A map of Washington State is shown on the left side of the slide, with a white outline and a light blue fill. The rest of the slide has a dark blue background.

Retirement Age

Initial Consideration

WASHINGTON STATE
Law Enforcement Officers' and Fire Fighters'
Plan 2 Retirement Board

August 24, 2005

History of Retirement Age

- On October 1, 1977 when LEOFF Plan 2 became effective, the retirement age was 58.
- Retirement age was lowered to 55 in 1993 with the passage of ESHB 1294.
- Retirement age was lowered again in 2000 to 53 with the passage of ESSB 6530.

Retirement Age

- Changing the retirement eligibility of a plan can influence the demographics of the membership:
 - Lowering the retirement age
 - Minimum service credit to retire

Retirement Eligibility

- Three basic approaches:
 - Age-based retirements
 - Service-based retirements
 - Blended retirements

Age-based Retirement

- Requires that members reach a minimum age in order to be eligible for an unreduced benefit.
- Examples of age-based retirements are PERS, SERS & TRS plans 2 & 3, and LEOFF Plan 2.

Service-based Retirement

- Requires that members reach a minimum number of years of service in order to be eligible for an unreduced benefit.
- Examples of service-based retirements are PERS & TRS plans 1 and WSPRS Plans 1 & 2.

Blended Retirement

- Uses a combination of age and service credit to qualify for retirement.
- Examples of blended retirement include the early retirement rules for PERS, TRS, SERS, and LEOFF Plan 2.
- Another type of a blended retirement is the “rule of” where any combination of age and service credit equals set number.

PROS & CONS

- Advantages of age-based retirement:
 - Lower costs
 - Encourages longer career
 - Potential for higher percentage benefit
- Disadvantages of age-based retirement:
 - Can take a toll for physically demanding jobs

Pros & Cons

- Advantages of service-based retirements:
 - Lets members in physically demanding jobs retire at reasonable time
 - Can be an attractive recruitment tool
- Disadvantages of service-based retirements:
 - Can create a gap in retirement income
 - Can create a loss of knowledge
 - Can be a more costly plan

Pros & Cons

- Advantages of a blended retirement:
 - Rewards longevity
 - Can be an attractive recruitment tool
 - Are usually less expensive than service-based retirements
- Disadvantages of a blended retirement:
 - More costly than age-based (65) retirements
 - May still require members in physically demanding jobs to work too long

Proposed Changes

- Lowering retirement age to 50 with 20 years.
- Lowering retirement age to 50 with 5 years.
- Retire at any age with 25 years of service.
- Retire at any age with 20 years of service.

Proposed Changes

- Examples of applying changes to service credit prospectively
 - A member retiring under the first option, 10 years after the effective date at age 50 with 20 years of service would have 10 years with no reduction and 10 years with a 9% reduction (3% per year from age 53 to 50).
 - A member retiring under the second option, 3 years after the effective date at age 50 with 5 years of service would have 3 years with no reduction and 2 years with an actuarial reduction of 34% (early reduction factor from 53 to 50). They are subject to the actuarial reduction instead of the 3% reduction because they have less than 20 years of service.

Proposed Changes

- Examples of applying changes to service credit prospectively
 - A member retiring under the third option, 12 years after the effective date at age 48 with 25 years of service would have 12 years with no reduction and 13 years with an actuarial reduction of 34% (early reduction factor from age 53 to 48). If this member waited 2 more years and retired at age 50 with 27 years of service, then they would then have 14 years with no reduction and 13 years with a 9% reduction (3% per year from age 53 to 50).
 - A member retiring under the fourth option, 10 years after the effective date at age 50 with 20 years of service would have 10 years with no reduction and 10 years with a 9% reduction (3% per year from age 53 to 50).

Questions?

LAW ENFORCEMENT OFFICERS' AND FIRE FIGHTERS' PLAN 2 RETIREMENT BOARD

Retirement Age Initial Consideration

August 24, 2005

1. Issue

The LEOFF Plan 2 Retirement Board requested, as part of a comprehensive review of potential improvements to the current benefit structure, the impacts of lowering the retirement age.

2. Staff

Greg Deam, Senior Research and Policy Manager
(360) 586-2325
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3. Members Impacted

As of the most recent actuarial valuation, there were 14,560 active LEOFF Plan 2 members and 316 retirees. Changing the retirement age could impact all active LEOFF Plan 2 members.

4. Current Situation

Under the current eligibility rules, a LEOFF Plan 2 member may retire at age 53 with at least five years of service credit. A member qualifies for early retirement at age 50 if they have at least twenty years of service credit. However, if a member retires under the provisions of early retirement, there is a three percent reduction in the benefit calculation for each year between age 50 and 53.

5. Background Information and Policy Issues

Demographics

According to the *Washington State Actuarial Valuation Report 2003* (ending September 2003), of the 14,560 active members, the average age is 39.5 years and the average years of service credit is 10.7. Using those two figures, the average entry age would be at 28.8 years of age. The average retirement age is 56.7 years.

Under Appendix A is a chart reproduced from the *2004 Comprehensive Annual Financial Report* by the Department of Retirement System showing, at different ages, the probability of member eligible for a service retirement, to retire. The chart indicates that most retirees wait until after the minimum retirement age to retire.

Retirement Eligibility

There are three basic approaches to qualify for retirement:

- Age-based retirements
- Service-based retirements
- Blended retirement

Age-Based Retirements

Age-based retirements require a minimum age to be eligible for retirement. Examples of age-based retirements are LEOFF Plan 2 which allows members to retire at age 53, and PERS, SERS, and TRS Plans 2 and 3 which allow members to retire at age 65.

Service-Based Retirements

Service-based retirements allow a member to retire at any age, provided they meet a minimum number of service credit years. Examples of service-based retirements are PERS Plan 1 which allows members to retire at any age with 30 years of service and WSPRS Plans 1 & 2 which allow members to retire at any age with 25 years of service.

Blended Retirements

Blended retirements require a combination of age and service credit to be eligible to retire. Examples of a blended retirement are the LEOFF Plan 2 early retirement, which allows members to retire at age 50 with at least 20 years of service with a reduction and PERS Plan 1, which allows members to retire if they are age 55 and have at least 25 years of service credit.

Another type of blended retirement is the “rule of” retirement. In this type of blended retirement a member becomes eligible when their age and service combined meet some minimum number. For example, if the plan had a rule of 80, then a member age 50 with 30 years of service would be eligible for an unreduced benefit.

Comparison

The following chart compares the age and service requirements for retirement of LEOFF Plan 2 to other Washington state systems.

