



# **Benefit Formula - 2% Multiplier**

**Initial Consideration**

**WASHINGTON STATE  
Law Enforcement Officers' and Fire Fighters'  
Plan 2 Retirement Board**

**May 25, 2005**

# Benefit Formula

- Typical DB plan formula
  - Years of Service
  - Average Salary
  - Multiplier
- LEOFF Plan 2
  - $2\% \times \text{Years of Service} \times \text{Final Average Salary}$

# Benefit Multiplier

- Commonly stated as single percentage
- Varying multiplier approaches
  - By years of service
  - By date of service
  - By contribution level
  - By type of service

# Multiplier in Washington Plans

- LEOFF Plan 2 uses 2%
- All Plan 1 and Plan 2 systems use 2% multiplier
- Plan 3 uses 1% multiplier + DC Account
- Exceptions
  - PERS Plan 1 Elected Official
  - SCERS Disability
  - TRS Plan 1

# Multiplier in Other States

- 2004 Workplace Economic Study of
  - “State Police” plans
  - Median multiplier of 2.5%
- 2001 Public Pension Coordinating Council
  - Soc Sec Covered/Average Multiplier = 2.11
  - Non Soc Sec/Average Multiplier = 2.43

# Final Average Salary (FAS)

- General salary levels can affect multiplier
  - Higher salary – lower multipliers
  - Lower salary levels – higher multipliers
  - Salary levels higher on West Coast
  - Multipliers lower on the West Coast

Questions?

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

## Benefit Formula - 2% Multiplier Initial Consideration

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### 1. Issue

The LEOFF Plan 2 Retirement Board requested a briefing on the multiplier used in the LEOFF Plan 2 retirement benefit formula.

### 2. Staff

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### 3. Members Impacted

A change to the existing multiplier could impact all LEOFF Plan 2 members and retirees. As of the most recent actuarial valuation there are approximately 14,560 active LEOFF Plan 2 members and 316 LEOFF Plan 2 Retiree (2003 Actuarial Valuation Report prepared in October 2004).

### 4. Current Situation

The current multiplier used in the LEOFF Plan 2 benefit formula is 2%. The current benefit formula is:

$$2\% \times \text{Years of Service} \times \text{Final Average Salary}$$

## 5. Background Information and Policy Issues

### Benefit Formula

A traditional defined benefit plan typically uses a formula where the benefits payable at the normal retirement eligibility are equal to some specified percentage of final average salary.

The current LEOFF Plan 2 benefit formula is:  $2\% \times \text{Years of Service} \times \text{Final Average Salary}$ . A LEOFF Plan 2 member receives a monthly benefit equal to 2% of the average highest five consecutive years of service earnings during the member's career, multiplied by the number of years of service rendered. For example, if normal retirement occurred after 20 years of service, then the benefit earned by the retiree is 40% of final average salary.

### Benefit Formula Multiplier

The formula multiplier in a defined benefit plan is commonly stated as a single percentage factor. However, there are varying approaches that may be used.

In some systems the multiplier is tied to the number of years of service in a career. For example, the Ohio Police and Fire Pension Fund apply different multipliers to different years of service in a career.

In other systems the multiplier is tied to the date of service. The Nevada Police and Fire subfund of the Nevada Public Employees' Retirement System applies different multipliers based on when service was earned.

Yet other systems tie the multiplier to the amount of contributions being paid by the member and employer. The New Mexico Public Employees Retirement Association of New Mexico has five Municipal Police Plans and five Municipal Fire Plans where each of the five plans has a different contribution rate and a different benefit multiplier. The higher the contribution rate, the higher the multiplier. Each employer under the New Mexico system determines which plan its employees will be covered under.

See Appendix A: Retirement Comparison Tables for a listing of the retirement formulas and multipliers used in several other state level law enforcement and fire fighter retirement plans.

### Multiplier in Other Washington Pension Plans

Currently, the same benefit formula with the 2% multiplier used in LEOFF Plan 2 is used in all of the Washington State Plan 1 and Plan 2 pension plans. There are some plans and situations in which the standard benefit formula with a 2% multiplier is not used.

- The Washington State TRS, SERS, and PERS Plans 3 use the same benefit formula as Plan 1 and Plan 2, except that these plans use a 1% multiplier. The lower multiplier in Plan 3 is offset for each member by a defined contribution account.

