

*Burlington Employees' Retirement System  
Funding and Contribution Review  
September 19, 2002*

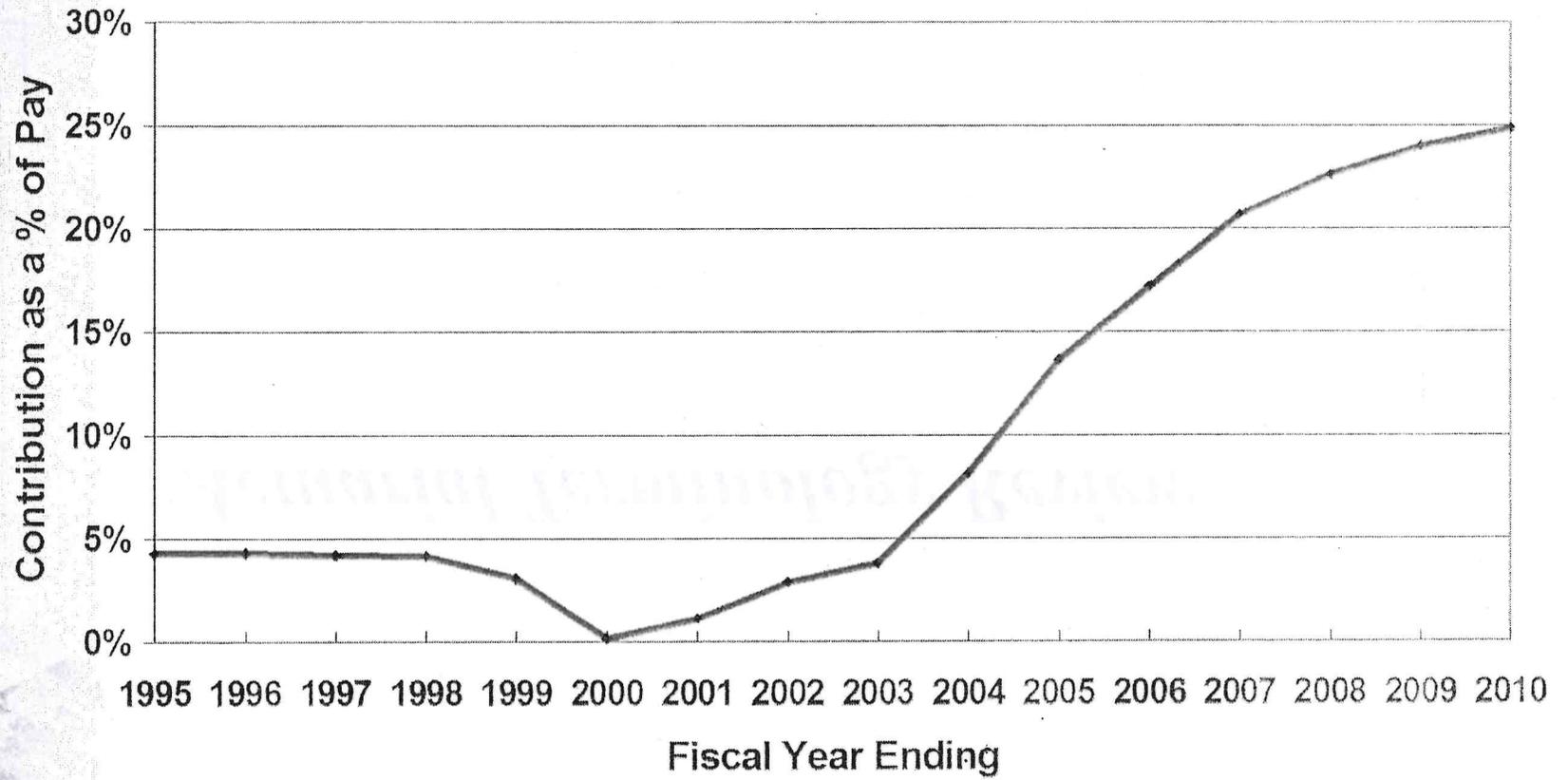
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## *Meeting Agenda*

- Actuarial terminology review
- Review of projected contributions and funded status
- Impact of benefit improvements and asset losses on contributions and funded status
- Alternatives to reduce cash contributions

# Contributions - Class A & B

June 30, 2002 Projection



— Total Annual Contribution

# *Actuarial Terminology Review*

## *Pension Plans*

- Pension plans provide promised benefits to employees upon retirement / termination
- Benefits include retirement, termination, death, and disability
- Burlington's benefits are based upon pay and service
- Benefits are payable over employee's lifetime

## *Paying for Promised Benefits*

- Ultimate Cost of Plan = Benefits Paid
- Pre-Funding - set aside funds during employee's career to provide benefits at retirement
  - Annual contributions
  - Assets are invested
- Contributions + investment earnings = benefits paid
- Today's tax payers pay for benefits accruing today

## *Contributions*

- Contributions determined to reach a specific target.  
For Burlington,
  - 100% funded liability (Accrued Liability equals Actuarial Assets)
  - no negative contributions
  
- Goal - provide reasonably consistent contributions from year to year

## *Pension Plan Liability*

- Total liability - present value “today” of all future benefit payments
- Simplified Example - Employee Presently Age 45

Pension	\$10,000 per year payable from age 65 to age 75
Total Payments	\$100,000
Interest	8%
Total Liability	\$15,500

## *Pension Plan Liability*

- Includes liability for active, retired and terminated participants
  
- Liability calculation based on assumptions
  - Rates of retirement, termination and disability
  - Mortality
  - Investment return
  - Cost of living increases

## *Pension Plan Liability - Accrued Liability*

- Total liability
  - Projected pay
  - Past and future service
  
- Accrued liability
  - Projected pay
  - Past service only
  
- Normal cost - increase in accrued liability attributable to next year's service

## *Assets*

- Market assets - fair value of assets available to pay benefits (can be volatile)
- Actuarial assets - market assets adjusted to reduce volatility (used to determine contributions)
- Burlington's actuarial assets - equal to market assets adjusted by phasing in investment gains (losses) over a five-year period

## *Actuarial Asset Example*

MV Assets 6/30/01	\$ 101,464
Expected MV Assets 6/30/02	\$ 105,903
– 8% assumed investment return	
– reflects cash flow	
Actual MV Assets 6/30/02	\$ 88,613
Asset Loss FY ending 6/30/02	\$ 17,290
Asset Loss recognized (20%)	\$ 3,458
– 6/30/02 actuarial assets	
Unrecognized Asset Loss	\$ 13,831
– recognized over next four years	

## *Actuarial Asset Example (Continued)*

MV Assets 6/30/02			\$ 88,613
<u>Year</u>	<u>Gain / (Loss)</u>	<u>%</u>	
2002	(17,290)	80%	\$ 13,832
2001	(20,410)	60%	\$ 12,246
2000	4,801	40%	\$ (1,920)
1999	1,767	20%	\$ (354)
1998	0	0%	<u>\$ 0</u>
Loss not recognized			\$ 23,804
AV Assets 6/30/02			\$112,417

