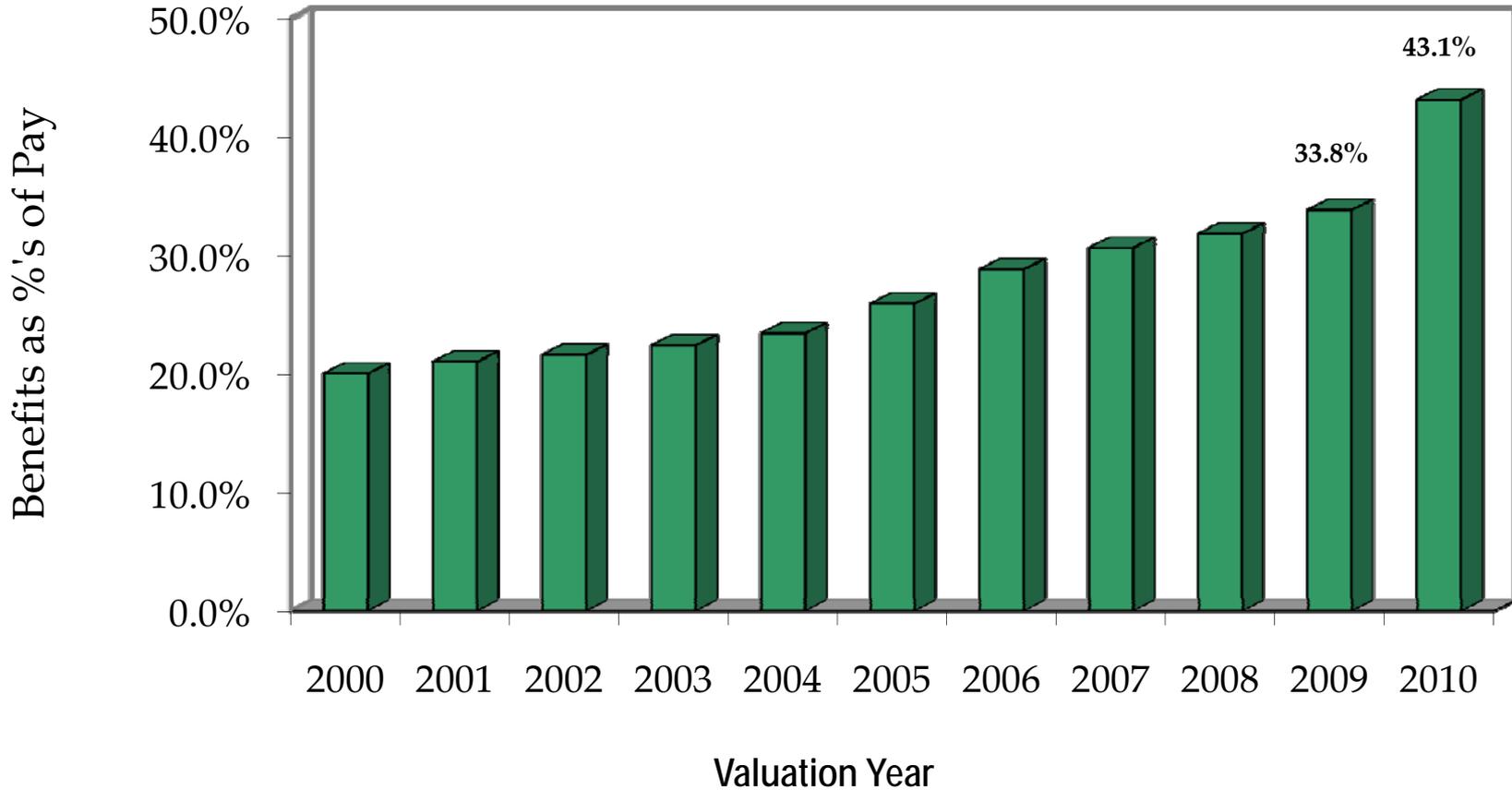


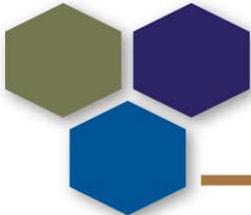
Ratio of Active Members to Pension Benefit Recipients



