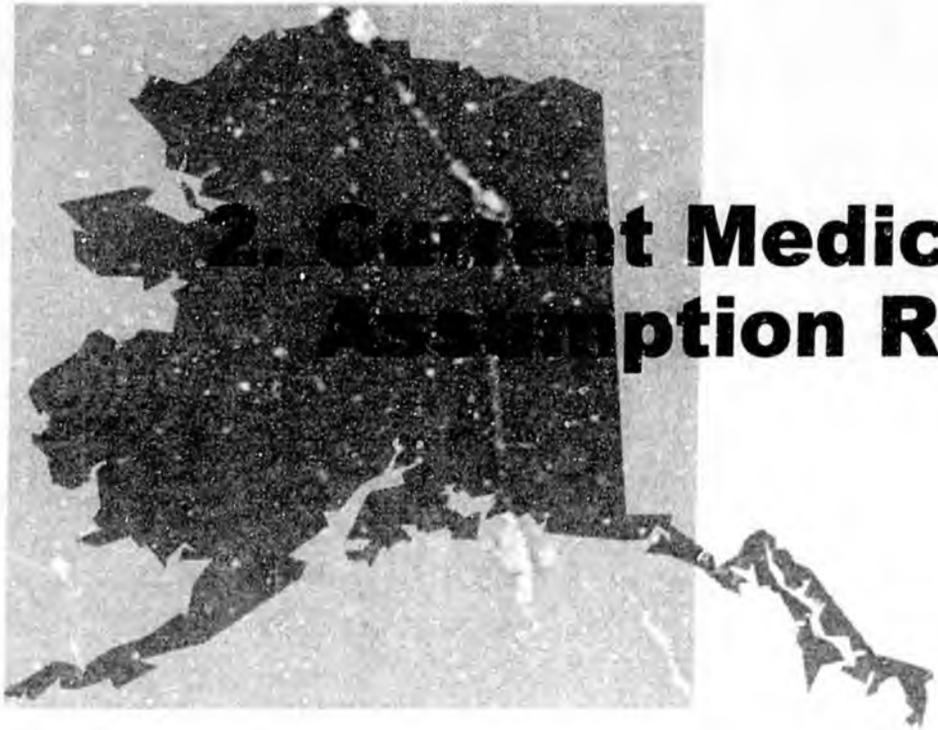


2. Current Medical Program – Assumption Refinements

Assumption Refinements
Objectives

- Independent review of claims development methodology
  - Potential refinement on going forward basis
- Update claims basis used in the valuation with more recent experience.
  - Update for experience through May 2004
  - Valuation claims were based on experience through August 2003
- Refinement of current valuation assumptions in advance of next formal assumption review
  - Current assumptions were last reviewed in 2000
  - Based on access to and detailed analysis of claims data

Assumption Refinements
Primary Changes

- We are recommending changes to the following elements:
  - Claims cost methodology
  - Claims costs
  - Medicare offset
  - Aging factors
  - Trend

Assumption Refinements
Claims Cost Methodology

- Current Methodology
  - Total rate for all retirees equals current premium rate
  - Pre-65 cost and (lower) post 65 claim cost per retiree are determined
  - Pre and post 65 costs increased with appropriate trend
- Proposed Methodology
  - Analysis of claims is completed based on claims information from Aetna and enrollment information from the State
  - Paid claims for June 2001 – May 2004 are tabulated and an average annual claim amount is determined. Next, four adjustments are applied.
    - Participation adjustment to account for differences in exposures between the experience period and current census.
    - Trend factor to trend historical claims from the midpoint of the experience period to the midpoint of the valuation period.

Assumption Refinements
Claims Cost Methodology

- Proposed methodology *(continued)*
  - Incurred claims adjustment to restate paid claims on an incurred basis. This assumes claims are paid on average three months after the incurred date.
  - Adjustments to paid claims to account for changes in the plan
  - Administrative costs are added to arrive at total projected costs for the valuation period
  - Distribution of per capita claims cost is developed by allocating total projected costs to the population census used in the valuation. The allocation is separate for medical and prescription drug costs.

Assumption Refinements
Chart of Claims Development

Chart revised. See September presentation page 28.

Assumption Refinements
Claims Cost

Chart revised. See September presentation page 29.

*Note: Age 65 costs represent pre- and post-Medicare medical and prescription drug costs for an age 65 participant

- Current claims cost are on a Per Subscriber (Retiree) Per Month (PSPM) basis
- Revised claims cost are on a Per Member Per Month basis (PMPM)
- Revised pre-65 costs are less, post-65 costs are greater

Assumption Refinements
Claims Cost

- The following table shows age 65 expected medical claims per covered individual for fiscal year 2004:

Chart revised. See September presentation.

Assumption Refinements
Medicare Offset

- Revised offset of 85%
- Based on experience study of pre- and post-65 members
- Currently no explicit Medicare offset assumed

Assumption Refinements
Aging Factors

- Aging factors represent the expected incremental increase in claims cost as an individual ages 1 year
- The following table shows proposed aging factors:

Age	Medical	Rx
00-44	2.0%	4.5%
45-54	2.5%	3.5%
55-64	3.5%	3.0%
65-74	4.0%	1.5%
75-84	1.5%	0.5%
85+	0.5%	0.0%

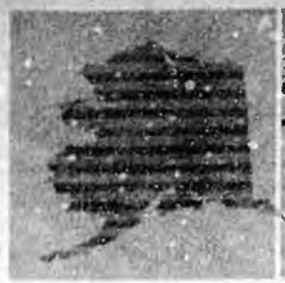
- For example, this means we expect medical claims to be 3.5 percent higher for a member age 57 compared to a member age 56
- Currently no explicit aging factors assumed

Assumption Refinements
Chart of Claims Costs by Age

Chart revised. See September presentation page 32.

Assumption Refinements
Trend

- Factors used to determine current and ultimate trend levels include:
  - Most recent 36 months of claims experience by claims cost category
    - Examined rolling 12 month averages and multiple regression models
  - Mercer's Actuarial and Financial Steering Committee retiree medical trend guidelines by claims cost category
  - Medicare trend forecasts
  - Current market observations



Assumption Refinements
Trend

The following table shows our proposed changes to assumed health care cost increases

Year	Current Medical/Rx	Proposed Medical	Proposed Rx
FY04	12.0%	10.0%	15%
FY05	12.0%	9.5%	14%
FY06	11.5%	9.0%	13%
FY07	11.0%	8.5%	12%
FY08	10.5%	8.0%	11%
FY09	10.0%	7.5%	10%
FY10	9.5%	7.0%	9%
FY11	9.0%	6.5%	8%
FY12	8.5%	6.0%	7%
FY13	8.0%	5.5%	6%
FY14	7.5%	5.0%	5%
FY15	7.0%	5.0%	5%
FY16	6.0%	5.0%	5%
FY17 and later	5.0%	5.0%	5%

Assumption Refinements
Valuation Results

- The proposed assumption changes produce the following percentage changes in medical liabilities:

	Percentage Change
Accrued Liability (medical only)	revised
Normal Cost (medical only)	revised

Assumption Refinements
Cost Projections

The following pages show the effect the proposed medical assumption changes would be expected to have over time on actuarial calculated contribution rates

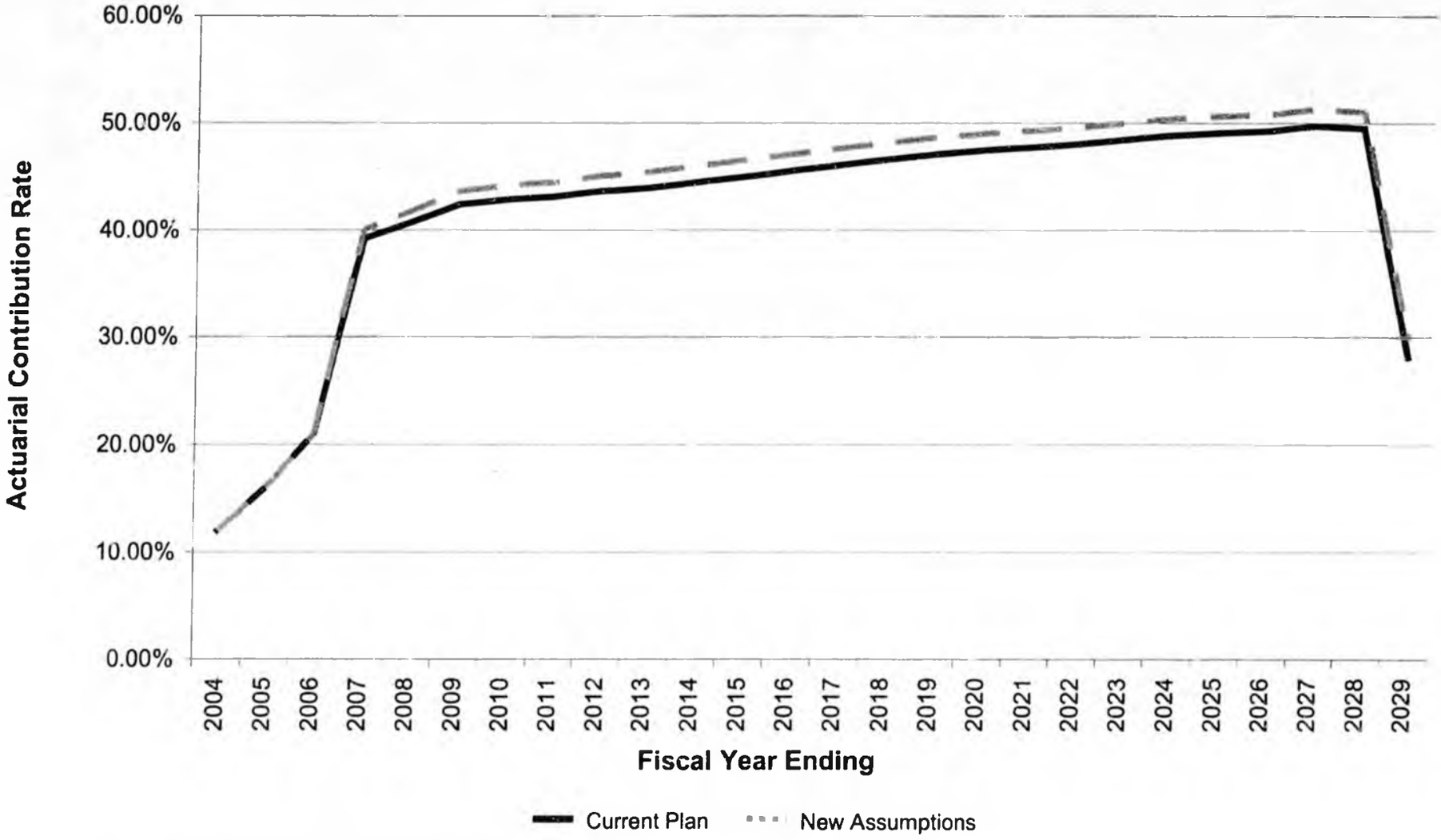
- For purposes of isolating the effect of the proposed medical assumption changes, non-medical benefits have been kept unchanged from the current program
- Members are assumed to contribute at their current contribution rate
- Member data, assumptions and methods are as described in the June 30, 2003 actuarial valuation reports, except for revisions to the medical assumptions described previously in this section