## *Unfunded Accrued Liability (Surplus)*

- Each actuarial valuation, the unfunded accrued liability (surplus) is recalculated
- Changes in the unfunded accrued liability result from actual versus assumed occurrences
  - Asset gains (losses) above (below) expected return
  - Actual retirement, termination or mortality different from assumed occurrences
  - Salary increases above (below) expected
  - Cost of living increases above (below) expected
- For Burlington, changes amortized over a 10 year period

## *Contributions*

- Annual contribution has two components:
  - Normal cost - increase in liability attributable to next year's benefit accrual
  - Past service cost - amount required to fund difference between accrued liability and actuarial assets (unfunded liability or surplus) over a given period

## *Asset / Liability Summary*

Liability for Total Benefits All Service	Present Value of Future Contributions (PVFC)	Present Value of Future Normal Costs (PVFNC)	PVFNC		
				Normal Cont	
	Actuarial Assets	Accrued Liability (Past Service)		Unfunded Accrued Liability	
					Past Svc Cont
		Actuarial Assets	Actuarial Assets	Actuarial Assets	

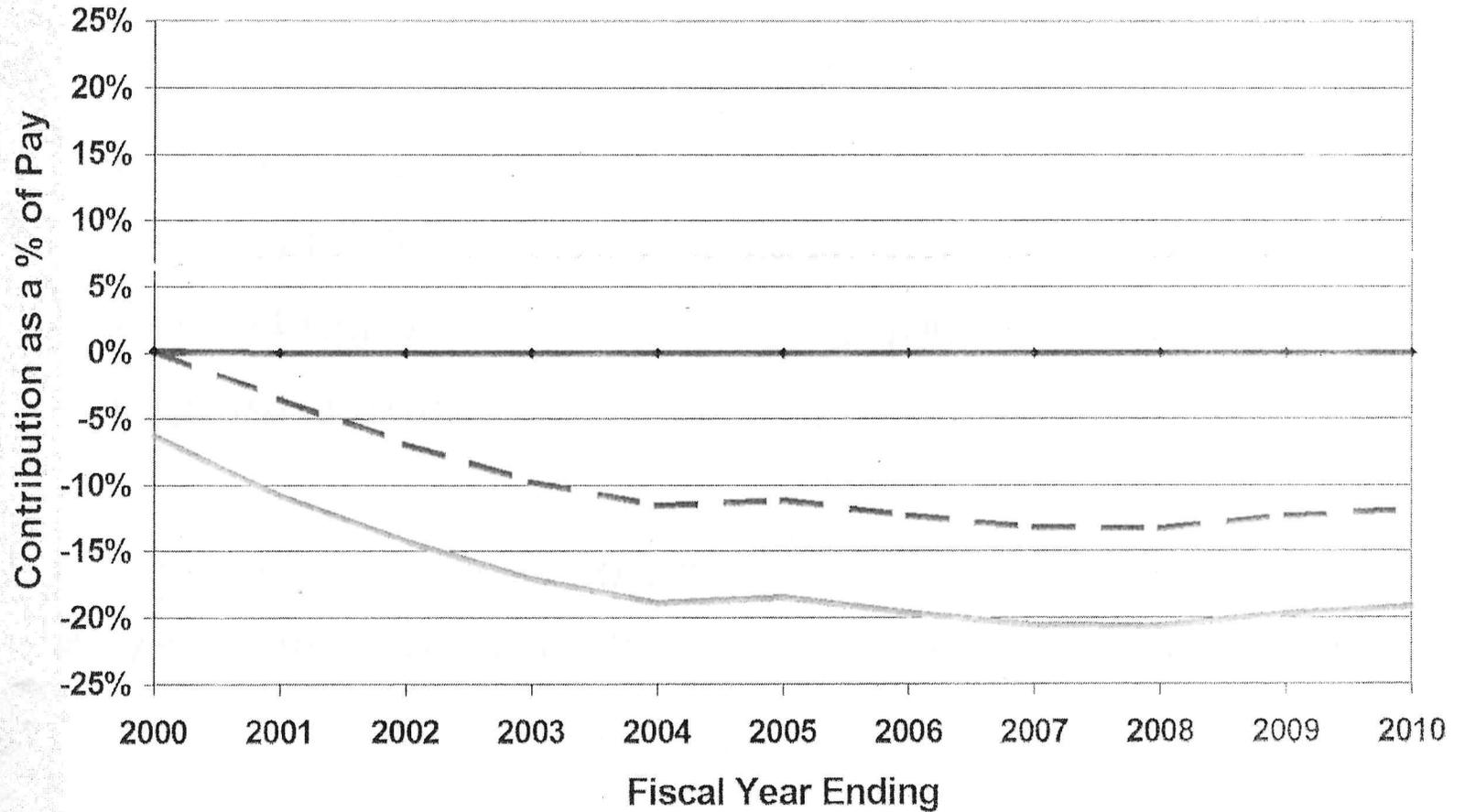
# *Review of Projected Contributions and Funded Status*

## *Contribution Projections*

- Deterministic projections through 2010
- Assumptions used in projections
  - 8% investment return
  - 5% salary increases
  - 4% cost of living increases
  - expected turnover

