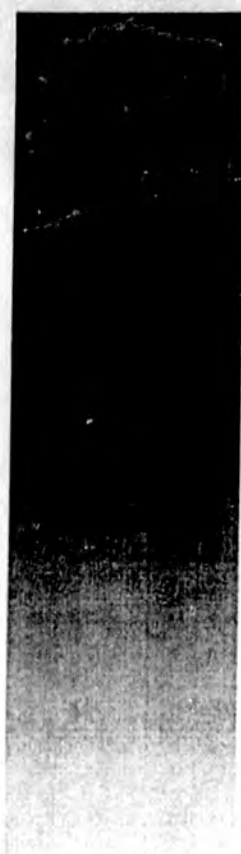


**SCOMM**

**134:3**

State of Alaska  
Division of Retirement & Benefits  
Top 20 TRS employers by salary

| Employer Number | Employer Name                                | Annual Earnings   | FY 2004 Employer Rate | Estimated FY 2004 Employer cost | 4% Increase Employer Cost | Total Expected FY 05 Employer Cost - 16% |
|-----------------|----------------------------------------------|-------------------|-----------------------|---------------------------------|---------------------------|------------------------------------------|
| 701             | Anchorage School District                    | \$ 174,110,494.00 | 12.00%                | \$ 20,893,259                   | \$ 6,984,419.76           | \$ 27,857,679                            |
| 706             | Fairbanks North Star Borough School District | \$ 57,301,300.00  | 12.00%                | \$ 6,876,156                    | \$ 2,282,052.00           | \$ 9,168,208                             |
| 722             | Matanuska-Susitna Borough School District    | \$ 50,380,853.00  | 12.00%                | \$ 6,045,702                    | \$ 2,016,234.12           | \$ 8,060,936                             |
| 733             | University of Alaska                         | \$ 37,998,991.00  | 12.00%                | \$ 4,559,879                    | \$ 1,519,959.64           | \$ 6,079,839                             |
| 746             | Kenai Peninsula Borough School District      | \$ 37,313,528.00  | 12.00%                | \$ 4,477,623                    | \$ 1,492,541.12           | \$ 5,970,164                             |
| 710             | City & Borough of Juneau School District     | \$ 19,867,624.00  | 12.00%                | \$ 2,384,115                    | \$ 794,704.96             | \$ 3,178,820                             |
| 754             | Lower Kuskokwim School District              | \$ 18,407,816.00  | 12.00%                | \$ 2,208,938                    | \$ 736,312.64             | \$ 2,945,251                             |
| 736             | North Slope Borough School District          | \$ 14,173,506.00  | 12.00%                | \$ 1,700,821                    | \$ 566,940.24             | \$ 2,267,761                             |
| 718             | Kodiak Island Borough School District        | \$ 12,306,958.00  | 12.00%                | \$ 1,476,835                    | \$ 492,278.32             | \$ 1,969,113                             |
| 751             | Northwest Arctic Borough School District     | \$ 12,289,935.00  | 12.00%                | \$ 1,474,792                    | \$ 491,597.40             | \$ 1,966,390                             |
| 752             | Bering Straits School District               | \$ 10,819,453.00  | 12.00%                | \$ 1,298,334                    | \$ 432,778.12             | \$ 1,731,112                             |
| 714             | Ketchikan Gateway Borough School District    | \$ 9,061,991.00   | 12.00%                | \$ 1,087,439                    | \$ 362,479.64             | \$ 1,449,919                             |
| 753             | Lower Yukon School District                  | \$ 8,902,384.00   | 12.00%                | \$ 1,068,286                    | \$ 356,095.36             | \$ 1,424,381                             |
| 727             | Sitka School District                        | \$ 6,727,046.00   | 12.00%                | \$ 807,246                      | \$ 269,081.84             | \$ 1,076,327                             |
| 737             | Alaska Department of Education & Early Dev.  | \$ 6,056,768.00   | 12.00%                | \$ 726,812                      | \$ 242,270.72             | \$ 969,083                               |
| 756             | Southwest Region School District             | \$ 4,994,756.00   | 12.00%                | \$ 599,371                      | \$ 199,790.24             | \$ 799,161                               |
| 730             | Valdez City School District                  | \$ 4,609,664.00   | 12.00%                | \$ 553,160                      | \$ 184,386.56             | \$ 737,546                               |
| 735             | Galena City School District                  | \$ 4,434,404.00   | 12.00%                | \$ 532,128                      | \$ 177,376.16             | \$ 709,505                               |
| 762             | Yukon-Koyukuk School District                | \$ 3,767,177.00   | 12.00%                | \$ 452,061                      | \$ 150,687.08             | \$ 602,748                               |
| 757             | Lake and Peninsula Borough School District   | \$ 3,174,454.00   | 12.00%                | \$ 380,934                      | \$ 126,978.16             | \$ 507,913                               |



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# **State of Alaska**

## **Public Employees' Retirement System Teachers' Retirement System**

**Presentation to the House Ways & Means Committee**

**April 30, 2003**



Marsh & McLennan Companies

**Alaska Division of Retirement and Benefits**  
**Public Employees' Retirement System (PERS) Plan Comparison Chart**

| <b>Tier I</b><br>1/1/61 - 6/30/86                                                                                                                                                                                                                                                      | <b>Tier II</b><br>Entered on or after 7/1/86                                                                                                                                                                                                                                                                                                                                                                 | <b>Tier III</b><br>Entered on or after 7/1/96                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| After tax employee contribution:<br>4.25% for all others<br>5% for police and fire<br>4.25% for school district employees<br>Contributions changed to Tier II level as noted under Tier II.                                                                                            | Pre-tax employee contribution:<br>6.75% beginning 1/1/87—all others<br>7.5% beginning 1/1/87—police and fire<br>9.6% beginning 7/1/99—school district                                                                                                                                                                                                                                                        | No change from Tier II.                                                                                                                                                                                                                                                                           |
| Members vest with 5 years of service.                                                                                                                                                                                                                                                  | No change.                                                                                                                                                                                                                                                                                                                                                                                                   | No change.                                                                                                                                                                                                                                                                                        |
| Normal retirement age is 55, with early retirement at age 50; police/fire members can retire at any age after 20 years of police/fire service; all other members can retire at any age after 30 years of membership service.<br>7/1/96—Early retirement reduction changed to Tier III. | Normal retirement age is 60, with early retirement at age 55; police/fire members can retire at any age after 20 years of police/fire service; all other members can retire at any age after 30 years of membership service.<br>7/1/96—Early retirement reduction changed to Tier III.                                                                                                                       | No change from Tier II. However, early retirement reduction will be ½% per month or 6% per year for every year less than the required normal retirement age.                                                                                                                                      |
| Benefit formula was 2% X "years of service" X "average salary" based on the high three consecutive years salaries.<br>Benefit formula changed to Tier II in 1986 applied to all service earned after that effective date.<br>P/F 2% X 10, 2.5% over 10.                                | Benefit formula is 2% for first 10 years, 2.25% for the next 10 years, and 2.5% per year thereafter. Benefit calculation is determined on the average of the high three consecutive years salary.<br>No change to P/F.                                                                                                                                                                                       | Benefit formulas did not change; however, the benefit calculation for "all others" occupation is determined on the average of the high five consecutive years salary and the Benefit calculation for "P/F" occupational code is high three consecutive years regardless of tier (effective 2002). |
| An Alaska Cost-of-Living Allowance is payable to benefit recipients who remain domiciled in Alaska after retirement. The allowance is \$50 or 10% of the base benefit, whichever is greater.                                                                                           | An Alaska Cost-of-Living Allowance is payable to benefit recipients 65 or older or disability benefit recipients regardless of age who remain domiciled in Alaska after retirement. The allowance is \$50 or 10% of the base benefit, whichever is greater.                                                                                                                                                  | No change from Tier II.                                                                                                                                                                                                                                                                           |
| PRPA increases granted on an ad hoc basis. The automatic PRPA legislated in 1986 applied to all members regardless of hire date.                                                                                                                                                       | Automatic PRPA adjustments to disabled members, retirees 60 and over, and those who have received benefits for 5 years.                                                                                                                                                                                                                                                                                      | No change from Tier II.                                                                                                                                                                                                                                                                           |
| Major medical insurance is provided to all benefit recipients and their eligible dependents at no cost.                                                                                                                                                                                | Major medical insurance is provided at no cost to disabilitants, regardless of age and benefit recipients over age 60 or <ul style="list-style-type: none"> <li>• police/fire members with 25 years of police/fire service</li> <li>• all other members with 30 years of membership service</li> </ul> and their eligible dependents at no cost. Benefit recipients under 60 must pay the full premium cost. | Same as Tier II. However, employees must accrue a minimum of 10 years of <b>credited service*</b> , to have system-paid coverage at age 60. Employees with less than 10 years must pay the full premiums as long as they wish to continue medical coverage.                                       |
| Disability benefits for members: nonoccupational disability benefits are calculated as a normal retirement. Occupational disability provides 40% of the gross monthly compensation.<br><br>Different occupational disability formula available before 7/1/76.                          | No change.                                                                                                                                                                                                                                                                                                                                                                                                   | No change.                                                                                                                                                                                                                                                                                        |

