

# Multiple Agency Fiscal Note Summary

<b>Bill Number:</b> 5873 E SB	<b>Title:</b> LEOFF plan 1 retirees
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## Estimated Cash Receipts

NONE

## Estimated Expenditures

Agency Name	2015-17			2017-19			2019-21		
	FTEs	GF-State	Total	FTEs	GF-State	Total	FTEs	GF-State	Total
Department of Retirement Systems	.1	0	41,561	.0	0	0	.0	0	0
Actuarial Fiscal Note - State Actuary	.0	0	0	.0	0	0	.0	0	0
<b>Total</b>	<b>0.1</b>	<b>\$0</b>	<b>\$41,561</b>	<b>0.0</b>	<b>\$0</b>	<b>\$0</b>	<b>0.0</b>	<b>\$0</b>	<b>\$0</b>

## Estimated Capital Budget Impact

NONE

This bill does not affect pension contribution rates, resulting in a 'no fiscal impact' actuarial fiscal note. However, there is a direct cost to the LEOFF 1 trust fund. Please see the AFN-Actuarial Fiscal note for additional information, especially "page 4 of 8" and "page 5 of 8".

<b>Prepared by:</b> Jane Sakson, OFM	<b>Phone:</b> 360-902-0549	<b>Date Published:</b> Final 3/24/2015
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\* See Office of the Administrator for the Courts judicial fiscal note

\*\* See local government fiscal note

ENPID: 41863

FNS029 Multi Agency rollout

# Individual State Agency Fiscal Note

<b>Bill Number:</b> 5873 E SB	<b>Title:</b> LEOFF plan 1 retirees	<b>Agency:</b> 124-Department of Retirement Systems
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## Part I: Estimates

☐ No Fiscal Impact

### Estimated Cash Receipts to:

NONE

### Estimated Expenditures from:

	FY 2016	FY 2017	2015-17	2017-19	2019-21
FTE Staff Years	0.1	0.0	0.1	0.0	0.0
<b>Account</b>					
Department of Retirement Systems	41,561	0	41,561	0	0
Expense Account-State 600-1					
<b>Total \$</b>	41,561	0	41,561	0	0

### Estimated Capital Budget Impact:

NONE

*The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.*

Check applicable boxes and follow corresponding instructions:

- ☐ If fiscal impact is greater than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.
- ☒ If fiscal impact is less than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).
- ☐ Capital budget impact, complete Part IV.
- ☐ Requires new rule making, complete Part V.

Legislative Contact: David Pringle	Phone: 360-786-7310	Date: 03/10/2015
Agency Preparation: Dave Nelsen	Phone: 360-664-7304	Date: 03/12/2015
Agency Approval: Marcie Frost	Phone: 360-664-7224	Date: 03/12/2015
OFM Review: Jane Sakson	Phone: 360-902-0549	Date: 03/12/2015

## Part II: Narrative Explanation

### II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

*Briefly describe by section number, the significant provisions of the bill, and any related workload or policy assumptions, that have revenue or expenditure impact on the responding agency.*

This bill creates a new “window” for Plan 1 retirees of the Law Enforcement Officers’ and Fire Fighters’ (LEOFF) Retirement System to add a spouse as a survivor beneficiary by adding the following to RCW 41.26.164(3):

“(b) A member who married a spouse ineligible for survivor benefits under RCW 41.26.160 or 41.26.161, has been married to that spouse for at least two years prior to September 1, 2015, and satisfies subsection (2) (a) of this section has one year from September 1, 2015, to designate their spouse as a survivor beneficiary. The office of the state actuary must provide the department with administrative factors to ensure that the benefits provided under this section are actuarially equivalent.”

The floor amendment to the bill added section (c) to RCW 41.26.164(3). It provides the surviving spouse of a LEOFF 1 retiree who died without selecting an actuarially reduced survivor benefit under RCW 41.26.164, a retirement allowance equal to two-thirds of the retiree's allowance, beginning August 1, 2015. This section only applies to surviving spouses who have exhausted all administrative remedies prior to March 1, 2015.