Assumption Refinements
Cost Projections

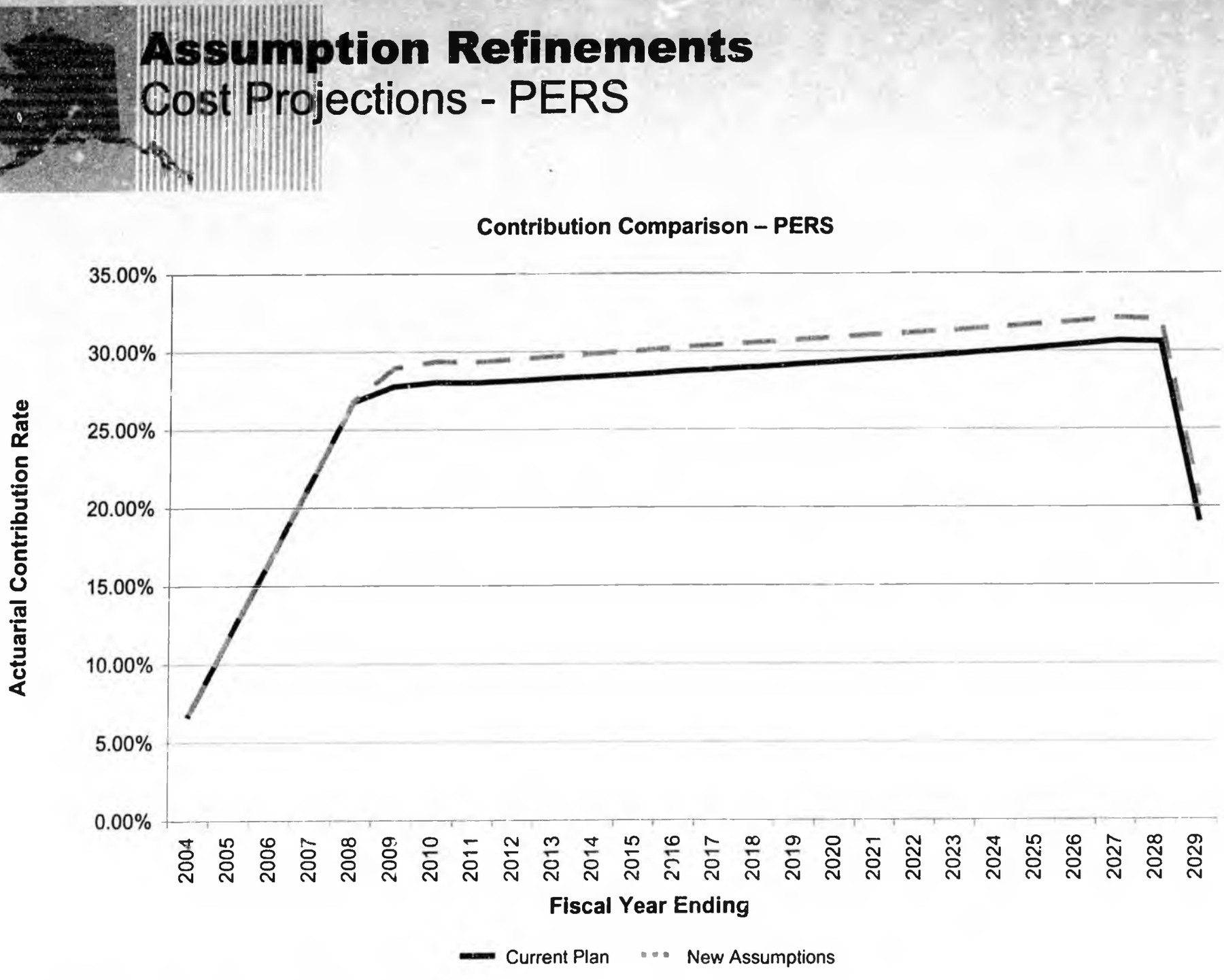
Other key assumptions

- Active population scenario: 1% growth
- New entrants brought in to replace members assumed to die, terminate, retire, or become disabled
- New entrant profiles based on average new entrant profiles from the prior 3 years
- Future liabilities and asset returns are calculated at 8.25%, except:
  - 17% investment return for FY04
- Adopted contribution rate is equal to the actuarially calculated rate for all future years.

Assumption Refinements
Cost Projections - TRS

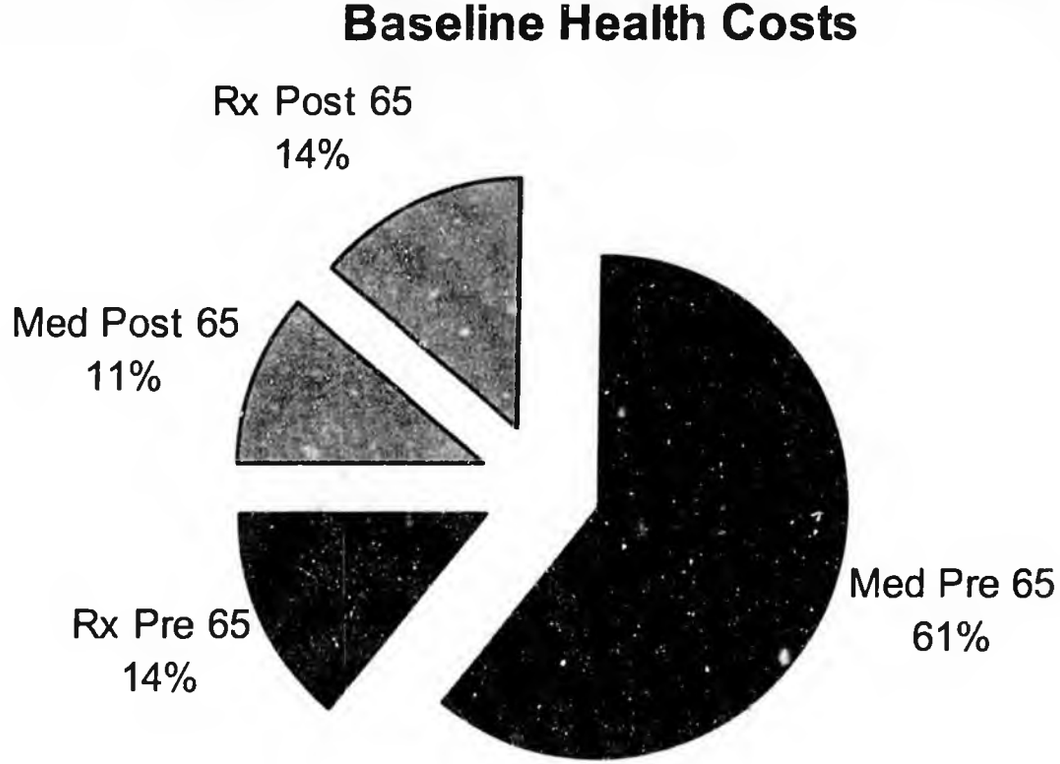


Assumption Refinements
Cost Projections - PERS



Assumption Refinements
Medicare Reform Impact

- Total Projected Claims Cost for Fiscal Year 2004 - $211,662,953

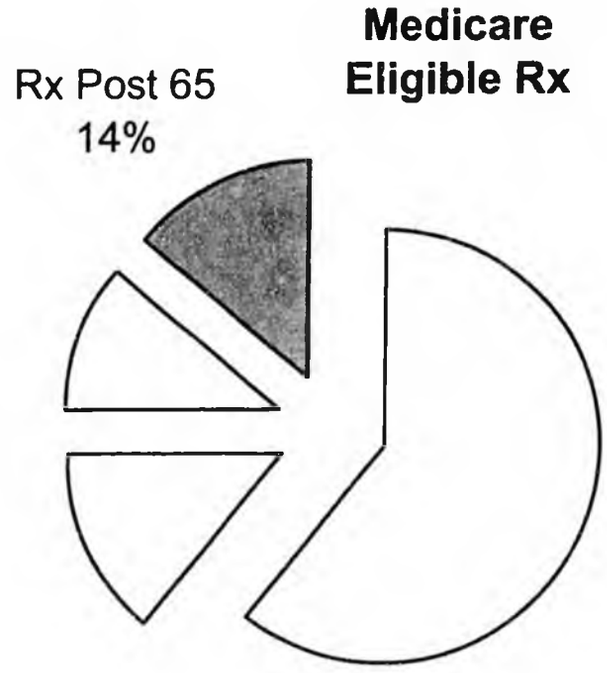


Assumption Refinements
Medicare Reform Impact

- Beginning in 2006, the federal government will provide a cash incentive payment to plan sponsors that maintain Rx plans which are at least actuarially equivalent to Medicare Part D
- Plan sponsor gets 28% subsidy for covered drug costs from $250 to $500 (indexed) per eligible participant

Medicare Eligible Rx Total Cost	$29.6 M
Estimated Subsidy	23.3%
Estimated Savings*	$6.9 M

*Represents savings in 2004 dollars.
Actual medicare subsidy will be effective in 2006.