# **Alaska Division of Retirement and Benefits** **Teachers' Retirement System (TRS) Plan Comparison Chart**

| <p style="text-align: center;"><b>Tier I</b><br/> <b>7/1/55 - 6/30/90</b></p>                                                                                                                                | <p style="text-align: center;"><b>Tier II</b><br/> <b>Entered on or after 7/1/90</b></p>                                                                                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>After tax employee contribution:<br/> 7%</p> <p><b>Contributions changed to Tier II level as noted under Tier II.</b></p>                                                                                 | <p>Pre-tax employee contribution:<br/> 8.65% beginning 1/1/91</p>                                                                                                                                                                         |
| <p>Members vest with 8 years of service.</p>                                                                                                                                                                 | <p>No change.</p>                                                                                                                                                                                                                         |
| <p>Normal retirement age is 55, with early retirement at age 50; teachers can retire at any age after 20 years of membership service.</p>                                                                    | <p>Normal retirement age is 60, with early retirement at age 55; teachers can retire at any age after 20 years of membership service.</p>                                                                                                 |
| <p>Benefit formula was 2% X "years of service" X "average of high 3 contract salaries."</p> <p>Benefit formula changed to Tier II in 1990 applied to all service earned <b>after</b> the effective date.</p> | <p>Benefit formula is: 2% for the first 20 years, 2.5% thereafter. Benefit calculation is determined on the average of the high three contract salaries.</p>                                                                              |
| <p>An Alaska Cost-of-Living Allowance is payable to benefit recipients who remain domiciled in Alaska after retirement. The allowance is 10% of the base benefit.</p>                                        | <p>An Alaska Cost-of-Living Allowance is payable to benefit recipients 65 or older or disability benefit recipients regardless of age who remain domiciled in Alaska after retirement. The allowance is 10% of the base benefit.</p>      |
| <p>PRPA increases granted on an ad hoc basis. The automatic PRPA legislated in 1990 applied to all members regardless of hire date.</p>                                                                      | <p>Automatic PRPA adjustments to disabled members, retirees 60 and over, and those who have received benefits for 8 years.</p>                                                                                                            |
| <p>Major medical insurance is provided to all benefit recipients and their eligible dependents at no cost.</p>                                                                                               | <p>Major medical insurance is provided at no cost to disability recipients, regardless of age and retirees and survivors over age 60. Retirees under 60 with less than 25 years of membership service must pay the full premium cost.</p> |
| <p>Disability benefits are 50% of base salary, plus 10% for each eligible dependent child up to a maximum of 4 children.</p>                                                                                 | <p>No change.</p>                                                                                                                                                                                                                         |

|                                                  |
|--------------------------------------------------|
| <p>State of Alaska - PERS</p> <p>Key Results</p> |
|--------------------------------------------------|

|                            | <u>FY04</u> | <u>FY05</u> |
|----------------------------|-------------|-------------|
| Average Contribution Rate: | 6.77%       | 24.91%      |
| Board Adopted Rate:        | 6.77%       | 11.77%      |

|                       | <u>June 30</u> |             |
|-----------------------|----------------|-------------|
|                       | <u>2001</u>    | <u>2002</u> |
| Funding Ratio:        |                |             |
| Non-Medical Benefits: | 143.7%         | 120.9%      |
| Total Benefits:       | 100.9%         | 75.2%       |

|                                   |                  |
|-----------------------------------|------------------|
| Plan Assets                       | \$ 7.412 Billion |
| Plan Pension Liabilities          | \$ 6.133 Billion |
| Plan Pension/Medical Liabilities: | \$ 9.859 Billion |

|                                                                          |
|--------------------------------------------------------------------------|
| <p style="text-align: center;">State of Alaska - TRS<br/>Key Results</p> |
|--------------------------------------------------------------------------|

|                          | <u>FY04</u> | <u>FY05</u> |
|--------------------------|-------------|-------------|
| Total Contribution Rate: | 14.44%      | 35.57%      |
| Board Adopted Rate:      | 12.00%      | 16.00%      |

|                       | <u>June 30</u> |             |
|-----------------------|----------------|-------------|
|                       | <u>2001</u>    | <u>2002</u> |
| Funding Ratio:        |                |             |
| Non-Medical Benefits: | 119.7%         | 93.2%       |
| Total Benefits:       | 95.0%          | 68.2%       |

|                                  |                  |
|----------------------------------|------------------|
| Plan Assets:                     | \$ 3.689 Billion |
| Plan Pension Liabilities:        | \$ 3.959 Billion |
| Plan Pension/Medical Liabilities | \$ 5.411 Billion |

## Background

Total system costs can be defined by the following equation:

$$\begin{aligned} & \text{Benefits Paid} \\ & \quad (\text{Pension and Medical}) \\ & + \\ & \text{Administration Expenses} \\ & = \\ & \text{Employer and Member Contributions} \\ & \quad (\text{Employer Contribution is Variable/Member Contribution is Fixed}) \\ & + \\ & \text{Net Investment Income/Loss} \\ & \quad (\text{Expected annual rate of return: 8.25\%}) \end{aligned}$$

# Background

Actuarial methods are used to allocate system costs over time in an orderly fashion. They do not, however, change the ultimate cost of the system.