The impact of the floor amendment will be minimal as DRS identified that only one account is affected by this language. As a result, the cost of DRS’ fiscal note on ESB 5873 will be the same as the cost estimated to implement SB 5873.

### II. B - Cash receipts Impact

*Briefly describe and quantify the cash receipts impact of the legislation on the responding agency, identifying the cash receipts provisions by section number and when appropriate the detail of the revenue sources. Briefly describe the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explain how workload assumptions translate into estimates. Distinguish between one time and ongoing functions.*

No impact.

### II. C - Expenditures

*Briefly describe the agency expenditures necessary to implement this legislation (or savings resulting from this legislation), identifying by section number the provisions of the legislation that result in the expenditures (or savings). Briefly describe the factual basis of the assumptions and the method by which the expenditure impact is derived. Explain how workload assumptions translate into cost estimates. Distinguish between one time and ongoing functions.*

## ADMINISTRATIVE ASSUMPTIONS

- This legislation only affects LEOFF Plan 1 retirees who have missed the previous opportunities to add a post-retirement spouse as a survivor. (Currently, retirees have a one-year window to add a post-retirement spouse as a survivor beneficiary between their first and second wedding anniversaries.)
- It’s unknown how many LEOFF Plan 1 retirees will be eligible for this “window,” so DRS would promote a vigorous communications and education effort to ensure that all LEOFF 1 retirees are informed of this limited opportunity.
- DRS may be provided with specific administrative factors by the state actuary in order to properly adjust the accounts of those taking advantage of this opportunity.
- Only one account is affected by the new language in RCW 41.26.164(3)(c).

The assumptions above were used in developing the following workload impacts and cost estimates.

## BENEFITS/CUSTOMER SERVICE

Retirement Specialists will assist in User Acceptance Testing to support the updates to DRS' automated systems. Team members will also review changes to member communications, update training/reference materials, and update internal procedures to implement this bill.

Retirement Specialist 3 – 80 hours (salaries/benefits) = \$2,798

## MEMBER COMMUNICATIONS

Communications will create an informational letter for all LEOFF Plan 1 retirees. In addition, they will write articles for the retiree newsletter, DRS website, and special communications provided to LEOFF Plan 1 stakeholder groups.

Communications Consultant 5 – 60 hours (salaries/benefits) = \$2,715

Mailing costs for approximately 6,000 letters (supplies and postage) = \$1,160

Total Estimated Member Communications Costs = \$3,875

## AUTOMATED SYSTEMS

Programming updates will be required to DRS' systems in order to implement this legislation. Updates will be required to the notification letters, retirement and estimate processes, and factor tables. Business requirements will be created and User Acceptance Testing will be performed to support these changes.

Info Tech Specialist 4 – 120 hours (salaries/benefits) = \$5,548

Programmer at \$95 per hour – 272 hours = \$25,840

CTS\* cost of \$500 per week for 7 weeks = \$3,500

Total Estimated Costs for Automated Systems = \$34,888

\*cost for mainframe computer processing time and resources at CTS/DES

ESTIMATED TOTAL COST TO IMPLEMENT THIS BILL: \$41,561

## Part III: Expenditure Detail

### III. A - Expenditures by Object Or Purpose

	FY 2016	FY 2017	2015-17	2017-19	2019-21
FTE Staff Years	0.1		0.1		
A-Salaries and Wages	8,101		8,101		
B-Employee Benefits	2,960		2,960		
C-Professional Service Contracts					
E-Goods and Other Services	30,500		30,500		
G-Travel					
J-Capital Outlays					
M-Inter Agency/Fund Transfers					
N-Grants, Benefits & Client Services					
P-Debt Service					
S-Interagency Reimbursements					
T-Intra-Agency Reimbursements					
9-					
<b>Total:</b>	\$41,561	\$0	\$41,561	\$0	\$0