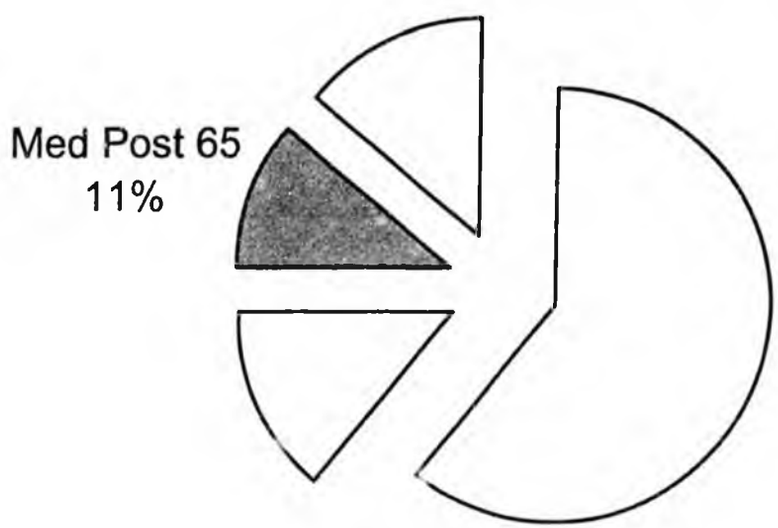


Assumption Refinements
Medicare Reform Impact

- As part of the Medicare Prescription Drug Improvement and Modernization Act of 2003, a special provision affecting physicians in Alaska will result in more than a 52% increase in average Physician fee schedule payments for 2004
- Assumptions
  - Portion of physician services performed in Stare of Alaska - 65%
  - Portion of medical expenses related to physician cost - 61%

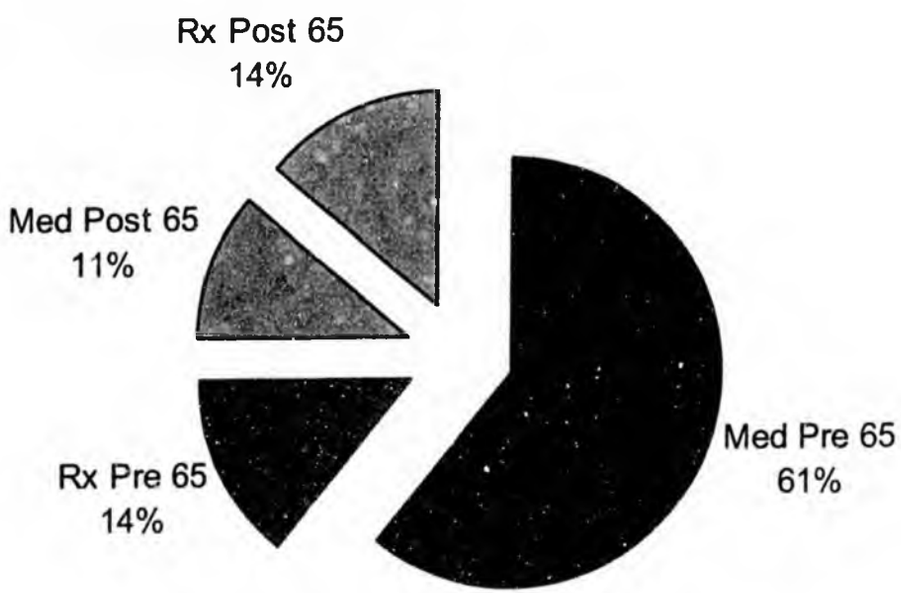
Post-65 Physician Reimbursement	$23.0 M
Estimated Increase	20.6%
Estimated Cost Increase	$4.7 M

Physician Fee Increase

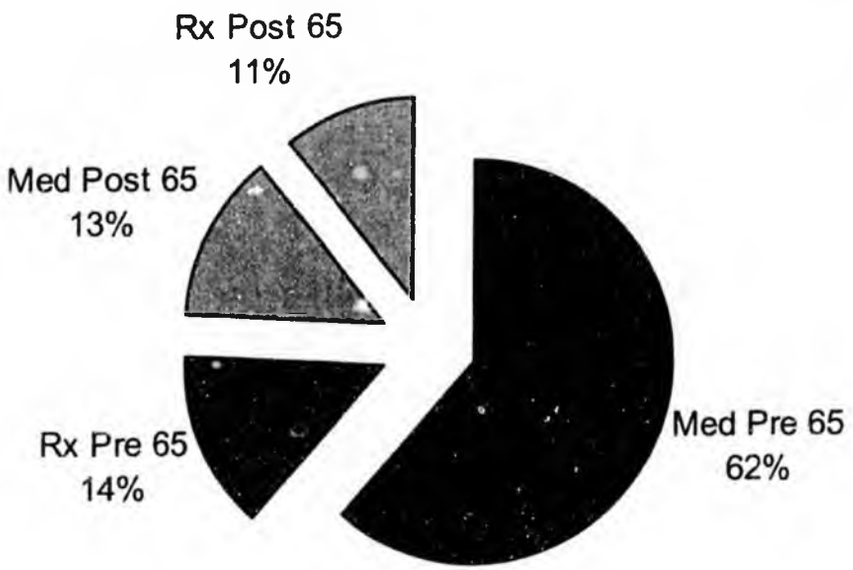


Assumption Refinements
Medicare Reform Impact

Revised Total Projected Claim Cost
$211.7 M



Total Claim Cost after Medicare Reform
$209.5 M*



*Represents savings in 2004 dollars.
Actual medicare subsidy will be effective in 2006.

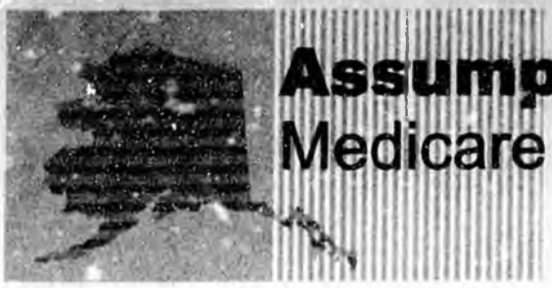
Assumption Refinements
Medicare Reform Impact

Claims Cost Assumptions – Age 65 Per Member Per Year

(See September presentation page 48 for revised figures.)

	Medical		Prescription Drug	
	Pre-Medicare	**Post-Medicare**	**Pre-Medicare**	**Post-Medicare**
Baseline	$6,410	$961	$1,472	$1,472
Medicare Reform	$6,409	$1,160	$1,472	$1,118

*Represents savings in 2004 dollars.
Actual medicare subsidy will be effective in 2006.

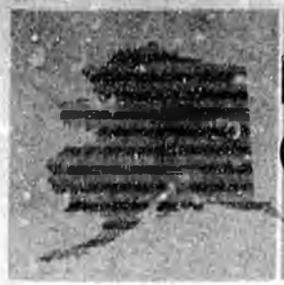


Assumption Refinements
Medicare Reform Impact

Valuation Results

- Incorporation of claims and assumption changes related to Medicare Reform produces the following percentage changes in medical liabilities:

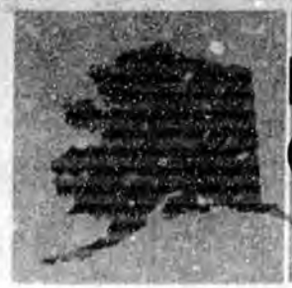
	Percentage Change
Accrued Liability (medical only)	revised
Normal Cost (medical only)	revised



Medicare Reform Impact
Cost Projections

The following pages show the effect the changes due to Medicare Reform would be expected to have over time on actuarial calculated contribution rates

- For purposes of isolating the effect of the Medicare Reform changes, non-medical benefits have been kept unchanged from the current program
- Members are assumed to contribute at their current contribution rate
- Member data, assumptions and methods are as described in the June 30, 2003 actuarial valuation reports, except for revisions to the medical assumptions described previously in this section
- Proposed assumption and method changes for valuation of medical liabilities have been incorporated in this analysis

