



PURCHASE OF ANNUITY

LEOFF Plan 2 Retirement Board

August 24, 2011

ISSUE

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KEY ELEMENTS

- Defined contribution assets can be used to purchase increased defined benefits
 - Service credit purchases are limited
 - Annuities from trust funds



HISTORY

- First reviewed in 2004 Interim
- Initial Consideration in 2006
- Included Interim issues letter to SCPP
 - 2007 through 2011
- Reached final proposal stage
 - 2006 – deferred to 2007 Interim to work with DRS
 - 2008 through 2010



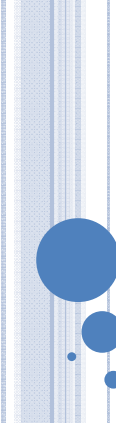
OPTIONS

- Introduce legislation permitting LEOFF Plan 2 retirees to purchase actuarially equivalent life annuity from the LEOFF Plan 2 retirement fund
 - Same features as the Plan 3 annuity
 - Allow Plan 3 features to be optional



QUESTIONS?






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

Purchase of Annuity Preliminary Report Follow-up

August 24, 2011

1. Issue

Members are limited in the amount of money they can convert to LEOFF Plan 2 by the amount required to purchase five years of service.

2. Staff

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3. Members Impacted

Purchase of annuity could affect any active LEOFF Plan 2 member. As of June 30, 2009 there were 16,951 active members and 1,367 retirees as reported in the Office of the State Actuary's *2009 Actuarial Valuation Report*.

4. Current Situation

Under current law, only Plan 3 members (TRS, PERS & SERS) can purchase an annuity out of the combined trust fund. LEOFF Plan 2 members have access to a similar product where they may purchase additional service credit at the time of normal retirement by paying the actuarial cost of the additional service, but they are limited to 5 years.

5. Background Information

Under traditional defined benefit plans, retirees receive an automatic and definite level of lifetime payouts based on a fixed accrual formula, regardless of financial market conditions. By contrast, most defined contribution plan participants are left to figure out a distribution strategy on their own, and they continue to be vulnerable to the ups and downs of financial markets in their retirement years. Research shows that one of the most effective ways to reduce the risk of outliving assets is by converting at least some of those assets to an annuity.

Brief History

The LEOFF Plan 2 Retirement Board studied both the Purchase of Service Credit and Purchase of Annuity during the 2004 Interim. Of these two concepts, the Board recommended legislation providing the option to purchase up to five years of service credit at the time of retirement. The legislation (HB 1269) was passed by the 2005 Legislature. Although annuities were not available from the trust fund in 2004 when this issue was first studied by the Board, annuities have since become available from the trust fund and have been defined by the Department of Retirement Systems (DRS). The Purchase of Annuity topic was studied by the Board during the 2006 through 2010 Interims reaching the final proposal stage in all but the 2007 Interim, but no legislation has been recommended to the Legislature. In 2006 the topic was deferred until the 2007 Interim at the request of DRS to ensure the proposed changes would be allowable under federal tax laws. In subsequent years the topic was deferred for joint consideration with the Select Committee on Pension Policy (SCPP) as one of several issues included in letters from the Board.

Federal Law

Changes in federal law have liberalized the rules on the transfer of funds between tax-deferred accounts, including government defined benefit pension plans like LEOFF Plan 2, and deferred compensation accounts such as 457, 403(b), and 401(k) plans. Many state and local government pension plans have subsequently provided the opportunity for members to transfer funds, including funds from tax-deferred accounts, into these plans to add value to a member's defined benefit through the purchase of additional service credit or the purchase of an annuity.

Members of LEOFF Plan 2 generally have the opportunity to participate in deferred compensation plans. These plans permit an individual to place a portion of salary into a special account prior to payroll tax reductions. DRS operates a deferred compensation program consistent with the federal tax requirements of 26 United States Code section 457, commonly called a "457 Plan" in which employees of the state, counties, municipalities and other political subdivisions may participate. Some employers may also participate in other 457 plans or deferred compensation-type plans commonly referred to as "403(b)" or "401(k)" plans.

The Pension Protection Act of 2006 affirmed the purchase of up to 5 years of service credit or "air-time" as permissible under the definition of service credit and made permanent the rules allowing the transfer of funds between the various plan types as described above.

Annuities

At a basic level, annuity contracts are offered by organizations which take a current lump-sum amount of money and pay it out over a period of years. These contracts are regulated by various jurisdictions. Annuities have been in existence for well over two hundred years. The very first mention of Annuities in the United States was the use of these products by the Presbyterian Church in 1740 to provide security for the clergy and widows. Annuities provide the ability to accumulate tax-deferred funds for retirement and then receive a guaranteed income payable for life or for a specified period of time.

The specific terms of an annuity will determine how much a person will receive as a stream of guaranteed income in exchange for the lump-sum dollar amount paid up front. There are several different features that may be available with an annuity which affect the price/value of the annuity. The terms and conditions of an annuity contract will specify features such as, whether the annuity will be for a single life or a joint annuity (like a survivor benefit feature), the payment frequency, adjustments for cost of living, and death provisions.