### III. B - Detail: *List FTEs by classification and corresponding annual compensation. Totals need to agree with total FTEs in Part I and Part IIIA*

Job Classification	Salary	FY 2016	FY 2017	2015-17	2017-19	2019-21
Communications Consultant 5	71,496	0.1		0.0		
Info Tech Specialist 4	69,756	0.0		0.0		
Retirement Specialist 3	51,864	0.0		0.0		
<b>Total FTE's</b>	193,116	0.1		0.1		0.0

## Part IV: Capital Budget Impact

NONE

No impact.

## Part V: New Rule Making Required

*Identify provisions of the measure that require the agency to adopt new administrative rules or repeal/revise existing rules.*

No impact.

# Individual State Agency Fiscal Note

<b>Bill Number:</b> 5873 E SB	<b>Title:</b> LEOFF plan 1 retirees	<b>Agency:</b> AFN-Actuarial Fiscal Note - State A
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## Part I: Estimates

☒ No Fiscal Impact

*The cash receipts and expenditure estimates on this page represent the most likely fiscal impact. Factors impacting the precision of these estimates, and alternate ranges (if appropriate), are explained in Part II.*

Check applicable boxes and follow corresponding instructions:

- ☐ If fiscal impact is greater than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.
- ☐ If fiscal impact is less than \$50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).
- ☐ Capital budget impact, complete Part IV.
- ☐ Requires new rule making, complete Part V.

Legislative Contact: David Pringle	Phone: 360-786-7310	Date: 03/10/2015
Agency Preparation: Aaron Gutierrez	Phone: 360-786-6152	Date: 03/24/2015
Agency Approval: Lisa Won	Phone: 360-786-6150	Date: 03/24/2015
OFM Review: Jane Sakson	Phone: 360-902-0549	Date: 03/24/2015

*Briefly describe by section number, the significant provisions of the bill, and any related workload or policy assumptions, that have revenue or expenditure impact on the responding agency.*

*Briefly describe and quantify the cash receipts impact of the legislation on the responding agency, identifying the cash receipts provisions by section number and when appropriate the detail of the revenue sources. Briefly describe the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explain how workload assumptions translate into estimates. Distinguish between one time and ongoing functions.*

*Briefly describe the agency expenditures necessary to implement this legislation (or savings resulting from this legislation), identifying by section number the provisions of the legislation that result in the expenditures (or savings). Briefly describe the factual basis of the assumptions and the method by which the expenditure impact is derived. Explain how workload assumptions translate into cost estimates. Distinguish between one time and ongoing functions.*

## **Part IV: Capital Budget Impact**

NONE

## SUMMARY OF RESULTS

**BRIEF SUMMARY OF BILL:** This bill creates a new window for retired LEOFF 1 members to designate a qualifying spouse as eligible for an AE survivor benefit. It also provides an annuity benefit equal to two-thirds of the member's benefit at death for certain survivors beginning August 1, 2015.

### COST SUMMARY

Members who elect this AE benefit would have their future benefits reduced in order to provide a lifetime benefit for their survivor. The member's benefit is reduced such that their expected total future benefit payments would be AE whether they elected the joint and survivor benefit or not. As a result, this component of the bill is not expected to impact the actuarial funding of the system.

The two-thirds benefit for certain survivors beginning August 1, 2015, is only expected to impact one individual as identified by DRS. The value of their lifetime benefits increases the LEOFF 1 liabilities by about \$0.25 million. Since LEOFF 1 is currently in a surplus funded status, no additional contributions are required at this time.

### HIGHLIGHTS OF ACTUARIAL ANALYSIS

- ❖ The AE benefit does not have an expected cost because we assume the reduction to the member's benefit will cover the full actuarial value of the additional benefit payments made to the surviving spouse.
  - ◇ However, as the experience of the system emerges, if the actual value of the benefit is more or less than the expected value, then a cost or savings could emerge.
  - ◇ If administrative factors used for the AE benefit are not based on actuarial equivalence, then this portion of the bill would result in either a cost or savings to the plan.

