ACTUARY'S FISCAL NOTE

RESPONDING AGENCY:	CODE:	DATE:	BILL NUMBER:
Office of the State Actuary	**035**	**3/15/2011**	**HB 3225**

WHAT THE READER SHOULD KNOW

The Office of the State Actuary ("we") prepared this fiscal note based on our understanding of the bill as of the date shown above. We intend this fiscal note to be used by the Legislature during the 2011 Legislative Session only.

We advise readers of this fiscal note to seek professional guidance as to its content and interpretation, and not to rely upon this communication without such guidance. Please read the analysis shown in this fiscal note as a whole. Distribution of, or reliance on, only parts of this fiscal note could result in its misuse, and may mislead others.

SUMMARY OF RESULTS

This bill amends the budget, and requires the Department of Retirement Systems (DRS) to include compensation forgone due to temporary reductions in pay when calculating Average Final Compensation (AFC) for members of the Public Employees' Retirement System (PERS), Teachers' Retirement System (TRS), Public Safety Employees' Retirement System (PSERS), Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF), and Washington State Patrol Retirement System (WSPRS).

The provision of the bill that impacts the state-administered retirement systems could increase the number of members receiving additional compensation in the calculation of their AFC which increases the cost of the plans. Due to a lack of sufficient data, however, that impact is indeterminate. We display potential cost impacts in the How the Results Change When the Assumptions Change section of this fiscal note.

See the body of this fiscal note for additional detail.

WHAT IS THE PROPOSED CHANGE?

Summary Of Change

This provision applies to members of the following systems:

- PERS, state and local
- TRS, state members only
- PSERS, state members only
- LEOFF, state members only
- WSPRS, state members only

This bill was enacted during the 2010 Special Session to amend the operating budget. It also impacts certain members of the pension systems by requiring DRS to modify the definition of AFC to include compensation forgone by members during the 2009-11 Biennium due to temporary reductions in pay implemented prior to December 11, 2010.

The new provision expands on current law (see Chapter 32, Laws of 2010). Compensation forgone by a member of one of the affected systems during the 2009-11 Biennium will be included in calculating the member's AFC, so long as the employer certifies the forgone compensation is an integral part of the employer's expenditure reduction efforts, and results from one of the following:

- Reduced work hours.
- Mandatory or voluntary leave without pay.
- Temporary reduction in pay implemented prior to December 11, 2010.
- Temporary layoffs.

Effective Date: Immediately upon passage.

What Is The Current Situation?

The forgone compensation provision currently includes compensation forgone due to reduced work hours, mandatory or voluntary leave without pay, and temporary layoffs. It does not include compensation forgone due to temporary pay reductions.

The provision currently applies to all state and local employees of PERS, and active members currently employed in state agencies in the other affected retirement systems listed above. For members of TRS, this means the forgone compensation provision only applies to employees of state agencies, such as teachers at the School for the Blind. It does not cover teachers employed by school districts or education service districts.

Who Is Impacted And How?

We estimate this bill could affect all active members of PERS and any of the active state agency employees in TRS, PSERS, LEOFF, and WSPRS through improved benefits. The table below shows the total count of impacted members by system and plan.

System	Plan 1	Plan 2/3	Total
PERS	10,354	148,881	159,235
TRS	208	180	388
PSERS	N/A	2,471	2,471
LEOFF	0	221	221
WSPRS	830	264	1,094

However, based on information from the DRS, we expect less than 1 percent of the affected members will have a temporary reduction in pay that is included in AFC under the terms of this bill.

If a member is impacted, the increase in their AFC will increase their retirement benefits paid from the plan. As an example, the average PERS 1 member aged 60 with 23 years of service has a salary of $56,000. Let’s assume the member takes a 3 percent temporary reduction in pay, for each year of the 2009-11 Biennium, which will be included in AFC based on the terms of this bill. If that member retires at the end of the 2009-11 Biennium, they will receive an increase in their retirement benefit of approximately $65 per month, payable for the member’s lifetime.