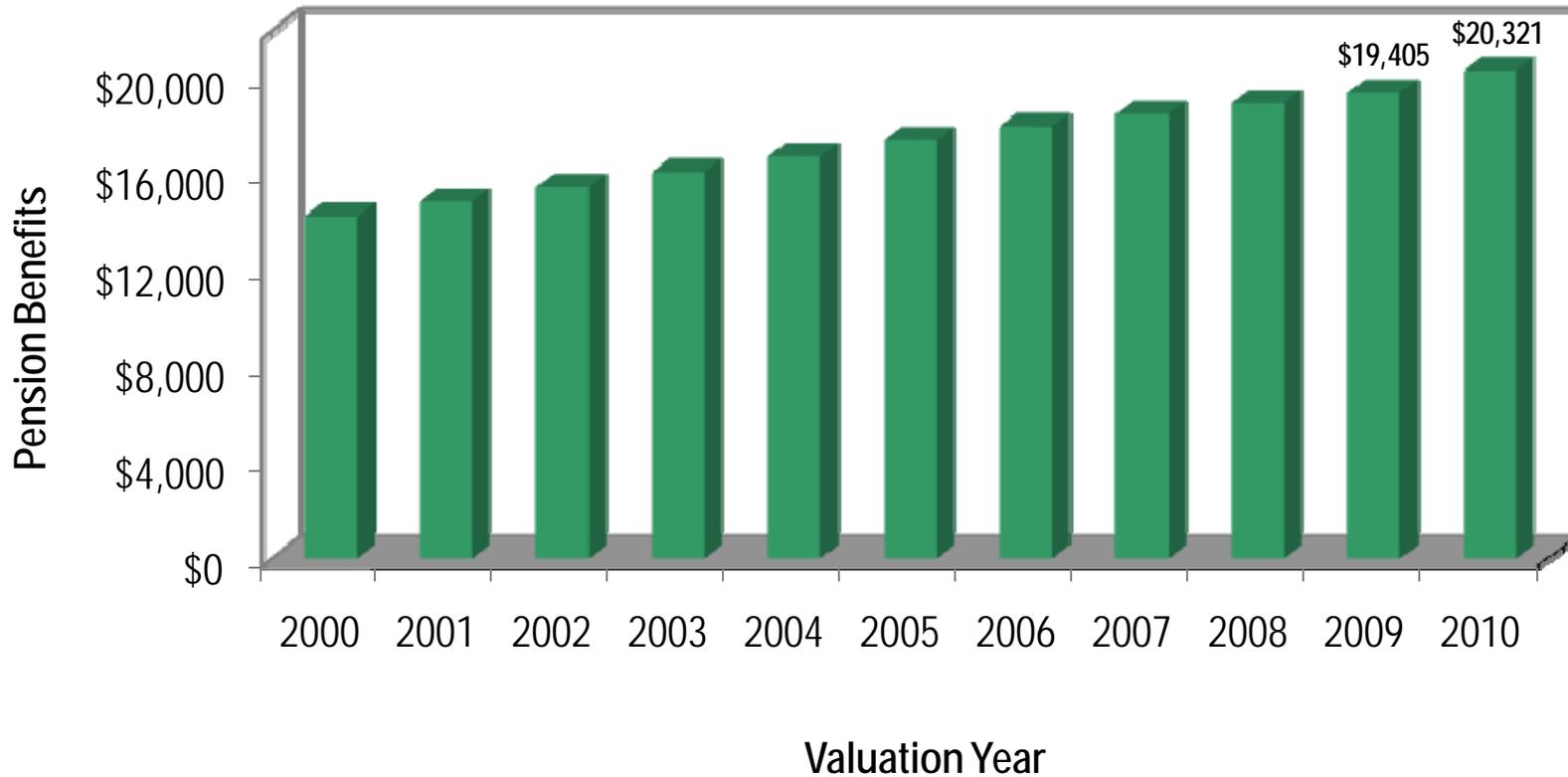


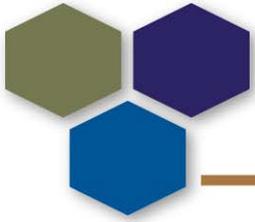
Pension Benefits Expressed as %'s of Active Member Pay