## System Funding Goals

The following are system funding goals based on observed board discussions:

- Relatively stable contribution rates over time
- Actuarial funding of retiree medical benefits
- 100% funded ratio of assets to accrued liabilities (including retiree medical)
- Pay for benefits during working lifetime



# **What does an Actuary do?**

# **Goal**

**Pay for retirement benefits during  
working lifetime of employees**



**Age 25**  
**Salary \$40,000**

**Age 45**  
**20 years of service**  
**annual accrued benefit of \$18,000**

## Retirement Benefit Calculation

**2% of \$40,000 times 10 years = \$ 8,000**

**2.5% of \$40,000 times 10 years = \$10,000**

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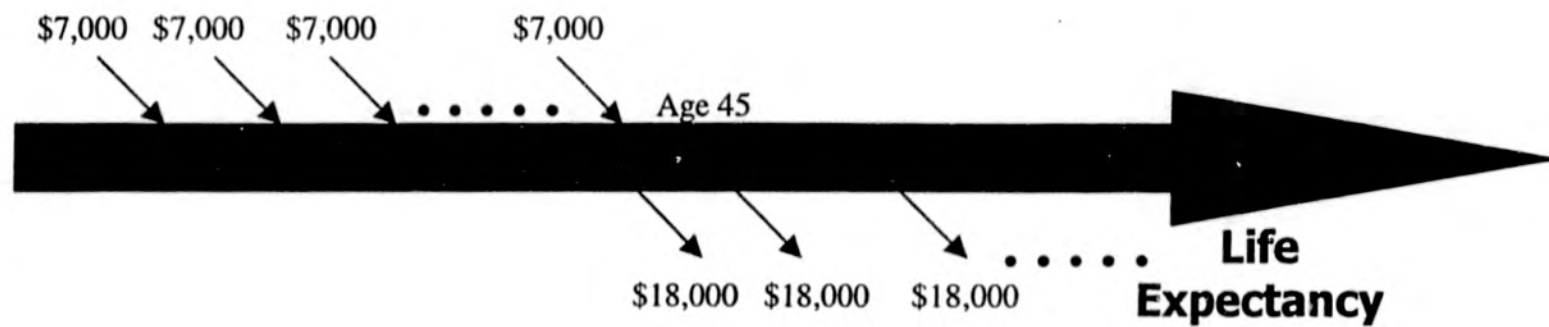
**Sum = \$18,000**

**/ year for life**

# **Goal**

**Accumulate \$210,000 during  
the employee's 20 year career**

# 17% of Pay



## **Additional Assumptions Built into the Model**

- **Salary increases**
- **Medical inflation**
- **Employment patterns**
- **Cost of living adjustments**
- **Others**

# **Entire System**

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**Sum of benefit values for each system participant**

\$

## Actuarial Cost Method

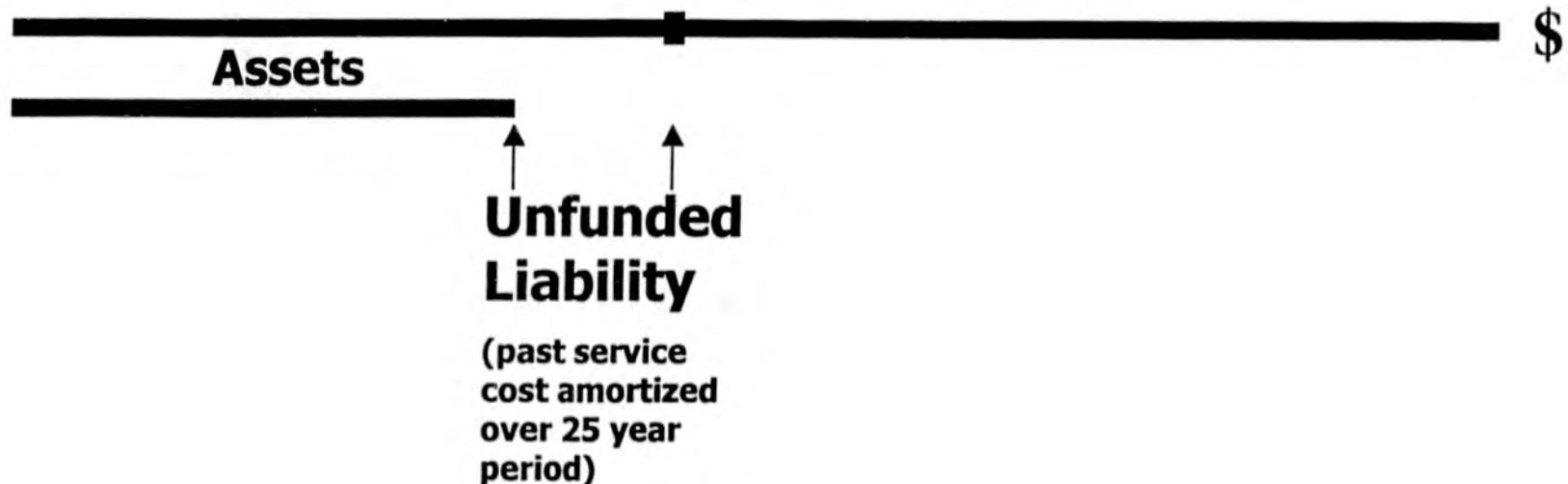
The annual contribution is defined by the following equation:

$$\begin{aligned} &\text{Annual Contribution} \\ &= \\ &\text{This Year's Normal Cost} \\ &+ \\ &\text{Past Service Cost} \end{aligned}$$

# Amortization Methods

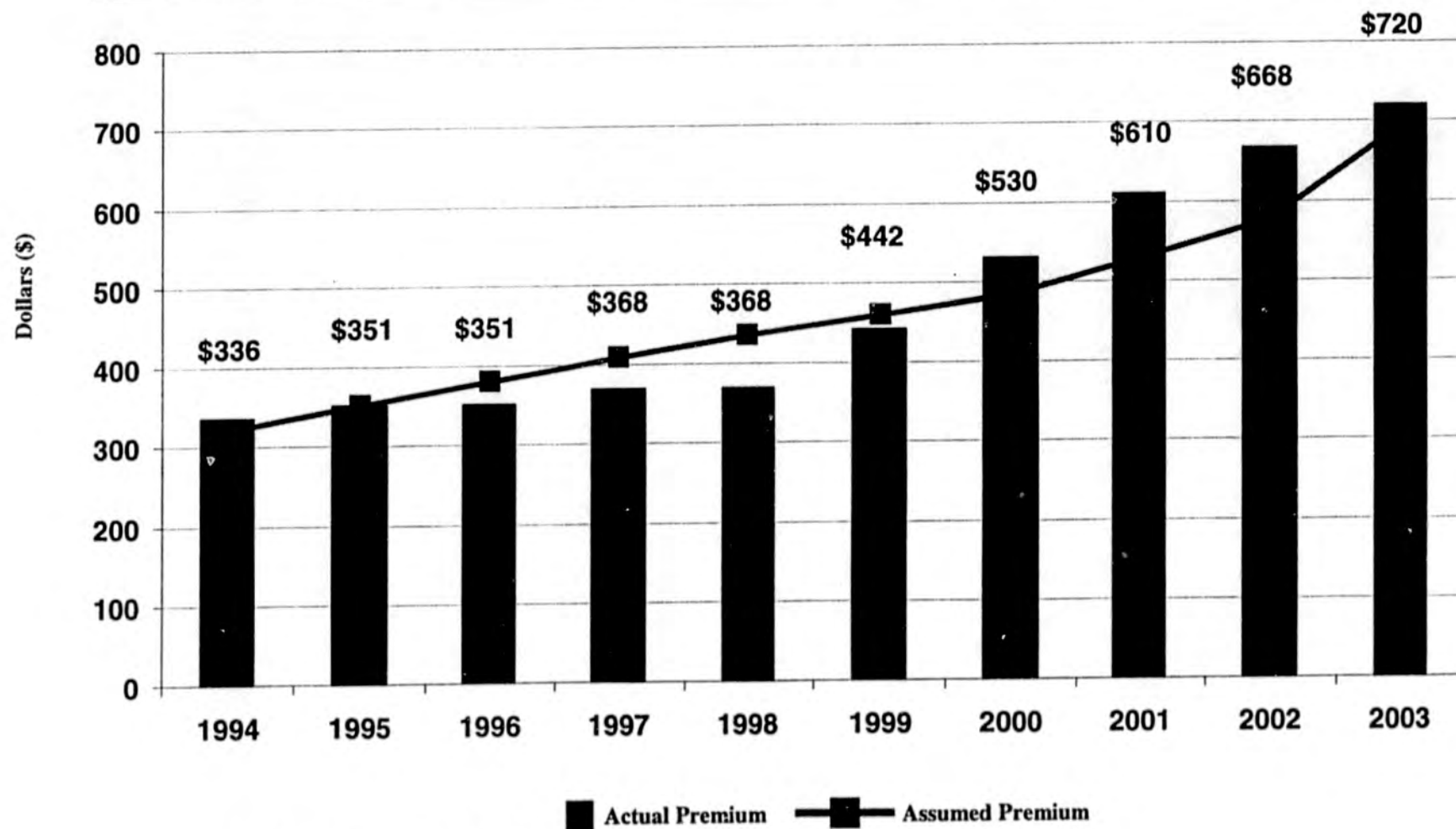
Amortization methods are used to systematically pay off the unfunded liability and achieve 100% funding of the accrued liability