### HOW THE RESULTS CHANGE WHEN THE ASSUMPTIONS CHANGE

- ❖ If more than one survivor is identified as eligible for the two-thirds benefit, the costs to the system will increase under this bill.
- ❖ For the AE benefit:
  - ◇ A cost to the plan could occur if the member and their surviving spouse don't live as long as expected or investment returns over their lifetimes are lower than expected.
  - ◇ A savings to the system could occur if the member and their surviving spouse live longer than expected or investment returns over their lifetimes are higher than expected.

*See the remainder of this fiscal note for additional details on the summary and highlights presented here.*



## **WHAT IS THE PROPOSED CHANGE?**

### **Summary Of Change**

This bill impacts the following systems:

- ❖ Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF) Plan 1.

This bill creates a new one-year window for LEOFF 1 members to designate a spouse as eligible for an Actuarially Equivalent (AE) survivor benefit.

To qualify, the spouse must:

- ❖ Be ineligible for the death benefits provided in RCW 41.26.160 and RCW 41.26.161.
- ❖ Have been married to the member for at least two years prior to September 1, 2015.

The Office of the State Actuary must provide the Department of Retirement Systems (DRS) with administrative factors to ensure the benefits are AE if all assumptions are realized.

The bill also provides a survivor two-thirds annuity benefit for certain survivors beginning August 1, 2015. Specifically, if a member did not select a survivor benefit, and the surviving spouse has exhausted all administrative remedies for establishing eligibility by March 1, 2015, then the survivor will begin receiving an annuity beginning August 1, 2015, that is equal to two-thirds of what the member was receiving per month at the time of death.

Effective Date: 90 days after session.

## **HOW THE ENGROSSED VERSION DIFFERS FROM THE ORIGINAL VERSION**

The engrossed version of the bill retains all prior bill language, and adds the two-thirds annuity benefit provision detailed above.

### **What Is The Current Situation?**

In 2005, the Legislature established a one-year window for members to designate a spouse who is otherwise ineligible for death benefits as eligible for an AE survivor benefit.

### **Who Is Impacted And How?**

We estimate this bill could impact any retired members of LEOFF 1 who do not currently have a survivor beneficiary selected, but who do have a qualifying spouse they wish to designate as a survivor. Additionally, DRS identified one survivor who is eligible for the two-thirds benefit.

We estimate this bill will improve benefits for a typical impacted member by providing a survivor benefit they cannot select under current law. We further estimate this bill will provide a lifetime annuity equal to two-thirds of the member's retirement benefit for certain survivors.

This bill will not affect member contribution rates in Plan 1 because no contributions are required as long as the plan remains in a fully funded status.

## **WHY THIS BILL HAS A COST AND WHO PAYS FOR IT**

### **Why This Bill Has A Cost**

The two-thirds benefit provided to certain survivors has a cost to the system because it is an additional benefit not available under current law. Also, no provisions are made to fund the cost of this additional benefit.

The AE benefit does not have an expected cost because members are paying the full actuarial value of the benefit change through actuarial reductions in their benefits. However, if experience is different than the assumptions used to determine the full actuarial value, then additional costs or savings could arise.

### **Who Will Pay For These Costs?**

The projected LEOFF 1 surplus will be lower as a result of the increase in costs from this bill. We do not expect LEOFF 1 to come out of its fully funded status as a direct result of the provisions of this bill.

## **HOW WE VALUED THESE COSTS**

### **Assumptions We Made**

To price the impact of the two-thirds benefit provided to certain survivors, we relied on data from DRS and our current assumptions for mortality, investment rate of return, and inflation. We used these assumptions to develop an annuity factor, which captures the expected value of the survivor's lifetime benefits based on their current age.