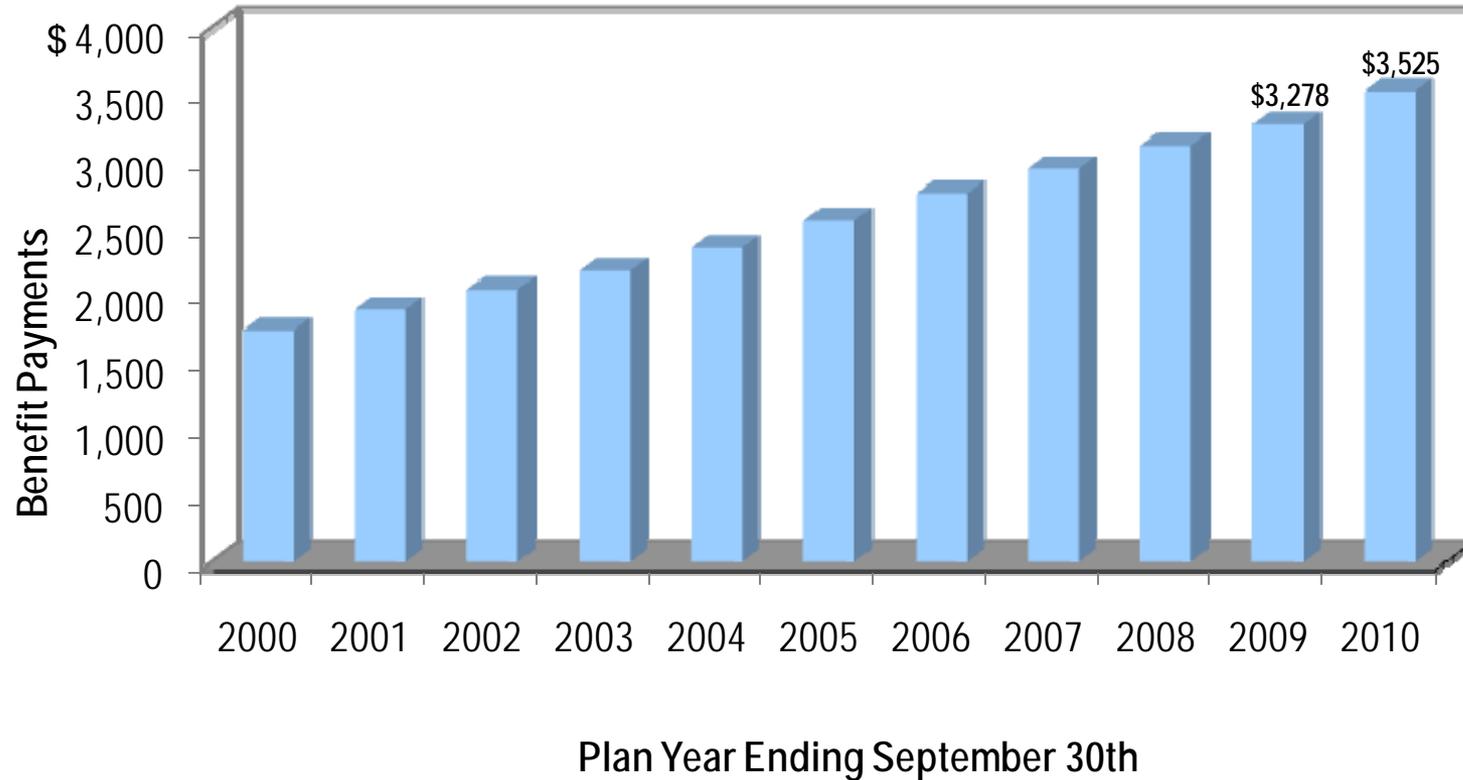
Average Annual Pensions

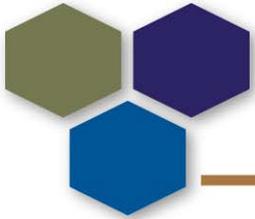




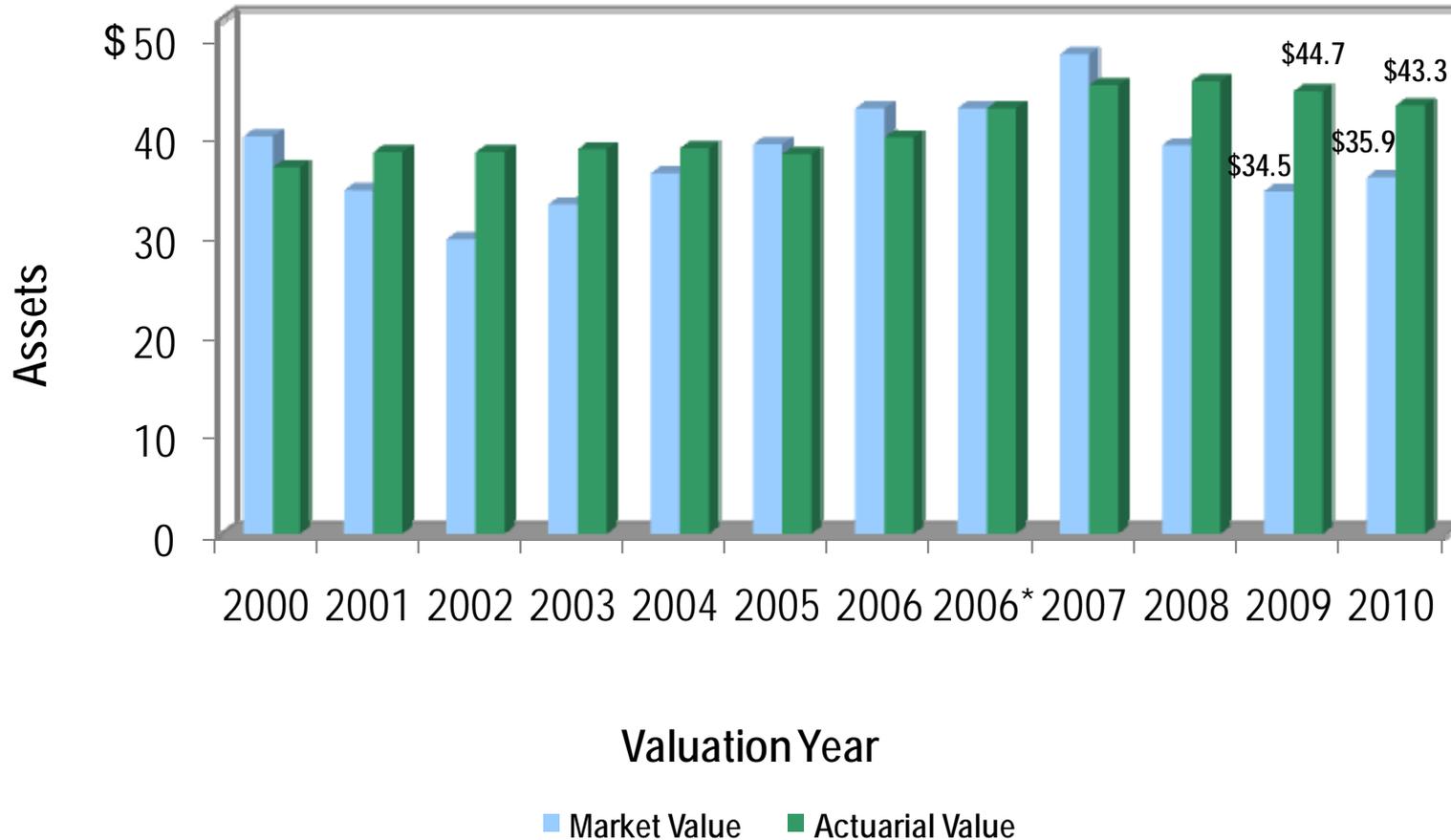
Benefit Payments by Fiscal Year

(Amounts in Millions)