Annuity Purchase Examples

Some Washington State pension plans currently have provisions that allow the purchase of an annuity:

- RCW 41.50.088 provides members and survivors in the Teachers' Retirement System (TRS) Plan 3, the School Employees' Retirement System (SERS) Plan 3, and the Public Employees' Retirement System (PERS) Plan 3 optional actuarially equivalent life annuity benefit payment schedules that may be purchased from the combined Plan 2 and Plan 3 funds under RCW 41.50.075.
- RCW 41.32.067 provides Teachers' Retirement System (TRS) Plan 1, 2 and 3 members the ability to purchase additional benefits in the form of an annuity, by making a member reserve contribution which is actuarially converted to a monthly benefit at the time of retirement.

Beginning July 1, 2011, members of North Carolina's Teachers' and State Employees' Retirement System and Local Governmental Employees' Retirement System may choose to transfer all or a portion of their 457 plan contributions to the North Carolina Retirement Systems and receive a monthly benefit. Their purchase plan has several benefit options such as COLA and joint and survivorship options.

Plan 3 Annuity

All Washington State Plan 3's have received IRS plan qualifications in the past. They are currently awaiting final confirmation from the IRS as to whether the Plans 3 have been re-qualified during what is called the "Cycle C" review.

Under current law, members may use funds from their Plan 3 Defined Contribution account to purchase a life annuity. A life annuity is a contract that provides a guaranteed income for the rest of a member's life in exchange for a lump-sum dollar amount that is paid up front. The contract specifies the amount paid to purchase the annuity, the benefit amount the member receives each month, and any other terms and conditions. Prior to 2005, a member could only purchase an annuity contract from an insurance company using defined contribution funds invested in the Self-Directed Investment Program.

Beginning July 1, 2005, Plan 3 members were provided with the opportunity to purchase an annuity directly from the pension trust fund using funds invested in the Washington State Investment Board Investment Program (WSIB). The WSIB annuity option is administered by the State of Washington. As defined by the Department of Retirement Systems, the WSIB annuity has several features and options as described in the following table.

| WSIB Investment Program Annuity Features and Options | |
|---|--|
| Contract Provider | Washington State |
| Minimum Purchase Price | \$25,000 |
| Annuity Payment Frequency | Monthly |
| Rescission Period | 15 calendar days from date of purchase |
| Single Life Annuity | <ul style="list-style-type: none"> • Provides regular payment for as long as annuitant lives. • Automatic 3% Annual Cost of Living Adjustment (COLA) • Conversion option to Joint Life Annuity • Balance Refund |
| Joint Life Annuity | <ul style="list-style-type: none"> • Provides regular payment for as long as member or joint annuitant is alive. • Joint annuitant survivorship options: 100%, 66 2/3%, or 50% • Automatic 3% Annual COLA • Monthly payment pops-up to Single Life Annuity amount if joint annuitant predeceases member. • Balance Refund |
| <p><i>Annuitant</i> – The member/owner who purchases the annuity; the payee who receives lifetime monthly payments.</p> <p><i>Balance Refund</i> – Any remaining balance equal to the original purchase price minus the total of all annuity payments made to the single or joint annuitants, may be refunded to the specified beneficiary.</p> <p><i>Conversion Option</i> – If a single life annuity is purchased and then a subsequent marriage occurs, a one-time opportunity is available to convert to a joint life annuity with the new spouse as the joint annuitant. If a joint annuity is purchased with someone other than a spouse named as the joint annuitant, the annuity may be converted to a single life annuity after payments have begun.</p> <p><i>Joint Annuitant</i> – The person designated to receive an ongoing payment in the event of the annuitant's death.</p> <p><i>Pop-up</i> – An increase from a joint annuity payment amount to the full single life annuity amount if the annuitant outlives the joint annuitant.</p> <p><i>Rescission Period</i> – A period of time (typically 7 to 15 days) during which the terms of the contract may be canceled or altered</p> | |

Service Credit Purchase

The Legislature passed the service credit purchase benefit during the 2005 Session. This benefit provides LEOFF Plan 2 members the opportunity to purchase up to five years of additional service credit at the time of retirement. The cost of the additional service credit is the actuarial equivalent value of the resulting increase in the member's benefit. A member may pay all or part of the cost of the additional service credit with an eligible transfer from a qualified retirement plan.