To price the impact of the AE benefit, we assumed that DRS would adopt administrative factors based on actuarial equivalence for joint and survivor benefit selections provided under this bill during the one-year window.

To determine the joint and survivor administrative factors, we would need to make the following key assumptions:

- ❖ Expected rate of investment return.
- ❖ Expected rate of mortality for the annuitant and the survivor given their ages at the time of selection.

As with any actuarial calculation that involves estimating future events, actual experience may differ from the underlying assumptions made. When actual experience differs from what we assumed would occur, the system experiences an actuarial gain or loss. An actuarial gain would decrease plan liabilities (or increase assets); whereas, an actuarial loss would increase plan liabilities (or decrease assets). Therefore, we cannot say with certainty that this bill will not impact plan costs in the future.

If the members who select survivor benefits under this bill, and their survivors, on average live longer/shorter than assumed, the system will experience actuarial gains/losses in the future. If the actual rate of investment return over their lifetimes is more/less than the assumed rate, the system will experience actuarial gains/losses from this assumption as well. For these two assumptions, we will not know whether a gain or loss has occurred until DRS has made all benefit payments to the member and their survivor.

Otherwise, we developed the value of these benefits using the same assumptions as disclosed in the [June 30, 2013, Actuarial Valuation Report](#) (AVR).

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

### **How We Applied These Assumptions**

To price the impact of the two-thirds benefit provided to certain survivors, we multiplied the survivor's annual annuity payment by the appropriate age-based annuity factor (approximately 10.6 in this case). The initial annual benefit provided to the eligible survivor after the two-thirds reduction is approximately \$23,000. This benefit amount will grow by the fully-indexed Cost of Living Adjustment as provided in the LEOFF 1 plan design.

Otherwise, we developed the value of these benefits using the same methods as disclosed in the AVR.

### **Special Data Needed**

We relied on DRS to identify all survivors eligible for the two-thirds benefit. For the one eligible member identified, DRS provided the deceased member's monthly benefit and the survivor's age as of the effective date of this bill. This data was not audited.

Otherwise, we developed the value of these benefits using the same assets and data as disclosed in the AVR.

## ACTUARIAL RESULTS

### How The Liabilities Changed

Impact on Pension Liability			
<i>(Dollars in Millions)</i>	Current	Increase	Total
<b>Actuarial Present Value of Projected Benefits</b>			
<i>(The Value of the Total Commitment to all Current Members)</i>			
<b>LEOFF 1</b>	<b>\$4,420</b>	<b>\$0.25</b>	<b>\$4,421</b>
<b>Unfunded Actuarial Accrued Liability</b>			
<i>(The Portion of the Plan 1 Liability that is Amortized According to Funding Policy)*</i>			
<b>LEOFF 1</b>	<b>(\$1,096)</b>	<b>\$0.25</b>	<b>(\$1,096)</b>
<b>Unfunded Projected Unit Credit Liability</b>			
<i>(The Value of the Total Commitment to all Current Members Attributable to Past Service that is Not Covered by Current Assets)</i>			
<b>LEOFF 1</b>	<b>(\$1,107)</b>	<b>\$0.25</b>	<b>(\$1,107)</b>

*Note: Totals may not agree due to rounding.*

*\*LEOFF 1 must be amortized by June 30, 2024.*

### No Impact To Present Value Of Future Salaries (PVFS)

This bill will not change the PVFS, so there is no impact on the actuarial funding of the affected system due to PVFS changes.

### No Expected Impact To Contribution Rates Or Budgets

This bill is not expected to change the contribution rates for members and employers since the system remains in a surplus funded status, so there is no expected impact on the actuarial funding of the affected system due to contribution rate changes.