System/Plan	Normal Retirement	Early Retirement	Early Retirement Reductions
LEOFF Plan 2	Age 53 w/5 YOS ¹	Age 50 with at least 20 YOS	3% for each year from age 53
PERS Plan 1	Any age w/30 YOS At 55 with at least 25 YOS At age 60 with at least 5 YOS		
PERS Plan 2	Age 65 w/5 YOS	Age 55 with at least 20 YOS Age 55 with at least 30 YOS	Actuarially reduced from age 65 3% for each year from age 65
PERS Plan 3	Age 65 w/5 YOS	Age 55 with at least 10 YOS Age 55 with at least 30 YOS	Actuarially reduced from age 65 3% for each year from age 65
SERS Plan 2	Age 65 w/5 YOS	Age 55 with at least 20 YOS Age 55 with at least 30 YOS	Actuarially reduced from age 65 3% for each year from age 65
SERS Plan 3	Age 65 w/5 YOS	Age 55 with at least 10 YOS Age 55 with at least 30 YOS	Actuarially reduced from age 65 3% for each year from age 65
TRS Plan 1	Any age w/30 YOS At 55 with at least 25 YOS At age 60 w/5 YOS		
TRS Plan 2	Age 65 w/5 YOS	Age 55 with at least 20 YOS Age 55 with at least 30 YOS	Actuarially reduced from age 65 3% for each year from age 65
TRS Plan 3	Age 65 w/5 YOS	Age 55 with at least 10 YOS Age 55 with at least 30 YOS	Actuarially reduced from age 65 3% for each year from age 65
WSPRS Plan 1	Any age w/25 YOS Age 55 Must retire at age 60 ²		
WSPRS Plan 2	Any age w/25 YOS Age 55 Must retire at age 60 ²		

There are several states that require only a minimum number of years to retire. They typically use either 20 or 25 years of service credit, which allows their members to retire at any age once this minimum service credit has been reached. There are at least three states that allow their members to retire regardless of the amount of service credit they have, as long as they meet the minimum age requirement. See Appendix A for detailed information.

Costs

Whether the retirement age is lowered or a minimum number of years of service are used to qualify for an unreduced retirement, the result is the ability for members to retire earlier. Retiring at an earlier age means benefits are paid for a longer period of time, which normally will increase costs.

¹ YOS – Years of Service

² WSPRS requires member to retire the month after the month they reach age 60, with the exception of the Chief.

The Office of the State Actuary will be providing the specific costs for each of the following options:

1. Age 50 & 20 Years
2. Age 50 & 5 Year
3. Any Age with 25 Years of Service
4. Any Age with 20 Years of Service

The options above would be applied to all service (retroactive as of the effective date). No reduction will be taken if the option's retirement eligibility criterion is met.

The Actuary's Office will also be providing the cost for each of the above options prospectively (reductions applied for service earned prior to the effective date). The following are examples of how the prospective option would be applied in each of the four options:

- A member retiring under option 1, 10 years after the effective date at age 50 with 20 years of service would have 10 years with no reduction and 10 years with a 9% reduction (3% per year from age 53 to 50).
- A member retiring under option 2, 3 years after the effective date at age 50 with 5 years of service would have 3 years with no reduction and 2 years with an actuarial reduction of 34% (early reduction factor from 53 to 50). They are subject to the actuarial reduction instead of the 3% reduction because they have less than 20 years of service.
- A member retiring under option 3, 12 years after the effective date at age 48 with 25 years of service would have 12 years with no reduction and 13 years with an actuarial reduction of 34% (early reduction factor from age 53 to 48). If this member waited 2 more years and retired at age 50 with 27 years of service, then they would then have 14 years with no reduction and 13 years with a 9% reduction (3% per year from age 53 to 50).
- A member retiring under option 4, 10 years after the effective date at age 50 with 20 years of service would have 10 years with no reduction and 10 years with a 9% reduction (3% per year from age 53 to 50).

6. Supporting Information

Appendix A – LEOFF Probability of Service Retirement.

Appendix B – Retirement Eligibility Comparison

Appendix A

LEOFF Probabilities of Service Retirement Among Members Eligible to Retire

<u>Age</u>	<u>Plan 1 Rate</u>	<u>Plan 2 Rate</u>
50	9%	10%
51	7%	10%
52	8%	10%
53	8%	16%
54	10%	19%
55	16%	24%
56	16%	25%
57	16%	25%
58	23%	33%
59	23%	33%
60	23%	33%
61	28%	37%
62	28%	37%
63	28%	37%
64	40%	48%
65	100%	100%

Retirement Eligibility Comparison

System	Normal Retirement Age/Service (A=Any)	Early Retirement Annual Reduction	Vesting	Member Contribution	Employer Contribution	Avg. Active Salary
Alaska Public Employees Retirement System (PERS)	60/5; A/20	55/5 6% per year	5Y	7.5%	8.42%	\$61,855
Arizona Public Safety Personnel Retirement System (PSPRS)	62/15; A/20	None	10Y	7.65%	7.66%	\$57,514
Arkansas Local Police and Fire Retirement System (LOPFI)	55/20; 60/5; A/28	A/20 ½ of 1% per mo from 55		6%		\$36,307
Colorado Fire and Police Pension Association (FPPA)	55/25	A/30 50/5 Actuarial Reduction	5Y	8%	8%	\$49,921
Delaware County & Municipal Police/Fire Pension	62/10; A/20; R-75 ¹	None	10Y	7%	8.3%	\$42,932
Kansas Police and Firemen's Retirement System (KP&F)	60/15; 55/20; 50/25	50/20 4.8%	15Y	7%	11.15%	\$49,017
Kentucky: Employees in "hazardous positions" in County Employees' Retirement System (CERS) or Kentucky Employees' Retirement System (KERS)	55/5; A/20	50/15 Reduced by 5.5% for each year to reach age 55 or 20 YOS, whichever is the closer timeframe	1 Month for Normal 60 months for Early Month must be current service	8%	Determined by the Board of Trustees	
Maryland Pension System for Local Fire Fighters and Police Officers	50/A; A/22	None	5Y	8%	7.58%	\$34,279
New Hampshire Retirement System – Group II	45/20; 60/any			FF – 5.0% PO – 5.0%	PO – ER 7.87% State 4.24% FF – ER 13.44% State 7.24%	
New Jersey Police and Firemen's Retirement System (PFRS)	55/A; A/20			8.5%		Not Available
Nevada Police/Fire Sub-Fund of the Nevada Public Employees Retirement System (PERS)	65/5; 55/10; 50/20; A/25	A/5 4%	5Y	14.75%	14.75%	\$65,870
New Mexico PERA –Police	A/25 63/11 60/20 64/8 61/17 65/5 62/14	*A/20 Only applies to Plans 3-5	5Y	Plan 1-7% Plan 2-7% Plan 3-7% Plan 4-12.35% Plan 5-16.3%	Plan 1-10% Plan 2-15% Plan 3-18.5% Plan 4-18.5% Plan 5-18.5%	\$37,969
New Mexico PERA - Fire	A/25 63/11 60/20 64/8 61/17 65/5 62/14	*A/20 Only applies to Plans 3-5	5Y	Plan 1-8% Plan 2-8% Plan 3-8% Plan 4-12.8% Plan 5-16.2%	Plan 1-11% Plan 2-17.5% Plan 3-21.25% Plan 4-21.25% Plan 5-21.25%	\$39,704
New York Police and Fire Retirement System (PFRS)	62/5	55/5 3%	5Y	3% for 10 yrs	5.8%	\$71,631
Ohio Police and Fire Pension Fund	48/25 48/15		15Y	10%	19.5% (P) 24% (F)	\$54,368
Rhode Island Employees Retirement System (Police and Fire tier is MERS)	55/10; A/25			7% ²	Actuarially Determined	
South Carolina Police Officers Retirement System (PORS)	A/25; 55/5		5Y	6.5%	10.30% ³	\$33,530
Washington LEOFF Plan 2	53/5	50/20 3%	5Y	6.75% ⁴	4.05% (ER) 2.70% (State)	\$66,388

¹ Delaware: "Rule of 75" may be exercised to qualify for normal retirement; that is, any age and service (min 10 yrs) combination that equals 75 defines eligibility.