Since the inception of the benefit through March 2011, one hundred four service credit purchase billings have been requested from the Department of Retirement Systems and paid in full. Seventy-two of the one hundred four billings were to purchase the maximum of 60 months of service credit; six billings requested to purchase less than 20 months of service credit; sixteen billings requested to purchase 20 to 40 months of service credit; and ten billings have requested more than 40, but less than 60 months of service credit. The average cost of all one hundred four billings is \$111,951.35. The average benefit increase is \$624.63 per month. See the following table for more specific details.

| Months Purchased | Status | Monthly Benefit Increase | Cost | Age at Retirement |
|------------------|--------|--------------------------|--------------|-------------------|
| 11 | Paid | \$90.32 | \$17,343.36 | 53 |
| 12 | Paid | \$142.42 | \$29,900.77 | 53 |
| 14 | Paid | \$204.77 | \$43,009.93 | 53 |
| 15 | Paid | \$108.16 | \$20,556.07 | 56 |
| 17 | Paid | \$160.43 | \$26,604.42 | 56 |
| 17 | Paid | \$205.15 | \$39,486.70 | 53 |
| 20 | Paid | \$210.96 | \$38,204.93 | 51 |
| 21 | Paid | \$189.11 | \$36,951.16 | 55 |
| 24 | Paid | \$205.10 | \$40,970.91 | 57 |
| 24 | Paid | \$307.29 | \$56,296.01 | 57 |
| 28 | Paid | \$213.84 | \$42,843.87 | 52 |
| 29 | Paid | \$484.67 | \$77,436.93 | 60 |
| 30 | Paid | \$309.73 | \$51,363.14 | 56 |
| 30 | Paid | \$293.39 | \$56,246.89 | 55 |
| 30 | Paid | \$313.89 | \$58,695.13 | 56 |
| 31 | Paid | \$428.01 | \$85,575.92 | 54 |
| 32 | Paid | \$533.70 | \$87,103.41 | 59 |
| 33 | Paid | \$539.45 | \$103,152.79 | 58 |
| 36 | Paid | \$312.20 | \$49,661.97 | 58 |
| 36 | Paid | \$311.39 | \$65,332.28 | 54 |
| 37 | Paid | \$293.69 | \$53,187.37 | 50 |

| Months Purchased | Status | Monthly Benefit Increase | Cost | Age at Retirement |
|-------------------------|---------------|---------------------------------|--------------|--------------------------|
| 39 | Paid | \$566.18 | \$102,983.01 | 53 |
| 41 | Paid | \$662.01 | \$119,380.46 | 60 |
| 43 | Paid | \$352.54 | \$69,021.27 | 57 |
| 44 | Paid | \$468.30 | \$86,738.21 | 54 |
| 48 | Paid | \$526.87 | \$100,030.38 | 50 |
| 48 | Paid | \$710.23 | \$123,755.59 | 62 |
| 49 | Paid | \$546.75 | \$103,278.05 | 55 |
| 52 | Paid | \$757.91 | \$137,856.91 | 53 |
| 53 | Paid | \$469.61 | \$80,033.81 | 60 |
| 54 | Paid | \$900.94 | \$163,872.82 | 53 |
| 56 | Paid | \$1,196.70 | \$210,679.20 | 55 |
| 60 | Paid | \$450.85 | \$65,116.81 | 69 |
| 60 | Paid | \$349.60 | \$69,252.48 | 53 |
| 60 | Paid | \$501.77 | \$80,169.04 | 60 |
| 60 | Paid | \$401.82 | \$80,968.41 | 53 |
| 60 | Paid | \$555.78 | \$84,449.64 | 59 |
| 60 | Paid | \$473.77 | \$84,453.99 | 51 |
| 60 | Paid | \$637.83 | \$87,645.18 | 70 |
| 60 | Paid | \$481.08 | \$89,551.69 | 62 |
| 60 | Paid | \$553.25 | \$94,936.77 | 57 |
| 60 | Paid | \$628.35 | \$95,476.51 | 60 |
| 60 | Paid | \$474.26 | \$99,032.62 | 53 |
| 60 | Paid | \$663.46 | \$102,448.48 | 67 |
| 60 | Paid | \$544.19 | \$105,764.19 | 55 |
| 60 | Paid | \$676.86 | \$107,668.81 | 58 |
| 60 | Paid | \$597.55 | \$108,634.30 | 57 |
| 60 | Paid | \$591.65 | \$108,779.19 | 50 |
| 60 | Paid | \$662.43 | \$109,582.08 | 56 |
| 60 | Paid | \$529.48 | \$110,865.05 | 54 |
| 60 | Paid | \$591.42 | \$112,208.55 | 53 |
| 60 | Paid | \$667.71 | \$115,492.79 | 56 |
| 60 | Paid | \$662.66 | \$116,165.62 | 59 |
| 60 | Paid | \$664.26 | \$116,451.04 | 53 |
| 60 | Paid | \$596.59 | \$116,466.81 | 53 |
| 60 | Paid | \$689.26 | \$117,195.88 | 62 |
| 60 | Paid | \$695.19 | \$118,402.89 | 57 |
| 60 | Paid | \$674.27 | \$118,582.71 | 59 |
| 60 | Paid | \$619.95 | \$118,649.42 | 54 |

