



WASHINGTON STATE LEGISLATURE  
**Office of the State Actuary**

July 23, 2007

Mr. Steve Nelsen, Executive Director  
LEOFF Plan 2 Retirement Board  
P.O. Box 40918  
Olympia, Washington 98504-0918

Dear Steve:

**RE: 2007 SUPPLEMENTAL RATES – REVISED**

As required under RCW 41.45.070, we are forwarding revised LEOFF 2 supplemental rate increases, effective September 1, 2007, for the following bill that passed during the 2007 Legislative Session:

	<b>Members</b>	<b>Employers</b>	<b>State</b>
<b>ESHB 1833 (C 490, L 07)</b>	0.04%	0.02%	0.02%

Please note that these rates have been revised from my previous communication dated, May 24, 2007. The revision was necessary for three reasons.

The first reason was due to the discovery of an inconsistency in how we applied the new assumptions necessary to price ESHB 1833 (“the bill”) during this past Legislative Session. The inconsistency was between the method used to apply the new duty-related disability assumptions in the pricing of the bill and the method used to apply the former assumptions under the 2005 Actuarial Valuation Report (AVR). This revision increased the cost of this legislation and the associated supplemental contribution rates.

The second reason for the revision was due to the unintentional omission of the impact of the new duty-related disability assumption on the new disability benefit enacted last year. The cost of HB 2932 (C 39, L 06) was included in the results of the 2005 AVR as an additional supplemental contribution rate (at that time, benefit not yet included in our actuarial modeling software). That supplemental contribution rate, however, was not adjusted to reflect the assumption change to price the bill from this past Legislative Session. This revision had a minor impact on the supplemental contribution rates.

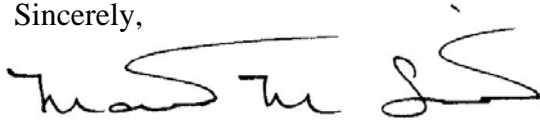
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The last revision was necessary to remove certain retroactive costs of the bill that were assumed during this past Legislative Session and later determined to be unwarranted. This revision decreased the cost of the bill and the associated supplemental contribution rates.

Please feel free to contact me directly should you have any questions.

Sincerely,



Matthew M. Smith  
State Actuary

cc: Ms. Sandra Matheson, Director  
Department of Retirement Systems  
Mr. Dave Nelsen  
Department of Retirement Systems  
Marilyn Oliver

N/OSA/contribution rate letters/Nelsen-2007\_supplemental\_rates\_revised

# OLIVER CONSULTING

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July 23, 2007

Law Enforcement Officers' & Firefighters' Plan 2 Retirement Board  
P.O. Box 40918  
Olympia, Washington 98504-0918

Re: Actuarial Review: Increases in Supplemental  
Contribution Rates Effective September 1, 2007

Chairman Fox and Members of the Board:

There follow the results of our actuarial review of the supplemental contribution rate increases effective September 1, 2007 as contained in the Office of the State Actuary's letter of July 23, 2007.

## **Background**

The supplemental rate increases are due to the passage of ESHB 1833. ESHB 1833 amends RCW 51.32.185 to include the following in the list of conditions classified as occupational diseases:

- Colorectal cancer
- Multiple myeloma
- Testicular cancer
- Prostate cancer diagnosed before age 50
- Any heart problems experienced within 24 hours of strenuous physical exertion due to firefighting activities.

Only cancers developing or manifesting themselves after 10 years of service as a firefighter are eligible. Presumptions are extended following termination of service for ¼ year for each year of service, up to a maximum of 5 years.

Firefighting activities include duties such as fire suppression, fire prevention, emergency medical services, rescue operations, hazardous materials response and training.

The change in the definition of occupational diseases increases the number of members eligible for the following benefits:

- \$150,000 death benefit for occupational disease deaths,
- Survivor benefit payable for members “killed in the course of employment”,
- Reimbursement of Washington State Health Care Authority medical premiums for the spouse and dependent children of members “killed in the course of employment”
- Disability benefits payable to members “disabled in the line of duty”, including catastrophic disability benefits payable to those “totally disabled in the line of duty”.

The recommended supplemental rate increases contained in the Office of the State Actuary’s letter are shown below.

Employee	0.04%
Employer	0.02%
<u>State</u>	<u>0.02%</u>
Total	0.08%

## **Results of Review**

### ***Assumptions***

We have based our review on the assumptions outlined by the Department of Labor and Industries (L&I) in their fiscal note for ESHB 1833, additional assumptions provided by L&I to the Office of the State Actuary, and a study, “Firefighter Heart Presumption Retirements in Massachusetts 1997-2004”, referenced in the L&I fiscal note.

Due to the increasing importance of the disability and duty-related mortality assumptions in pricing and contribution rates, we recommend a detailed review of these assumptions and associated methodologies. This review should take into account the Plan’s experience and administrative practices as well as data from other sources such as relevant L&I experience and the experience of other retirement systems. Though this study could be undertaken as part of the next experience study, conducting a special study at this time would allow the results to be used in pricing potential plan changes during the coming year.

### ***Retroactive Provisions***

We have assumed that ESHB 1833 will not be applied retroactively.

### ***Contribution Rates***

We independently calculated the increases in the LEOFF 2 Actuarial Present Value of Projected Benefits and the resulting contribution rate increases. The resulting contribution rate increases agree with those of the State Actuary.

***Conclusions***

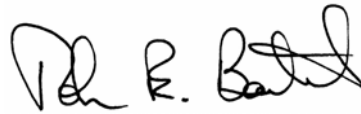
The supplemental contribution rate increases shown in the Office of the State Actuary letter of July 23, 2007 are appropriate for funding effective September 1, 2007.

The undersigned are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

Sincerely,



Marilyn M. Oliver, F.S.A., M.A.A.A.  
Actuary and Principal  
Oliver Consulting  
Contractor



John E. Bartel, A.S.A., M.A.A.A.  
President  
Bartel Associates, LLC  
Peer Review

Cc.

Steve Nelsen, Executive Director  
Matthew M. Smith, State Actuary