



September 26, 2018

Cost of Survivor Benefit Improvement

EDUCATIONAL BRIEFING

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ISSUE STATEMENT

One of the goals of the LEOFF 2 Board's strategic plan is to keep the stakeholders informed. One of the ways of meeting that goal is for the Board to be briefed on the price of certain benefit improvements.

OVERVIEW

Last Fall the Board was presented with the costs of increasing the multiplier in LEOFF Plan 2. The results of that pricing are found in Appendix A. For the first benefit improvement pricing of 2018, the Board asked staff to study the cost impacts if members currently contributing to LEOFF 2 received a no cost 100% Joint and Survivor (J&S) benefit.

BACKGROUND

When a member applies for retirement, they will choose one of the four benefit options shown below.

1. Option 1 Single Life
 - a. This option pays the highest monthly amount of the four choices, but it is for your lifetime only. No one will receive an ongoing benefit after you die. If you die before the benefit you have received equals your contributions plus interest (as of the date of your retirement), the difference will be paid in a lump sum to your designated beneficiary.
2. Option 2 Joint and 100% survivor
 - a. Your monthly benefit under this option is less than the Single Life Option. But after your death, your survivor will receive the same benefit you were receiving for his or her lifetime.
3. Option 3 Joint and 50% survivor
 - a. This option applies a smaller reduction to your monthly benefit than Option 2. After your death, your survivor will receive half the benefit you were receiving for his or her lifetime.

4. Option 4 Joint and 66.67% survivor
 - a. This option applies a smaller reduction to your benefit than Option 2 and a larger reduction than Option 3. After your death, your survivor will receive 66.67% (or roughly two-thirds) of the benefit you were receiving for his or her lifetime.

PRICING DETAILS

Staff asked The Office of the State Actuary to estimate the cost if all currently active LEOFF 2 members were given the option for a free option 2 at retirement. This proposal would be a benefit improvement for future annuitants because it offers a free spouse benefit.

Overall, OSA estimated the employee and total employer contribution rates would each increase by approximately 260 basis points under this proposal. Over a 25-year period, OSA expects a total employer cost of this proposal to be approximately \$1.3 billion. As a result of the increase in liabilities, the funded status would decline by approximately eight percent.

OSA assumed 70% of members would be married at retirement and utilize the free survivor benefit. A different percent married assumption could be reasonable and would materially impact the results. As an example, a 50 or 100 percent married assumption would increase the employee and total employer contribution rates by approximately 180 or 370 basis points above current law, respectively.

TECHNICAL DETAILS

In general, a married couple would be expected to receive more benefit payments upon retirement than a single retiree as a result of this benefit improvement. Additionally, LEOFF 2 is heavily weighted toward male employees [approximately 90% male] and OSA's model assumes their spouse to be female. Females are expected to live longer than males and OSA thinks the following link <http://www.longevityillustrator.org/> is a helpful illustrator of longevity between males and females. Not only is the spouse expected to live longer than the male member but OSA currently assumes the female spouse will be three years younger than the member at retirement.

To price this proposal, OSA assumed the member must be married at the time of retirement to select the no cost 100% J&S benefit. They then valued all future retiree benefits as 100% J&S benefits and made an assumption on the marital status of the future retirees. OSA considered three sources of data to develop our assumption for marital status (i.e. the "percent married" assumption):

1. “We considered our current valuation assumption which measures the likelihood that a survivor is both married and selects an annuity upon death of a member. This assumption will vary based on age but is between 60% and 70% for ages 50 through 60 which is where most LEOFF 2 retirements are expected to occur. We developed this assumption as part of the 2017-12 Demographic Experience Study (SurvAnn). In general, we feel the percent married assumption will be at least as high as this assumption.
2. We looked at United States Census Data for Washington State. The percent married for males ages 55 through 64 was approximately 68%.
3. We also considered the current J&S selection behavior of L2 retirees. As of the 2016 AVR, we observed approximately 56% of members selected a J&S option upon retirement. We expect the actual percent of L2 retirees who have a spouse to be higher than the percent currently selecting J&S benefits.

Given the three data sources above, we selected a 70% percent married assumption for this pricing.”

This analysis reflects the lower economic assumptions adopted by the LEOFF 2 Board during the 2017 Interim. Unless noted above, these costs were developed using assumptions, data, and methods consistent with the June 30, 2016 Actuarial Valuation Report (AVR).

RESULTS

Expected Contribution Rate Increase

Impact on Contribution Rates: No Cost 100% J&S Benefit*	
	Best Estimate
Total Rate Increase	5.18%
Employee	2.59%
Employer	1.56%
State	1.03%

*Displayed rates based on the impact to Aggregate contribution rates.

Rates with Benefit Improvement

Employee – 11.18%

Employer – 6.71%

State – 4.47%

Expected Budget Impact

Budget Impacts: No Cost 100% J&S Benefit			
(Dollars in Millions)	2019-2021	2021-2023	25-Year
General Fund-State	\$40.7	\$41.6	\$536.1
Local Government	\$61.6	\$62.4	\$804.7
Total Employer	\$102.3	\$104.0	\$1,340.8

Note: We use long-term assumptions to produce our short-term budget impacts. Therefore, our short-term budget impacts will likely vary from estimates produced from other short-term budget models.