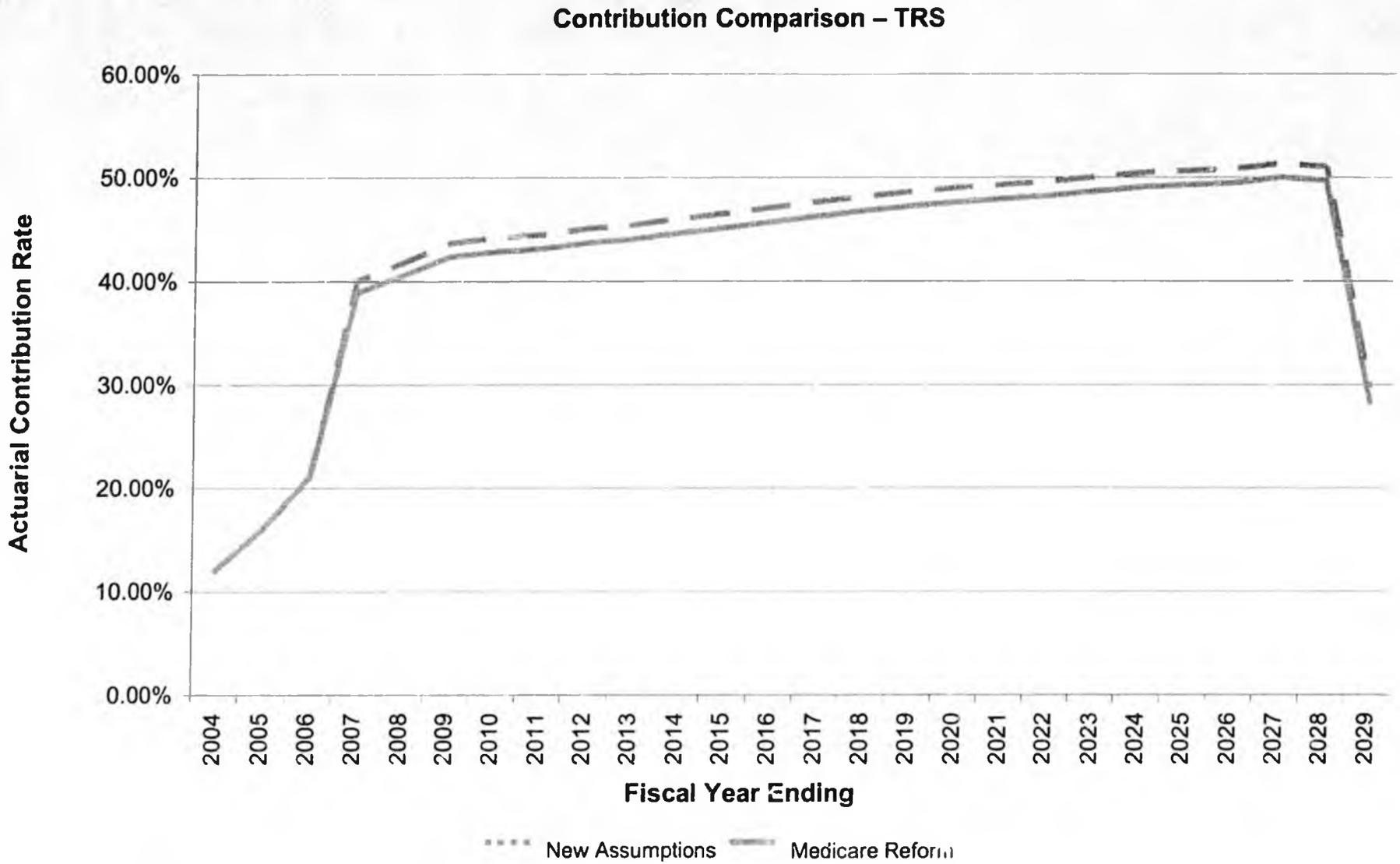


Medicare Reform Impact
Cost Projections

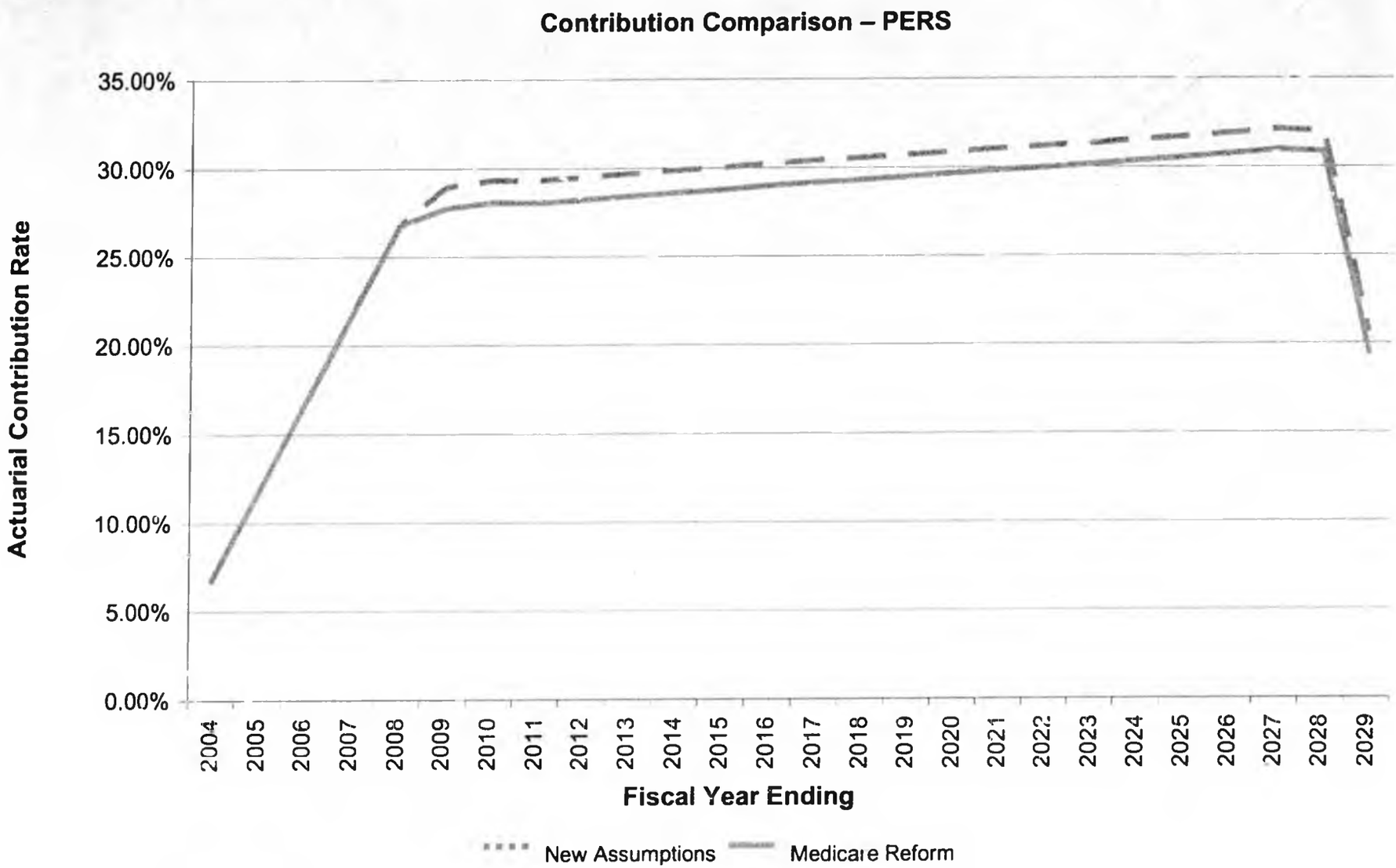
Other key assumptions

- Active population scenario: 1% growth
- New entrants brought in to replace members assumed to die, terminate, retire, or become disabled
- New entrant profiles based on average new entrant profiles from the prior 3 years
- Future liabilities and asset returns are calculated at 8.25%, except:
  - 17% investment return for FY04
- Adopted contribution rate is equal to the actuarially calculated rate for all future years.

Medicare Reform Impact
Cost Projections - TRS

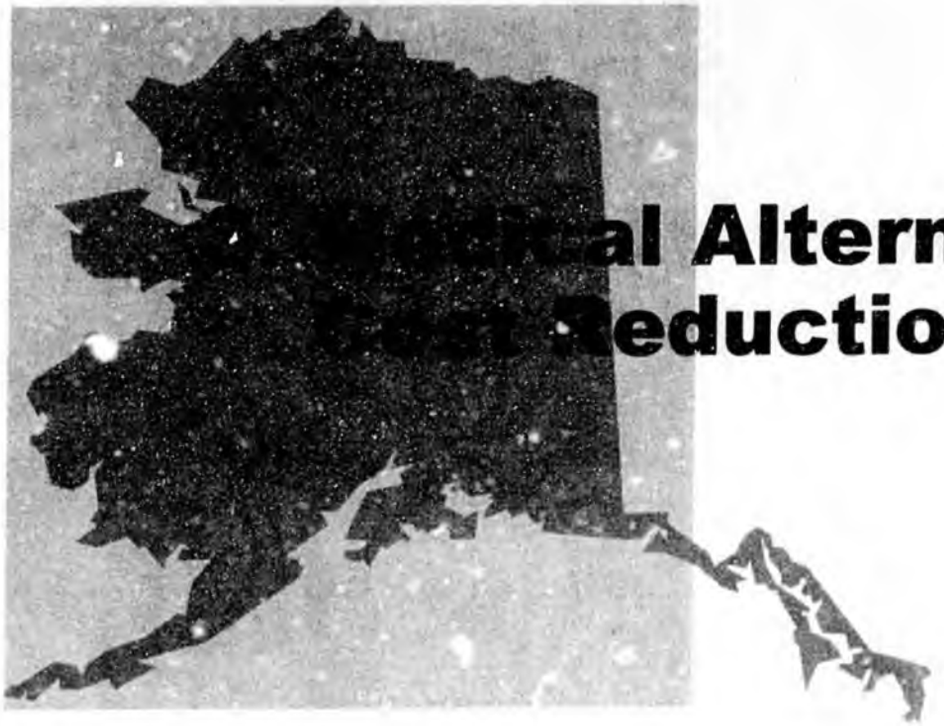


Medicare Reform Impact
Cost Projections - PERS



Assumption Refinements & Medicare Reform
Key Observations

- Net cost effect of new assumptions and Medicare reform is almost no effect on total employer actuarial contribution rate
  - 0.2% to 0.3% increase
  - Increase in accrued liability offset by decrease in normal cost for medical liabilities
- Assumption and method improvements over current
  - Separate costs and trend for medical versus Rx
    - More accurate estimation and valuation of benefit changes
  - Explicit recognition of effect of aging on claims
  - Detailed analysis of claims costs by Medicare eligibility status (pre and post 65)
- Opportunity for further method improvements
  - Annual review recommended
  - Dependent coverage data for retiree population

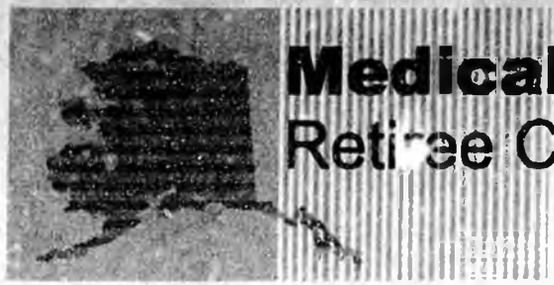


al Alternative 1 – eduction and Sharing

Medical Alternative 1
Defined Benefit

- The current medical plan would be replaced by an alternative plan which is designed to share and reduce costs
- Basic plan design elements

	Current Plan	Alternative Plan
Medical		
▪ Coordination with Medicare	Total Allowable	Maintenance of Benefits
▪ Deductible	$150/person, $450/family	$250/person, $750/family
▪ Out of Pocket	$800	$2,500
▪ Outpatient Surgery Coinsurance	100%	80%
Prescription Drug		
▪ Retail	90 day supply	30 day supply
- Generic	$4	$5
- Brand Formulary	$8	$15
- Brand Non-Formulary	$8	$30
▪ Mail Order	90 day supply	90 day supply
- Generic	$0	$5
- Brand Formulary	$0	$15
- Brand Non-Formulary	$0	$30
Dental, Vision, Audio	No Change	



Medical Alternative 1
Retiree Contributions

- Retirees who were previously eligible for 100% subsidy of retiree health plan costs will now participate in the premium cost.
- Apply percentages to the contribution base to arrive at the applicable contribution amount.
- Contributions are on a per member basis
- Contribution Base Annual PMPY for fiscal year 2004:

Pre Medicare	$5,749
Post Medicare	$2,667

Medical Alternative 1
Retiree Contributions

- Contribution Percentage

Service (yrs)	Contribution %
<20	30%
20-29	20%
30+	10%

- Retirees who are not eligible for subsidized retiree health plan costs will pay 100% of the base PMPY costs