| Months Purchased | Status | Monthly Benefit Increase | Cost | Age at Retirement |
|-------------------------|---------------|---------------------------------|--------------|--------------------------|
| 60 | Paid | \$648.71 | \$119,211.11 | 57 |
| 60 | Paid | \$634.91 | \$119,675.36 | 55 |
| 60 | Paid | \$682.71 | \$120,623.90 | 60 |
| 60 | Paid | \$734.27 | \$121,693.40 | 62 |
| 60 | Paid | \$789.39 | \$122,791.54 | 59 |
| 60 | Paid | \$657.68 | \$123,235.74 | 59 |
| 60 | Paid | \$681.88 | \$124,027.79 | 53 |
| 60 | Paid | \$725.81 | \$125,542.26 | 56 |
| 60 | Paid | \$679.16 | \$125,816.03 | 59 |
| 60 | Paid | \$723.25 | \$126,792.54 | 53 |
| 60 | Paid | \$651.62 | \$126,899.85 | 60 |
| 60 | Paid | \$631.74 | \$128,387.72 | 53 |
| 60 | Paid | \$671.52 | \$128,800.04 | 55 |
| 60 | Paid | \$731.38 | \$130,417.49 | 60 |
| 60 | Paid | \$751.19 | \$134,482.08 | 54 |
| 60 | Paid | \$869.56 | \$135,262.18 | 58 |
| 60 | Paid | \$784.26 | \$135,879.90 | 62 |
| 60 | Paid | \$743.28 | \$137,227.41 | 53 |
| 60 | Paid | \$755.76 | \$138,952.01 | 50 |
| 60 | Paid | \$753.67 | \$139,161.34 | 52 |
| 60 | Paid | \$716.50 | \$139,274.59 | 54 |
| 60 | Paid | \$876.92 | \$139,343.61 | 66 |
| 60 | Paid | \$853.11 | \$141,390.26 | 62 |
| 60 | Paid | \$767.93 | \$141,794.38 | 52 |
| 60 | Paid | \$775.96 | \$143,118.15 | 58 |
| 60 | Paid | \$690.62 | \$143,399.18 | 53 |
| 60 | Paid | \$849.30 | \$143,605.96 | 54 |
| 60 | Paid | \$899.15 | \$146,747.29 | 59 |
| 60 | Paid | \$809.60 | \$148,500.36 | 56 |
| 60 | Paid | \$818.01 | \$150,374.74 | 58 |
| 60 | Paid | \$801.50 | \$152,545.69 | 55 |
| 60 | Paid | \$842.87 | \$152,644.07 | 51 |
| 60 | Paid | \$912.77 | \$153,681.13 | 61 |
| 60 | Paid | \$953.97 | \$154,416.68 | 62 |
| 60 | Paid | \$803.65 | \$158,300.90 | 53 |
| 60 | Paid | \$817.90 | \$160,580.48 | 56 |
| 60 | Paid | \$943.56 | \$164,580.04 | 60 |
| 60 | Paid | \$874.08 | \$164,768.07 | 53 |

| Months Purchased | Status | Monthly Benefit Increase | Cost | Age at Retirement |
|------------------|--------|--------------------------|--------------|-------------------|
| 60 | Paid | \$859.64 | \$168,342.66 | 55 |
| 60 | Paid | \$869.91 | \$169,461.85 | 54 |
| 60 | Paid | \$946.12 | \$170,245.79 | 59 |
| 60 | Paid | \$1,052.38 | \$171,755.45 | 59 |
| 60 | Paid | \$958.25 | \$179,467.27 | 55 |
| 60 | Paid | \$1,045.60 | \$183,378.67 | 57 |
| 60 | Paid | \$1,269.94 | \$224,378.53 | 60 |

Below is an example calculation for the purchase of five years of service credit by an average LEOFF Plan 2 retiree. At the time of retirement, an average LEOFF Plan 2 retiree is age 56, has 17 years of service, and a monthly final average salary of \$5,000.

Service Credit Purchase Calculation

1. Calculate Base Benefit:

$$2\% \times 17 \text{ YOS} \times \$5,000 = \$1,700 \text{ per month}$$

2. Calculate Benefit With Additional 5 Years Of Service Credit:

$$2\% \times 22 \text{ YOS} \times \$5,000 = \$2,200 \text{ per month}$$

3. Calculate Increase in Monthly Benefit from Additional Service Credit:

$$\$2,200 - \$1,700 = \$500 \text{ increase per month}$$

4. Calculate Service Credit Purchase Cost:

$$\$500 \div 0.0057814^1 = \$86,484$$

Trust Fund Annuity Purchase

An annuity purchase calculation is similar to the service credit purchase calculation in that DRS uses the same actuarial factors for computing the monthly benefit per \$1.00 of accumulation for defined benefits. A key difference between an annuity purchase and a service credit purchase is that the annuity purchase does not limit the lump sum amount that can be converted to a defined benefit. The service credit purchase is limited to converting only up to the amount to purchase the maximum of five years of service credit.

In the service credit example above, the retiree would be limited to converting \$82,916 into defined benefit payments. An annuity purchase from the trust fund would not have the same

¹ The factor for the "Monthly benefit per \$1.00 of accumulation for defined benefit plans" for an age 56 LEOFF Plan 2 member as found in WAC 415-02-340.

constraint and would allow a member to roll-in all assets held from a deferred compensation account or other qualified account. For example, if the average retiree above had \$100,000 in a deferred compensation account, the entire amount could be converted into defined benefits through an annuity purchase.