- PERS Plan 1 uses a 3% multiplier for the elected service of state elected officials. All other service outside of elected service is calculated using the standard 2% multiplier.
- The Statewide City Employees' Retirement System (SCERS), which was merged into PERS in 1972, used varying formulas and multipliers for disability benefits. A SCERS member with a duty disability was provided a benefit that was 50% of salary. This is equivalent to a 2.5% multiplier for a person with a 20 year career. A SCERS member with a non-duty disability retirement was entitled to a 3% multiplier for the first 10 years of service with a maximum of 30% of salary, and a 1.5% multiplier for each year over 10 years of service, with a total maximum of 35% of salary.
- TRS Plan 1 has two exceptions to the 2% multiplier. One exception was if a member was the Superintendent of Public Instruction on January 1, 1973 they were entitled to a benefit calculated with a 3% multiplier. The second exception is for persons who were members prior to April 25, 1973. These members are entitled to the "1% rule". Under the "1% rule" a member could receive the higher of a standard 2% benefit or a three part benefit consisting of: (1) an annuity which is the actuarial equivalent of the member's accumulated contributions at retirement; (2) a basic service pension of \$100 per year of service; and (3) a 1% benefit.

### **Multiplier in Other State Pension Plans**

A 2004 study of "State Police" plans by Workplace Economics, Inc. found that the median defined benefit for a twenty five year career in the plans in the study was 62.5% of FAS or equal to a percentage factor of 2.5%. The study included 43 different "State Police" plans, which also included several municipal law enforcement and fire fighter plans similar to LEOFF Plan 2.

In 2001, 152 public employee retirement systems, representing 263 retirement plans, responded to a survey conducted by the Public Pension Coordinating Council. These plans covered 67% of the 13.9 million active plan members reported by the U.S. Bureau of the Census and held 68% of the \$2.3 trillion in state and local retirement system assets reported by the Federal Reserve.

According to the survey, the average annual benefit multiplier earned for each year of service changed very little between 1998 and 2000. The average multiplier grew from 2.06 percent of final average salary in 1998 to 2.11 percent in 2000. For members not covered under Social Security, the average benefit multiplier grew marginally from 2.39 percent to 2.43 percent during the same two years.

### **Final Average Salary**

The definition of final average salary (FAS) is significant in determining the value of a pension benefit. The most commonly used final average salary definitions include average salary for the three highest years of service earnings, or average salary for the highest three consecutive years of service earnings. Some plans though define FAS as a single year while

other plans require the use of a five year average. LEOFF Plan 2 falls in the latter category using the highest five consecutive years of service earnings.

Generally, if fewer years of service are considered in the average, the dollar amount of the average will be higher and more influenced by the final years of employment, during which earnings are generally higher. By utilizing pay at or near the end of an employee's career to calculate benefits, the final average salary formula automatically compensates for pre-retirement inflation, although ongoing protection of the retirement benefit must come some form of cost-of-living adjustment.

The retirement benefit formula is often a function of the average salary of a plan's membership. In jurisdictions where the average salary is higher, the benefit formula may be less generous compared to jurisdictions with lower salary. Components of the retirement formula, such as the multiplier, are often increased to offset the impact of lower salary on the final benefit. Generally speaking, the salary levels for law enforcement and fire fighters tend to be higher on the west coast than on the east coast.

### **Benefit Limits**

Some benefit plans place limits on the total retirement benefit that can be paid to a member. These limits are usually expressed as a maximum percentage of final average salary or as a maximum number of creditable years of service that can be used in the benefit computation. Benefit limits may be used as a means of controlling benefit costs or as a policy to affect how many years members remain in the plan. LEOFF Plan 2 does not have a benefit limit. A member who works more than fifty years could receive in excess of 100% of Final Average Salary.