Medical Alternative 1
Eligibility

- No change to the basic eligibility requirements for members who retire directly from active service.
  - TRS members must be age 60 or older or have at least 25 years of service. Disabled members are also eligible.
  - PERS members must be age 60 or older or have at least 30 years of service (25 years for police officers or firefighters). Disabled members are also eligible.
- Terminated vested members are not eligible. A member must retire directly from active service in order to receive coverage

Medical Alternative 1
Valuation Results

Claims Cost Assumptions

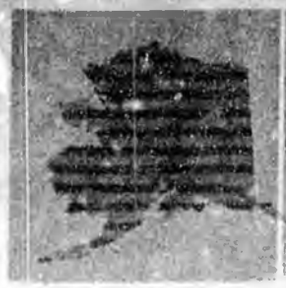
	Medical		Prescription Drug	
	Pre-Medicare	**Post-Medicare**	**Pre-Medicare**	**Post-Medicare**
Baseline	$6,410	$961	$1,472	$1,472
Medicare Reform	$6,409	$1,160	$1,472	$1,118
Plan Alternative	$6,034	$881	$1,368	$1,039

Medical Alternative 1
Valuation Results

- Incorporation of claims and assumption changes related to medical alternative 1 produces the following percentage changes in medical liabilities:

	Percentage Change
Accrued Liability (medical only)	N/A
Normal Cost (medical only)	-35%

- Long-term reduction in medical liabilities is expected to be 35%
- Little current change since new tier only



Medical Alternative 1
Cost Projections

The following pages show the effect that proposed medical alternative 1 would be expected to have over time on actuarial calculated contribution rates

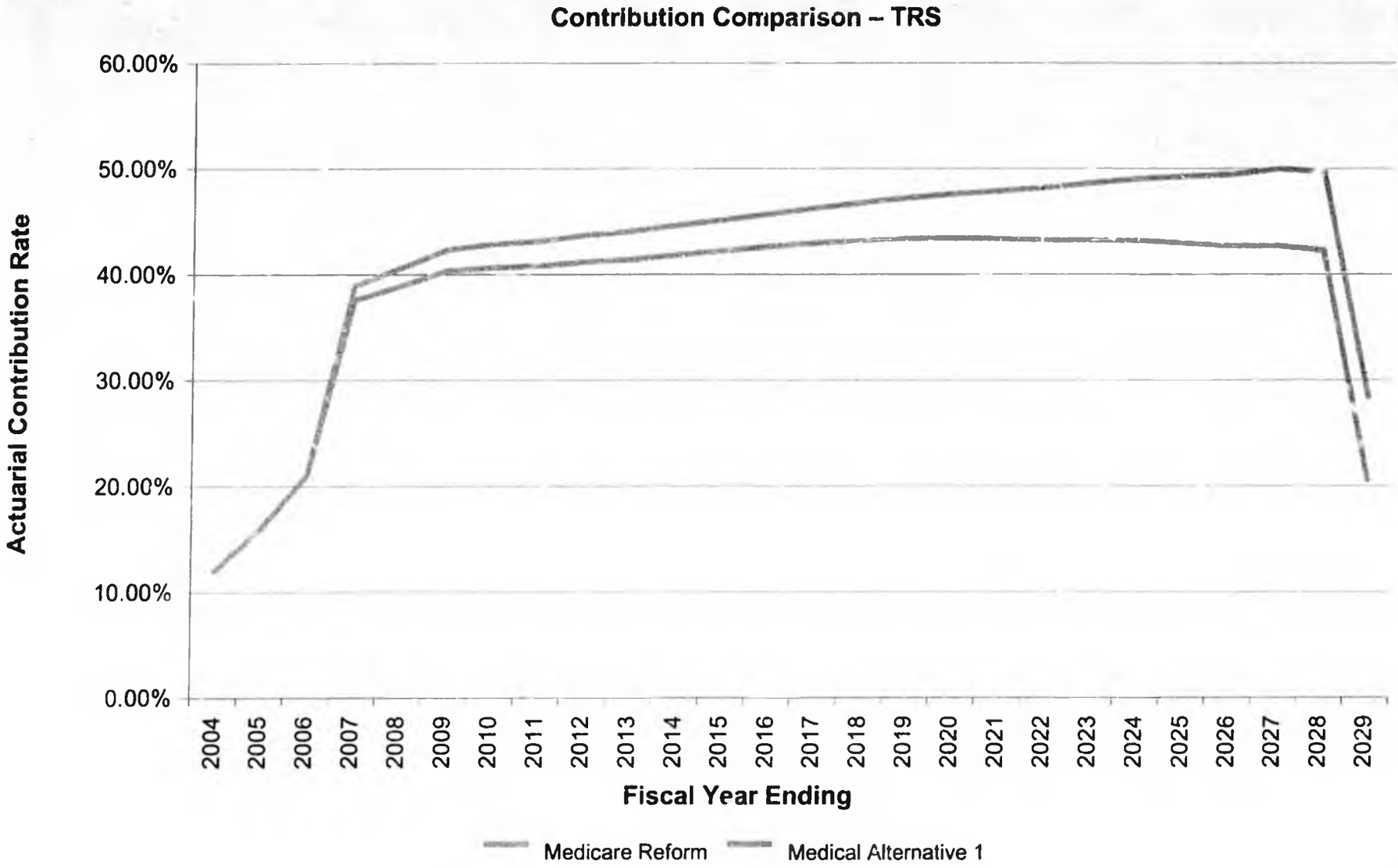
- For purposes of isolating the effect of the medical program changes, non-medical benefits have been kept unchanged from the current program
- Members are assumed to contribute at their current contribution rate
- Member data, assumptions and methods are as described in the June 30, 2003 actuarial valuation reports, except for revisions to the medical assumptions previously described
- Proposed assumption and method changes (including the estimated effect of Medicare Reform) have been incorporated in this analysis

Medical Alternative 1
Cost Projections

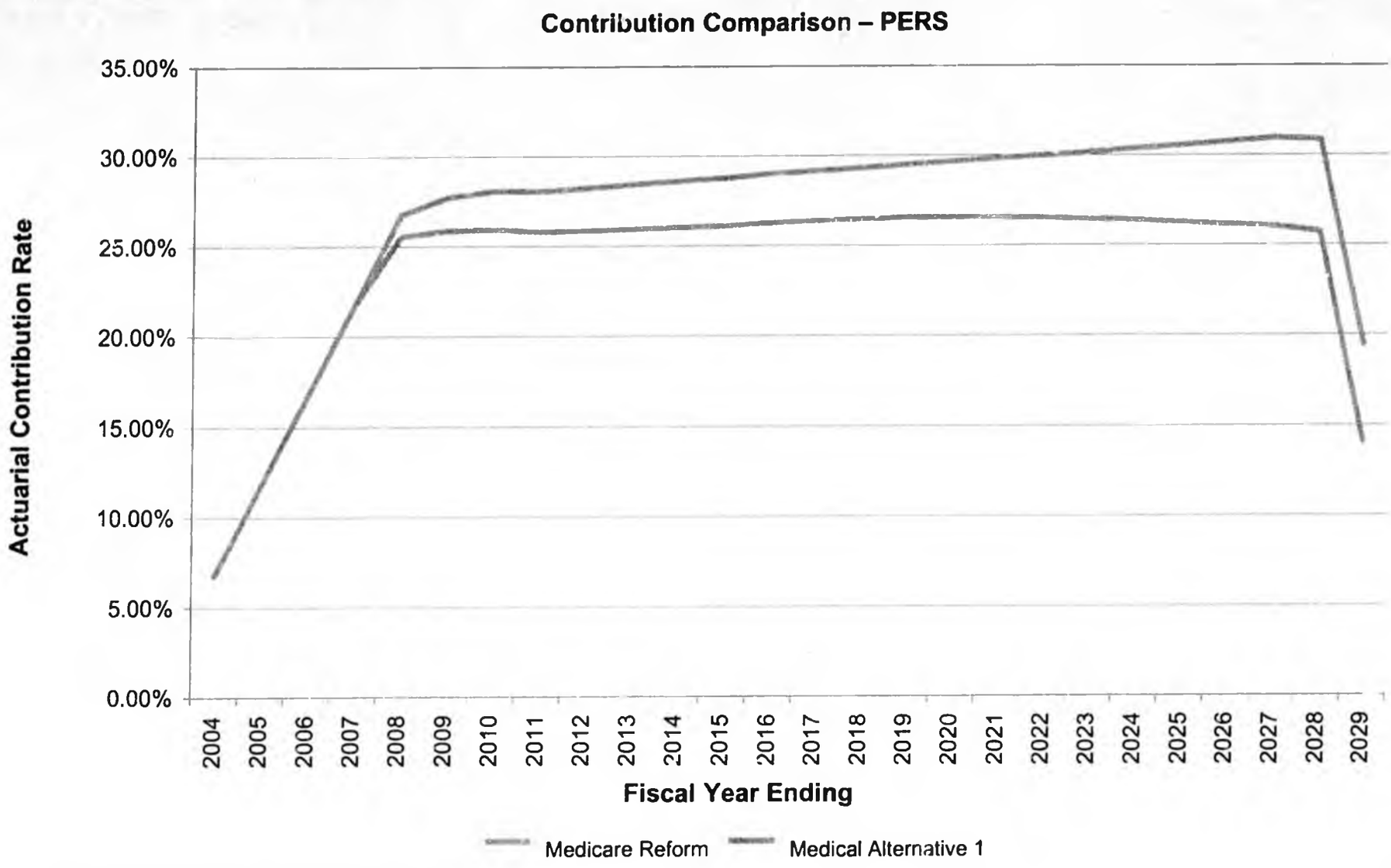
Other key assumptions

- Active population scenario: 1% growth
- New entrants brought in to replace members assumed to die, terminate, retire, or become disabled
- New entrant profiles based on average new entrant profiles from the prior 3 years
- Future liabilities and asset returns are calculated at 8.25%, except:
  - 17% investment return for FY04
- Adopted contribution rate is equal to the actuarially calculated rate for all future years.