Annuity Purchase Calculation

1. Calculate Base Benefit:

$$2\% \times 17 \text{ YOS} \times \$5,000 = \$1,700 \text{ per month}$$

2. Calculate Benefit Increase from a \$100,000 Annuity Purchase:

$$\$100,000 \times 0.0057814 = \$578.14 \text{ increase per month}$$

3. Calculate New Benefit (Base Benefit *plus* Annuity):

$$\$1,700 + \$578.14 = \$2,278.14 \text{ per month}$$

Other States

Beginning July 1, 2011 North Carolina Retirement Systems is allowing member the option to transfer their 401(k) and 457 plan assets to their retirement system in order to receive an additional monthly benefit.

Commercial Market Annuity

Annuities can be purchased through insurance agents, financial planners, banks and life insurance carriers. However, only life insurance companies issue policies. Products developed by life insurance companies are often marketed through banks and stock brokerage firms.

Generally, commercial market annuities are not available with the same features available on a trust fund annuity and do not provide as favorable annuity payment amounts. Quotes were obtained from six different insurance companies based on a male age 55½ years old. The annuity quote was based on \$100,000 annuity purchase, included a 3% COLA, no ongoing beneficiary payment and had a monthly payment frequency. The income quotes² were as follows:

| Insurance Company | Quote |
|--------------------------|--------------|
| American General | \$420 |
| Genworth Life Insurance | \$391 |
| Integrity Life Insurance | \$399 |
| Penn Mutual | \$397 |
| Protective LIC | \$387 |
| United of Omaha | \$412 |

² Source: WEBANNUITIES, June 10, 2009

6. Options

Option 1: Purchase of Annuity out of Trust Fund same options as Plan 3

Under this option a member or beneficiary may at the time of application for retirement benefits from LEOFF Plan 2, purchase an actuarially equivalent life annuity from the LEOFF Plan 2 retirement fund using all or a portion of their 457 plan funds. The features of this annuity would be same as those offered in the Plans 3 purchase. This option is actuarially neutral and would not increase the cost of the plan.

Option 2: Purchase of Annuity out of Trust Fund with additional Options

This option would be the similar to option 1. Like Plan 3, members would be able to choose from three survivor options. However, instead of having fixed features such as a COLA and a “pop-up” feature, as in the Plan 3 program, the member would be given option of electing those features.

7. Supporting Information

RCW 41.50.088

RCW 41.32.067

WAC 415-02-340

Draft Bill Z-0314.1 – Attached

RCW 41.50.088

Duties of director — Retirement investments.

(1) The director shall adopt rules as necessary and exercise the following powers and duties:

(a) The director shall recommend to the state investment board types of options for member self-directed investment in the teachers' retirement system plan 3, the school employees' retirement system plan 3, and the public employees' retirement system plan 3 as deemed by the director to be reflective of the members' preferences;

(b) By July 1, 2005, subject to favorable tax determination by the internal revenue service, the director shall make optional actuarially equivalent life annuity benefit payment schedules available to members and survivors that may be purchased from the combined plan 2 and plan 3 funds under RCW [41.50.075](#); and

(c) Determination of the basis for administrative charges to the self-directed investment fund to offset self-directed account expenses;

(2) The director shall recommend to the state investment board types of options for participant self-directed investment in the state deferred compensation plan, as deemed by the director to be reflective of the participants' preferences.

[2010 1st sp.s. c 7 § 28; 2005 c 327 § 14; 2000 c 247 § 602. Prior: 1998 c 341 § 507; 1998 c 116 § 10; 1995 c 239 § 302.]

Notes:

Effective date -- 2010 1st sp.s. c 26; 2010 1st sp.s. c 7: See note following RCW [43.03.027](#).

Effective dates -- Subchapter headings not law -- 2000 c 247: See RCW [41.40.931](#) and [41.40.932](#).

Effective date -- 1998 c 341: See note following RCW [41.34.060](#).

Intent -- Purpose -- 1995 c 239: See note following RCW [41.32.831](#).

Effective date -- Part and subchapter headings not law -- 1995 c 239: See notes following RCW [41.32.005](#).

Benefits not contractual right until date specified: RCW [41.34.100](#).

RCW 41.32.067

Purchase of additional benefits -- Conditions.

A member may purchase additional benefits subject to the following:

- (1) The member shall pay all reasonable administrative and clerical costs; and
- (2) The member shall make a member reserve contribution to be actuarially converted to a monthly benefit at the time of retirement.

[1992 c 212 § 13; 1991 c 278 § 2.]

WAC 415-02-340

Monthly benefit per \$1.00 of accumulation for defined benefit plans.

(1) **How does the department use the information in the table called "monthly benefit per \$1.00 of accumulation for defined benefit plans"?** The department uses this information to:

- (a) Determine what a future lifetime monthly benefit is worth in present-day dollars;
- (b) Determine the equivalent value of a lump sum when compared with monthly payments;
- (c) Determine the cost of purchasing additional service credit as described in WAC [415-02-177\(7\)](#); and
- (d) For TRS Plan 1 only: Determine the reduction in the monthly retirement benefit if some or all of the accumulated contributions in a member's individual account are withdrawn at retirement pursuant to RCW [41.32.498](#).