² South Carolina: In addition, employer also contributes 0.15% for group life insurance, 3.3% for retirement insurance surcharge, and 0.20% for accidental death benefit.

³ Rhode Island requires an additional 1% increase in contribution rate for each additional benefit (e.g. unreduced retirement for 20 YOS or a COLA provision)

⁴ Rates effective 7/1/05. Washington is in the process of implementing a incremental rate increase to a funding level that can support benefits long term (8.73% -EE, 5.24% - ER, 3.48% - State)



Changing the LEOFF 2 Retirement Age

August 24, 2005

Marty McCaulay
Office of the State Actuary



Current Retirement Age

- ❖ Unreduced at age 53 with five years
- ❖ Early retirement at age 50 with 20 years
- ❖ Reduction is 3 percent per year before age 53
- ❖ 91 percent of benefit at age 50

Current Reduction at Age 50

- ❖ $\text{Benefit} = 2\% \times \text{service} \times \text{FAS}$
- ❖ $\text{Reduction Factor} = 1 - [3\% \times (53 - \text{Age})]$
- ❖ Example: Age 50, 25 years of service, FAS = \$63,308
- ❖ $\text{Benefit} = .02 \times 25 \times \$63,308 = \$31,654$
- ❖ $\text{Reduction Factor} = 1 - (.03 \times 3) = .91$
- ❖ Actual Benefit after reduction =
 $\$31,654 \times .91 = \$28,805$

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Proposed Retirement Ages

- ❖ Age 50 and 20 years
- ❖ Age 50 and five years
- ❖ 25 and Out
- ❖ 20 and Out

Sample Member

FAS = 63,308 and Service = 25

Retirement Benefits	Age 50 at Start Date	Age 48 at Start Date	Age 45 at Start Date
Current with RA 53	\$28,805	\$26,906	\$24,057
50 & 20 or 50 & 5	\$31,654	\$29,755	\$26,906
25 & Out or 20 & Out	\$31,654	\$31,654	\$31,654

Impact on Rates

- ❖ Lower expected retirement ages
- ❖ Expect higher rates when first eligible
- ❖ Liabilities increase
- ❖ Present values of salaries decrease

Retirement Rates

Age	Current	Proposed	Proposed at first eligibility
39	0%	0%	16%
40 to 45	0%	2%	16%
46	0%	4%	16%
47	0%	6%	16%
48	0%	8%	16%
49	0%	10%	16%
50 to 52	10%	12%	16%
53	16%	16%	16%



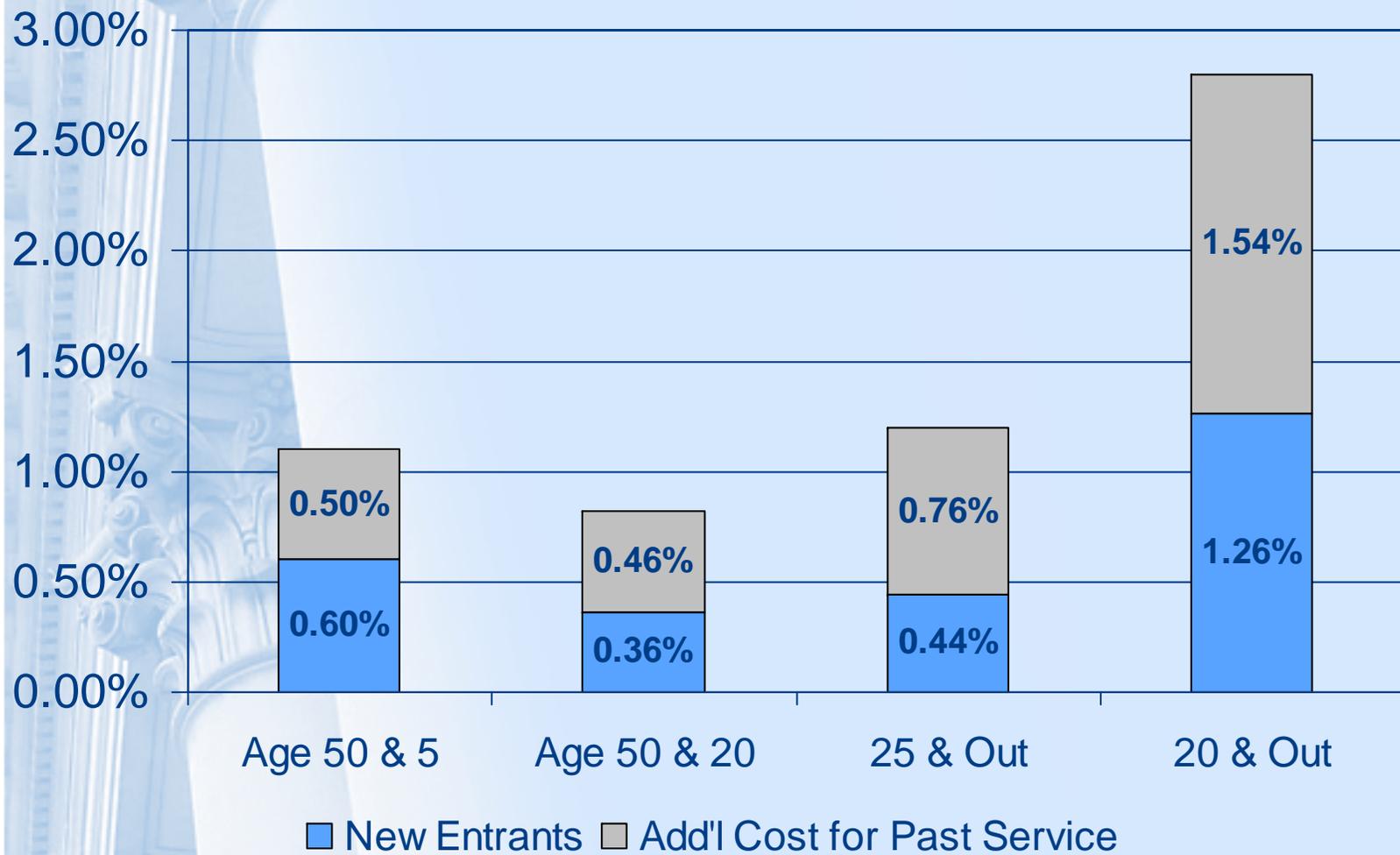
Total Rate Increases

- ❖ Sum of state, employer, and member rate increases for current members
- ❖ Age 50 and 20 – 0.82 percent
- ❖ Age 50 and five – 1.10 percent
- ❖ 25 and Out – 1.20 percent
- ❖ 20 and Out – 2.80 percent