This bill could impact all Plan 2 members of these systems through an increase in contribution rates. With the exception of WSPRS members, this bill will not affect member contribution rates in Plan 1 since they are fixed in statute. Additionally, this bill will not affect member contribution rates in Plan 3 since these members do not contribute to their employer-provided defined benefit.

WHY THIS BILL HAS A COST AND WHO WILL PAY FOR IT

Why This Bill Has A Cost

This bill changes the law to increase the AFC, and retirement benefit, of members who take cost-saving temporary reductions in pay during the 2009-11 Biennium, as defined under the bill. Any increase in a member’s AFC will increase the retirement benefits payable from the plan and would be considered a cost to the pension system. The AFC is used in the retirement benefit calculation through termination, retirement, disability, and death.

The costs for this bill are indeterminate since we have no data to determine how many members may qualify for additional compensation included in their AFC or how much that additional compensation may be. According to DRS, this bill would actually affect only a couple hundred of the163,409 employees who could potentially be affected. In addition, a member would only be impacted by this bill if salary from the 2009-11

Biennium is used in calculating that member's AFC. A Plan 1 member's AFC is calculated as the average annual compensation earnable for the highest 24 consecutive months, whereas a Plan 2/3 member's AFC is calculated over the highest 60 consecutive months. This implies that a member is not likely to be affected if they retire (or elect to receive a deferred pension) more than two years after the 2009-11 Biennium as a Plan 1 member, or five years as a Plan 2/3 member. As a result of these limitations, we don't expect a material impact to the affected systems for this bill.

Who Will Pay For These Costs?

Any costs that arise from this bill will be divided between members, local employers, and the state according to standard funding methods that vary by plan:

- Plan 1 and Plan 3: 100 percent employer.
- Plan 2, WSPRS: 50 percent member and 50 percent employer.
- LEOFF 2: 50 percent member, 30 percent employer, and 20 percent state.

All employers of PERS, the School Employees' Retirement System (SERS), and PSERS members could pay higher PERS Plan 1 Unfunded Actuarial Accrued Liability (UAAL) contribution rates. Similarly, all employers of TRS members could pay higher TRS Plan 1 UAAL contribution rates.

The analysis of this bill does not consider any other proposed changes to the systems. The combined effect of several changes to the systems could exceed the sum of each proposed change considered individually.

As with the costs developed in the actuarial valuation, the emerging costs of the systems will vary from those presented in the June 30, 2009, Actuarial Valuation Report (AVR) or this fiscal note to the extent that actual experience differs from the actuarial assumptions.

HOW WE VALUED THESE COSTS

Assumptions We Made

For this bill, we were unable to collect data on the number of members who took temporary reductions in pay during the 2009-11 Biennium. Also, we were unable to obtain the average amount of temporary reduction in salaries for the affected members. Therefore, we were unable to set best-estimate assumptions for this pricing. As a result, this fiscal note shows an indeterminate fiscal impact for this bill.

Please see the How The Results Change When The Assumptions Change section of this fiscal note for additional details.

Special Data Needed

We relied on information from DRS that only a couple hundred members could be affected by this bill. Otherwise, we developed these costs using the same assets and data as disclosed in the AVR.

HOW THE RESULTS CHANGE WHEN THE ASSUMPTIONS CHANGE

We were unable to determine a best estimate cost for this bill. This sensitivity analysis illustrates the costs that would produce a supplemental rate impact for PERS in the 2011-13 Biennium. We chose PERS because a higher percentage of PERS employees are more likely impacted by this bill relative to the other systems.

For this sensitivity analysis, we assumed the temporary reduction in salaries would have a similar cost to a member taking ten furloughs days for each year during the 2009-11 Biennium. We created a new “base” which reflects the future benefits expected to be earned based on AFC, excluding missed furlough pay.

To do this we first altered the projected salary stream of the affected PERS members. Each affected member’s salary would decrease by 2/52 in the first year to reflect two workweeks of time off. We then increased every member’s salary by 4.00 percent in the second year to reflect assumed general salary growth, consistent with the salary growth assumption of the plan. We then increased every member’s salary by 8.16 percent in the third year to reflect assumed general salary growth and the return to a full annual salary. Please see the table below for an example of the salary streams under this pricing.