# Contributions - Class A & B

Projection - June 30, 1999



## *Surplus versus Normal Cost*

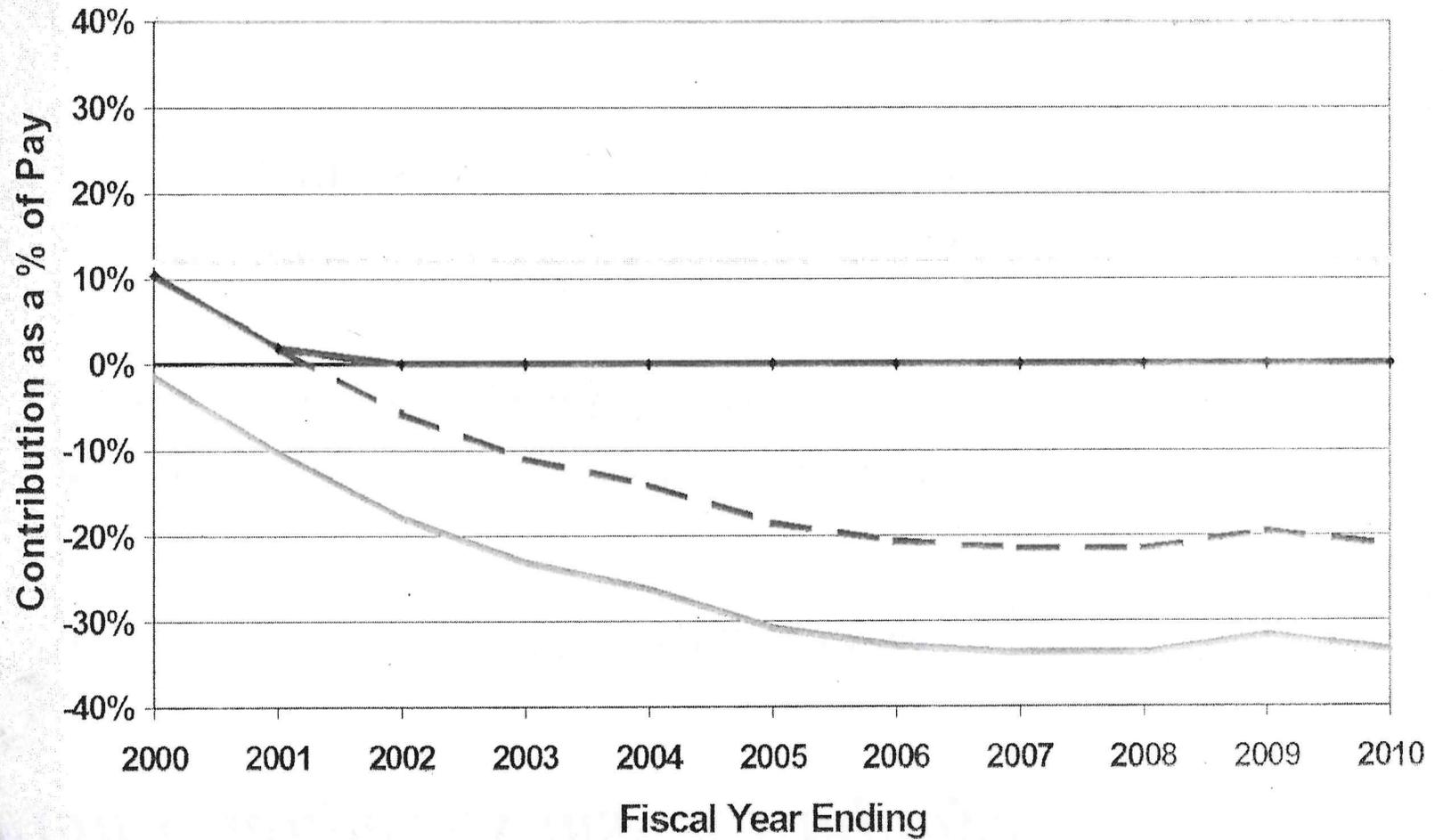
- As of June 30, 1999, anticipated investment earnings on surplus exceeds normal cost

6/30/99 Surplus	\$ 29,500
Interest (8%)	\$ 2,400
Normal Cost	<u>\$ (1,650)</u>
Expected 6/30/00 Surplus	\$ 30,250

- No contributions would be required if assets earn 8% and liabilities grow as expected

# Class A - Annual Contributions

Projection - June 30, 1999



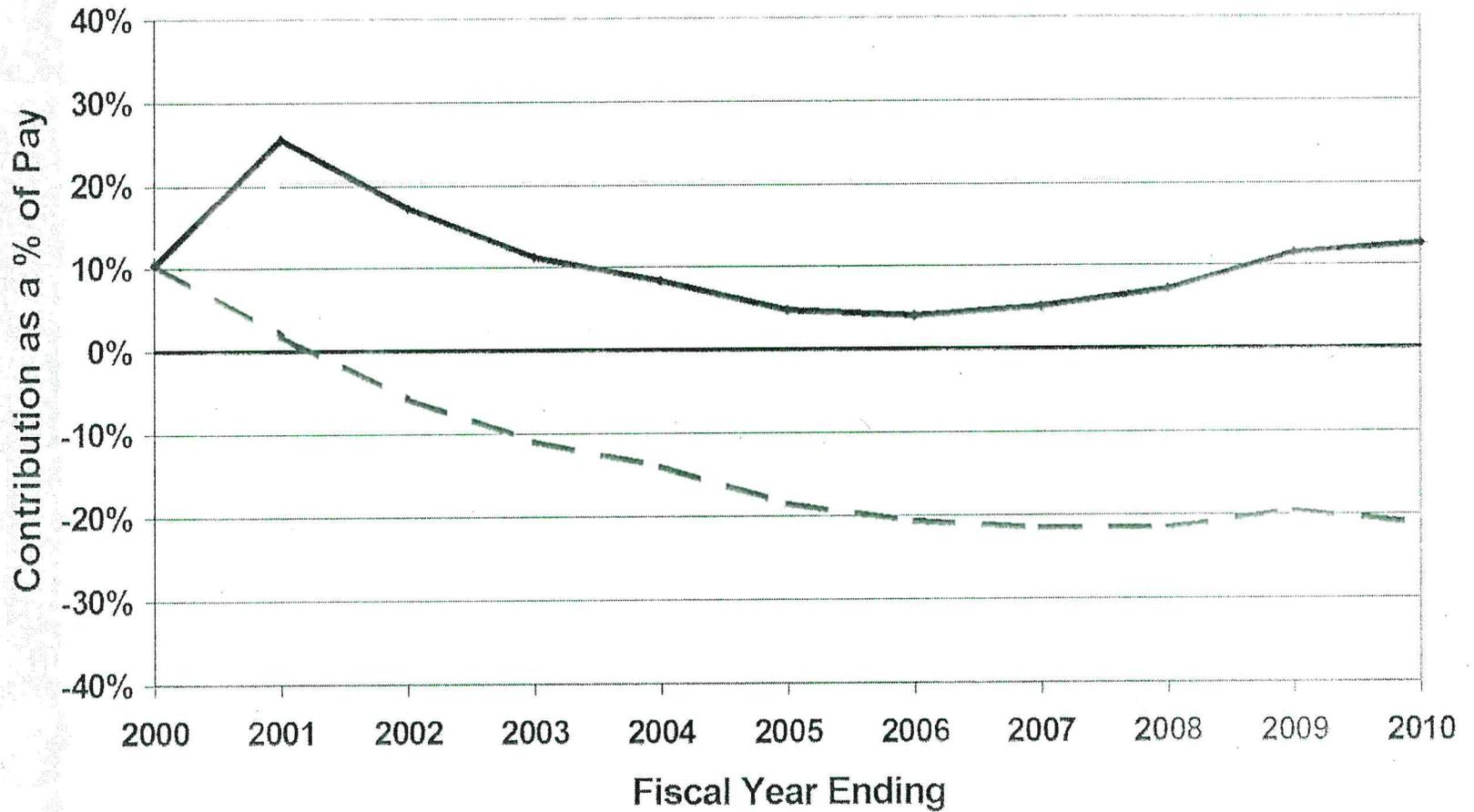
## *Plan Changes - Class A Employees*

- Accrual Rate - 2.75% (from 2.35%)
- Early reduction - 1.8% per year if 20 - 25 years of service at retirement (previously actuarial equivalent)
  - Employee with 20 years of service eligible for 91% benefit (previously 60%)