Rate Increases for New Entrants

- ❑ Sum of state, employer, and member rate increases for new entrants
- ❑ Rates would apply to current members if prospective only
- ❑ Age 50 and 20 – 0.36 percent (was 0.82 percent)
- ❑ Age 50 and five – 0.60 percent (was 1.10 percent)
- ❑ 25 and Out – 0.44 percent (was 1.20 percent)
- ❑ 20 and Out – 1.26 percent (was 2.80 percent)

Total Rate Increases



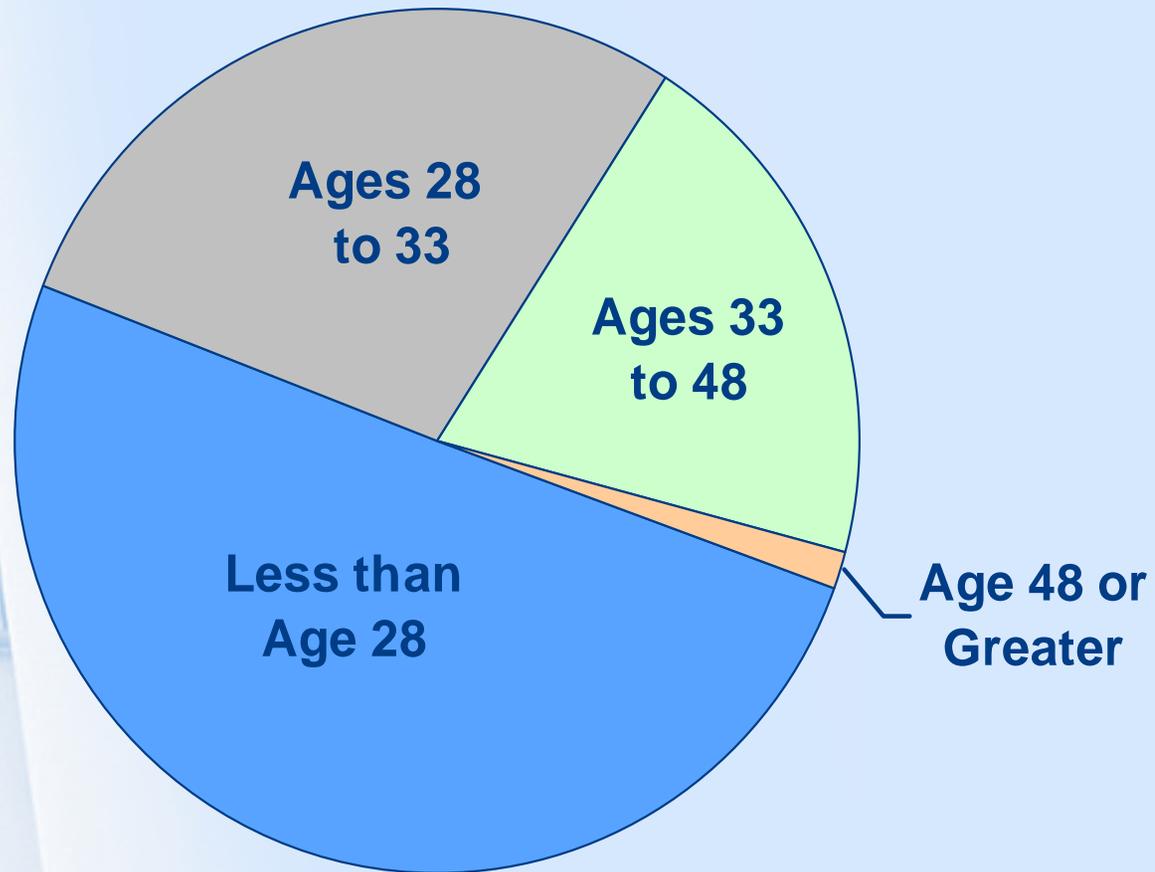
Members Impacted

- ❑ Whether or not an active member is impacted depends on hire age
- ❑ Average active member hired at age 29
- ❑ Age 50 and five – hire age less than 48
- ❑ Age 50 and 20 – hire age less than 33
- ❑ 20 and Out – hire age less than 33
- ❑ 25 and Out – hire age less than 28

Members Impacted

- ❑ 14,754 total active members
- ❑ Age 50 and five – 14,558 active members with hire age less than 48
- ❑ Age 50 and 20 – 11,596 active members with hire age less than 33
- ❑ 20 and Out – 11,596 active members with hire age less than 33
- ❑ 25 and Out – 7,409 active members with hire age less than 28

Member Age Distribution



Age 50 and 20

- Liabilities increase \$67 million
- Rate increase for current members
 - Member = .41 percent
 - Employer = .25 percent
 - State = .16 percent
- Rate increase for future members
 - Member = .18 percent
 - Employer = .11 percent
 - State = .07 percent

Age 50 and five

- ❑ Liabilities increase \$62 million
- ❑ Rate increase for current members
 - ⊕ Member = .55 percent
 - ⊕ Employer = .33 percent
 - ⊕ State = .22 percent
- ❑ Rate increase for future members
 - ⊕ Member = .30 percent
 - ⊕ Employer = .18 percent
 - ⊕ State = .12 percent