(2) **What type of information is in this table?** The information in this table is based on the expected duration of lifetime payments for recipients over a range of ages. These values differ by system and plan, and all reflect an assumed rate of return of 8.0%.

The younger a person is at retirement, the longer the anticipated lifetime of payments would be, and the greater the sum required to provide for these payments. The amount of monthly lifetime benefit that a present-day dollar buys increases as the remaining life expectancy of the recipient decreases.

(a) **Example:**

Celina is a 65-year-old PERS Plan 2 member who is eligible to receive \$45.00 per month. She wants to know how much money she would receive if she accepted a lump sum payment instead. Celina looks at the row in the table for age 65 in the PERS Plan 2 column and learns that \$.0069798 per month for life has a present day cash value of one dollar (\$1.00) for this system, plan, and age class. Celina divides \$45.00 by .0069798 and learns that her lump sum payment would be \$6,447.18.

(b) **Example:**

Fred is a 58-year-old TRS Plan 1 member. The balance in Fred's account is \$124,934.00. Upon retirement, Fred chooses to withdraw the \$124,934.00 (as only members of TRS Plan 1 can do and still receive a monthly benefit). From the row in the table for age 58 in the TRS Plan 1 column, Fred learns that \$.0077298 per month for life has a present day cash value of one dollar (\$1.00) for this system, plan, and age class. Fred multiplies \$124,934.00 by .0077298, and learns that his monthly retirement benefit will be reduced by \$965.71 per month if he withdraws his account balance.

(3) **Table** - Monthly benefit per \$1.00 of accumulation for defined benefit plans. The rates contained in this table

are effective:

(a) January 1, 2010, for LEOFF Plan 2.

(b) September 1, 2010, for LEOFF Plan 1, PSERS Plan 2, PERS Plans 1, 2, and 3, SERS Plans 2 and 3, TRS Plans 1, 2, and 3, and WSPRS Plans 1 and 2.

| Age | LEOFF 1 | LEOFF 2 | PERS 1 | PERS 2/3 | PSERS | SERS 2/3 | TRS 1 | TRS 2/3 | WSPRS 1/2 |
|-----|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| 20 | .0039630 | .0042990 | .0066256 | .0044560 | .0044926 | .0043681 | .0067741 | .0043601 | .0043122 |
| 21 | .0039783 | .0043125 | .0066400 | .0044786 | .0045172 | .0043857 | .0067970 | .0043765 | .0043261 |
| 22 | .0039944 | .0043266 | .0066556 | .0045024 | .0045432 | .0044042 | .0068200 | .0043935 | .0043409 |
| 23 | .0040113 | .0043414 | .0066725 | .0045277 | .0045708 | .0044238 | .0068425 | .0044110 | .0043563 |
| 24 | .0040290 | .0043571 | .0066909 | .0045527 | .0045970 | .0044446 | .0068636 | .0044289 | .0043727 |
| 25 | .0040476 | .0043735 | .0067108 | .0045775 | .0046219 | .0044665 | .0068824 | .0044471 | .0043899 |
| 26 | .0040672 | .0043908 | .0067323 | .0046023 | .0046458 | .0044898 | .0068973 | .0044650 | .0044081 |
| 27 | .0040879 | .0044091 | .0067558 | .0046271 | .0046688 | .0045144 | .0069111 | .0044835 | .0044273 |
| 28 | .0041096 | .0044283 | .0067812 | .0046522 | .0046911 | .0045404 | .0069240 | .0045024 | .0044475 |
| 29 | .0041325 | .0044486 | .0068089 | .0046765 | .0047126 | .0045658 | .0069358 | .0045218 | .0044690 |
| 30 | .0041567 | .0044701 | .0068389 | .0047004 | .0047338 | .0045907 | .0069464 | .0045417 | .0044917 |
| 31 | .0041821 | .0044927 | .0068716 | .0047243 | .0047552 | .0046155 | .0069558 | .0045622 | .0045156 |
| 32 | .0042089 | .0045166 | .0069070 | .0047485 | .0047771 | .0046406 | .0069647 | .0045835 | .0045409 |
| 33 | .0042369 | .0045416 | .0069454 | .0047740 | .0048004 | .0046662 | .0069736 | .0046056 | .0045674 |
| 34 | .0042663 | .0045679 | .0069870 | .0048003 | .0048250 | .0046915 | .0069837 | .0046292 | .0045953 |
| 35 | .0042972 | .0045956 | .0070321 | .0048278 | .0048512 | .0047169 | .0069950 | .0046542 | .0046246 |
| 36 | .0043296 | .0046246 | .0070452 | .0048564 | .0048790 | .0047428 | .0070072 | .0046806 | .0046555 |
| 37 | .0043637 | .0046552 | .0070575 | .0048864 | .0049084 | .0047694 | .0070212 | .0047088 | .0046879 |
| 38 | .0043996 | .0046874 | .0070688 | .0049179 | .0049396 | .0047969 | .0070369 | .0047387 | .0047222 |
| 39 | .0044374 | .0047214 | .0070789 | .0049517 | .0049727 | .0048272 | .0070543 | .0047705 | .0047584 |
| 40 | .0044774 | .0047574 | .0070877 | .0049878 | .0050077 | .0048606 | .0070735 | .0048043 | .0047968 |
| 41 | .0045196 | .0047956 | .0070940 | .0050264 | .0050448 | .0048971 | .0070945 | .0048402 | .0048374 |
| 42 | .0045644 | .0048361 | .0070990 | .0050678 | .0050842 | .0049369 | .0071156 | .0048778 | .0048805 |
| 43 | .0046118 | .0048791 | .0070989 | .0051123 | .0051264 | .0049803 | .0071367 | .0049171 | .0049263 |
| 44 | .0046620 | .0049248 | .0070984 | .0051581 | .0051690 | .0050256 | .0071581 | .0049584 | .0049750 |
| 45 | .0047153 | .0049733 | .0070975 | .0052058 | .0052129 | .0050731 | .0071796 | .0050016 | .0050267 |
| 46 | .0047719 | .0050249 | .0070965 | .0052558 | .0052584 | .0051232 | .0072015 | .0050470 | .0050817 |
| 47 | .0048320 | .0050797 | .0070915 | .0053071 | .0053044 | .0051753 | .0072216 | .0050943 | .0051402 |
| 48 | .0048959 | .0051382 | .0071400 | .0053597 | .0053509 | .0052297 | .0072393 | .0051435 | .0052026 |