## *Plan Changes - Class A Employees*

- Estimated Cost of Plan Changes (\$000)
  - Liability \$ 6,284
  - Past Service Cost \$ 937
  - Normal Cost \$ 514
  - Total Annual Contribution \$ 1,451
  
- Estimated Cost as Percent of Pay
  - Normal Cost 8.38%
  - Past Service Cost 15.27%
  - Total Annual Contribution 23.65%

# Class A - Impact of Plan Improvements



- - - Normal Cost  
 — Contributions prior to Amendments  
 — Contributions after Amendments

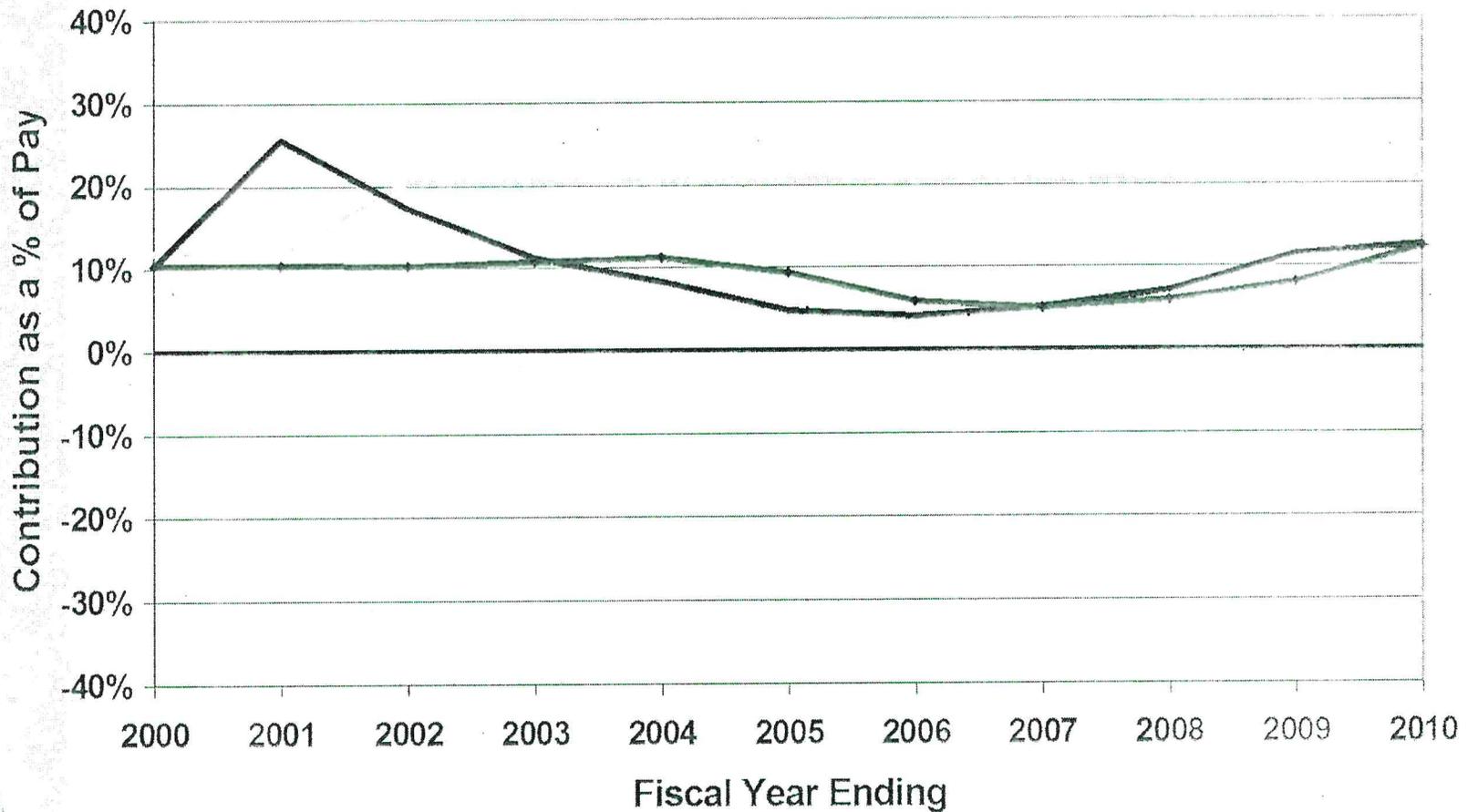
## *Recognize Asset Gains*

- Fully recognize asset gains prior to June 30, 1999 in actuarial asset for June 30, 2000 valuation
- Used to offset cost of benefit improvements

### Gains to be recognized immediately

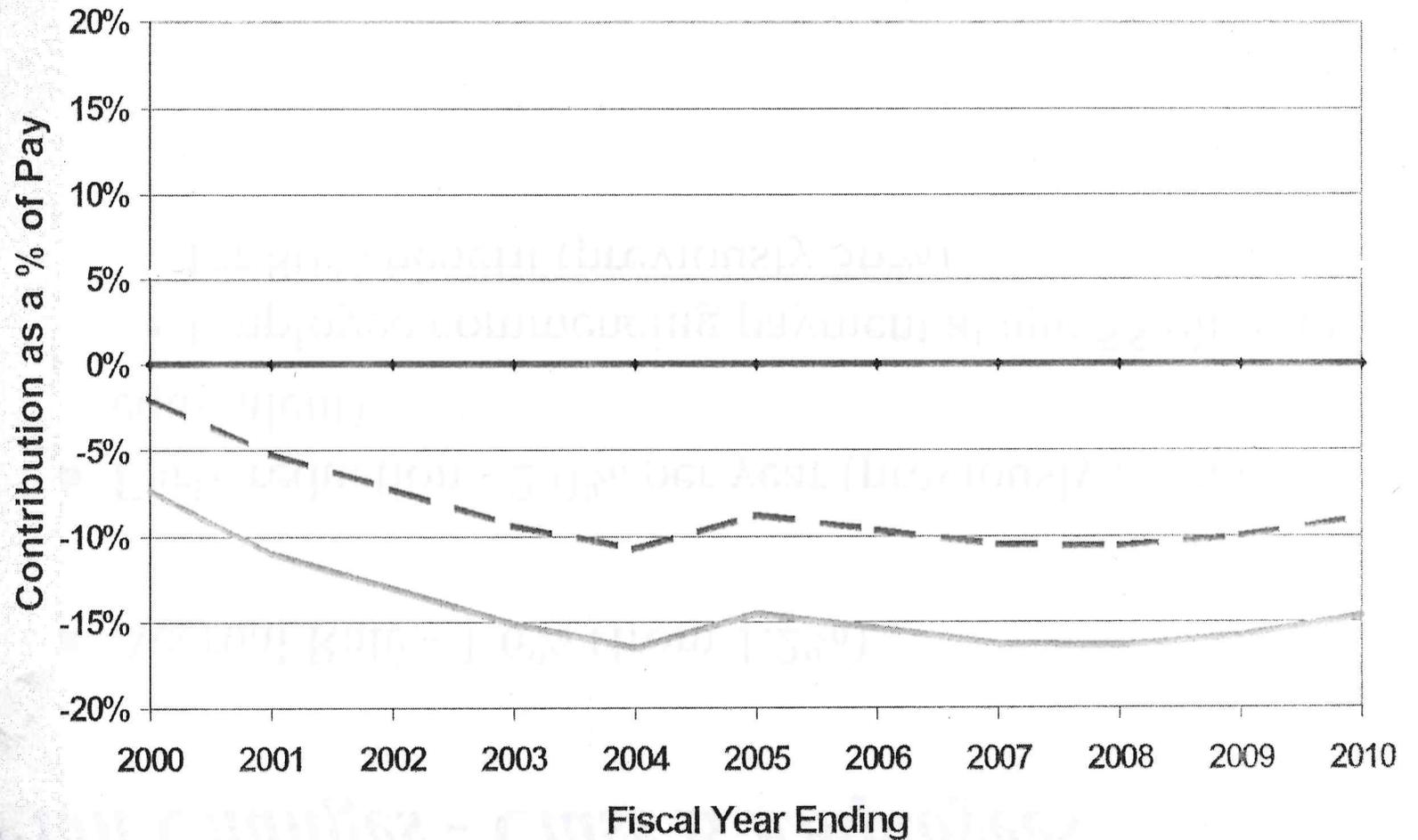
1999 Gain	\$ 1,400,000
1998 Gain	\$ 7,100,000
1997 Gain	<u>\$ 3,500,000</u>
Total	\$12,000,000