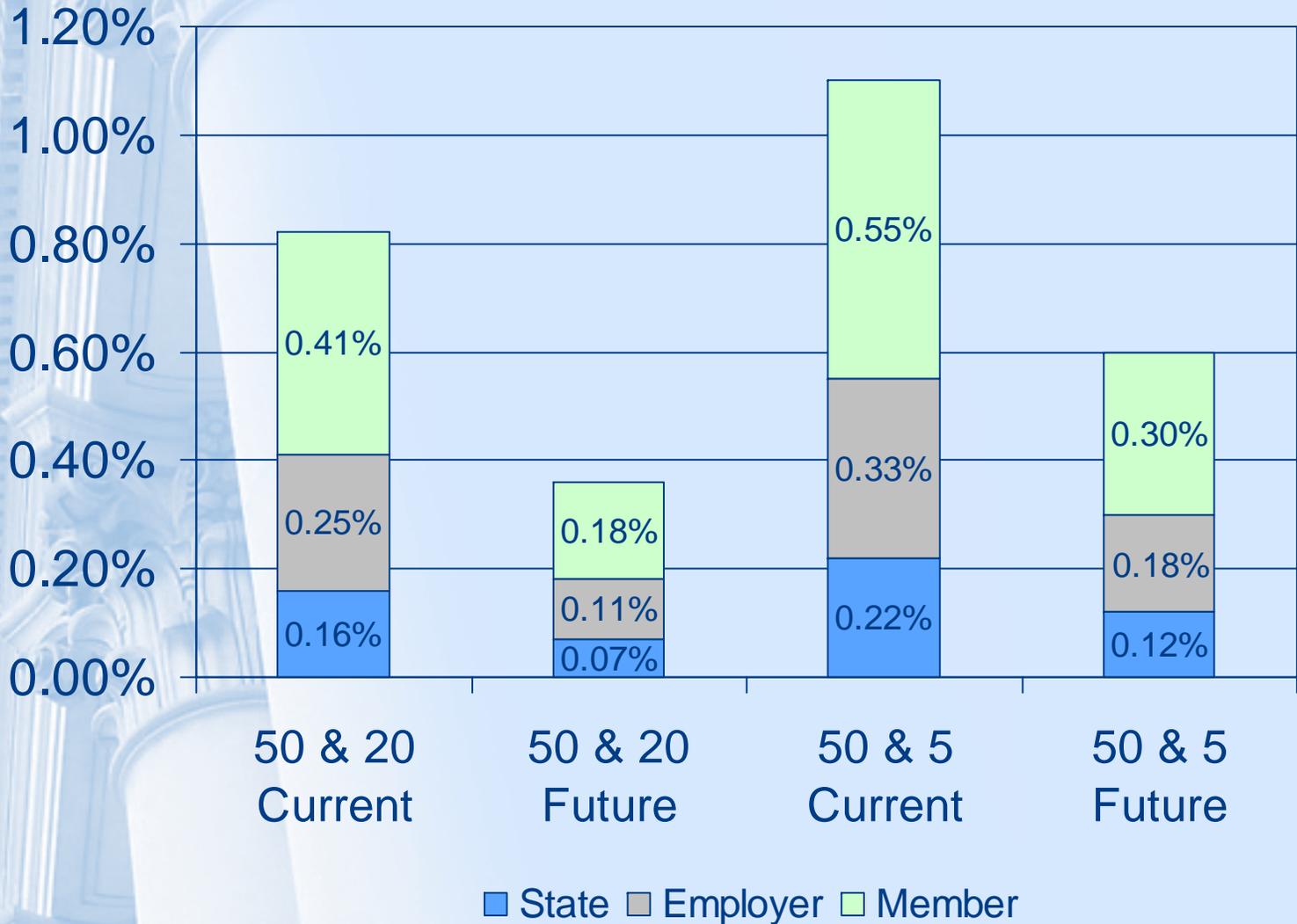
25 and Out

- ❑ Liabilities increase \$85 million
- ❑ Rate increase for current members
 - ⊕ Member = .60 percent
 - ⊕ Employer = .36 percent
 - ⊕ State = .24 percent
- ❑ Rate increase for future members
 - ⊕ Member = .22 percent
 - ⊕ Employer = .13 percent
 - ⊕ State = .09 percent

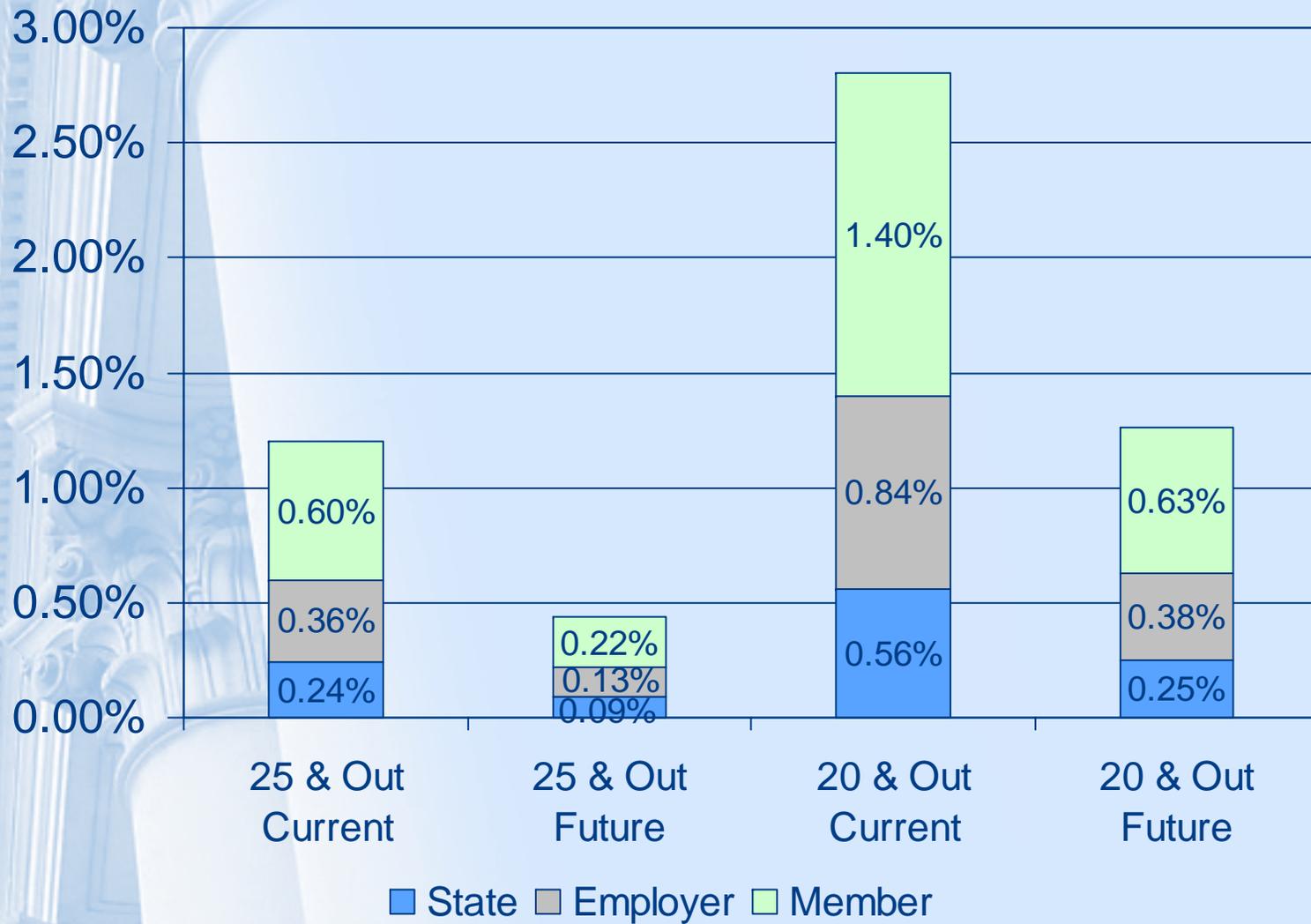
20 and Out

- ❑ Liabilities increase \$165 million
- ❑ Rate increase for current members
 - ⊕ Member = 1.40 percent
 - ⊕ Employer = .84 percent
 - ⊕ State = .56 percent
- ❑ Rate increase for future members
 - ⊕ Member = .63 percent
 - ⊕ Employer = .38 percent
 - ⊕ State = .25 percent