## **6. Supporting Information**

- **Appendix A: Retirement Comparison Tables**

## Appendix A: Retirement Comparison Tables – Retirement Benefit Formula

| System   | Formula   | Limit                             | FAS                 | Member Contribution               | Employer Contribution                      | Average Salary |
|--|---|-----------------------------------|---------------------|-----------------------------------|--|----------------|
| Alaska Public Employees Retirement System                                    | $[2\% \times 1^{st} 10 \text{ yrs} \times \text{FAS}] + [2.5\% \times 10+\text{yrs} \times \text{FAS}]$   |                                   | 3HC <sup>1</sup>    | 7.5%                              | 8.42%                                      | \$61,855       |
| Arizona Public Safety Personnel Retirement System                            | $2.5\% \times \text{YOS} \times \text{FAS}$   | 80% <sup>2</sup>                  | 3HC/10 <sup>3</sup> | 7.65%                             | 7.66%                                      | \$57,514       |
| Arkansas Local Police and Fire Retirement System                             | $2.5\% \times \text{FAS} \times \text{YOS}$<br>$1.5\% \times \text{FAS} \times \text{YOS}$ when eligible for unreduced Soc Sec if covered   | 80%                               | 3HC/10              | 6%                                | ?  | \$36,307       |
| Colorado Fire and Police Pension Association                                 | $[2\% \times 1^{st} 10 \text{ yrs} \times \text{FAS}] + [2.5\% \times 10+\text{yrs} \times \text{FAS}]$   |                                   | 3H                  | 8%                                | 8%   | \$49,921       |
| Delaware County & Municipal Police/Fire Pension                              | $2.5\% \times \text{FAS} \times \text{YOS}$   |                                   | 3HC                 | 7%                                | 8.3%                                       | \$42,932       |
| Kansas Police and Firemen's Retirement System                                | $2.5\% \times \text{FAS} \times \text{YOS}$   | 80%                               |                     | 7%                                | 11.15%                                     | \$49,017       |
| Maryland Pension System for Local Fire Fighters and Police Officers          | $1.5\% \times \text{YOS} \times \text{FAS}$   | 71.4%                             | 3HC                 | 8%                                | 7.58%                                      | \$34,279       |
| Nevada Police/Fire Sub-Fund of the Nevada Public Employees Retirement System | $[(2.5\% \times \text{YOS} \times \text{FAS}, \text{ for service prior } 7/1/01) + 2.67\% \times \text{YOS} \times \text{FAS}, \text{ for service after } 7/1/01]$  | 75%                               | 3HC                 | 14.75%                            | 14.75%                                     | \$65,870       |
| New Jersey Police and Firemen's Retirement System                            | $2\% \times \text{YOS} \times \text{FAS}$<br>$20 < Y \leq 25 = 50\% \text{ FAS}$<br>$65/20 = 50\% \text{ FAS} + [3\% \times \text{FAS} \times \text{YOS } 20-25]$<br>$\geq 40 = 70\% \text{ FAS}$   |                                   | 1H                  | 8.5%                              | Actuarial determined for each employer.    | \$65,870       |
| New Mexico PERA –Police  | Plan 1: $2\% \times \text{YOS} \times \text{FAS}$<br>Plan 2: $2.5\% \times \text{YOS} \times \text{FAS}$<br>Plan 3: $2.5\% \times \text{YOS} \times \text{FAS}^*$<br>Plan 4: $3\% \times \text{YOS} \times \text{FAS}^*$<br>Plan 5: $3.5\% \times \text{YOS} \times \text{FAS}^*$ | 60%<br>100%<br>100%<br>80%<br>80% | 3HC                 | 7%<br>7%<br>7%<br>12.35%<br>16.3% | 10%<br>15%<br>18.5%<br>18.5%<br>18.5%      | \$37,969       |
| New Mexico PERA - Fire   | Plan 1: $2\% \times \text{YOS} \times \text{FAS}$<br>Plan 2: $2.5\% \times \text{YOS} \times \text{FAS}$<br>Plan 3: $2.5\% \times \text{YOS} \times \text{FAS}^*$<br>Plan 4: $3\% \times \text{YOS} \times \text{FAS}^*$<br>Plan 5: $3.5\% \times \text{YOS} \times \text{FAS}^*$ | 60%<br>100%<br>100%<br>80%<br>80% | 3HC                 | 8%<br>8%<br>8%<br>12.8%<br>16.2%  | 11%<br>17.5%<br>21.25%<br>21.25%<br>21.25% | \$39,704       |
| New York Police and Fire Retirement System                                   | $\geq 20 = 2\% \times \text{FAS} \times \text{YOS}$<br>$< 20 = 1.66\% \times \text{FAS} \times \text{YOS}$  | 60%<br>49.8%                      | 3HC                 | 3% for 10 yrs                     | 5.8%                                       | \$71,631       |
| Ohio Police and Fire Pension Fund  | $[2.5\% \times 1^{st} 20 \text{ yrs} \times \text{FAS}] + [2\% \times (21^{st} \text{ to } 25^{th}) \times \text{FAS}] + [1.5\% \times (26^{th} \text{ to } 33^{rd}) \times \text{FAS}]$  | 60%                               | 3H                  | 10%                               | 19.5% (P)<br>24% (F)                       | \$54,368       |
| South Carolina Police Officers Retirement System                             | $2.14\% \times \text{FAS} \times \text{YOS}$  |                                   | 3HC                 | 6.5%                              | 10.30% <sup>4</sup>                        | \$33,530       |
| Washington LEOFF Plan 2  | $2\% \times \text{FAS} \times \text{YOS}$   |                                   | 5HC                 | 5.09                              | 3.06 <sup>5</sup>                          | \$66,388       |

<sup>1</sup> Tier II benefits (Entered system between 1986 and 1996)

<sup>2</sup> Arizona PSPRS: For members retiring with more than 25 years of service, formula is 50% FAS for 1<sup>st</sup> 20 years plus 2.5% for each year above 20 years to a max of 80% of FAS.

