Recalculation of Retirement Benefits Preliminary Follow-up Report

LEOFF Plan 2 Retirement Board

October 21, 2009

Key Issues

- Implementation of new actuarial factors as the result of the 2002 experience study resulted in significantly different retirement benefits for members with nearly identical careers.

Example

Final Average Salary (FAS) = $60,000

Year of Service (YOS) = 25

Age Difference = same age

Joint and 100% Survivorship

Retirement Date	Benefit Formula 2% x FAS/12 x YOS x Reduction Factor	Monthly Benefit
08/01/2002	2% x $60,000/12 x 25 x 0.780	$1,950.00
09/01/2002	2% x $60,000/12 x 25 x 0.870	$2,175.00
	Monthly Difference	$ 225.00
	Annual Difference	$2,700.00

Example

Final Average Salary (FAS) = $60,000

Year of Service (YOS) = 25

Age Difference = same age

Joint and 100% Survivorship

Retirement Date	Benefit Formula 2% x FAS/12 x YOS x Reduction Factor	Monthly Benefit
12/01/2009	2% x $60,000/12 x 25 x 0.870	$2,175.00
01/01/2010	2% x $60,000/12 x 25 x 0.881	$2,202.50
	Monthly Difference	$ 27.50
	Annual Difference	$ 330.00

Policy Issues

- Recalculate member benefits who retired prior to 9/1/02 and chose a survivor option

- Scope of adjustments

Recalculation of Retirement Benefits

Questions?

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

Recalculation of Retirement Benefits

Preliminary Follow-up Report

October 21, 2009

1. Issue

Implementation of new actuarial factors as the result of the 2002 Experience Study resulted in significantly different retirement benefits for members with nearly identical careers.

2. Staff

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3. Members Impacted

As of June 30, 2007 there were 16,099 active members and 924 retirees as reported in the Office of the State Actuary's *2007 Actuarial Valuation Report*. This issue would apply to all LEOFF 2 retirees whose benefits were calculated using a survivor reduction factor or an early retirement reduction factor. The same issue exists in other retirement systems.

4. Current Situation

A member who chooses to provide a survivor benefit at the time of retirement has their benefit reduced so that the lifetime benefit covering both the retiree and beneficiary is actuarially equivalent to a lifetime benefit for the retiree only. Similarly, a retiree who goes out on a disability retirement prior to age 53 or the beneficiary of a member who died prior to retirement may have had their benefit actuarially reduced for "early retirement."

5. Background Information

The Office of the State Actuary produces experience studies for LEOFF Plan 2 every five years which compare previous actuarial projections to actual experience regarding assumptions for such things as mortality, rates of disability, and retirements. New reduction factors for survivor benefits and early retirements are calculated using the updated experience. The LEOFF Plan 2 Retirement Board is responsible for adopting the actuarial reduction factors for LEOFF Plan 2. The Department of Retirement Systems puts the new reduction factors in WAC and uses updated factors to calculate benefits for new retirees but does not recalculate the benefits of members who have already retired using the prior factors. The Board will be adopting new reduction factors during the 2009 Interim.

Economic and Demographic Assumptions
Actuaries use both economic and demographic assumptions to determine the projected liabilities of a plan.

"Economic assumptions" include such items as inflation and the rate of return on assets invested in the plan. These types of assumptions are usually set in statute and change infrequently.

"Demographic assumptions" are assumptions about member behavior and include such things as life expectancy, probability of disablement and probability of service retirement at a certain age. These types of assumptions are published in actuarial valuations and comprehensive annual financial reports and are adjusted periodically based on the results of actuarial studies. The most common type of study in Washington is the Actuarial Experience Study which is conducted by the Office of the State Actuary every five years.

Experience studies play an important part in younger retirement plans, such as LEOFF Plan 2, because they validate or adjust the demographic assumptions on which the plan's funding is based. For example, if the original life expectancy assumptions for members are found to be low, then the liabilities of the plan increase because retirees will now be expected to receive their benefits longer. The resulting increase in liabilities would tend to increase the contributions necessary to fund the plan.

Results of the Previous Experience Study (2002)
During the previous experience study the Office of the State Actuary discovered that both LEOFF members and their beneficiaries tended to live longer than the assumptions predicted.

The increase in life expectancy for beneficiaries was based largely on a new national table (RP 2000) developed by the Society of Actuaries. LEOFF Plan 2 members also showed an increase in life expectancy based on Washington LEOFF experience. The effect of this positive life expectancy experience on survivor reduction factors was significant.

Although the effect of increased life expectancy would generally be to increase reduction factors, in this case the new factors were 2.5% to 16.5% lower. Presumably, this was because the life expectancy of members increased at a far greater pace than the life expectancy for beneficiaries. Additional elements that may have an influence on administrative factors include rate of return assumption, change in the plan's retirement age, and changes in the calculation methodology used by the actuary.