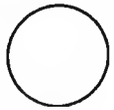
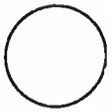
Medical Alternative 1
Cost Projections - TRS



Medical Alternative 1
Cost Projections - PERS



Medical Alternative 1
Comparison versus Objectives

Objective	Alternative 1
Members should bear a greater share of the cost of medical benefits.	
Members should have to retire from the System in order to be eligible for medical benefits.	
System benefits should favor longer-service members.	
Employer contributions should be predictable and stable.	
Investment risk should not be borne solely by the employers	
Healthcare inflation risk should not be borne solely by the employers	

- Meets objective
- Partially meets objective
- Does not meet objective

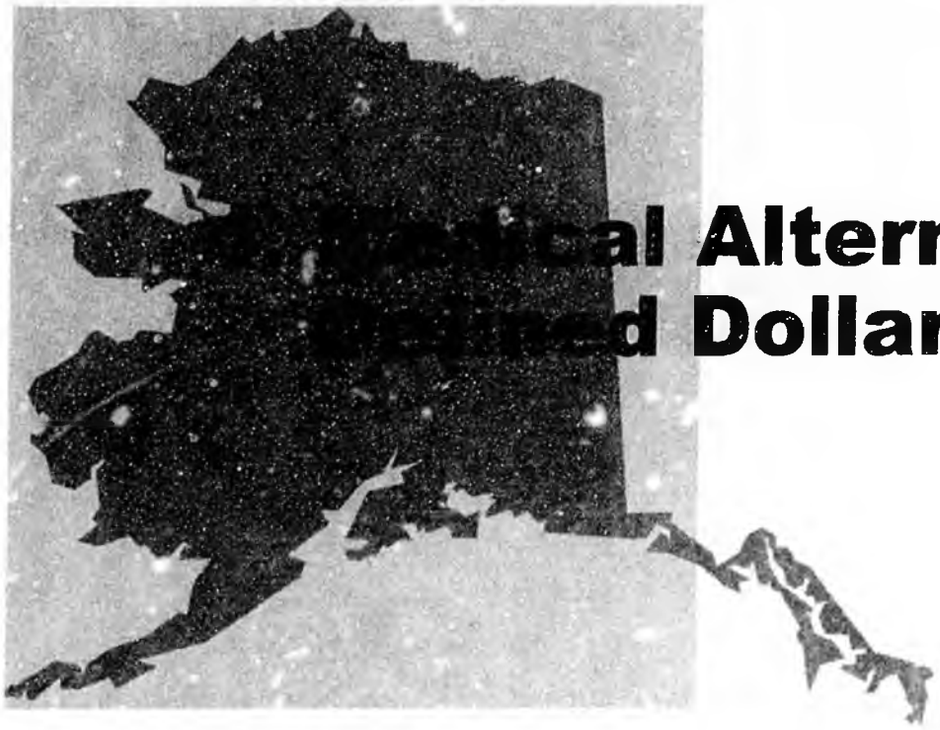
Medical Alternative 1
Comparison versus Constraints

Constraint	Alternative 1
Benefit changes must take the form of new "tiers."	●
Annual cost of benefits should not be designed to exceed current Systems' normal cost rates.	●

● Meets constraint
◐ Partially meets constraint
○ Does not meet constraint

Medical Alternative 1
Key Observations

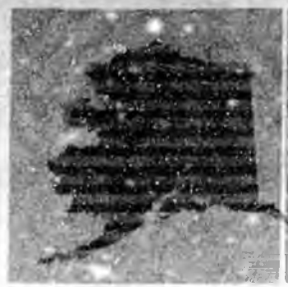
- Alternative 1 reduces overall cost
- Cost is shared between employers and members
- Investment risk is borne by employers
- Healthcare inflation risk is borne by both employers and members



[illegible]al Alternative 2 – [illegible]d Dollar Approach

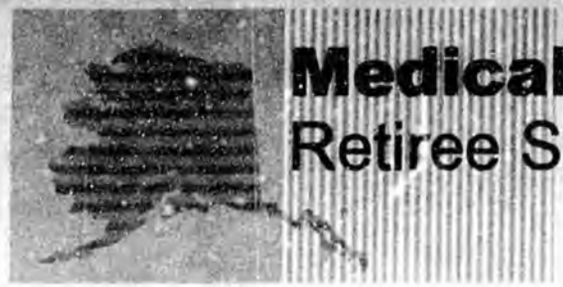
Medical Alternative 2
Defined Dollar Plan

- The current medical plan would be replaced by an alternative defined dollar plan which is designed to increase predictability and stability of employer retiree medical health care costs
- Defined Dollar Plan
  - Fixed dollar subsidy at retirement for health coverage
  - Subsidy may or may not be tied to an index
  - Employer may or may not sponsor health benefits
  - May structure subsidy to be based on service



Medical Alternative 2
Defined Dollar Plan

- Proposed plan
  - Fixed dollar subsidy at retirement for health coverage
  - Offer access to retiree medical plan as outlined in Alternative 1
  - Subsidy amount is based on Medicare eligibility and length of service
  - Subsidy amount indexed each year by general inflation (CPI)



Medical Alternative 2
Retiree Subsidy Amount

- Retirees who were previously eligible for 100% subsidy of retiree health plan costs will now receive a defined subsidy amount based on Medicare eligibility status and service duration.
- Apply percentages to the applicable subsidy base to arrive at the appropriate subsidy amount.
- Defined Dollar Subsidy Base Annual PMPY for fiscal year 2004:

Pre Medicare	$5,749
Post Medicare	$2,667

- Subsidy Percentage

Service (yrs)	Subsidy %
<20	70%
20-29	80%
30+	90%

Medical Alternative 2
Retiree Contribution Example

- Retiree contributions are determined by subtracting the annual subsidy amount from the annual claims cost for a given year.
- Assumptions
  - Pre Medicare retiree, average age, 25 years of service
  - Year 1 assumes plan cost and subsidy base are equal
  - Average plan cost increases with blended medical, prescription drug trend of 11%
  - Subsidy base increases at a general inflation rate of 3.5%

Year 1	
Average Plan Cost	$5,749
Retiree Subsidy (80% of $5,749)	$4,599
Retiree Contribution	$1,150

Year 2	
Average Plan Cost	$6,381
Retiree Subsidy (80% of $5,950)	$4,760
Retiree Contribution	$1,621
Percentage Increase	41%

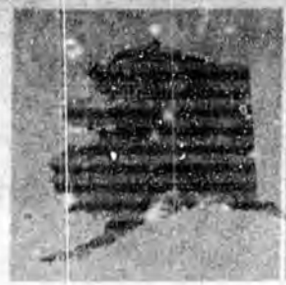
Medical Alternative 2
Eligibility

- No change to the basic eligibility requirements for members who retire directly from active service.
  - TRS members must be age 60 or older or have at least 25 years of service. Disabled members are also eligible.
  - PERS members must be age 60 or older or have at least 30 years of service (25 years for police officers or firefighters). Disabled members are also eligible.
- Terminated vested members are not eligible. A member must retire directly from active service in order to receive coverage.

Medical Alternative 2
Valuation Results

- Incorporation of claims and assumption changes related to medical alternative 1 produces the following percentage decreases in medical liabilities (compared to current program):

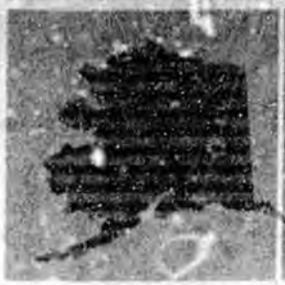
	Percentage Change
Accrued Liability (medical only)	N/A
Normal Cost (medical only)	-70%



Medical Alternative 2
Cost Projections

The following pages show the effect that proposed medical alternative 1 would be expected to have over time on actuarial calculated contribution rates

- For purposes of isolating the effect of the medical program changes, non-medical benefits have been kept unchanged from the current program
- Members are assumed to contribute at their current contribution rate
- Member data, assumptions and methods are as described in the June 30, 2003 actuarial valuation reports, except for revisions to the medical assumptions previously described
- Proposed assumption and method changes (including the estimated effect of Medicare Reform) have been incorporated in this analysis