# Class A Plan Changes & Recognition of Asset Gains



# Class B - Annual Contributions

Projection - June 30, 1999



## *Plan Changes - Class B Employees*

- Accrual Rate - 1.6% (from 1.2%)
  
- Early reduction - 2.0% per year (previously actuarial equivalent)
  - Employee commencing payment at age 55 eligible for 80% benefit (previously 36%)

## *Plan Changes - Class B Employees*

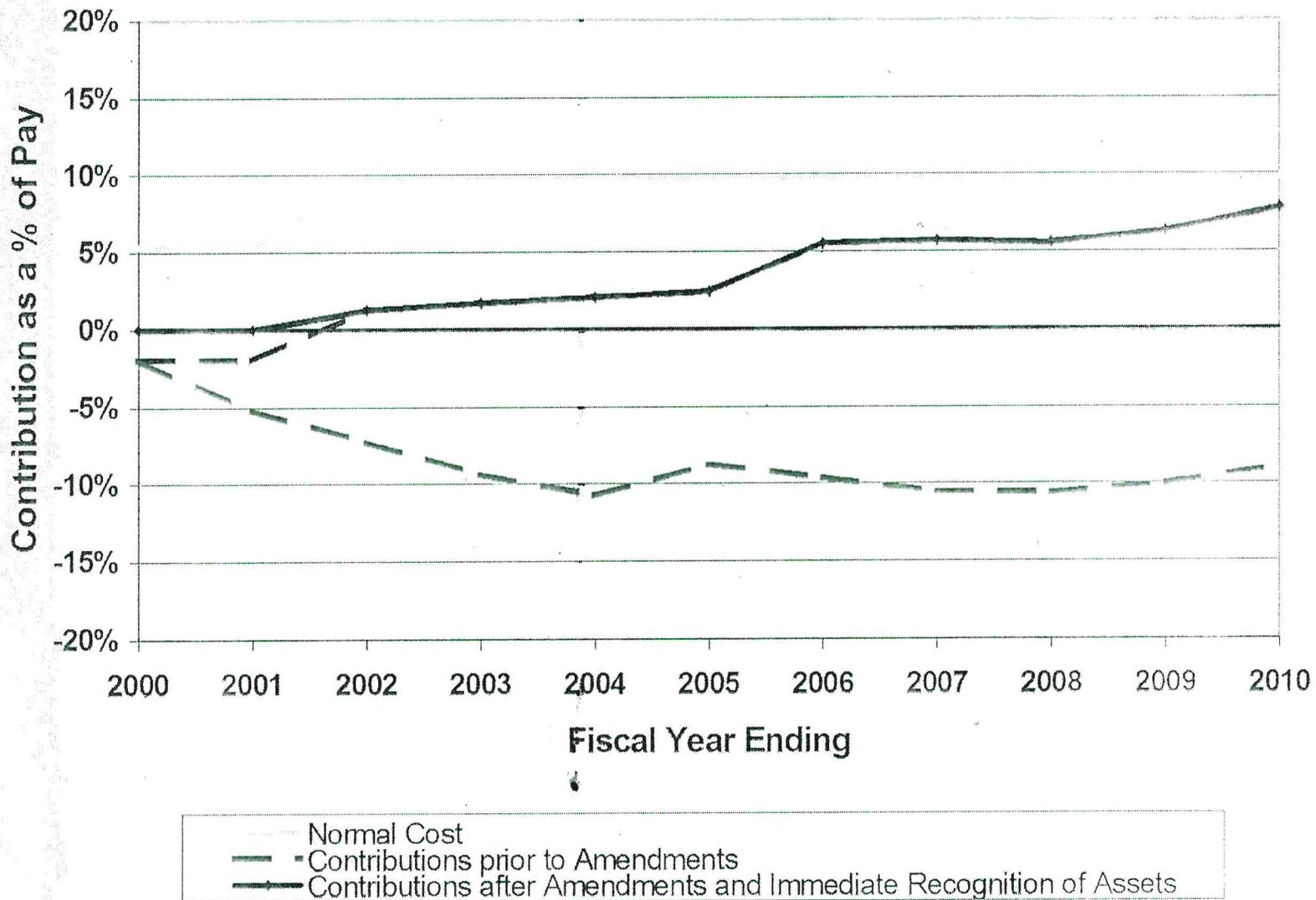
### ■ Estimated Cost of Plan Changes (\$000)

• Liability	\$ 10,587
• Past Service Cost	\$ 1,578
• Normal Cost	<u>\$ 758</u>
• Total Contribution	\$ 2,336