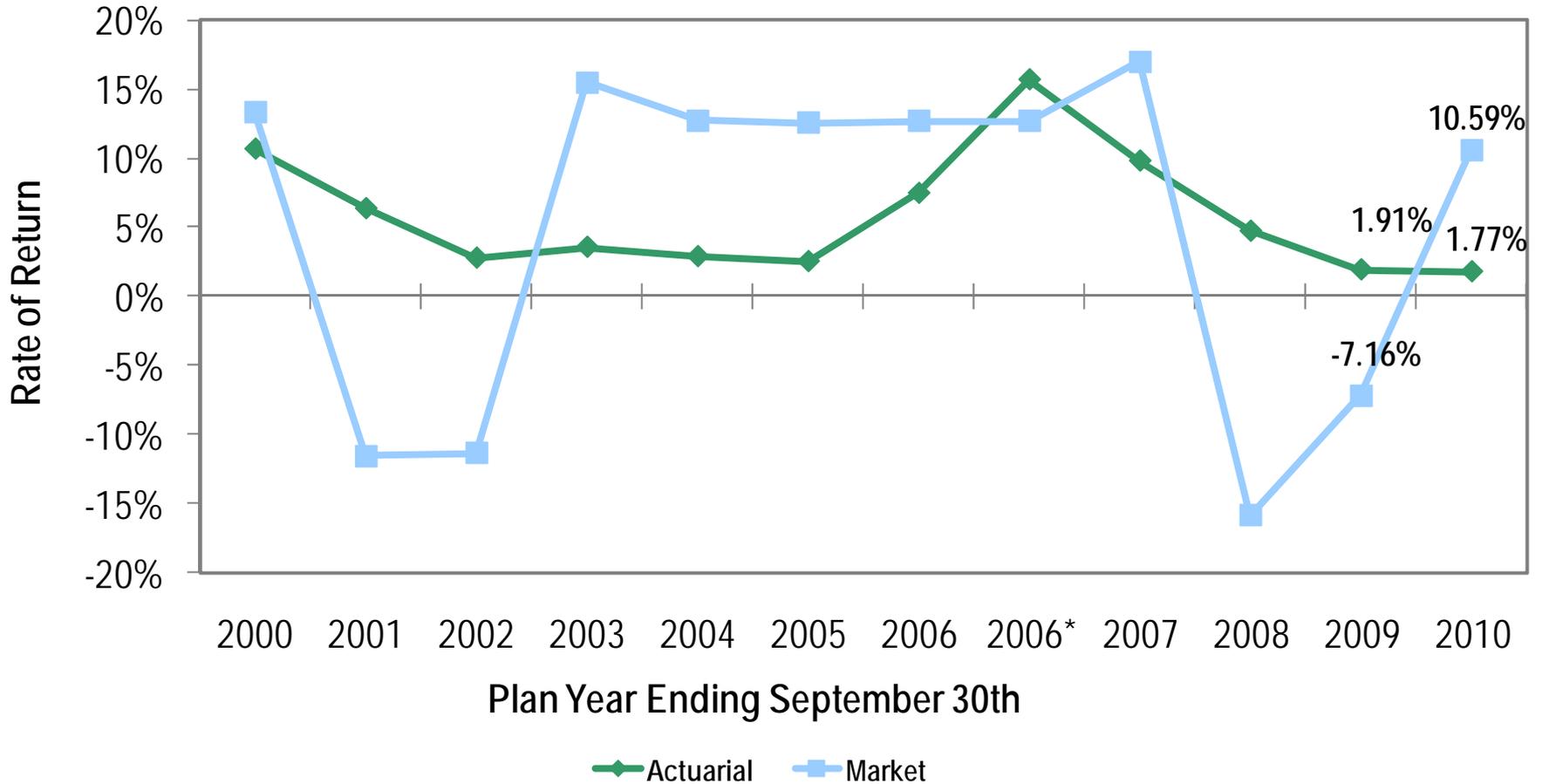


Growth of Pension Assets (Amounts in Billions)

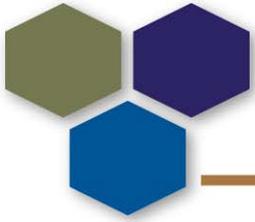


* After adjusting to market value.