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| 49 | .0049640 | .0052005 | .0071924 | .0054123 | .0053965 | .0052834 | .0072541 | .0051948 | .0052691 |
| 50 | .0050366 | .0052671 | .0072490 | .0054649 | .0054413 | .0053369 | .0072655 | .0052480 | .0053403 |
| 51 | .0051142 | .0053389 | .0073101 | .0055179 | .0054854 | .0053893 | .0072727 | .0053034 | .0054164 |
| 52 | .0051972 | .0054158 | .0073762 | .0055712 | .0055289 | .0054418 | .0072741 | .0053604 | .0054980 |
| 53 | .0052853 | .0054978 | .0074471 | .0056258 | .0055733 | .0054938 | .0073367 | .0054189 | .0055849 |
| 54 | .0053797 | .0055858 | .0075233 | .0056745 | .0056596 | .0055433 | .0074042 | .0054793 | .0056779 |
| 55 | .0054807 | .0056802 | .0076058 | .0057184 | .0057498 | .0055902 | .0074767 | .0055411 | .0057777 |
| 56 | .0055889 | .0057814 | .0076921 | .0058127 | .0058440 | .0056775 | .0075550 | .0056278 | .0058848 |
| 57 | .0057044 | .0058893 | .0077823 | .0059112 | .0059501 | .0057690 | .0076393 | .0057206 | .0059992 |
| 58 | .0058273 | .0060042 | .0078773 | .0060140 | .0060619 | .0058646 | .0077298 | .0058208 | .0061211 |
| 59 | .0059589 | .0061272 | .0079792 | .0061247 | .0061827 | .0059661 | .0078266 | .0059269 | .0062516 |
| 60 | .0060997 | .0062589 | .0080922 | .0062396 | .0063106 | .0060720 | .0079310 | .0060395 | .0063915 |
| 61 | .0062505 | .0064002 | .0082202 | .0063666 | .0064504 | .0061903 | .0080462 | .0061608 | .0065415 |
| 62 | .0064118 | .0065513 | .0083578 | .0065016 | .0065977 | .0063169 | .0081703 | .0062902 | .0067019 |
| 63 | .0065841 | .0067129 | .0085052 | .0066506 | .0067558 | .0064550 | .0083036 | .0064296 | .0068736 |
| 64 | .0067682 | .0068853 | .0086629 | .0068077 | .0069257 | .0066012 | .0084463 | .0065775 | .0070570 |
| 65 | .0069647 | .0070694 | .0088312 | .0069798 | .0071083 | .0067597 | .0085990 | .0067357 | .0072527 |
| 66 | .0071751 | .0072670 | .0090119 | .0071671 | .0073064 | .0069302 | .0087617 | .0069054 | .0074626 |
| 67 | .0074005 | .0074781 | .0092055 | .0073673 | .0075182 | .0071120 | .0089361 | .0070866 | .0076873 |
| 68 | .0076417 | .0077043 | .0094125 | .0075807 | .0077444 | .0073062 | .0091231 | .0072802 | .0079279 |
| 69 | .0079015 | .0079491 | .0096357 | .0078101 | .0079879 | .0075136 | .0093229 | .0074865 | .0081872 |
| 70 | .0081820 | .0082138 | .0098771 | .0080572 | .0082505 | .0077363 | .0095381 | .0077080 | .0084672 |
| 71 | .0084859 | .0085025 | .0101389 | .0083241 | .0085349 | .0079758 | .0097709 | .0079465 | .0087708 |
| 72 | .0088138 | .0088151 | .0104201 | .0086103 | .0088406 | .0082342 | .0100231 | .0082039 | .0090984 |
| 73 | .0091701 | .0091561 | .0107251 | .0089197 | .0091722 | .0085108 | .0102934 | .0084793 | .0094545 |
| 74 | .0095574 | .0095288 | .0110556 | .0092540 | .0095316 | .0088090 | .0105863 | .0087767 | .0098417 |
| 75 | .0099786 | .0099363 | .0114135 | .0096154 | .0099213 | .0091299 | .0109028 | .0090974 | .0102629 |
| 76 | .0104363 | .0103798 | .0118015 | .0100065 | .0103437 | .0094759 | .0112453 | .0094437 | .0107207 |
| 77 | .0109340 | .0108658 | .0122231 | .0104305 | .0108023 | .0098495 | .0116161 | .0098178 | .0112186 |
| 78 | .0114761 | .0113957 | .0126816 | .0108908 | .0113009 | .0102538 | .0120181 | .0102226 | .0117609 |
| 79 | .0120673 | .0119743 | .0131812 | .0113914 | .0118439 | .0106928 | .0124555 | .0106622 | .0123525 |
| 80 | .0127133 | .0126071 | .0137267 | .0119372 | .0124365 | .0111699 | .0129318 | .0111400 | .0129990 |
| 81 | .0134199 | .0132991 | .0143230 | .0125327 | .0130838 | .0116897 | .0134518 | .0116607 | .0137063 |
| 82 | .0141935 | .0140556 | .0149754 | .0131831 | .0137915 | .0122554 | .0140201 | .0122286 | .0144806 |
| 83 | .0150329 | .0148749 | .0156858 | .0138907 | .0145603 | .0128713 | .0146417 | .0128485 | .0153209 |