Salary Example			
	Year 1	Year 2	Year 3
With Furlough	$48,077	$50,000	$54,080
Without Furlough	$50,000	$52,000	$54,080

We then measured the increase in liability between the “base” and the “pricing” – where the “pricing” is consistent with our AVR. The increase in liability emerges due to a higher AFC in the calculation of retirement benefits.

The sensitivity analysis determined that approximately 11 percent of all PERS members would need to take a temporary reduction in salary equivalent to ten furlough days per year in the 2009-11 Biennium in order to produce a supplemental rate impact for both the Plan 1 UAAL and the Plan 2/3 Normal Cost rate. We found that this was equivalent to about a $75 million salary savings over all of PERS.

We estimate that approximately 1,000 Plan 1 members and 16,000 Plan 2/3 members of PERS would need to be affected by this bill in order for a supplemental rate impact to occur. This is significantly larger than the estimated count provided by DRS.

If 200 members took about a 4 percent salary reduction over the two year period, the total employer plus member 25-year fiscal impact would be less than $300,000. Therefore we expect this bill will likely not have a material impact on the retirement systems.

This bill also extends protection against reductions in members' AFC to state-employed members of systems other than PERS. We do not believe additional costs that result from the AFC protection would be material for those systems because they have relatively few state employees who would be impacted by this bill.

Otherwise, we developed these costs using the same assumptions and methods as disclosed in the AVR.

ACTUARY'S CERTIFICATION

The undersigned hereby certifies that:

1. The actuarial cost methods are appropriate for the purposes of this pricing exercise.
2. The actuarial assumptions used are appropriate for the purposes of this pricing exercise.
3. The data on which this fiscal note is based are sufficient and reliable for the purposes of this pricing exercise.
4. Use of another set of methods, assumptions, and data may also be reasonable, and might produce different results.
5. We prepared this fiscal note during the 2011 Legislative Session for the bill that passed during the 2010 Legislative Special Session.
6. We prepared this fiscal note and provided opinions in accordance with Washington State law and accepted actuarial standards of practice as of the date shown on page one of this fiscal note.

While this fiscal note is meant to be complete, the undersigned is available to provide extra advice and explanations as needed.

Lisa A. Won, ASA, MAAA
Actuary

GLOSSARY OF ACTUARIAL TERMS

Actuarial Accrued Liability: Computed differently under different funding methods, the actuarial accrued liability generally represents the portion of the present value of fully projected benefits attributable to service credit that has been earned (or accrued) as of the valuation date.

Actuarial Present Value: The value of an amount or series of amounts payable or receivable at various times, determined as of a given date by the application of a particular set of actuarial assumptions (i.e. interest rate, rate of salary increases, mortality, etc.).

Aggregate Funding Method: The Aggregate Funding Method is a standard actuarial funding method. The annual cost of benefits under the Aggregate Method is equal to the normal cost. The method does not produce an unfunded actuarial accrued liability. The normal cost is determined for the entire group rather than on an individual basis.

Entry Age Normal Cost Method (EANC): The EANC method is a standard actuarial funding method. The annual cost of benefits under EANC is comprised of two components:

- Normal cost.
- Amortization of the unfunded actuarial accrued liability.

The normal cost is determined on an individual basis, from a member's age at plan entry, and is designed to be a level percentage of pay throughout a member's career.

Normal Cost: Computed differently under different funding methods, the normal cost generally represents the portion of the cost of projected benefits allocated to the current plan year.

Projected Unit Credit (PUC) Liability: The portion of the Actuarial Present Value of future benefits attributable to service credit that has been earned to date (past service).

Projected Benefits: Pension benefit amounts that are expected to be paid in the future taking into account such items as the effect of advancement in age as well as past and anticipated future compensation and service credits.

Unfunded PUC Liability: The excess, if any, of the Present Value of Benefits calculated under the PUC cost method over the Valuation Assets. This is the portion of all benefits earned to date that are not covered by plan assets.

Unfunded Actuarial Accrued Liability (UAAL): The excess, if any, of the actuarial accrued liability over the actuarial value of assets. In other words, the present value of benefits earned to date that are not covered by plan assets.