### ■ Estimated Cost as Percent of Pay

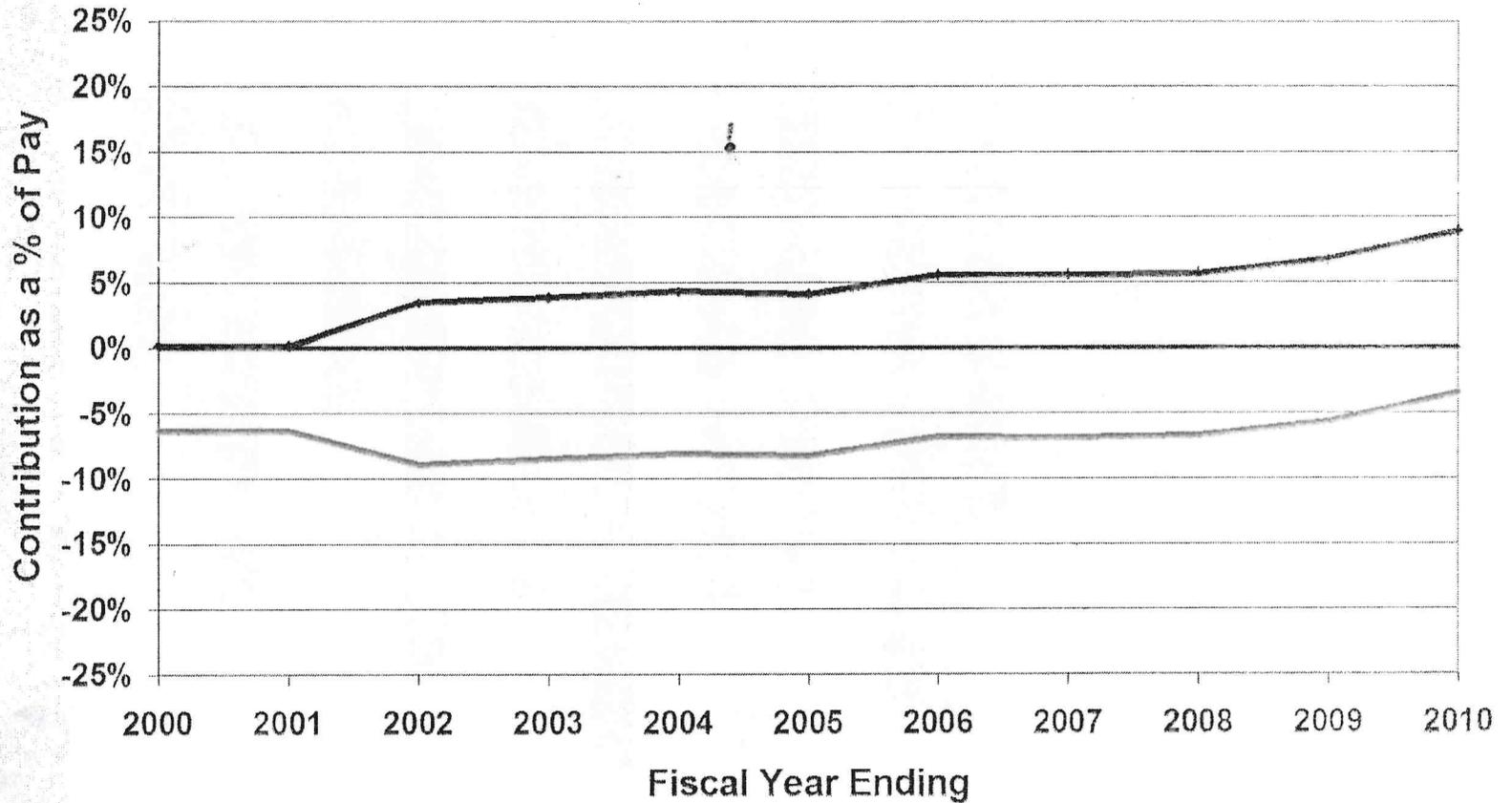
• Normal Cost	3.98%
• Past Service Cost	<u>8.28%</u>
• Total Contribution	12.26%

# Class B Plan Changes & Recognition of Asset Gains



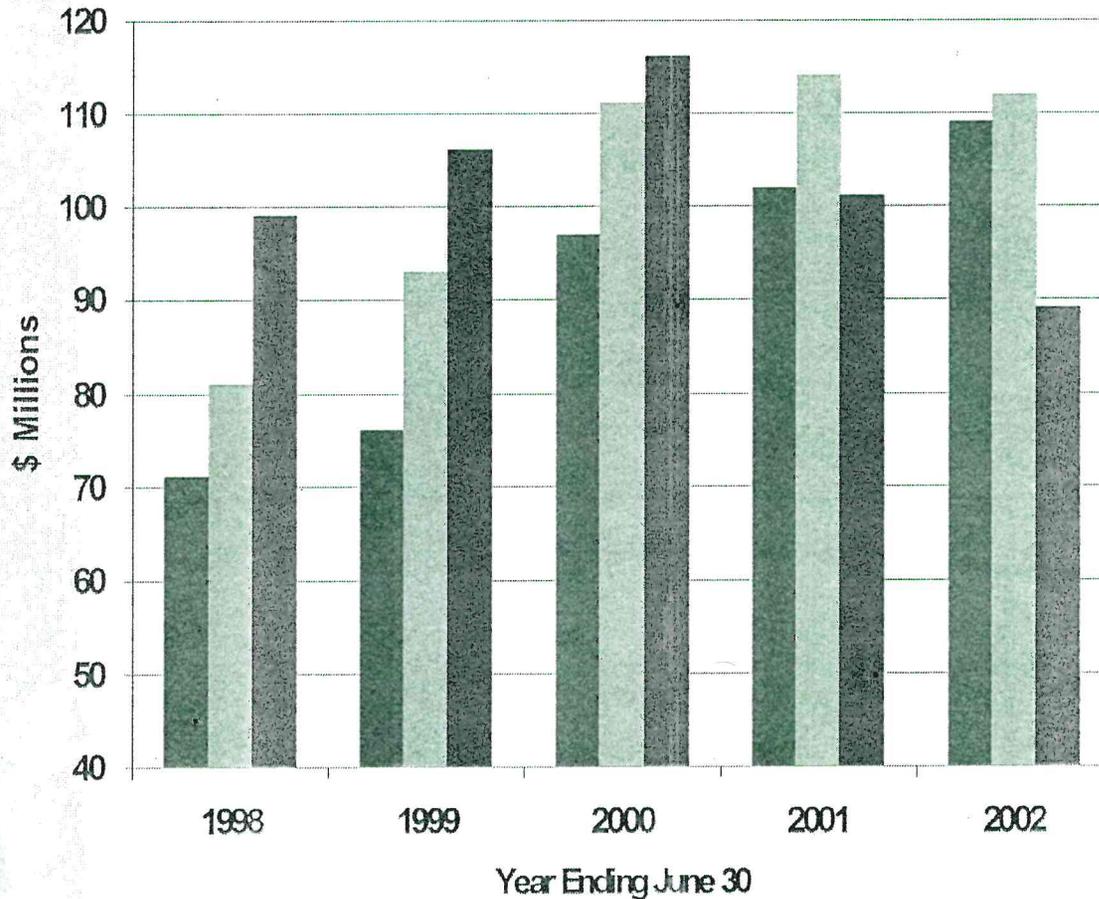
# Contributions - Class A & B

Projection - June 30, 1999



Normal Cost  
1999 Projection with Amendments and Asset Recognition  
Past Service Cost