**Accrued Liability    Future Normal Costs**

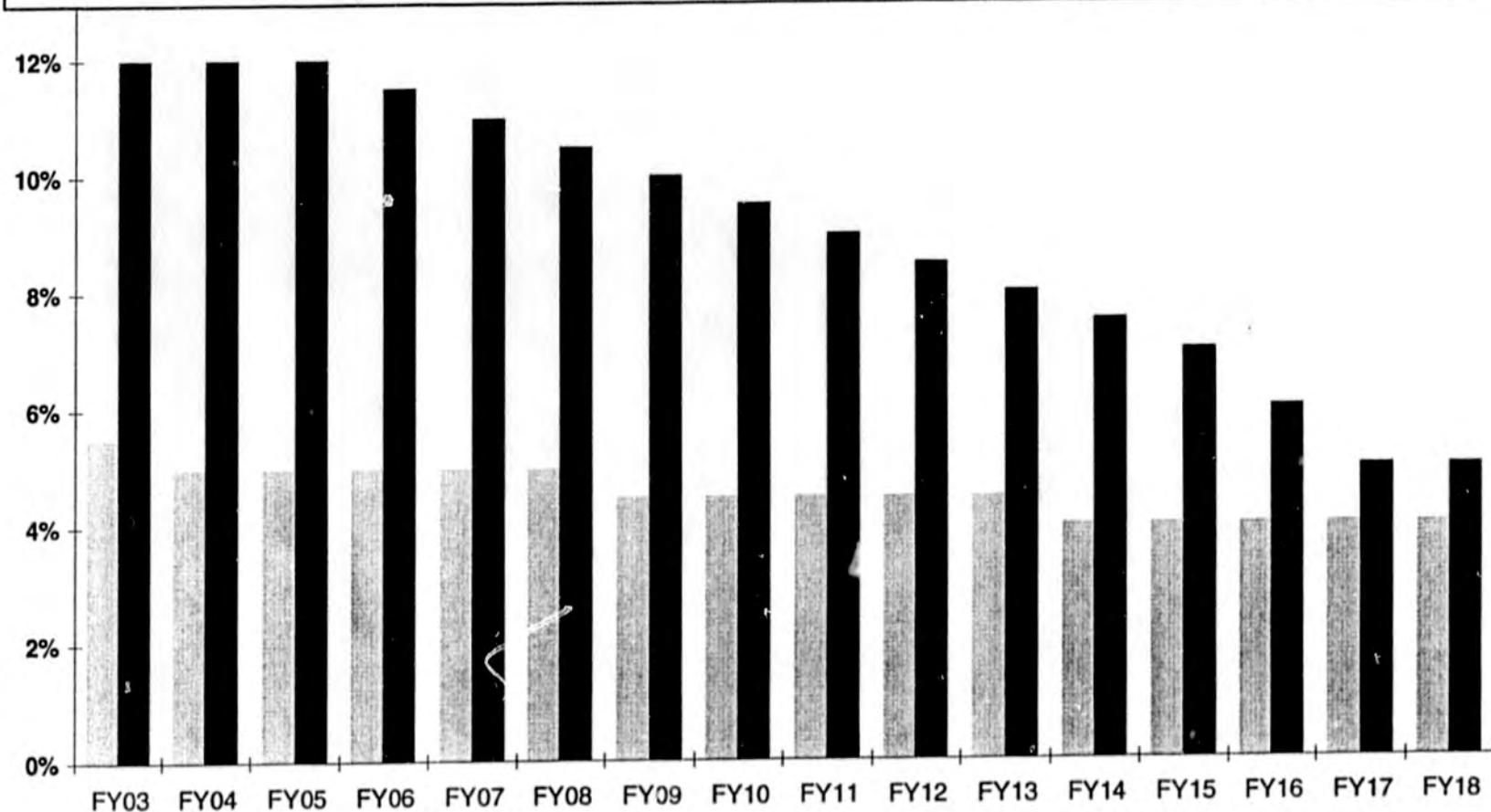


# State of Alaska - PERS & TRS

## Monthly Blended Premium per Retiree for Health Coverage



## State of Alaska PERS & TRS Health Cost Trend Assumption



■ Prior Rates

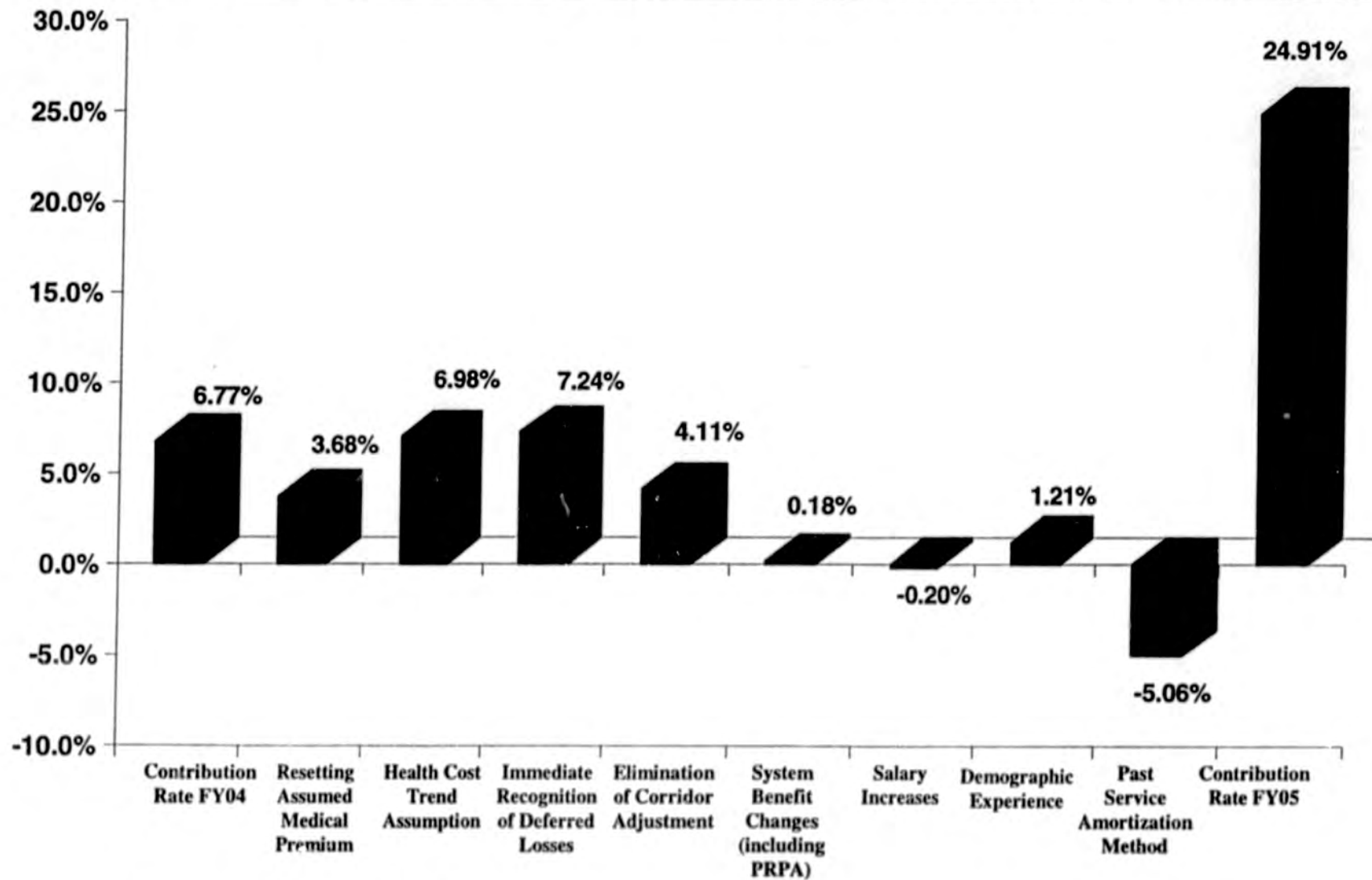
■ Revised Rates

## State of Alaska - PERS & TRS Development of Valuation Assets

- Preliminary valuation assets are assumed to return 8.25% per year.
- Asset valuation method recognizes 20% of the investment gain or loss in each of the current and preceding four years.
- The method defines investment gain or loss as the difference between actual investment return (net of expenses) and the expected return (8.25%) on the actuarial value of assets.
- This method will be phased in over the next five years.
- As of June 30, 2002, the actuarial value of assets equals the market value of \$7.413 billion in PERS and \$3.689 billion in TRS.