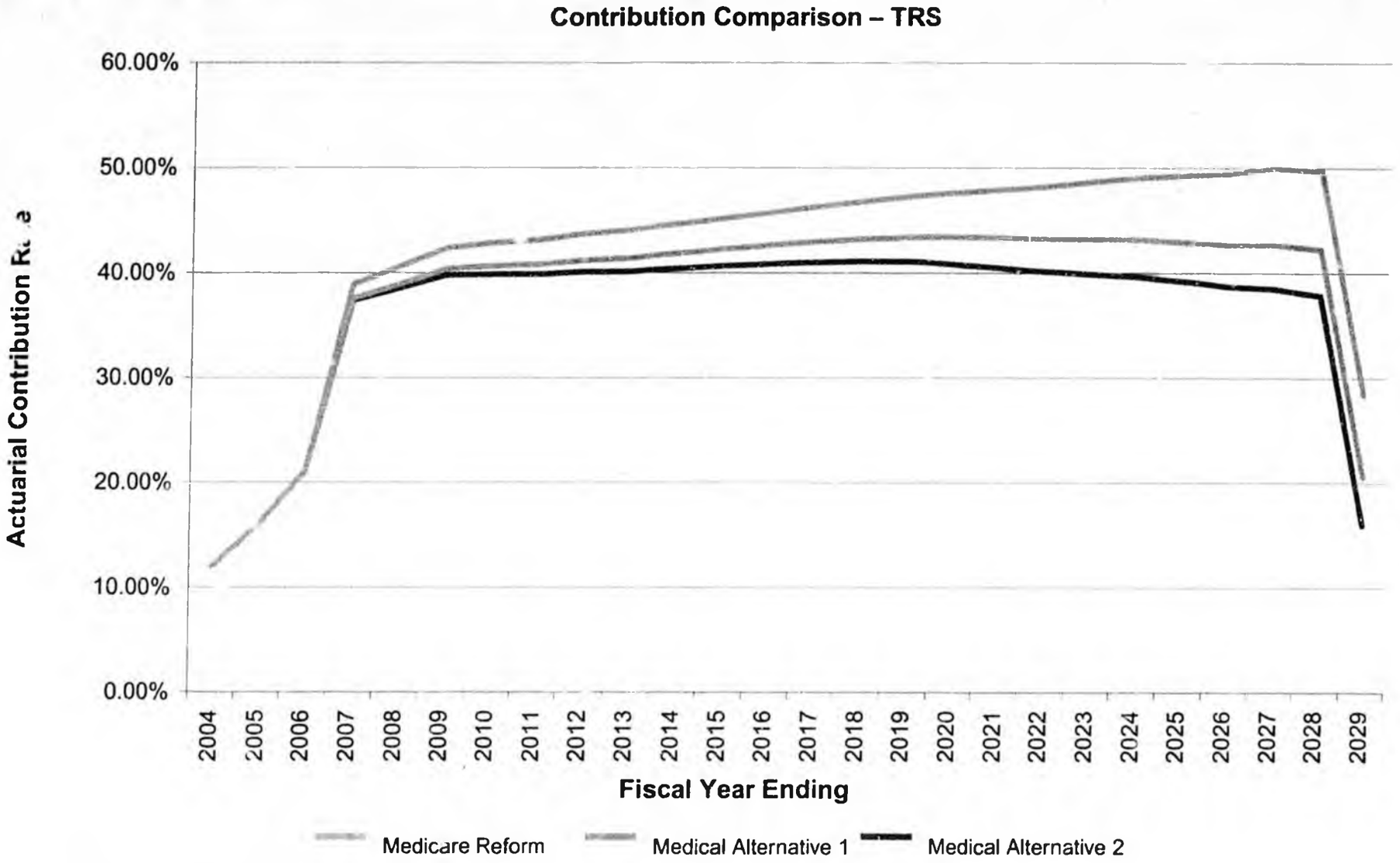


Medical Alternative 2
Cost Projections

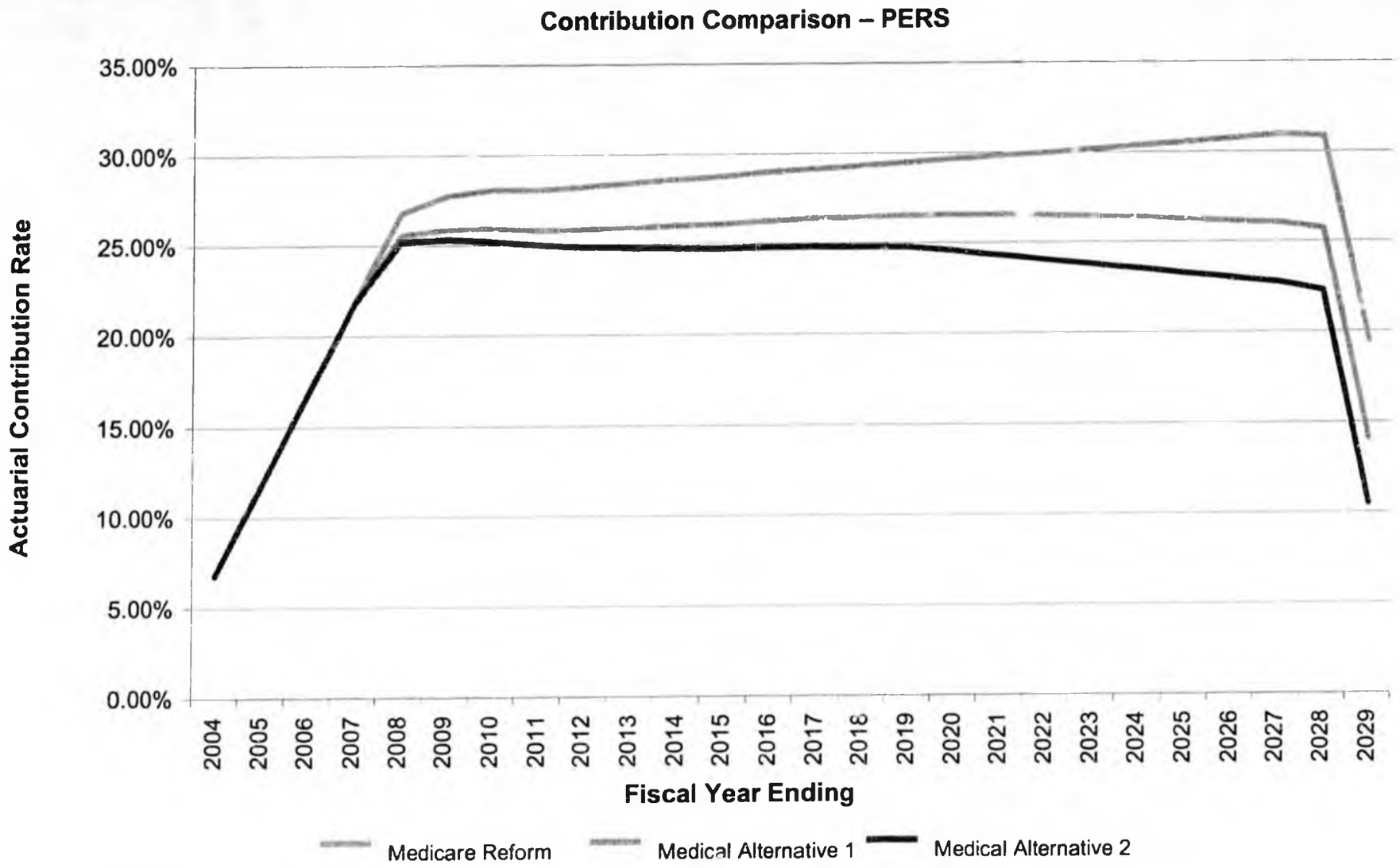
Other key assumptions

- Active population scenario: 1% growth
- New entrants brought in to replace members assumed to die, terminate, retire, or become disabled
- New entrant profiles based on average new entrant profiles from the prior 3 years
- Future liabilities and asset returns are calculated at 8.25%, except:
  - 17% investment return for FY04
- Adopted contribution rate is equal to the actuarially calculated rate for all future years.

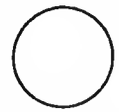
Medical Alternative 2
Cost Projections - TRS



Medical Alternative 2
Cost Projections - PERS



Medical Alternative 2
Comparison versus Objectives

Objective	Alternative 2
Members should bear a greater share of the cost of medical benefits.	
Members should have to retire from the System in order to be eligible for medical benefits.	
System benefits should favor longer-service members.	
Employer contributions should be predictable and stable.	
Investment risk should not be borne solely by the employers	
Healthcare inflation risk should not be borne solely by the employers	

- Meets objective
- Partially meets objective
- Does not meet objective

Medical Alternative 2
Comparison versus Constraints

Constraint	Alternative 2
Benefit changes must take the form of new "tiers."	
Annual cost of benefits should not be designed to exceed current Systems' normal cost rates.	

● Meets constraint
◐ Partially meets constraint
○ Does not meet constraint

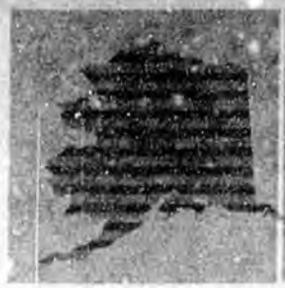
Medical Alternative 2
Key Observations

- Alternative 2 significantly reduces overall cost
- Cost is shared between employers and retirees
- Employers bear investment risk
- Members bear healthcare inflation risk
  - Can expect to pay greater share over time

Medical Alternative Summary
Comparison versus Objectives

● Meets objective
◐ Partially meets objective
○ Does not meet objective

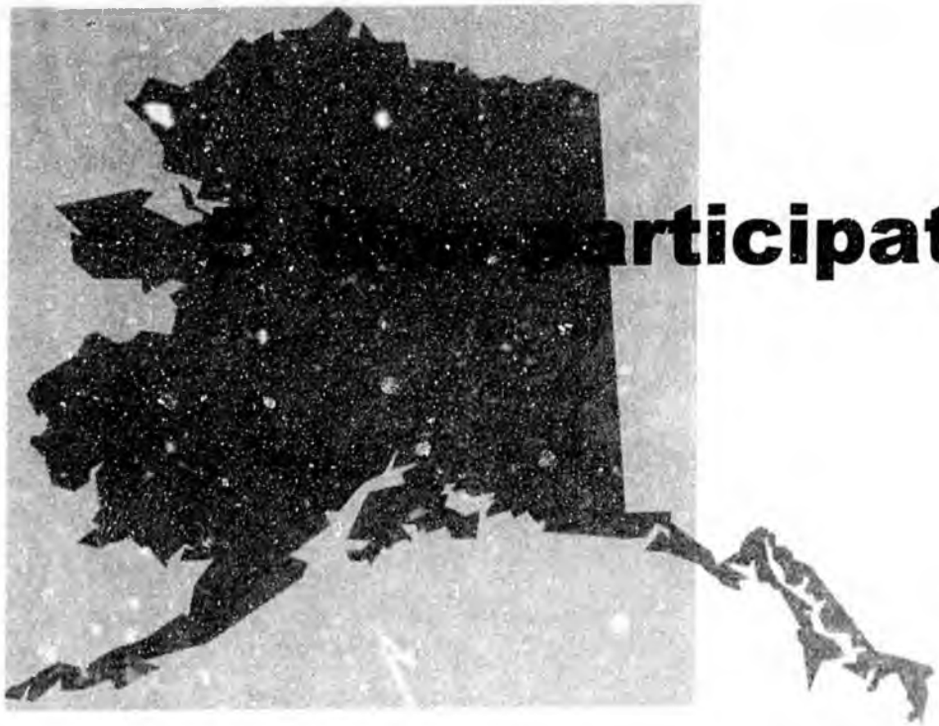
Objective	Alternative 1	Alternative 2
Members should bear a greater share of the cost of medical benefits.	●	●
Members should have to retire from the System in order to be eligible for medical benefits.	●	●
System benefits should favor longer-service members.	◐	◐
Employer contributions should be predictable and stable.	○	◐
Investment risk should not be borne solely by the employers	○	○
Healthcare inflation risk should not be borne solely by the employers	◐	●



Medical Alternative Summary
Comparison versus Constraints

● Meets constraint
◐ Partially meets constraint
○ Does not meet constraint

Constraint	Alternative 1	Alternative 2
Benefit changes must take the form of new "tiers."	●	●
Annual cost of benefits should not be designed to exceed current Systems' normal cost rates.	●	●