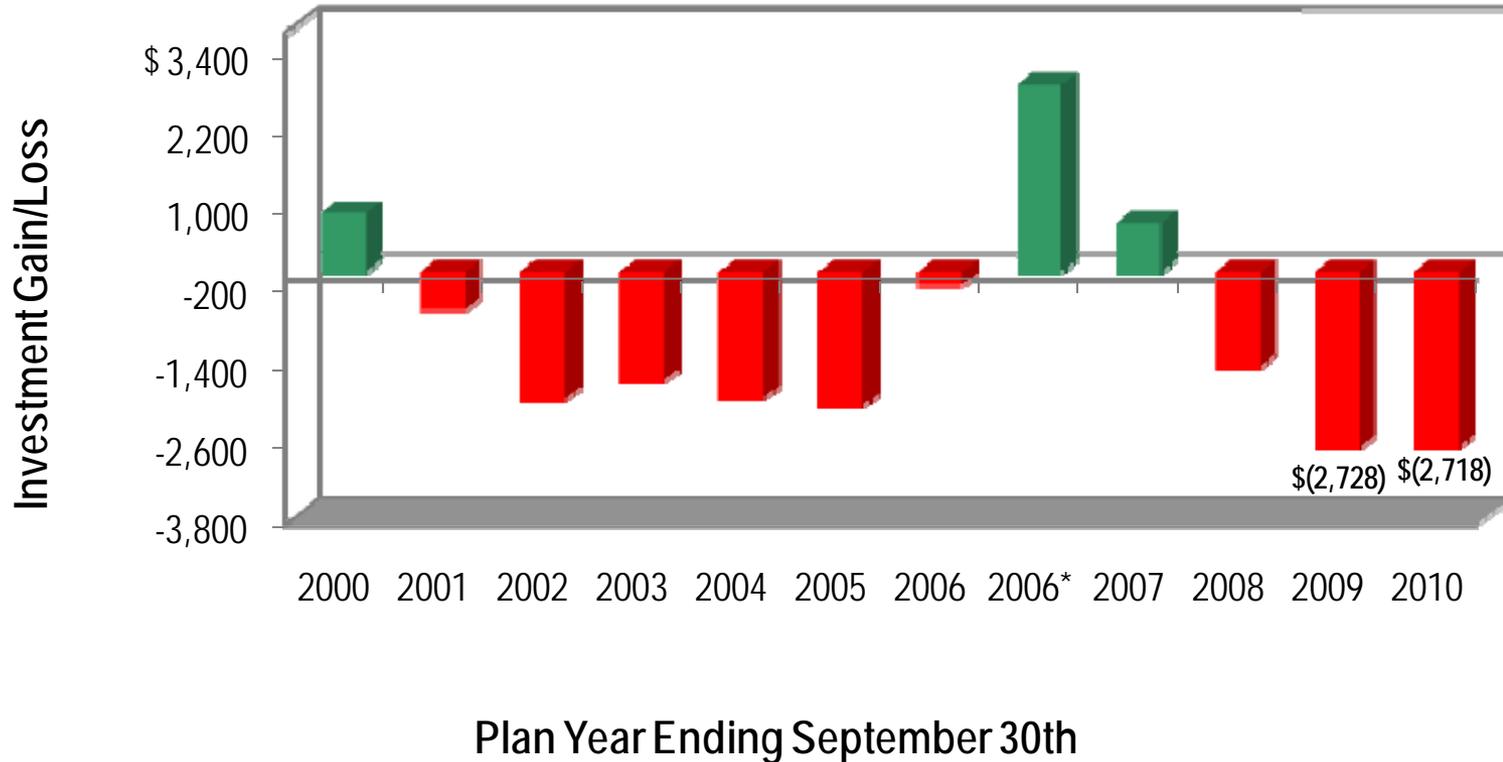
Actuarial & Market Net Rates of Return



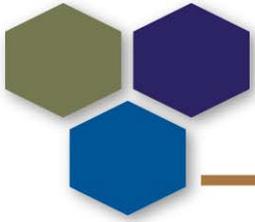
* After adjusting to market value.



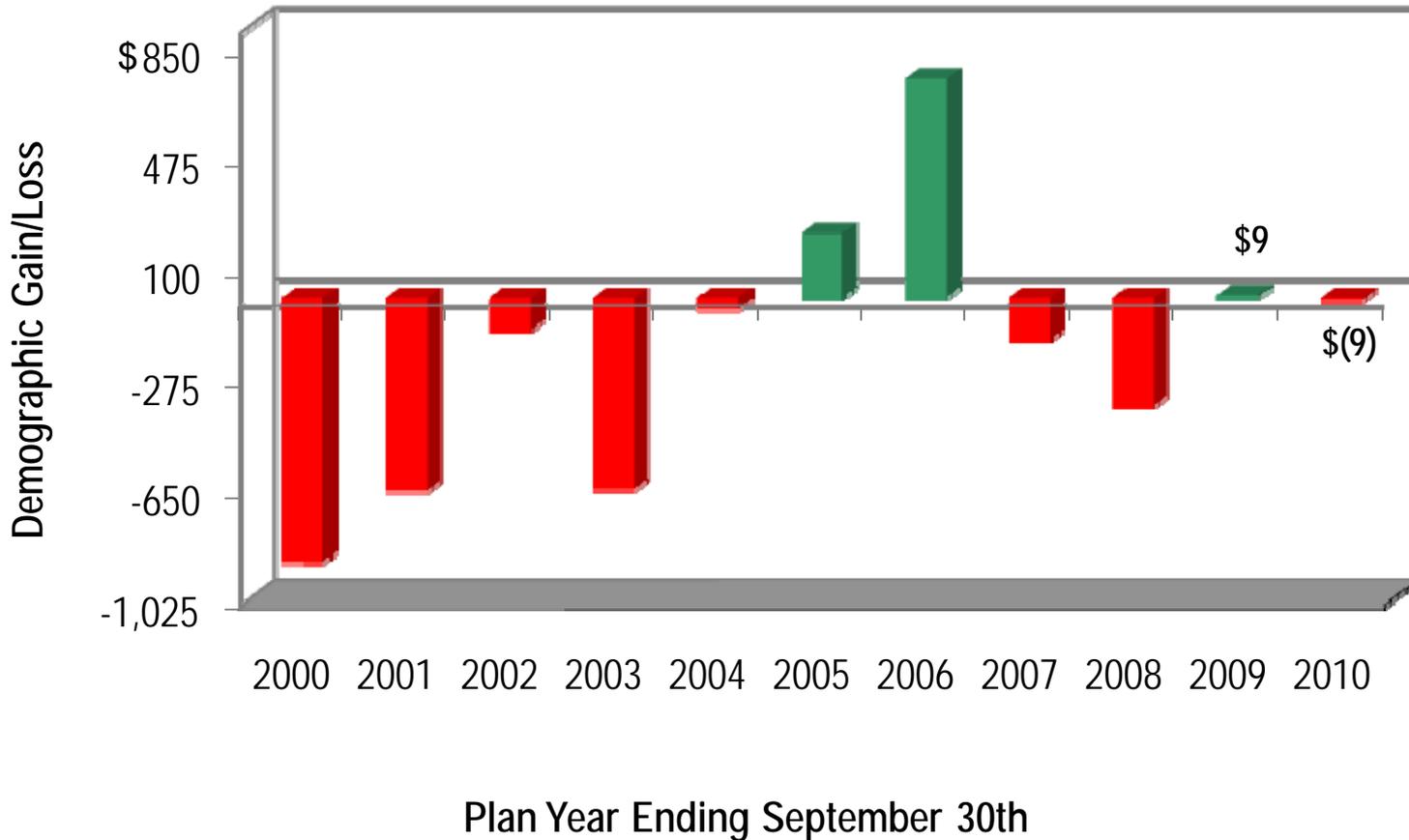
Investment Gain/Loss (Amounts in Millions)

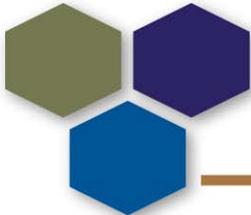


* After adjusting to market value.