SUPPLEMENTAL INFORMATION

Appendix A – Fall 2017 Benefit Pricing

APPENDIX A

Board staff requested the state actuary's office to price two specific multiplier increases:

- 2.50% multiplier on all service
- 2.50% multiplier on prospective service only

Impact on Contribution Rates	
2.50% Multiplier - All Service	
Total Rate Increase	12.34%
Employee	6.17%
Employer	3.70%
State	2.47%

Contribution rates if this benefit was approved¹:

- **Employee: 14.92%**
- **Employer: 8.95%**
- **State: 5.97%**

Impact on Contribution Rates	
2.50% Multiplier - Prospective Service Only	
Total Rate Increase	4.88%
Employee	2.44%
Employer	1.46%
State	0.98%

Contribution rates if this benefit was approved:

- **Employee: 11.19%**
- **Employer: 6.71%**
- **State: 4.48%**

Budget Impacts - 2.50% Multiplier - All Service			
<i>(Dollars in Millions)</i>	2018-2019	2019-2021	25-Year
General Fund-State	\$42.6	\$97.0	\$1,278.6
Local Government	\$63.7	\$145.5	\$1,917.9
Total Employer	\$106.3	\$242.5	\$3,196.5

Budget Impacts - 2.50% Multiplier - Prospective Service Only			
<i>(Dollars in Millions)</i>	2018-2019	2019-2021	25-Year
General Fund-State	\$16.9	\$41.8	\$777.8
Local Government	\$25.2	\$62.6	\$1,166.5
Total Employer	\$42.0	\$104.4	\$1,944.3

2015 Funded Status	
2015 Valuation Report	105%
2.5% Benefit Multiplier	90%
2.5% Benefit Multiplier Prospective Service Only	100%

¹ Current contribution rates: Employee – 8.75%; Employer – 5.25%; State – 3.50%

Tiered Multiplier

The following charts showcase the following options for a tiered multiplier:

1. Increased benefit multiplier from 2.0% to 3.0% for all earned and future service over 16 years (all service). Service earned from years 0 to 16 remains at a 2.0% multiplier.
2. Increased benefit multiplier from 2.0% to 3.0% for all service earned over 16 years after the valuation date (prospective service only). Service earned from years 0 to 16 remains at a 2.0% multiplier.

Impact on Contribution Rates	
Tiered Multiplier - All Service	
Total Rate Increase	11.06%
Employee	5.53%
Employer	3.32%
State	2.21%

Contribution rates if this benefit was approved²:

- **Employee: 14.28%**
- **Employer: 8.57%**
- **State: 5.71%**

Impact on Contribution Rates	
Tiered Multiplier - Prospective Service Only	
Total Rate Increase	7.31%
Employee	3.66%
Employer	2.19%
State	1.46%

Contribution rates if this benefit was approved:

- **Employee: 12.41%**
- **Employer: 7.44%**
- **State: 4.96%**

Budget Impacts - Tiered Multiplier - All Service			
<i>(Dollars in Millions)</i>	2018-2019	2019-2021	25-Year
General Fund-State	\$38.1	\$86.3	\$1,103.5
Local Government	\$57.2	\$129.5	\$1,655.4
Total Employer	\$95.3	\$215.9	\$2,758.9

Budget Impacts - Tiered Multiplier - Prospective Service Only			
<i>(Dollars in Millions)</i>	2018-2019	2019-2021	25-Year
General Fund-State	\$25.2	\$58.7	\$852.6
Local Government	\$37.9	\$88.0	\$1,279.1
Total Employer	\$63.1	\$146.7	\$2,131.8

2015 Funded Status	
2015 Valuation Report	105%
Tiered Benefit Multiplier	91%
Tiered Benefit Multiplier Prospective Service Only	96%

² Current contribution rates: Employee – 8.75%; Employer – 5.25%; State – 3.50%



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Issue

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Background

When a member applies for retirement, they will choose one of the four benefit options shown below.

1. Single Life
2. Joint and 100% survivor
3. Joint and 50% survivor
4. Joint and 66.67% survivor

Pricing Details

- Staff asked OSA to estimate the cost if all currently active LEOFF 2 members were given the option for a free option 2, joint and 100%, at retirement.
 - This proposal would be a benefit improvement for future annuitants because it offers a free spouse benefit.
- Overall, OSA estimated the employee and total employer contribution rates would each increase by approximately 260 basis points under this proposal.
- Over a 25-year period, OSA expects a total employer cost of this proposal to be approximately \$1.3 billion. As a result of the increase in liabilities, the funded status would decline by approximately eight percent.

Technical Details

- In general, a married couple would be expected to receive more benefit payments upon retirement than a single retiree as a result of this benefit improvement.
- Additionally, LEOFF 2 is heavily weighted toward male employees [approximately 90% male] and OSA's model assumes their spouse to be female.
 - Females are expected to live longer than males
 - Not only is the spouse expected to live longer than the male member but OSA currently assumes the female spouse will be three years younger than the member at retirement.

Results

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