Rate Increases



Rate Increases



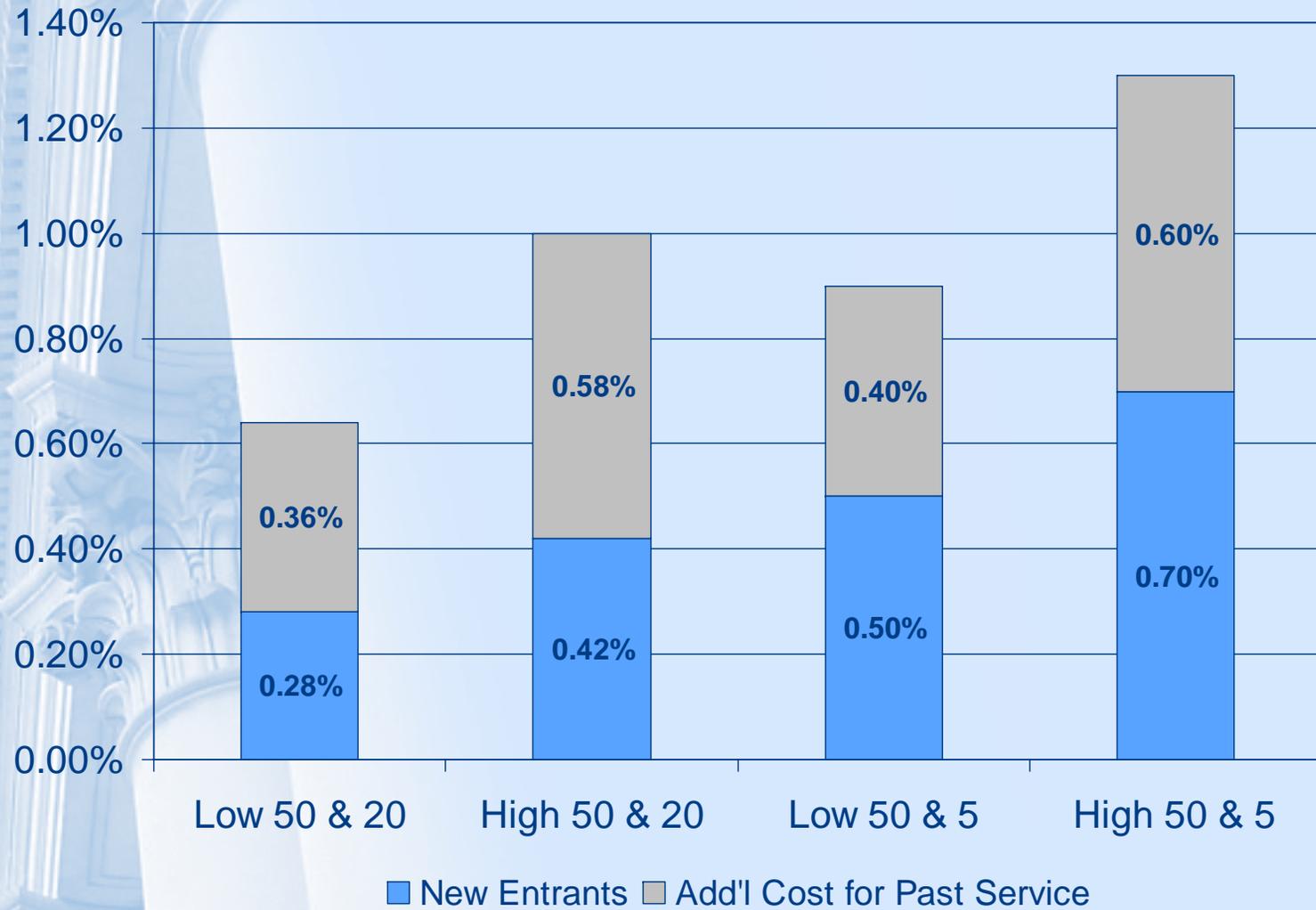
Sensitivity Analysis

- ❑ Determined costs under different retirement rate assumptions
- ❑ Started with assumption of 16 percent when first eligible
- ❑ Low rates –14 percent when first eligible
- ❑ High rates- 18 percent when first eligible