Demographic Gain/Loss (Amounts in Millions)



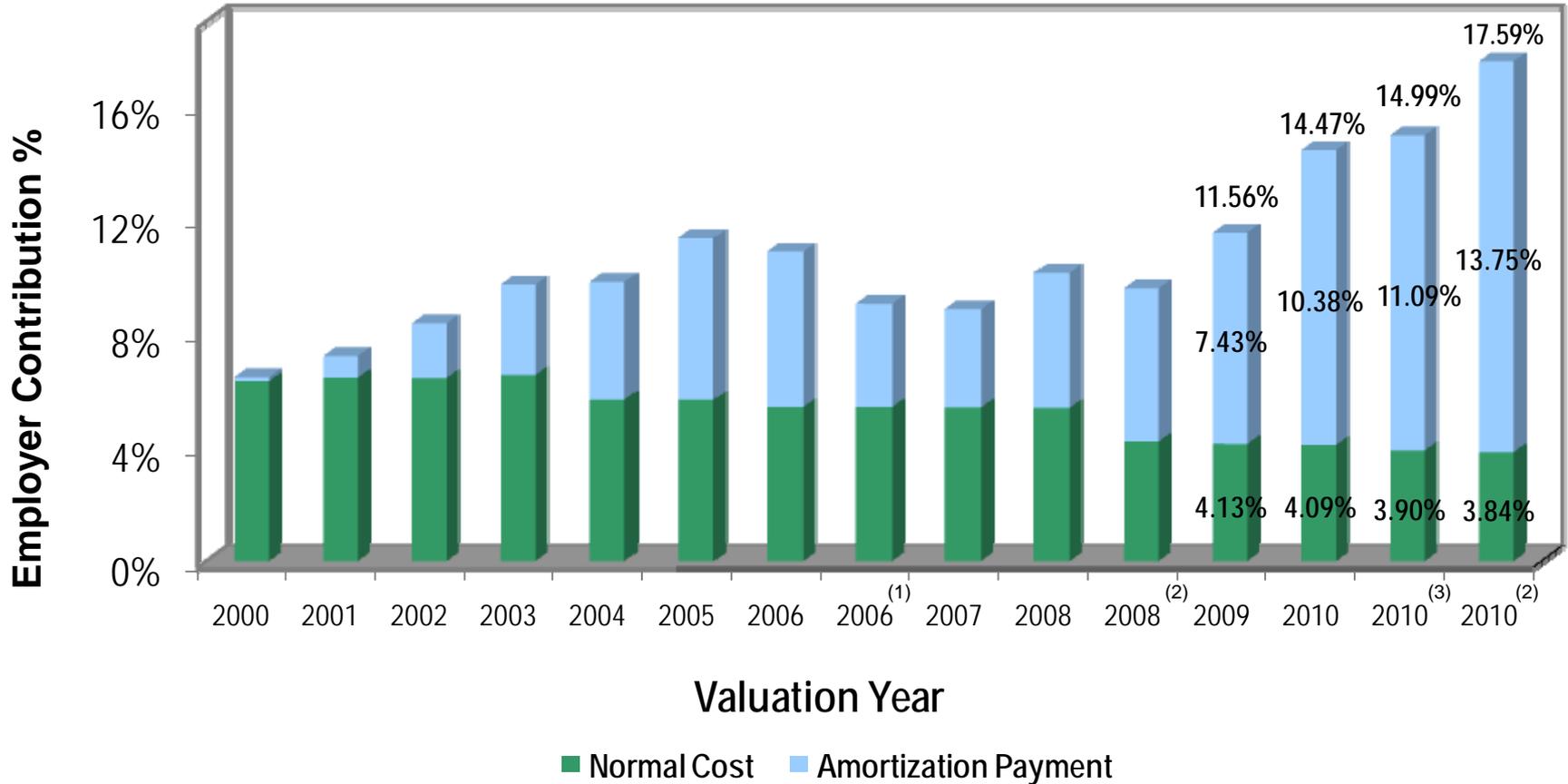


Gain/(Loss) by Type of Activity

(Amounts in Millions)

Plan Year					
Ending 9/30	2010	2009	2008	2007	2006
New Entrants	\$ (60.0)	\$ (91.1)	\$ (97.2)	\$ (90.0)	\$ (98.7)
Retiree Deaths	(259.6)	(259.4)	(158.0)	(231.4)	(49.2)
Investments	(2,718.2)	(2,727.8)	(1,463.6)	756.8	(204.6)
Pay Increases	114.1	487.8	(320.2)	17.1	691.6
Withdrawal	(0.5)	(21.4)	10.5	3.1	(5.9)
Retirements	(19.6)	150.7	80.5	35.4	46.2
Other	216.5	(258.0)	113.7	123.0	160.0
Total	(2,727.3)	(2,719.2)	(1,834.3)	614.0	539.4