# Funded Status

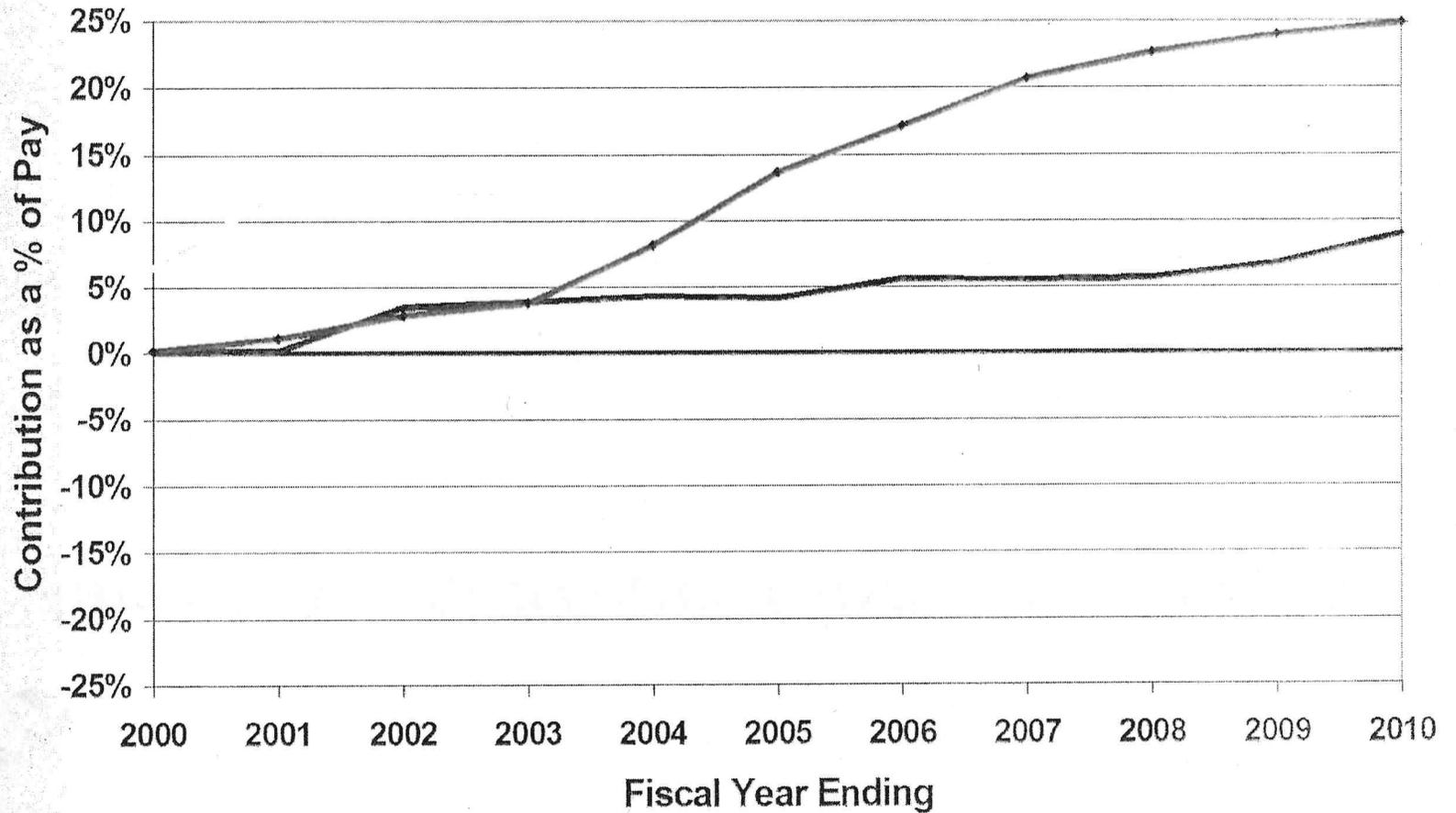


<u>Year</u>	<u>Asset Gain/(Loss)</u>
1998	11,850,000
1999	1,767,000
2000	4,801,000
2001	(20,410,000)
2002	(17,290,000)

■ Accrued Liability    ■ Actuarial Value of Assets    ■ Market Value of Assets

# Contributions - Class A & B

Projection - June 30, 2002



— Normal Cost  
— 1999 Projection with Amendments and Asset Recognition  
— 2002 Projection

## *Alternatives to Reduce Cash Contributions*

## *Review Valuation Assumptions*

- Plan's COLA Increases

<u>Year</u>	<u>Increase</u>
1999	1.7%
2000	2.0%
2001	3.7%
2002	3.2%

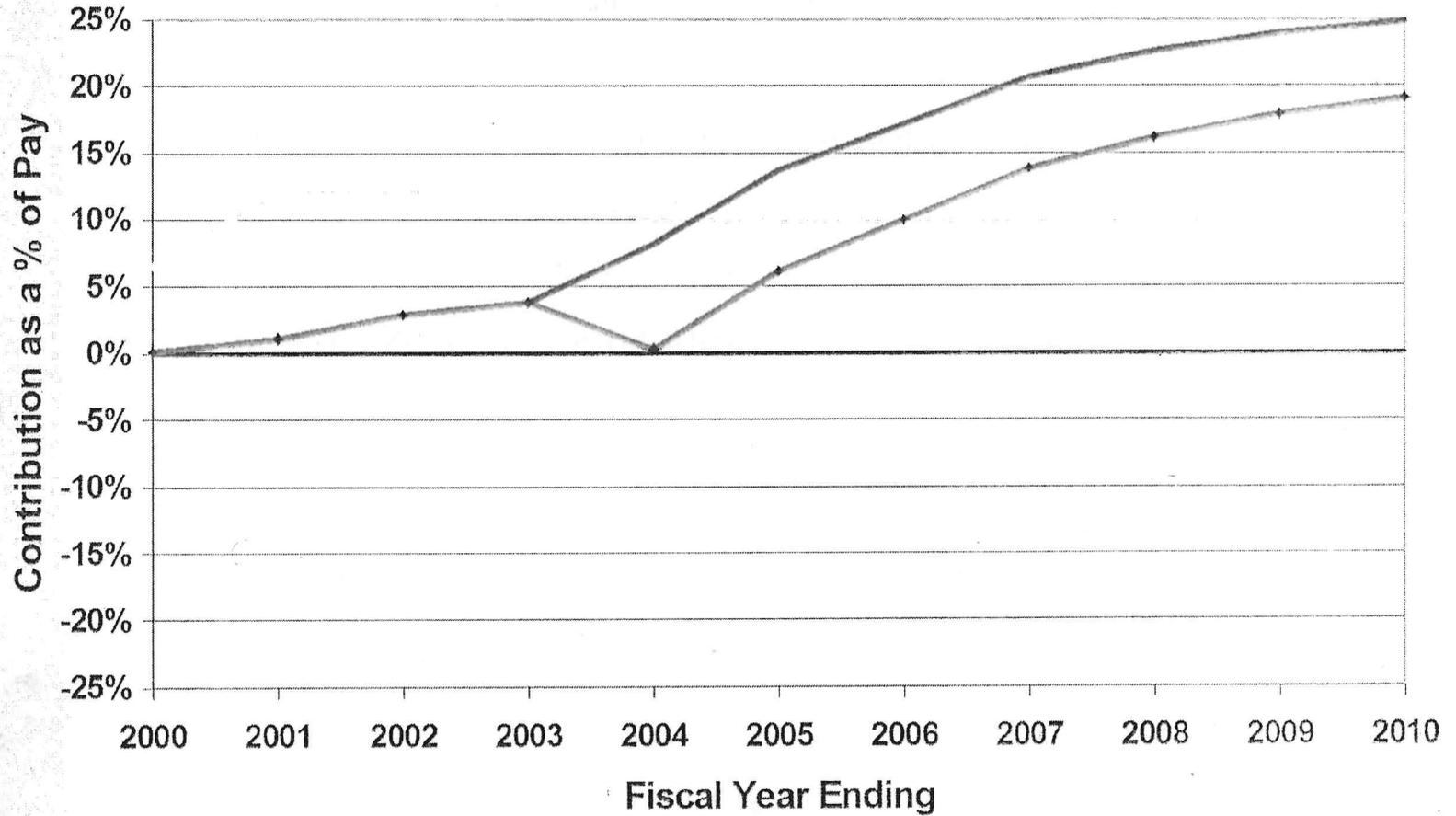
- Salary increase assumption reflects long term COLA assumption