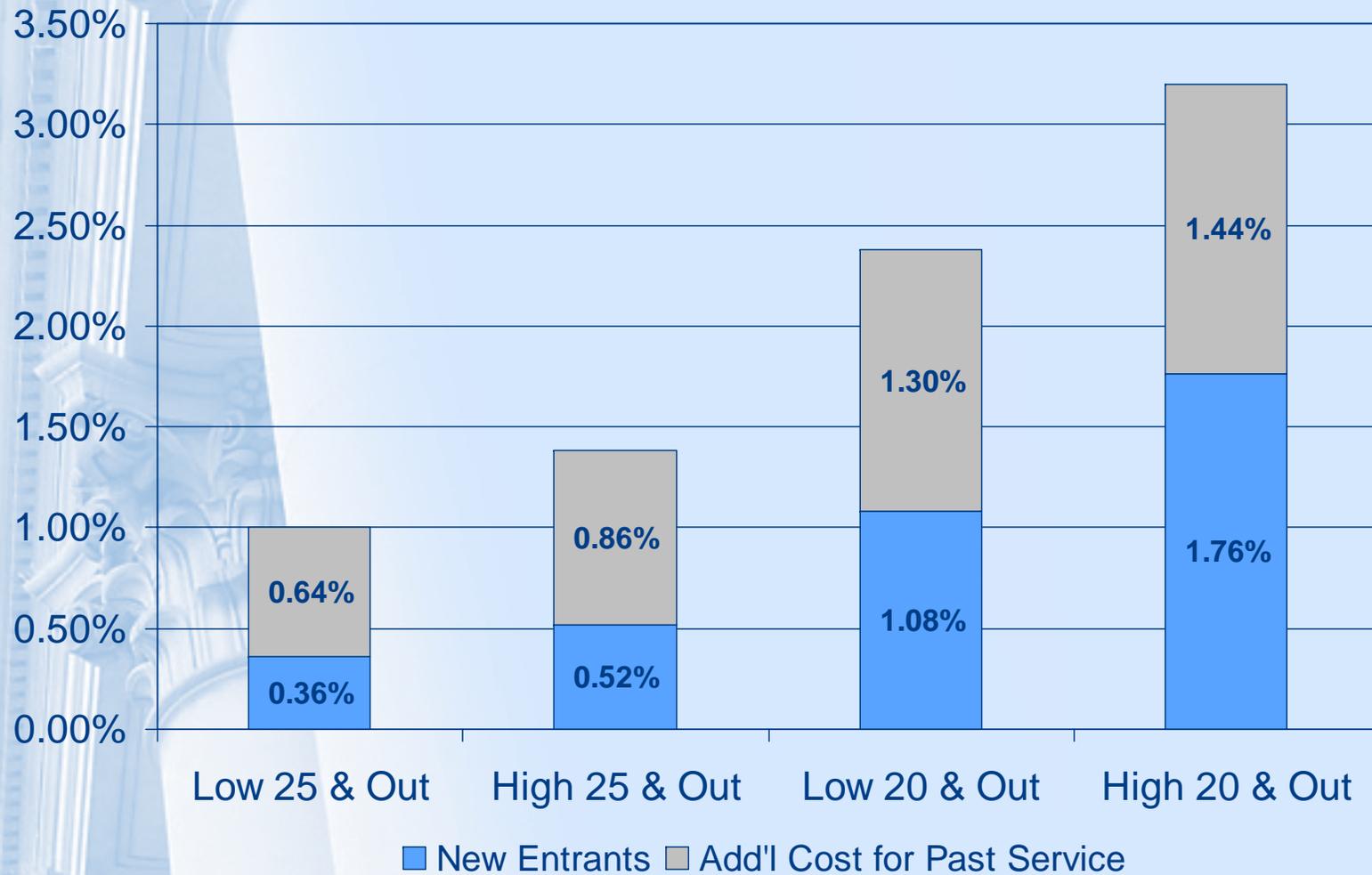
Retirement Rate Assumptions

Age	Low Rates	Medium Rates	High Rates
39	0%	0%	0%
40 to 45	1%	2%	3%
46	3%	4%	5%
47	5%	6%	7%
48	7%	8%	9%
49	9%	10%	11%
50 to 52	11%	12%	13%
53	16%	16%	16%

Range of Rate Increases



Range of Rate Increases



Summary of Cost

- ❖ 20 and Out – 2.80 percent
- ❖ Age 50 and 20 – 0.82 percent
- ❖ 25 and Out – 1.20 percent
- ❖ 50 and five – 1.10 percent
- ❖ Cost for new entrants or prospective only is generally less than half
- ❖ Cost is very sensitive to retirement rate assumption



WASHINGTON STATE LEGISLATURE
Office of the State Actuary

August 24, 2005

TO: Steve Nelsen, Executive Director
LEOFF Plan 2 Retirement Board

FROM: Marty McCaulay, Senior Pension Actuary

CC: Matt Smith, State Actuary

SUBJECT: CHANGING THE RETIREMENT AGE FOR LEOFF 2 RETIREMENT BENEFITS

Summary of Results

As requested, we estimated the cost of changing the retirement age for LEOFF 2 retirement benefits. Currently, unreduced benefits are payable at age 53 with five years of service. Early retirement benefits are payable at age 50 with 20 years of service, with a reduction of 3 percent per year before age 53 (a 9 percent reduction at age 50).

We prepared estimates based on a reduction of the retirement age from 53 to 50 with unreduced benefits after at least 20 and five years of service, as well as estimates for unreduced benefits after at least 25 and 20 years of service at any age. Details on the costs of changing the retirement age are shown in Exhibit 1.

Cost Summary - Unreduced Retirement Benefits

Retirement Age	Total Rate Increase Current Members	2007-2009 Total Employer Cost (Millions)	Total Rate Increase New Entrants
Age 50 & 20 years	0.82%	\$10.2	0.36%
Age 50 & 5 years	1.10%	\$13.9	0.60%
25 years of service	1.20%	\$14.7	0.44%
20 years of service	2.80%	\$34.9	1.26%

Members Impacted

Whether or not an active member is impacted depends on the member's hire age; the average hire age is 29. Changing the age for unreduced retirement to age 50 and 20 years would impact 11,596 of the 14,754 active members, as well as new entrants hired before age 33. Changing the age for unreduced retirement

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to age 50 and five years would impact 14,558 of the 14,754 active members, as well as new entrants hired before age 48. Changing the requirement for unreduced retirement to 25 years of service (25 and out) would impact 7,409 of the 14,754 active members, as well as new entrants hired before age 28. Changing the requirement for unreduced retirement to 20 years of service (20 and out) would impact 11,596 of the 14,754 active members, as well as new entrants hired before age 33.

Distribution of Active Members by Hire Age

Hire Age	Active Members	Percent
Less than age 28	7,409	50%
Age 28 or later, but less than age 33	4,187	28%
Age 33 or later, but less than age 48	2,962	20%
Greater than or equal to age 48	196	2%
Total	14,754	

Typical Member

For a typical member making about \$69,000 per year and retiring at age 50 with 25 years of service, the retirement benefit would increase from \$28,805 per year (after a 9 percent early retirement reduction) to \$31,654 (with no reduction).

The following chart shows the impact of the proposed changes for a member with an accrued benefit, before reduction, of \$31,654 per year, based on 25 years of service.

Benefits after Reduction based on Age for Unreduced Retirement	Annual Benefit Payable at Age 50	Annual Benefit Payable at Age 48	Annual Benefit Payable at Age 45
Current plan - unreduced at age 53	\$28,805	\$26,906	\$24,057
Proposed plan - unreduced at age 50 with 5 or 20 years of service	\$31,654	\$29,755	\$26,906
Proposed plan - unreduced at any age following 20 or 25 years of service	\$31,654	\$31,654	\$31,654

Analysis of Results

Lowering the retirement age from 53 to 50 reduces the reduction of earned benefits by 9 percent for anyone under age 50 who meets the required years of service (five or 20). The reduction of earned benefits would be eliminated for those over age 50. For retirement at any age based on 20 or 25 years of service, the reduction of earned benefits is eliminated altogether.

The average member is age 40 with 11 years of service. An average member hired at age 29 would not benefit from unreduced retirement after 25 years of service. The average member would be age 54 upon reaching 25 years of service, one year past the age for unreduced benefits under the current plan.

Sensitivity Testing

The cost of the benefit improvements depend on how retirement behavior would change as a result of the lower retirement ages. For example, the total cost increase for the 20 and out benefit ranges from 2.38 percent to 3.20 percent, depending on the retirement rate assumptions. More detail on the sensitivity analysis is shown in Exhibit 3.

Assumptions and Methods

The results are based on preliminary 2004 valuation data and the same actuarial assumptions and methods as disclosed in the 2003 Actuarial Valuation report, with the exception of the retirement rates. For most ages, we assumed that retirement rates would increase by 2.0 percent for each year a member is eligible for retirement under the current retirement age (53). We used a 16 percent rate of retirement for the first year a member became eligible for unreduced benefits. These rates are shown in the Appendix under the heading "Medium Retirement Rates." We also determined costs under low and high retirement rates to test the sensitivity of the rate increase to the retirement rate assumption.

We did not change any other assumptions. Benefit improvements were not applied to currently inactive members. The costs shown would be higher if combined with other benefit improvements. The costs associated with the increased retirement rates were included in the cost of the plan change. The retirement assumptions changed the present value of future salaries and the cost of the proposed changes were based on the difference in the rate before the change and the rate based on the liabilities and present value of salaries after the change.