Historical Employer Contribution %'s Valuation as of September 30

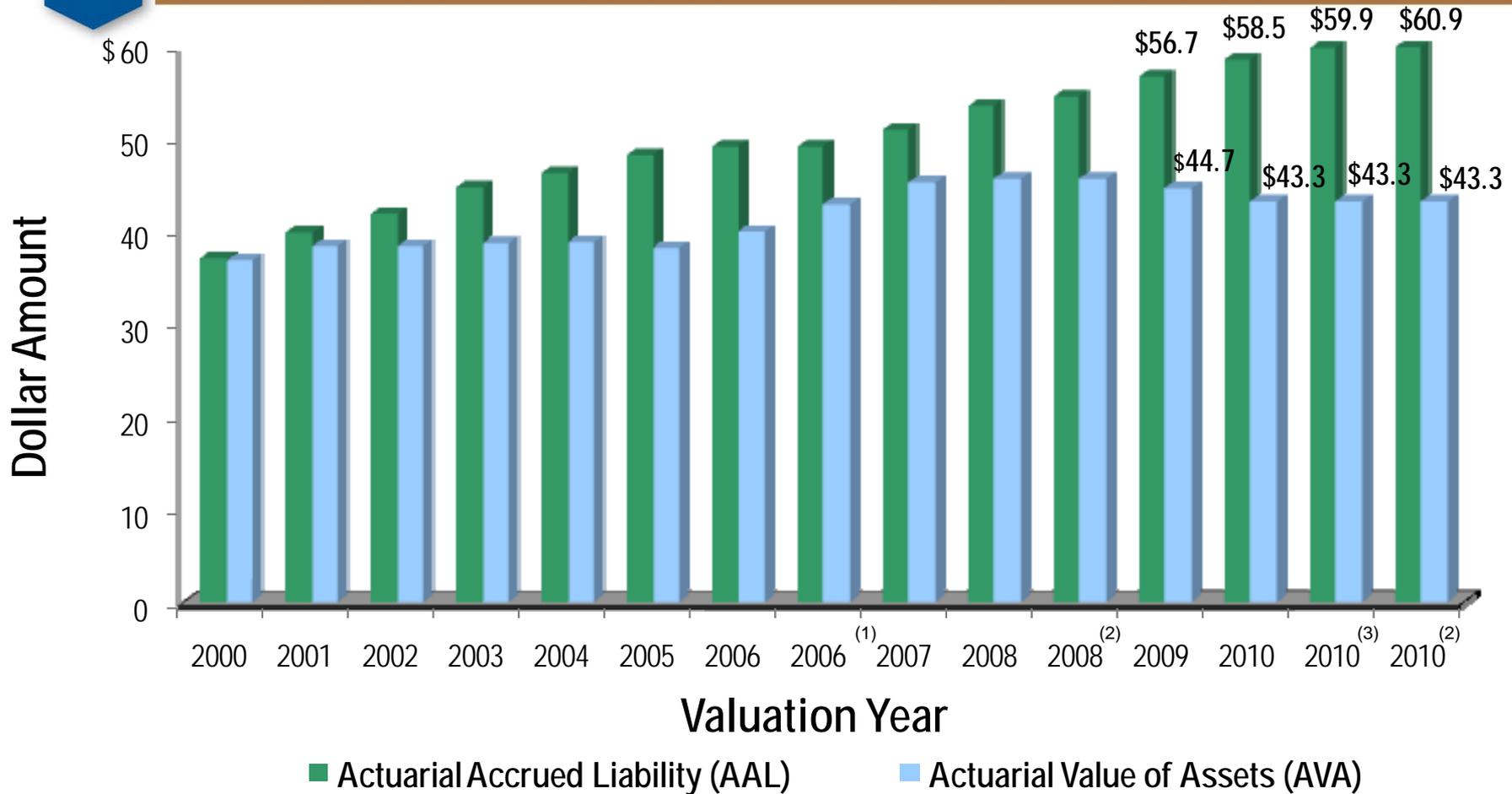


(1) After adjusting to market value.

(2) Revised benefit provisions.

(3) Reflects actuarial assumptions and methods change.

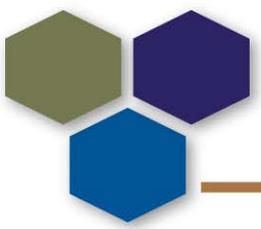
Actuarial Accrued Liability Compared to Actuarial Value of Assets (in Billions)