To determine the significance of the change in the joint life administrative factors, the following example illustrates the difference in the benefit amount relative to the September 1, 2002 joint survivor administrative factor change versus the change taking place January 1, 2010.

Example:
The member retires at age 53 with 25 years of service, a final average salary of $60,000 ($5,000 monthly), and chooses a joint and 100% survivorship. In this example, the member and spouse are the same age.

Retirement Date	Benefit Calculation
August 1, 2002	2% x $5,000 x 25 x 0.780 = $1,950.00
September 1, 2002	2% x $5,000 x 25 x 0.870 = $2,175.00
	Monthly Difference = $ 225.00

Retirement Date	Benefit Calculation
December 1, 2009	2% x $5,000 x 25 x 0.870 = $2,175.00
January 1, 2010	2% x $5,000 x 25 x 0.881 = $2,202.50
	Monthly Difference = $ 27.50

Actuarial Equivalence
Statues require certain types of benefit options, such as survivor benefits, to be "actuarially equivalent." For example, RCW 41.26.460 provides that the service retirement beneficiary options shall be calculated so as to be actuarially equivalent to each other.

Appendix A shows the various reduction factors for the three survivor options currently available to LEOFF Plan 2 retirees: Option 2 (Joint and 100%), Option 3 (Joint and 50%) and Option 4 (Joint and 66.67%). The table in Appendix A compares the previous (prior to September 1, 2002) survivor reduction factors to the current factors.

Ongoing Actuarial Equivalence
RCW 41.26.460 does not specifically address the question of whether the required "actuarial equivalence" is for the time of retirement only or whether the required equivalence should be maintained throughout the period of time that a retiree or beneficiary receives payments. Ongoing actuarial equivalence would mean that the benefit being paid to a retiree or beneficiary would be adjusted when actuarial factors are changed due to changing assumptions.

The Department of Retirement Systems has resolved this question via agency rule development. WAC 415-02-300(6) provides that "the tables, schedules and factors in this chapter shall apply to the calculation of retirement allowances for those who retire on or after September 1, 2002, (until subsequent amendment)." The Department did not adjust the benefits of prior retirees when the new factors were adopted. A change in that practice would require DRS to implement a method for recalculating a retiree's benefit using new factors.

However, when the Department adopted WAC 415-108-805 and 415-112-555 implementing the new minimum benefit for Plan 1 retirees in the Teachers' Retirement System and the Public Employees' Retirement System, the Department used the "the same factors used to calculate their benefit at the time of retirement; or for beneficiaries, at the time benefit payments commenced." The same policy approach would be an option for implementing revised actuarial factors.

The Office of the State Actuary does not recalculate the liabilities associated with retired members for actuarial valuation purposes when new factors are adopted. A change in that practice could mean increased liabilities in the next actuarial valuation since the experience in the plan so far appears to have been positive. An increase in liabilities could mean an increase in the amount of member, employer and state contributions necessary to fund the plan although the number of retirees in LEOFF Plan 2 is fairly small.

Future experience could result in either higher or lower factors. Application of new factors to decrease a retiree's pension might not be legally permissible.

All of the State's public retirement plans use actuarial reduction factors to calculate survivor benefits and the reductions associated with retiring before normal retirement age. The question of how to apply new actuarial reduction factors has not been discussed by the Select Committee on Pension Policy or its predecessor, the Joint Committee on Pension Policy.

The question of implementing new actuarial reduction factors which would result in a reduced pension for retirees has not been addressed in the Courts. The Supreme Court in Washington has long held that new reduction factors may be applied to retirements that occur after the effective date of the new factors [*King County Employees' Association v. State Employees' Retirement Board*, 54 Wn.2d 1, 336 P.2d 387 (1959)].

RCW 41.26.720(a) provides that the LEOFF Plan 2 Retirement Board is required to adopt actuarial tables, assumptions and cost methodologies for LEOFF Plan 2. The Board did adopt new factors this year that will become effective January 1, 2010.

6. Policy Questions

One policy question to be answered is whether or not a member who retired prior September 1, 2002 and chose a survivor option should have their benefit recalculated. Once that decision is made, the scope of the adjustment can be determined.

Scope of Adjustment
If the Board decides that an adjustment needs to be made, the scope of whom and how far back will also need to be determined. For example, if the Board determines the changes were a result of the normal experience study process, then maybe only those members who, had they been informed of the change, may have reasonably delayed their retirement until the new factors took effect would have their benefit recalculated. However, if the Board believes the changes were the result of an error in the previous factors, they may want to make adjustments to all members' benefits.