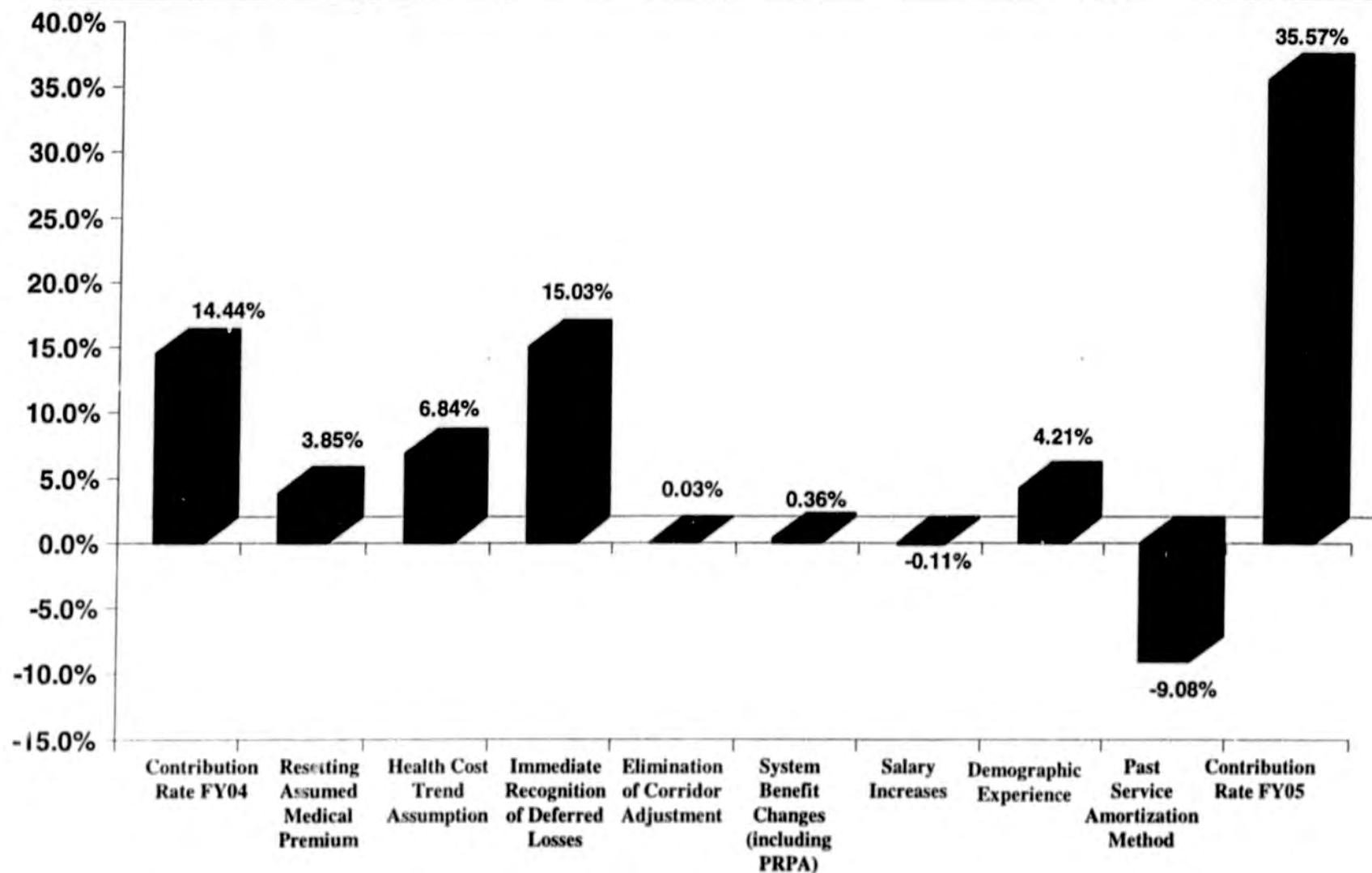
# State of Alaska - PERS

## Reconciliation of Average Contribution Rate for Fiscal Year 2005

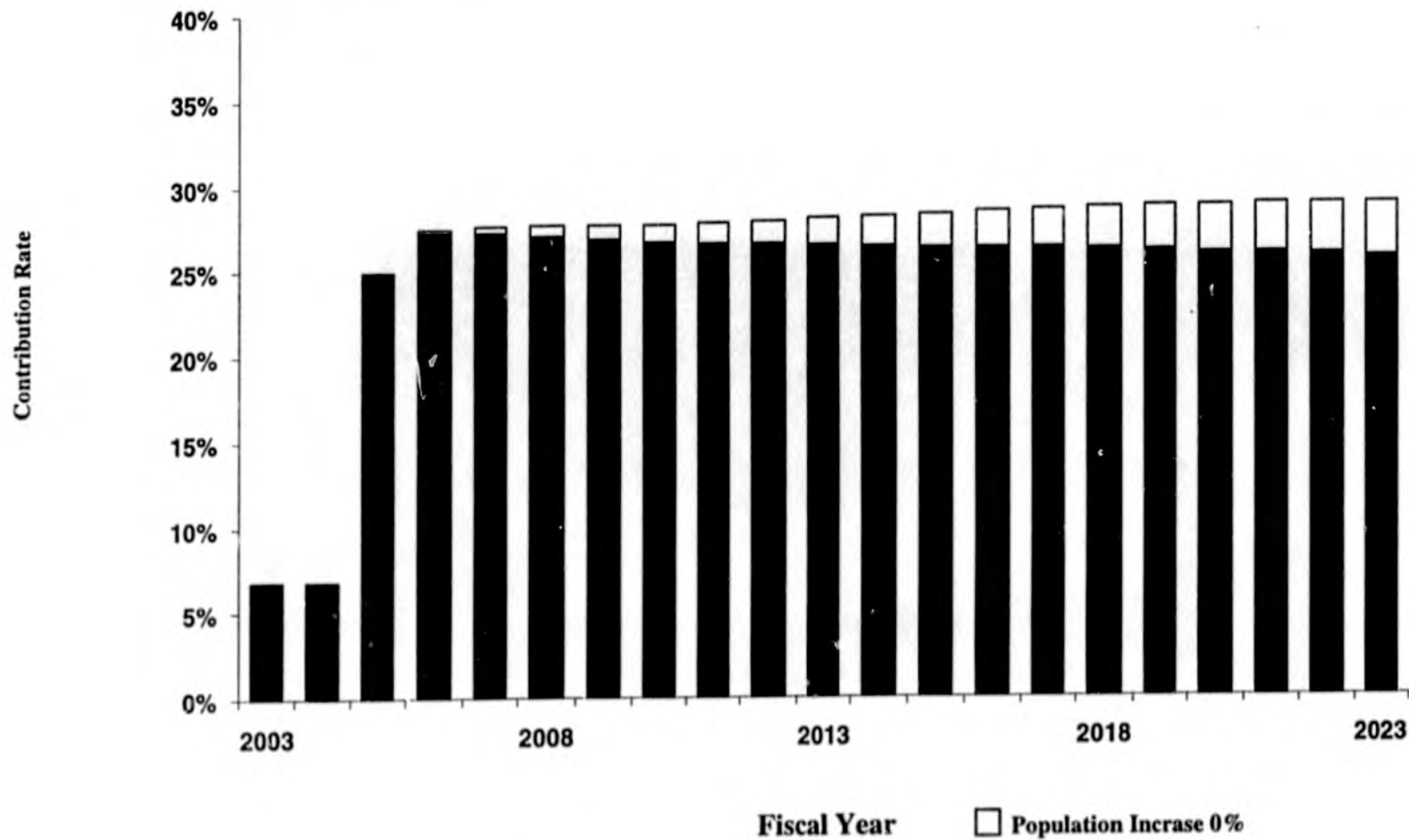


## State of Alaska - TRS

### Reconciliation of Total Contribution Rate for Fiscal Year 2005

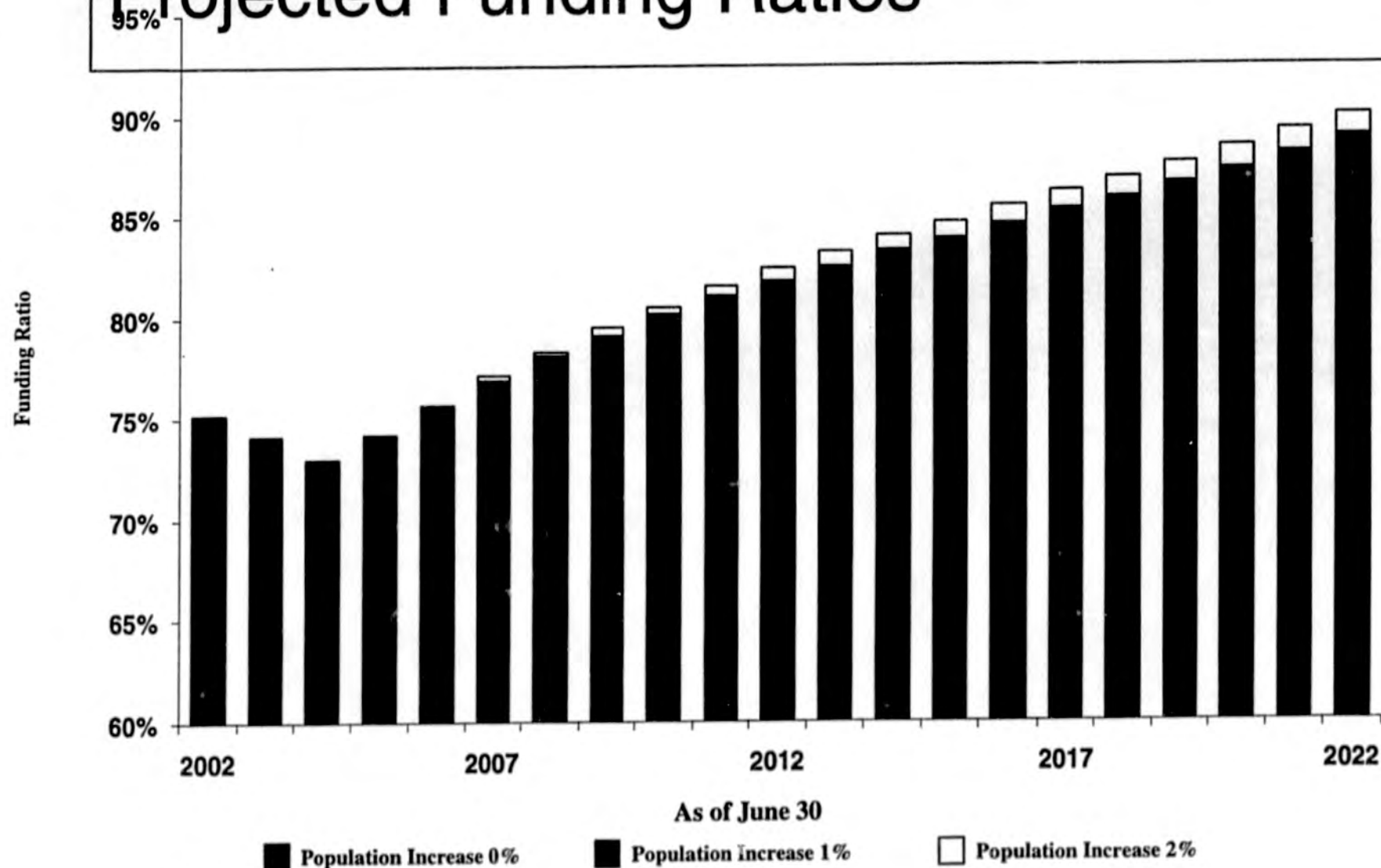