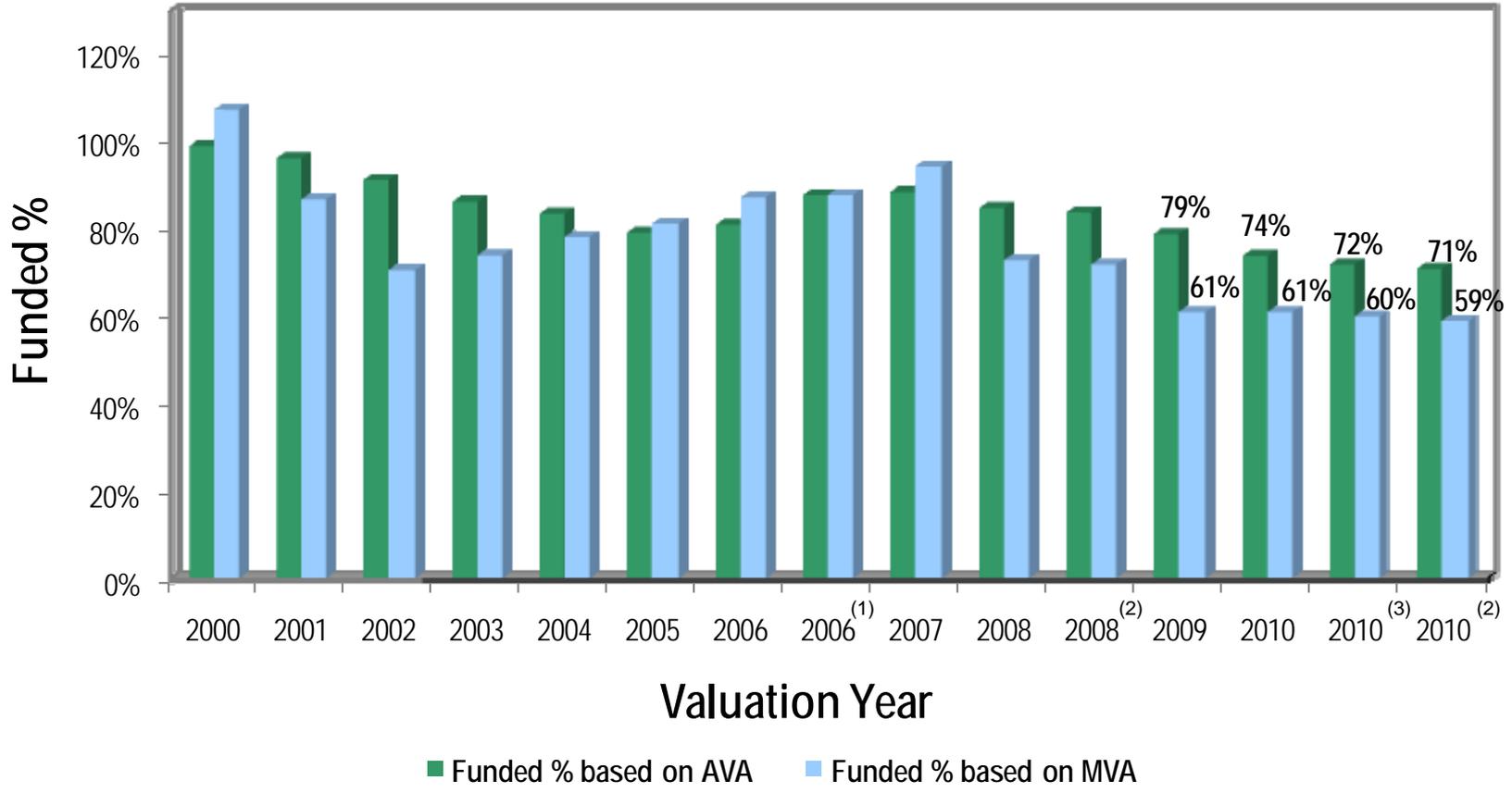
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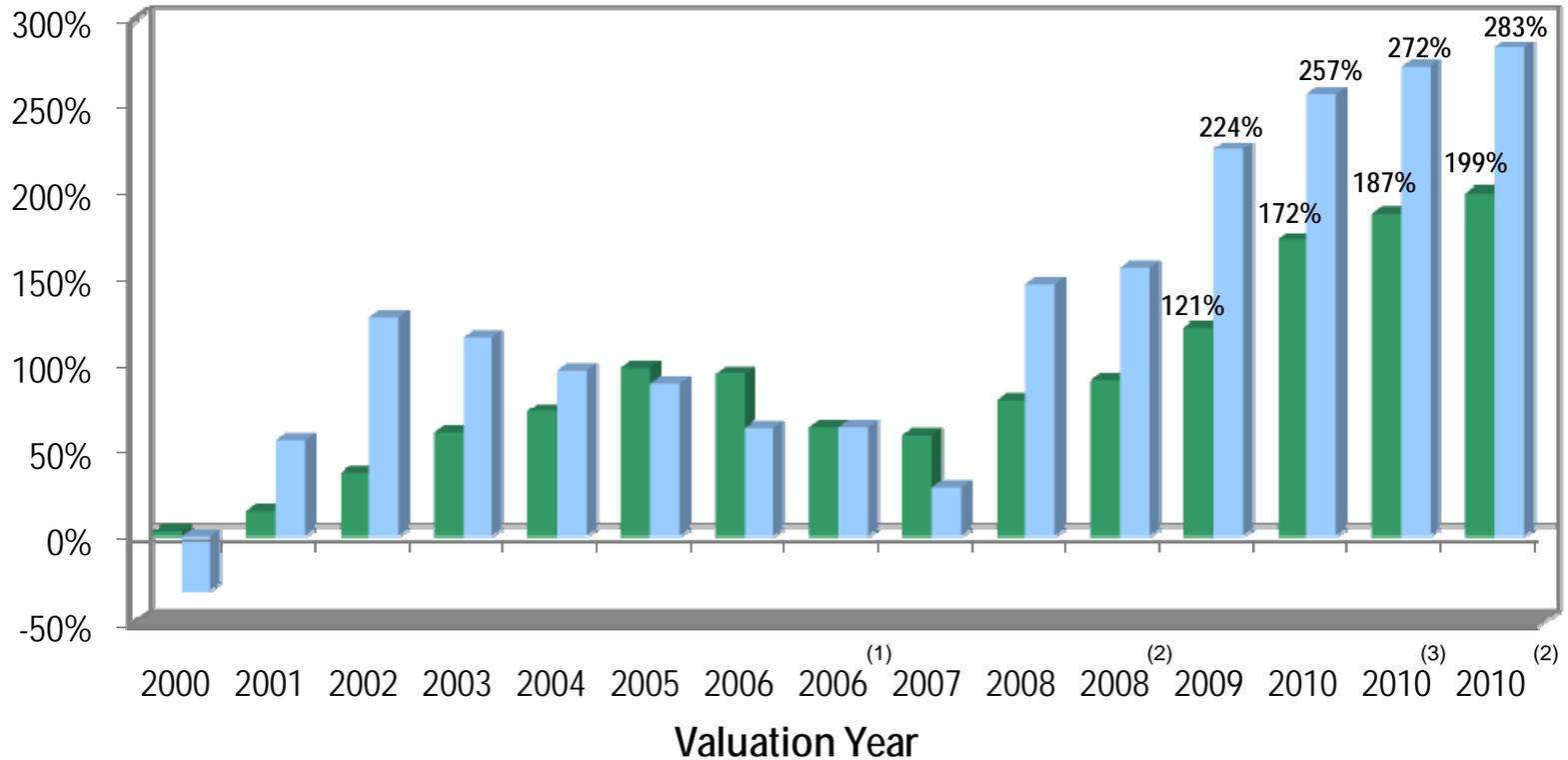


Retirement System Funded % Based on Actuarial Value and Market Value of Assets



(1) After adjusting to market value.
(2) Revised benefit provisions.
(3) Reflects actuarial assumptions and methods change.

Unfunded as Percentage of Payroll



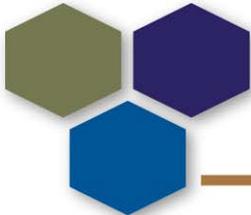
■ UAAL(AVA) as % of Payroll

■ UAAL(MVA) as % of Payroll

(1) After adjusting to market value.

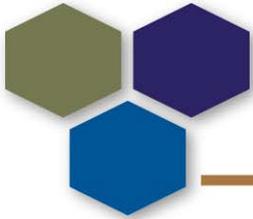
(2) Revised benefit provisions.

(3) Reflects actuarial assumptions and methods change.



Comments on the Investment Markets

- ◆ Investment markets have been very volatile.
- ◆ Valuation is based on a 5-year smoothed value of assets.
 - Reduces the volatility of the valuation results.
- ◆ 9/30/2010 smoothed value of assets was higher than market value.
 - Meeting the actuarial assumption will require average future market returns over 8%.
- ◆ 9/30/2010 valuation results based on market value:
 - Funded percent would be 58.8% (instead of 71.1%).
 - Employer contribution would be 22.65% of payroll (instead of 17.59%).



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