Exhibit 1
Changing the Retirement Age - All Service

<i>(Dollars in Millions)</i>	Retirement Age	Current	Increase	Total
Actuarial Present Value of Projected Benefits	Age 50 & 20 years	\$4,800	\$67	\$4,867
(The Value of the Total Commitment to all Current Members)	Age 50 & 5 years	\$4,800	\$62	\$4,862
	25 years service	\$4,800	\$85	\$4,885
	20 years service	\$4,800	\$165	\$4,965
Unfunded Liability (PBO)	Age 50 & 20 years	(\$426)	\$62	(\$368)
(The Value of the Total Commitment to all Current Members Attributable to Past Service)	Age 50 & 5 years	(\$426)	\$87	(\$339)
	25 years service	(\$426)	\$99	(\$327)
	20 years service	(\$426)	\$217	(\$209)
Increase in Contribution Rates: * (Effective 09/01/2006)	Age 50 & 20 Years	Age 50 & 5 Years	25 Years Service	20 Years Service
Current Members				
Employee	0.41%	0.55%	0.60%	1.40%
Employer	0.25%	0.33%	0.36%	0.84%
State	0.16%	0.22%	0.29%	0.56%
Total - Current Members	0.82%	1.10%	1.20%	2.80%
New Entrants**				
Employee	0.18%	0.30%	0.22%	0.63%
Employer	0.11%	0.15%	0.13%	0.38%
State	0.07%	0.12%	0.09%	0.25%
Total - New Entrants	0.36%	0.60%	0.44%	1.26%

*For LEOFF 2 the employer pays 60 percent of the Employer State cost, the State pays 40 percent.

**Rate change applied to future new entrant payroll and used for fiscal budget determinations only. A single supplemental rate increase, equal to the increase for current members, would apply initially for all members or employers.

Fiscal Budget Determinations:

The proposal would result in higher contribution rates for all LEOFF 2 members and employers. As a result of the changes in the required contribution rates, the increase in funding expenditures is projected to be:

Costs (in Millions):	Age 50 & 20 Years	Age 50 & 5 Years	25 Years Service	20 Years Service
2006-2007				
State:				
General Fund	\$1.6	\$2.2	\$2.3	\$5.5
Non-General Fund	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>
Total State	\$1.6	\$2.2	\$2.3	\$5.5
Local Government	\$2.4	\$3.3	\$3.5	\$8.2
Total Employer	\$4.0	\$5.5	\$5.8	\$13.7
Total Employee	\$4.0	\$5.5	\$5.8	\$13.7
2007-2009				
State:				
General Fund	\$4.0	\$5.6	\$5.9	\$13.9
Non-General Fund	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>
Total State	\$4.0	\$5.6	\$5.9	\$13.9
Local Government	\$6.2	\$8.4	\$8.8	\$21.0
Total Employer	\$10.2	\$14.0	\$14.7	\$34.9
Total Employee	\$10.2	\$13.9	\$14.7	\$34.9
2006-2031				
State:				
General Fund	\$68.0	\$103.8	\$92.7	\$238.5
Non-General Fund	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>	<u>\$0.0</u>
Total State	\$68.0	\$103.8	\$92.7	\$238.5
Local Government	\$104.5	\$155.4	\$139.2	\$358.1
Total Employer	\$172.5	\$259.2	\$231.9	\$596.6
Total Employee	\$172.6	\$259.3	\$232.1	\$596.5

Exhibit 2
Changing the Retirement Age - Prospective Service Only

The costs shown in Exhibit 1 assume that the entire accrued benefit is unreduced, including service prior to the effective date of the change. Exhibit 2 shows the cost if the benefit improvements were prospective only. For the prospective only cost, the part of the benefit based on service earned after the effective date was unreduced and the part based on service earned before the effective date was reduced. These rate increases for current members would be about half of the rate increases if the entire benefit were unreduced. The rate increases for current members would be the same as the increases for new entrants.

Changing the Retirement Age - Unreduced Benefits for Prospective Service Only

Increase in Contribution Rates: *
 (Effective 09/01/2006)

	Retirement Age			
	Age 50 & 20 years	Age 50 & 5 years	25 years service	20 years service
Current Members				
Employee	0.18%	0.30%	0.22%	0.63%
Employer	0.11%	0.18%	0.13%	0.38%
State	0.07%	0.12%	0.09%	0.25%
Total - Current Members	0.36%	0.60%	0.44%	1.26%
New Entrants**				
Employee	0.18%	0.30%	0.22%	0.63%
Employer	0.11%	0.18%	0.13%	0.38%
State	0.07%	0.12%	0.09%	0.25%
Total - New Entrants	0.36%	0.60%	0.44%	1.26%

*For LEOFF 2, the employer pays 60 percent of the Employer State cost, the State pays 40 percent.

**Rate change applied to future new entrant payroll and used for fiscal budget determinations only. A single supplemental rate increase, equal to the increase for current members, would apply initially for all members or employers.

Exhibit 3
Sensitivity to Changes in the Assumed Retirement Rates

The cost depends on how much retirement behavior would change as a result of the lower retirement ages. For example, the 2.80 percent rate increase for current members for unreduced retirement at 20 years of service is based on our best estimate of the increase in retirement rates. Lower retirement rates would produce a lower cost of 2.38 percent and higher retirement rates would produce a higher cost of 3.20 percent.

Increase in Contribution Rates
Based on Low Retirement Rates:
 (Effective 09/01/2006)

	Retirement Age			
	Age 50 & 20 Years	Age 50 & 5 Years	25 Years Service	20 Years Service
Total - Current Members	0.64%	0.90%	1.00%	2.38%
Total - New Entrants *	0.28%	0.50%	0.36%	1.08%

Increase in Contribution Rates
Based on High Retirement Rates:
 (Effective 09/01/2006)

	Retirement Age			
	Age 50 & 20 Years	Age 50 & 5 Years	25 Years Service	20 Years Service
Total - Current Members	1.00%	1.30%	1.33%	3.20%
Total - New Entrants *	0.42%	0.70%	0.52%	1.44%

**Rate change applied to future new entrant payroll and used for fiscal budget determinations only. A single supplemental rate increase, equal to the increase for current members, would apply initially for all members or employers.*

Appendix

Retirement Rate Assumptions

	Current	Low*	Medium**	High***
Age	Retirement Rates	Retirement Rates	Retirement Rates	Retirement Rates
39	0%	0%	0%	0%
40	0%	1%	2%	3%
41	0%	1%	2%	3%
42	0%	1%	2%	3%
43	0%	1%	2%	3%
44	0%	1%	2%	3%
45	0%	1%	2%	3%
46	0%	3%	4%	5%
47	0%	5%	6%	7%
48	0%	7%	8%	9%
49	0%	9%	10%	11%
50	10%	11%	12%	13%
51	10%	11%	12%	13%
52	10%	11%	12%	13%
53	16%	16%	16%	16%
54	19%	19%	19%	19%
55	24%	24%	24%	24%
56	25%	25%	25%	25%
57	25%	25%	25%	25%
58	33%	33%	33%	33%
59	33%	33%	33%	33%
60	33%	33%	33%	33%
61	37%	37%	37%	37%
62	37%	37%	37%	37%
63	37%	37%	37%	37%
64	48%	48%	48%	48%
65	100%	100%	100%	100%

*14 percent at age when first eligible under age 53, based on age and service.

**16 percent at age when first eligible under age 53, based on age and service.

***18 percent at age when first eligible under age 53, based on age and service.