7. Supporting Information

Appendix A: Joint Survivor Factors

Table One: Joint Survivor Factors

	Joint and 100%		Joint and 50%		Joint and 66⅔%	
Age Difference	Current Factor	Previous Factor	Current Factor	Previous Factor	Current Factor	Previous Factor
-20	0.9530	0.9280	0.9760	0.9630	0.9680	0.9510
-19	0.9500	0.9230	0.9740	0.9600	0.9660	0.9470
-18	0.9470	0.9180	0.9730	0.9570	0.9640	0.9440
-17	0.9440	0.9120	0.9710	0.9540	0.9620	0.9400
-16	0.9400	0.9060	0.9690	0.9510	0.9590	0.9350
-15	0.9370	0.8990	0.9670	0.9470	0.9570	0.9300
-14	0.9330	0.8920	0.9650	0.9430	0.9540	0.9260
-13	0.9290	0.8850	0.9630	0.9390	0.9520	0.9210
-12	0.9250	0.8770	0.9610	0.9350	0.9490	0.9150
-11	0.9210	0.8690	0.9590	0.9300	0.9460	0.9090
-10	0.9170	0.8610	0.9570	0.9260	0.9430	0.9030
-09	0.9130	0.8540	0.9540	0.9220	0.9400	0.8980
-08	0.9080	0.8460	0.9520	0.9170	0.9370	0.8920
-07	0.9040	0.8380	0.9490	0.9120	0.9340	0.8860
-06	0.8990	0.8300	0.9470	0.9070	0.9300	0.8800
-05	0.8940	0.8230	0.9440	0.9030	0.9270	0.8750
-04	0.8900	0.8140	0.9420	0.8980	0.9240	0.8680
-03	0.8850	0.8060	0.9390	0.8930	0.9200	0.8620
-02	0.8800	0.7980	0.9360	0.8880	0.9160	0.8560
-01	0.8750	0.7900	0.9330	0.8830	0.9130	0.8500
0	0.8700	0.7800	0.9300	0.8770	0.9090	0.8420
01	0.8650	0.7710	0.9270	0.8710	0.9050	0.8350
02	0.8600	0.7600	0.9240	0.8640	0.9020	0.8270
03	0.8550	0.7510	0.9220	0.8580	0.8980	0.8200
04	0.8500	0.7430	0.9190	0.8530	0.8940	0.8130
05	0.8450	0.7350	0.9160	0.8480	0.8910	0.8070
06	0.8400	0.7280	0.9130	0.8430	0.8870	0.8010
07	0.8350	0.7210	0.9100	0.8380	0.8830	0.7950
08	0.8300	0.7140	0.9070	0.8330	0.8800	0.7890
09	0.8250	0.7060	0.9040	0.8280	0.8760	0.7830
10	0.8210	0.7000	0.9020	0.8240	0.8730	0.7780
11	0.8160	0.6940	0.8990	0.8200	0.8700	0.7730
12	0.8120	0.6870	0.8960	0.8150	0.8660	0.7680
13	0.8080	0.6810	0.8940	0.8110	0.8630	0.7620
14	0.8030	0.6730	0.8910	0.8050	0.8600	0.7550
15	0.7990	0.6640	0.8880	0.7990	0.8570	0.7480
16	0.7950	0.6560	0.8860	0.7930	0.8540	0.7410
17	0.7920	0.6500	0.8840	0.7880	0.8510	0.7360
18	0.7880	0.6440	0.8810	0.7840	0.8480	0.7310
19	0.7840	0.6390	0.8790	0.7800	0.8450	0.7260
20	0.7810	0.6340	0.8770	0.7760	0.8420	0.7220
21	0.7770	0.6290	0.8750	0.7730	0.8400	0.7180
22	0.7740	0.6250	0.8730	0.7700	0.8370	0.7150
23	0.7710	0.6200	0.8710	0.7660	0.8350	0.7100
24	0.7680	0.6160	0.8690	0.7630	0.8320	0.7070
25	0.7650	0.6120	0.8670	0.7600	0.8300	0.7030

	Joint and 100%		Joint and 50%		Joint and 66⅔%	
Age Difference	Current Factor	Previous Factor	Current Factor	Previous Factor	Current Factor	Previous Factor
26	0.7630	0.6080	0.8650	0.7570	0.8280	0.7000
27	0.7600	0.6040	0.8640	0.7540	0.8260	0.6960
28	0.7570	0.6010	0.8620	0.7510	0.8240	0.6940
29	0.7550	0.5980	0.8600	0.7480	0.8220	0.6900
30	0.7530	0.5950	0.8590	0.7460	0.8200	0.6880
31	0.7500	0.5920	0.8570	0.7440	0.8180	0.6850
32	0.7480	0.5890	0.8560	0.7410	0.8170	0.6820
33	0.7460	0.5860	0.8550	0.7390	0.8150	0.6800
34	0.7440	0.5830	0.8530	0.7370	0.8140	0.6770
35	0.7420	0.5810	0.8520	0.7350	0.8120	0.6750
36	0.7410	0.5780	0.8510	0.7330	0.8110	0.6730
37	0.7390	0.5760	0.8500	0.7310	0.8800	0.7890
38	0.7370	0.5740	0.8490	0.7290	0.8760	0.7830
39	0.7360	0.5710	0.8480	0.7270	0.8730	0.7780
40	0.7340	0.5690	0.8470	0.7250	0.8700	0.7730