## HOW THE RESULTS CHANGE WHEN THE ASSUMPTIONS CHANGE

To determine the sensitivity of the actuarial results for the AE benefits provided under this bill, we varied the following assumptions:

- ❖ **Investment Returns** – We determined the cost (or savings) to the system if we observe lower (or higher) returns on assets than expected. For this sensitivity run, we assumed an investment return 1 percent lower (or 1 percent higher) than expected.
- ❖ **Mortality Rate** – We determined the cost (or savings) to the system if an annuitant and their survivor live shorter (or longer) than expected. For this sensitivity run, we assumed a three-year age set forward (or setback). In other words, we determined the cost (or savings) if an annuitant and their survivor receive fewer (or more) pension payments than expected.

The table below shows the expected results versus the four sensitivity runs outlined above. The example outlines the impact of one annuitant currently age 70 selecting a joint and survivor benefit and paying for it using an AE administrative factor. You'll note that the cost for the single life and joint life benefits are the same in Scenario 1, illustrating that this bill has no expected cost to the system.

Sensitivity Example - 70 Year Old Retiree with \$40,000 Current Benefit			
Scenario	Present Value of Single Life Benefits	Present Value of Joint Life Benefits	Cost to the System (Joint Life - Single Life)
1) Value of Benefits, All Experience As Assumed	\$458,537	\$458,537	\$0
2) 1% Lower Asset Returns Than Expected	\$498,134	\$506,618	\$8,485
3) 1% Higher Asset Returns Than Expected	\$424,041	\$417,537	(\$6,504)
4) Live Shorter Than Expected	\$415,838	\$426,557	\$10,719
5) Live Longer Than Expected	\$499,486	\$487,727	(\$11,759)

Unless stated otherwise, we used the assumptions displayed in the table below to calculate cost/savings to the system for each sensitivity run.

Sensitivity Example Assumptions			
Member Age	70	Mortality Improvement Scale	100% Scale BB
Spouse Age	67	Static Projection Year	2025
Joint Survivor Benefit Option	100%	Age Setback	+1 (Males), -1 (Females)
Current member benefit	\$40,000	Interest Rate	7.8%

The sensitivity runs provided in the table above are meant to give the reader an idea of how the costs to the system may change if actual results do not match assumptions. The sensitivity runs are not intended to provide a range for the maximum cost (or savings) to the system.

One sensitivity example may be more likely to occur than another sensitivity example. For instance, we assume a long-term return on assets of approximately 7.50 percent. As such, we would expect Scenario 2 to be more likely (or occur more often) than Scenario 3 in the table above.

Another consideration with AE selections pertains to the concept of anti-selection. This is defined as a risk where members with above-average costs make a choice (in this case, to select a joint and survivor benefit) resulting in higher costs for the plan. For example, members in poor health may be more likely to select a survivor option for their spouse or partner, while members in relatively good health may be less likely to do so. To address anti-selection and limit that risk to the plan, specific mortality assumptions could be adopted for these benefits.

For the two-thirds benefit, if more than one survivor is identified as eligible, the costs to the system will be higher than the costs presented in this fiscal note. Also, if the assumptions we used to price this benefit are different than the actual

experience, the results shown will vary. For example, if actual asset returns are 1 percent lower (or higher) than expected, the LEOFF 1 liability will be about \$0.27 million (or \$0.23 million) compared to our best estimate of \$0.25 million.

## 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 in the footer. We intend this fiscal note to be used by the Legislature during the 2015 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.

## 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. Use of another set of methods and assumptions may also be reasonable, and might produce different results.
4. We prepared this fiscal note for the Legislature during the 2015 Legislative Session.
5. 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 in the footer of this fiscal note.

The undersigned, with actuarial credentials, meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

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, FCA, MAAA  
Senior Actuary

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## 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. Under this method, all plan costs (for past and future service credit) are included under the normal cost. Therefore, the method does not produce an unfunded actuarial accrued liability outside the normal cost. It's most common for the normal cost to be determined for the entire group rather than on an individual basis for this method.

**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 most commonly 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) based on the PUC method.

**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 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.

**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.