## *Review Valuation Assumptions*

- Reduce cost of living increase assumption from 4% to 3%
  - 85% of active employees assume to elect no cola accrual rates
- Reduce salary increase assumption from 5% to 4%
- Review demographic assumptions such as retirement, termination, disability and mortality in 2003 experience study

# Contributions - Class A & B

Reflecting 3% Cola & 4% Salary

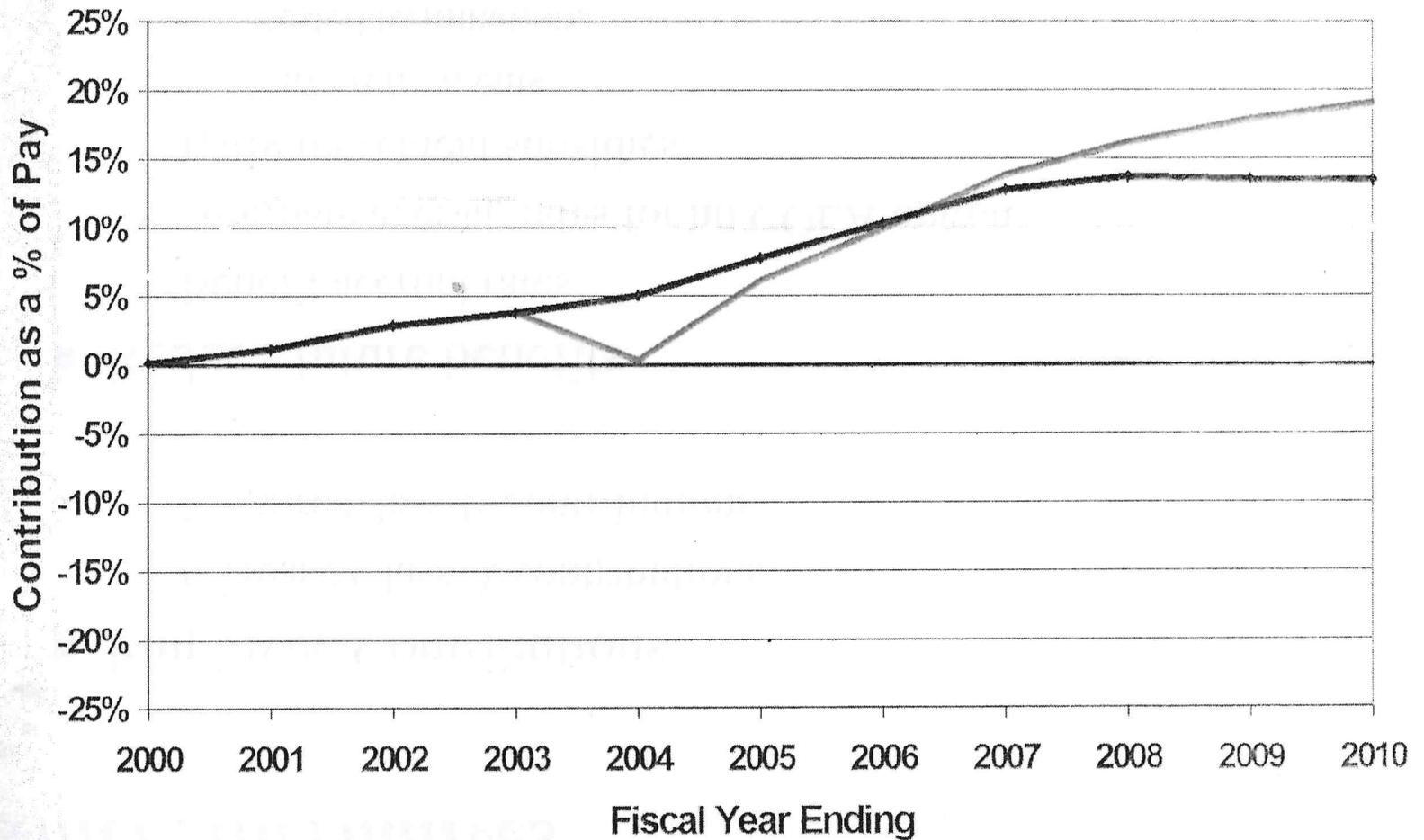


## *Funding Method Changes*

- Increase funding period from 10 to 30 years
  - Consolidate past service contributions
  - New past service contribution - 30 year amortization of unfunded liability as of June 30, 2002
  - Effective for fiscal year end 2004 contribution
  - Future gains and losses amortized over 30 years

# Contributions - Class A & B

## 30 Year Amortization of Unfunded Past Service



— Normal Cost  
 — 2002 Projection with 3% COLA and 4% Salary Increase Assumptions  
 —◆— 30 Year Amortization of Unfunded Past Service

## *Other Alternatives*

- Employee Contributions
  - Increase Class A contributions
  - Require Class B contributions
  
- Reduce future benefits
  - Benefit accrual rates
  - Alternate accrual rates for no COLA options
  - Early retirement subsidies
    - Early retirements
    - Vested terminations

## *Summary - Alternatives to Consider*

- Change assumptions to reflect lower long term cost of living
- Restart and extend amortization of unfunded past service
- Increase employee contributions
- Reduce benefits

# *Appendix*