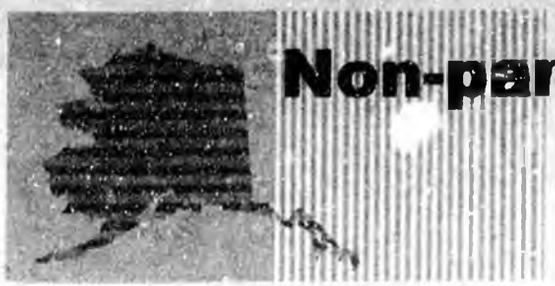


Participation in Social Security

Non-participation in Social Security

Implications of opting out of Social Security

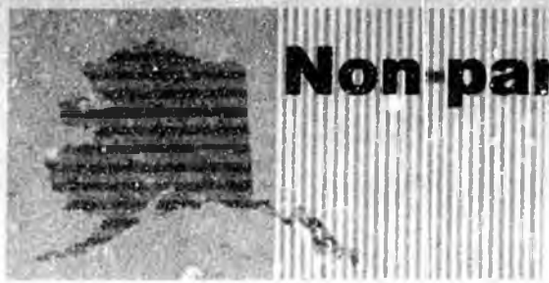
- Required minimum level of benefits
- Separate requirements for defined benefit versus defined contribution plans
- Described in Federal Insurance Contributions Act
- Further described in Revenue Procedure 91-40



Non-participation in Social Security

Required minimum level of benefits – defined contribution plans

- Allocations must be at least 7.5% of compensation
- Allocation can be any combination of employer and employee contributions
- Employer match may be taken into account
- Definition of compensation must at least include base pay



Non-participation in Social Security

Required minimum level of benefits – defined benefit plans

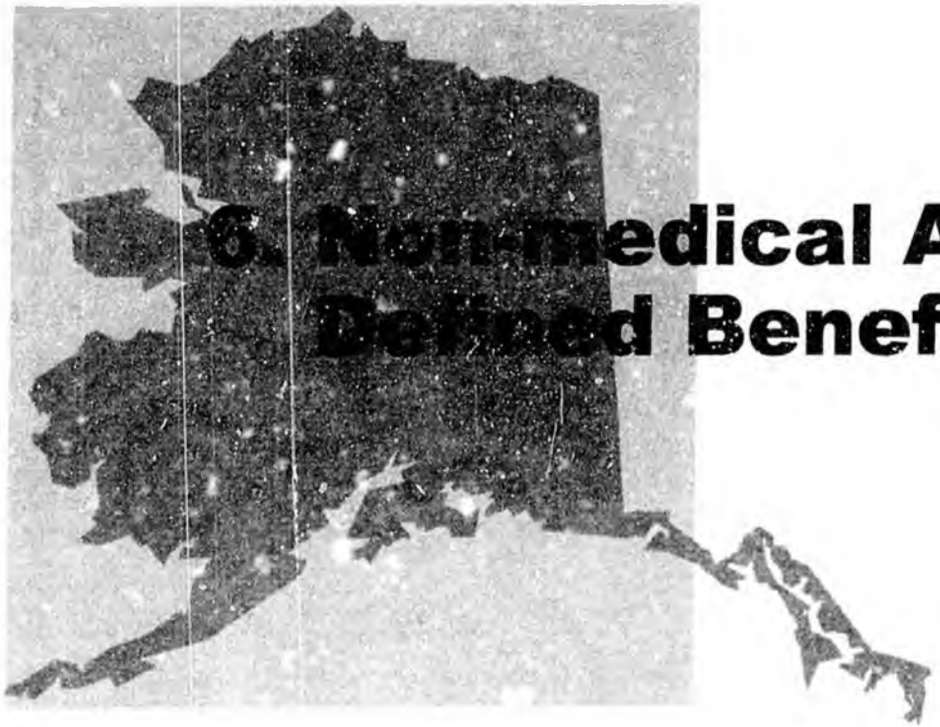
- Minimum accrued benefit
- Expressed as annual amount commencing on or before Social Security retirement age
- Must at least equal Primary Insurance Amount (PIA)
- Revenue Procedure 91-40 provides "safe harbor" formulas

Non-participation in Social Security

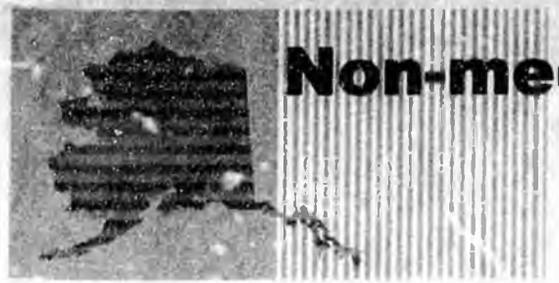
Safe harbor defined benefit plans

- Defined as percentage of final average pay times years of service

Averaging Period (months)	Percentage
36 or less	1.50%
37 to 48	1.55%
49 to 60	1.60%
61 to 120	1.75%
Over 120	2.00%



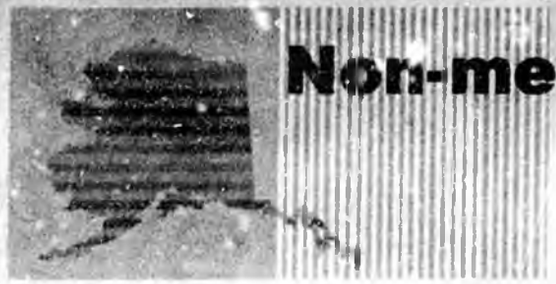
6. Non-Medical Alternative 1 – Defined Benefit Plan



Non-medical Alternative 1 – Defined Benefit

The current defined benefit plan would be replaced by a program based on a safe harbor under the Social Security rules

- Plan provisions for new members would be as follows:
  - Normal retirement at age 65
  - Early retirement at age 55 with actuarial reduction
  - Benefit formula: 1.5% of final 3-year average pay per year of service
  - Vesting, disability and death benefits similar to those provided by the current plan
  - Member contributions at same level as current plan
  - PRPA is eliminated
  - 10% Alaska COLA is retained
- Current members would continue to receive benefits at their current tier levels



Non-medical Alternative 1 – Defined Benefit

The following pages show the effect such a new tier would be expected to have over time on actuarial calculated contribution rates

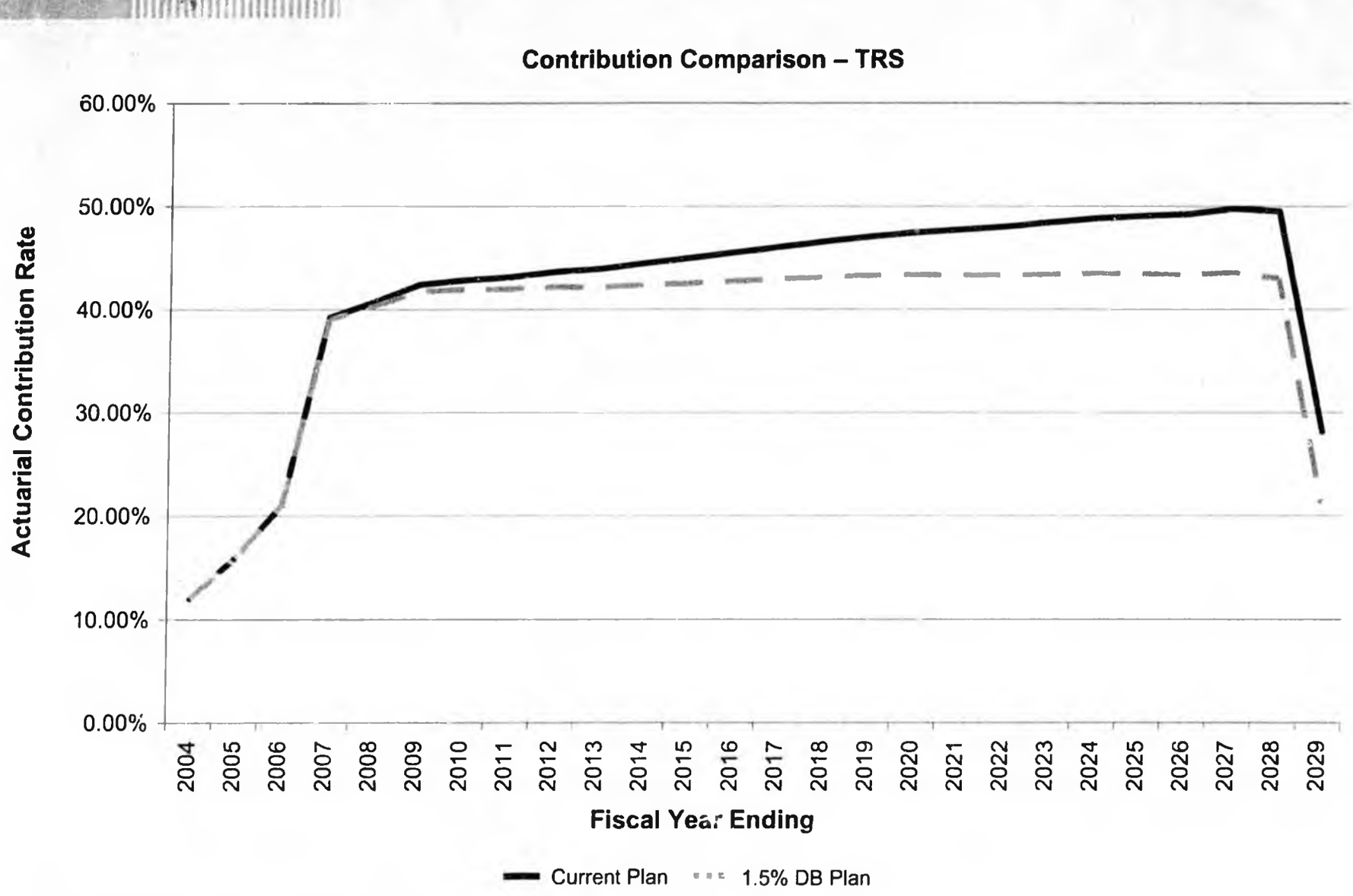
- Costs are based on a defined benefit new tier as previously described
- Current members continue under the current System structure
- For purposes of evaluating the effect of the defined benefit change, medical benefits have been kept unchanged from the current program
- Member data, assumptions and methods are as described in the June 30, 2003 actuarial valuation reports

Non-medical Alternative 1 – Defined Benefit

Other key assumptions

- Active population scenario: 1% growth
- New entrants brought in to replace members assumed to die, terminate, retire, or become disabled
- New entrant profiles based on average new entrant profiles from the prior 3 years
- Future liabilities and asset returns are calculated at 8.25%, except:
  - 17% investment return for FY04
- Adopted contribution rate is equal to the actuarially calculated rate for all future years.

Non-medical Alternative 1 – Defined Benefit



Non-medical Alternative 1 – Defined Benefit