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| 84 | .0159449 | .0157725 | .0164602 | .0146610 | .0153963 | .0135431 | .0153203 | .0135243 | .0162339 |
| 85 | .0169344 | .0167437 | .0173034 | .0154990 | .0163048 | .0142750 | .0160601 | .0142601 | .0172243 |
| 86 | .0180074 | .0178057 | .0182194 | .0164082 | .0172909 | .0150708 | .0168660 | .0150605 | .0182984 |
| 87 | .0191721 | .0189719 | .0192109 | .0173915 | .0183603 | .0159338 | .0177414 | .0159287 | .0194643 |
| 88 | .0204278 | .0202253 | .0202755 | .0184464 | .0195120 | .0168612 | .0186859 | .0168647 | .0207214 |
| 89 | .0217668 | .0215551 | .0214081 | .0195682 | .0207399 | .0178513 | .0197002 | .0178688 | .0220619 |
| 90 | .0231832 | .0229787 | .0225995 | .0207480 | .0220372 | .0188950 | .0207759 | .0189334 | .0234798 |
| 91 | .0246573 | .0244483 | .0238330 | .0219700 | .0233859 | .0199836 | .0219061 | .0200515 | .0249552 |
| 92 | .0261621 | .0259752 | .0250904 | .0232169 | .0247641 | .0211073 | .0230763 | .0212095 | .0264610 |
| 93 | .0277078 | .0275207 | .0263675 | .0244841 | .0261746 | .0222518 | .0242665 | .0223884 | .0280075 |
| 94 | .0292794 | .0291108 | .0276431 | .0257513 | .0275992 | .0233979 | .0254667 | .0235783 | .0295796 |
| 95 | .0308761 | .0307651 | .0289073 | .0270087 | .0290311 | .0245376 | .0266650 | .0247675 | .0311768 |
| 96 | .0324718 | .0323798 | .0301473 | .0282442 | .0304507 | .0256481 | .0278402 | .0259359 | .0327726 |
| 97 | .0340569 | .0340193 | .0313572 | .0294522 | .0318500 | .0267305 | .0289917 | .0270827 | .0343576 |
| 98 | .0356440 | .0357060 | .0325325 | .0306287 | .0332303 | .0277699 | .0300994 | .0281894 | .0359444 |
| 99 | .0372127 | .0373073 | .0336697 | .0317712 | .0345762 | .0287711 | .0311701 | .0292630 | .0375126 |

[Statutory Authority: RCW [41.50.050\(5\)](#). 10-16-086, § 415-02-340, filed 7/30/10, effective 9/1/10. Statutory Authority: RCW [41.50.050\(5\)](#), chapter [41.45](#) RCW. 06-18-009, § 415-02-340, filed 8/24/06, effective 9/24/06; 02-18-048, § 415-02-340, filed 8/28/02, effective 9/1/02.]

Annuity Purchase Bill Draft

NEW SECTION. **Sec. 1.** A new section is added to chapter 41.26 RCW under the subchapter heading "plan 2" to read as follows:

(1) The department of retirement systems shall make optional actuarially equivalent life annuity benefit payment schedules available to members and survivors that may be purchased from the Washington law enforcement officers' and fire fighters' system plan 2 retirement fund.