## State of Alaska - PERS Projected Contribution Rates

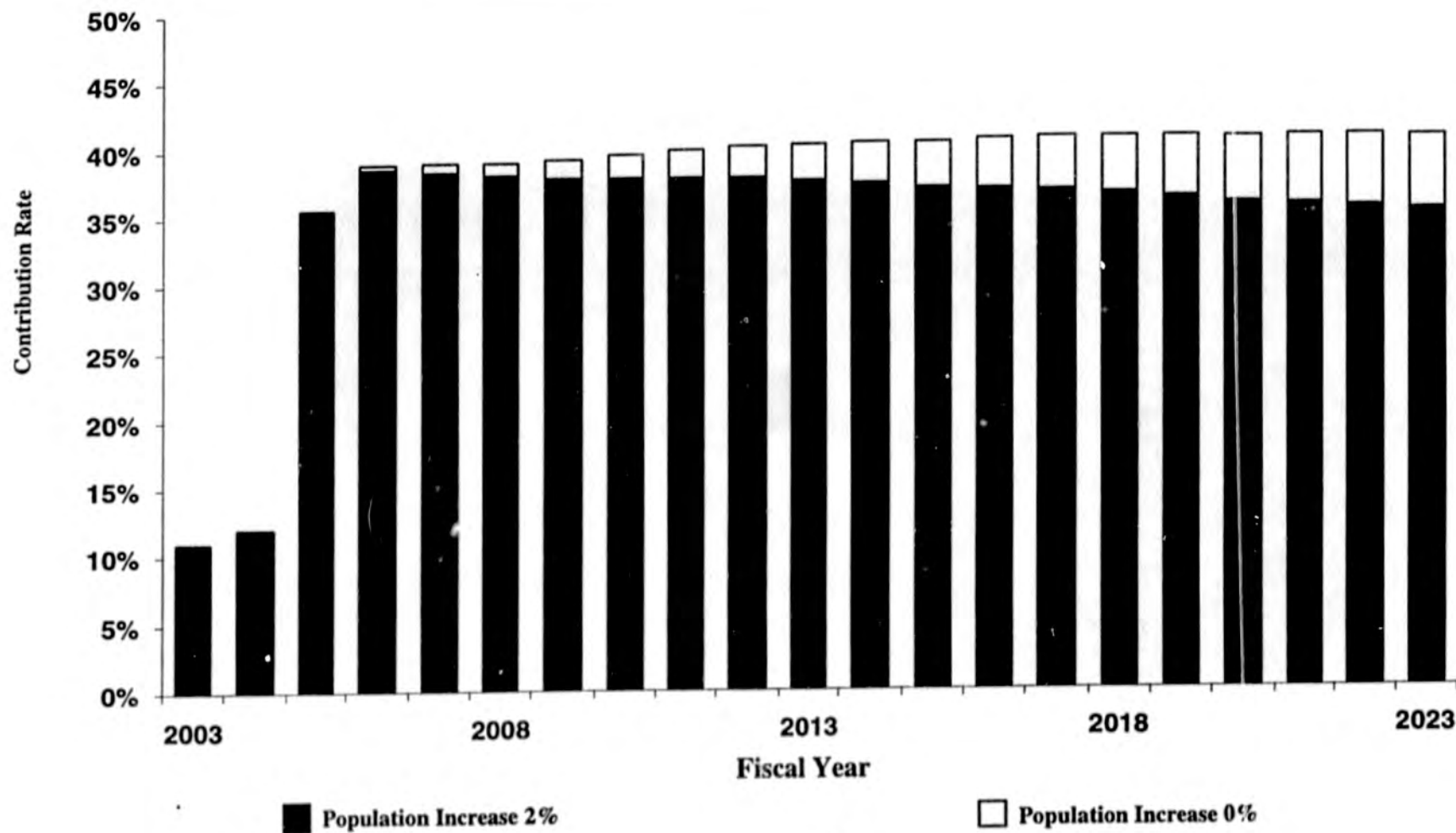


## State of Alaska - PERS

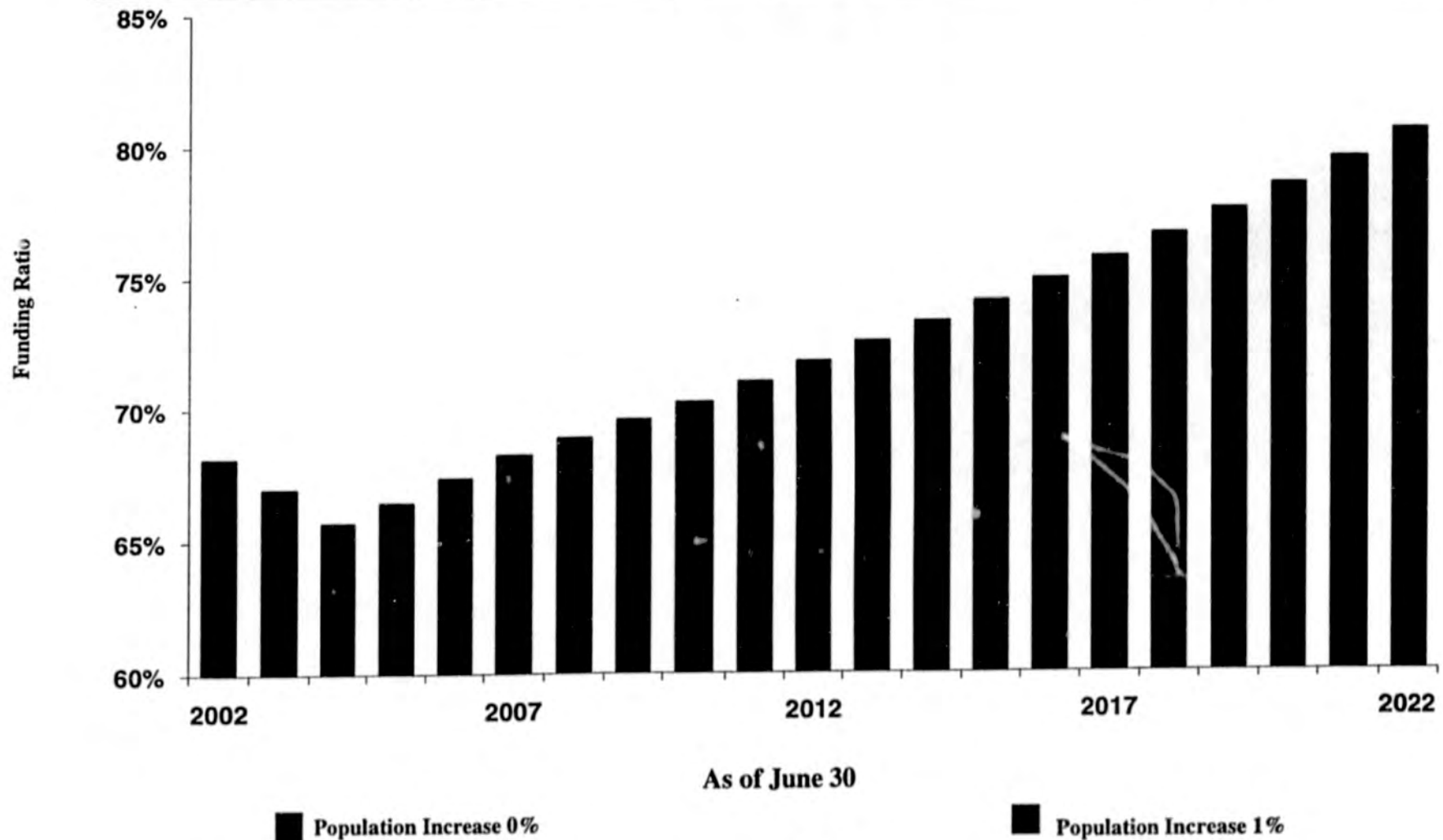
# Projected Funding Ratios



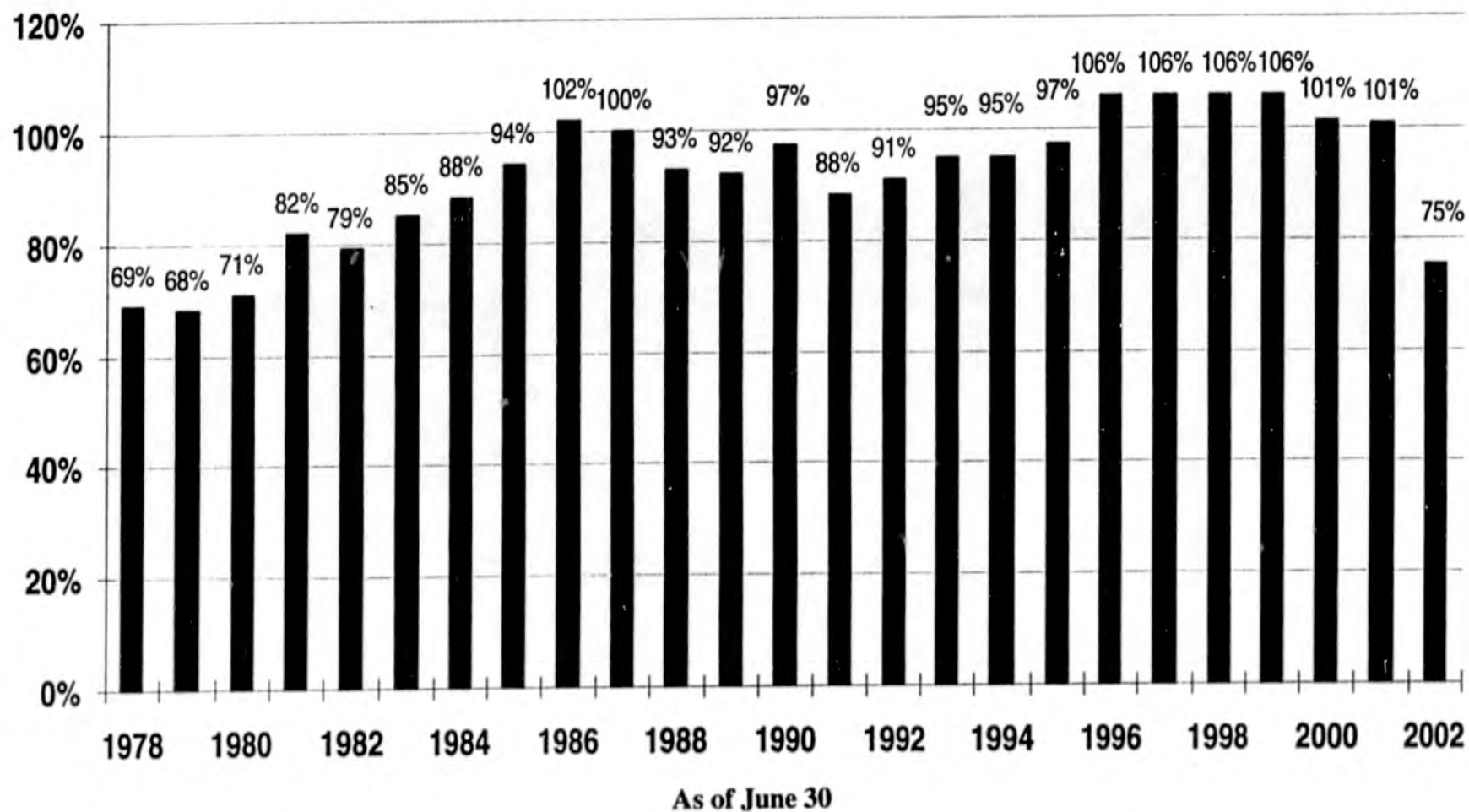
# State of Alaska - TRS Projected Contribution Rates



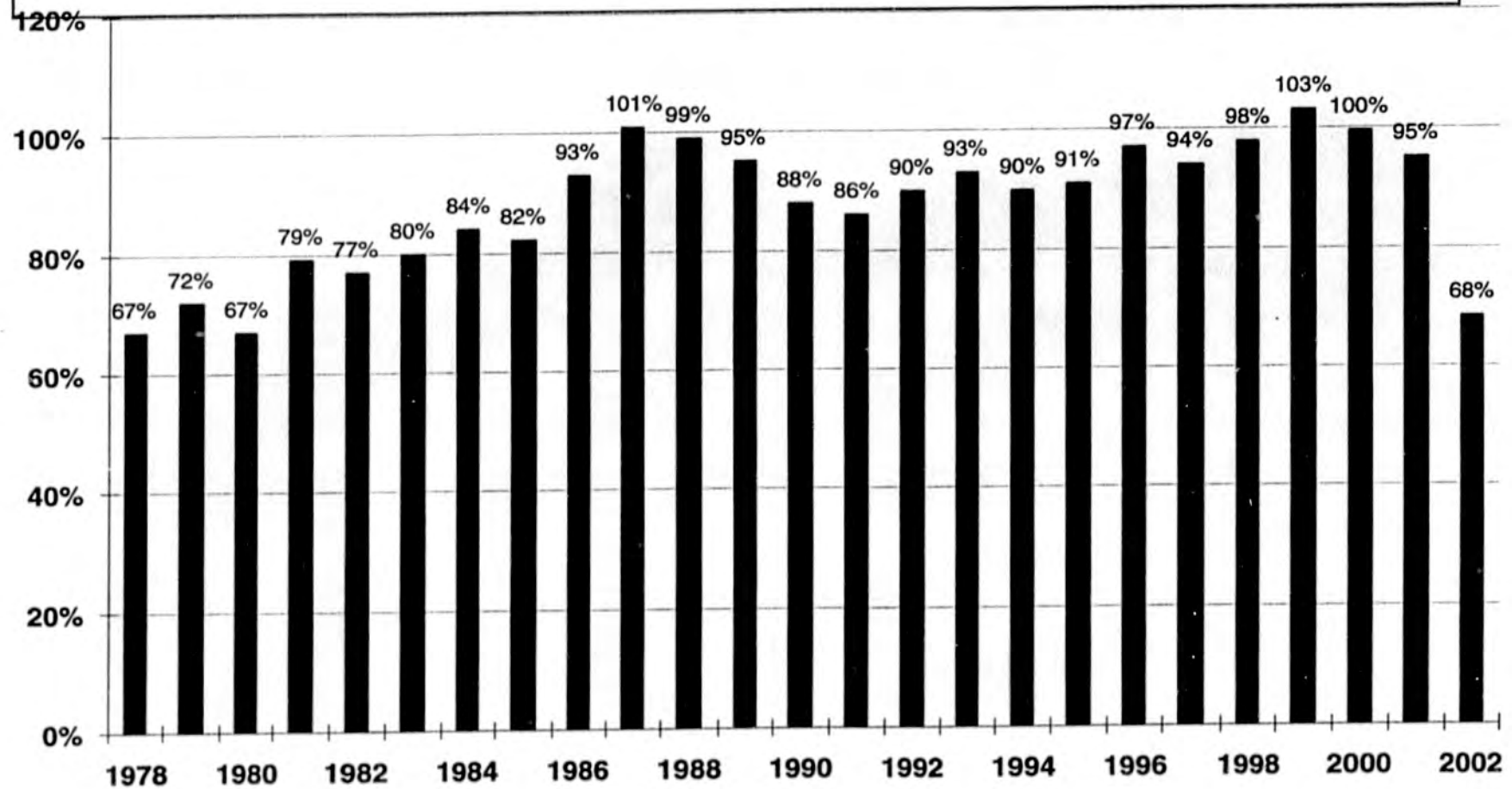
# State of Alaska - TRS Projected Funding Ratios



# State of Alaska - PERS Funding Ratio History



## State of Alaska - TRS Funding Ratio History



|                                                  |
|--------------------------------------------------|
| <p>State of Alaska - PERS</p> <p>Key Results</p> |
|--------------------------------------------------|

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|                                                 |
|-------------------------------------------------|
| <p>State of Alaska - TRS</p> <p>Key Results</p> |
|-------------------------------------------------|

|                          | <u>FY04</u> | <u>FY05</u> |
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