<sup>3</sup> 3HC/10 = 3 highest consecutive earning years within a 10 year window.

<sup>4</sup> South Carolina: In addition, employer also contributes 0.15% for group life insurance, 3.3% for retirement insurance surcharge, and 0.20% for accidental death benefit.

<sup>5</sup> The state also pays a contribution rate of 2.03%

## Appendix A: Retirement Comparison Tables – Retirement Eligibility

| System   | Normal Retirement Age/Service (A=Any)           | Early Retirement Annual Reduction       | Vesting | Member Contribution  | Employer Contribution   | Average Salary |
|--|---|---|---------|--|---|----------------|
| Alaska Public Employees Retirement System                                    | 60/5;<br>A/20                                   | 55/5<br>6% per year                     | 5Y      | 7.5%   | 8.42%   | \$61,855       |
| Arizona Public Safety Personnel Retirement System                            | 62/15;<br>A/20                                  | None                                    | 10Y     | 7.65%  | 7.66%   | \$57,514       |
| Arkansas Local Police and Fire Retirement System                             | 55/20;<br>60/5;<br>A/28                         | A/20<br><br>½ of 1% per mo from 55      |         | 6%   | ?   | \$36,307       |
| Colorado Fire and Police Pension Association                                 | 55/25   | A/30<br>50/5<br><br>Actuarial Reduction | 5Y      | 8%   | 8%  | \$49,921       |
| Delaware County & Municipal Police/Fire Pension                              | 62/10;<br>A/20;<br>R-75 <sup>6</sup>            | None                                    | 10Y     | 7%   | 8.3%  | \$42,932       |
| Kansas Police and Firemen's Retirement System                                | 60/15; 55/20;<br>50/25                          | 50/20<br>4.8%                           | 15Y     | 7%   | 11.15%  | \$49,017       |
| Maryland Pension System for Local Fire Fighters and Police Officers          | 50/A; A/22                                      | None                                    | 5Y      | 8%   | 7.58%   | \$34,279       |
| Nevada Police/Fire Sub-Fund of the Nevada Public Employees Retirement System | 65/5; 55/10;<br>50/20; A/25                     | A/5<br>4%                               | 5Y      | 14.75%   | 14.75%  | \$65,870       |
| New Jersey Police and Firemen's Retirement System                            | 55/A; A/20                                      |   |         | 8.5%   | Actuarial determined for each employer.                                       | \$65,870       |
| New Mexico PERA –Police  | A/25 63/11<br>60/20 64/8<br>61/17 65/5<br>62/14 | *A/20<br><br>Only applies to Plans 3-5  | 5Y      | Plan 1-7%<br>Plan 2-7%<br>Plan 3-7%<br>Plan 4-12.35%<br>Plan 5-16.3% | Plan 1-10%<br>Plan 2-15%<br>Plan 3-18.5%<br>Plan 4-18.5%<br>Plan 5-18.5%      | \$37,969       |
| New Mexico PERA – Fire   | A/25 63/11<br>60/20 64/8<br>61/17 65/5<br>62/14 | *A/20<br><br>Only applies to Plans 3-5  | 5Y      | Plan 1-8%<br>Plan 2-8%<br>Plan 3-8%<br>Plan 4-12.8%<br>Plan 5-16.2%  | Plan 1-11%<br>Plan 2-17.5%<br>Plan 3-21.25%<br>Plan 4-21.25%<br>Plan 5-21.25% | \$39,704       |
| New York Police and Fire Retirement System                                   | 62/5  | 55/5<br>3%                              | 5Y      | 3% for 10 yrs  | 5.8%  | \$71,631       |
| Ohio Police and Fire Pension Fund  | 48/25<br><br>48/15                              |   | 15Y     | 10%  | 19.5% (P)<br>24% (F)  | \$54,368       |
| South Carolina Police Officers Retirement System                             | A/25; 55/5                                      |   | 5Y      | 6.5%   | 10.30% <sup>7</sup>   | \$33,530       |
| Washington LEOFF Plan 2  | 53/5  | 50/20<br>3%                             | 5Y      | 5.09%  | 3.06 <sup>8</sup>   | \$66,388       |

<sup>6</sup> Delaware: "Rule of 75" may be exercised to qualify for normal retirement; that is, any age and service (min 10 yrs) combination that equals 75 defines eligibility.

<sup>7</sup> South Carolina: In addition, employer also contributes 0.15% for group life insurance, 3.3% for retirement insurance surcharge, and 0.20% for accidental death benefit.

<sup>8</sup> The state also pays a contribution rate of 2.03%