Multiple Agency Fiscal Note Summary

Bill Number: 6264 SB

Title: LEOFF 2 retirees/annuities

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	.3	0	79,319	.0	0	0	.0	0	0
State Investment Board	Fiscal n	ote not available							
Law Enforcement Officers' and Fire Fighters' Plan 2 Retirement Board	.0	0	0	.0	0	0	.0	0	0
Actuarial Fiscal Note - State Actuary	.0	0	0	.0	0	0	.0	0	0
Total	0.3	\$0	\$79,319	0.0	\$0	\$0	0.0	\$0	\$0

Estimated Capital Budget Impact

NONE

Prepared by:	Jane Sakson, OFM	Phone:	Date Published:
		360-902-0549	Preliminary 1/20/2016

* See Office of the Administrator for the Courts judicial fiscal note

** See local government fiscal note FNPID: 42665

FNS029 Multi Agency rollup

Individual State Agency Fiscal Note

Bill Number: 6264 SB Title: LEOFF 2 retirees/annuities	Agency: 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	0.6	0.0	0.3	0.0	0.0
Account					
Department of Retirement Systems	79,319	0	79,319	0	0
Expense Account-State 600-1					
Total \$	79,319	0	79,319	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:		Phone:	Date: 01/13/2016
Agency Preparation:	Shawn Merchant	Phone: 360-664-7303	Date: 01/15/2016
Agency Approval:	Marcie Frost	Phone: 360-664-7312	Date: 01/15/2016
OFM Review:	Jane Sakson	Phone: 360-902-0549	Date: 01/15/2016

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 allows retirees of Plan 2 of the Law Enforcement Officers' and Fire Fighters' (LEOFF) Retirement System, who retired prior to June 1, 2014, to purchase an annuity between January 1, 2017 and June 1, 2017. This bill will amend RCW 41.26 to allow this population a one-time opportunity to make this purchase.

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:

- All annuity purchases will be paid prospectively.
- Payments for annuity purchases must be received by June 1, 2017.
- The factors used to calculate the annuity will be based on the optional bill payment date.

Benefits/Customer Service

Retirement Specialists (RSs) will support the modifications to DRS' automated systems by participating in business requirement development and user acceptance testing activities. RSs will participate on the project team to implement these changes, and will also assist in review of member communications and will make necessary updates to internal reference manuals and training materials.

Retirement Specialist 3 – 116 hours (salaries/benefits) = \$4,109

Member Communications

Communications will create a unique letter and form for approximately 3,500 retirees to inform them of this one-time opportunity.

Communications Consultant 5 – 80 hours (salaries/benefits) = \$3,760 Mailing costs for approximately 3,500 letters (supplies/postage) = \$1,666

Total Estimated Member Communications Costs = \$5,426

Automated Systems

Form FN (Rev 1/00)

Programming updates will be required for the Member Information System, Benefits System and Web Services. Updates will be required to the annuity module. New purchased benefit type codes need to be created and existing programs updated to accept the new codes. Business requirements will be created and user acceptance

testing will be performed to support these changes.

IT System/Application Specialist 6 - 700 hours (salaries/benefits) = \$39,345 Info Tech Specialist 4 - 180 hours (salaries/benefits) = \$8,460 Mainframe* costs of \$500 per week for 18 programmer weeks = \$9,000

Total Estimated Automated Systems Costs = \$56,805

*cost for mainframe computer processing time and resources at WaTech

Project Management

Due to the complexity of the change proposed by the legislation, project management resources will be required during implementation.

Project Manager - 240 hours (salaries/benefits) = \$12,979

ESTIMATED TOTAL COST TO IMPLEMENT THIS BILL: \$79,319

Part III: Expenditure Detail

III. A - Expenditures by Object Or Purpose

	FY 2016	FY 2017	2015-17	2017-19	2019-21
FTE Staff Years	0.6		0.3		
A-Salaries and Wages	52,104		52,104		
B-Employee Benefits	16,549		16,549		
C-Professional Service Contracts					
E-Goods and Other Services	10,666		10,666		
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-					
Total:	\$79,319	\$0	\$79,319	\$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
Comm Consultant 5	73,644	0.0		0.0		
IT App/Spec 6	89,712	0.3		0.2		
IT Spec 4	73,644	0.1		0.1		
Project Manager	86,004	0.1		0.1		
Retirement Specialist 3	53,424	0.1		0.0		
Total FTE's	376,428	0.6		0.3		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

Bill Number: 6264 SB	Title: LEOFF 2 retirees/annuities	Agency: 341-LEOFF 2 Retirement Board
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Part I: Estimates

X 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:		Phone:	Date: 01/13/2016
Agency Preparation:	Pouth Ing	Phone: (360) 407-8165	Date: 01/13/2016
Agency Approval:	Steve Nelsen	Phone: 360-586-2323	Date: 01/13/2016
OFM Review:	Jane Sakson	Phone: 360-902-0549	Date: 01/13/2016

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.

SB 6264 adds a new section to RCW 41.26 allowing certain law enforcement officers' and firefighters' plan 2 retirees to purchase annuities. If enacted there would be no fiscal impact to the Law Enforcement Officers & Firefighters Plan 2 Retirement Board.

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.

No impact.

Part III: Expenditure Detail

Part IV: Capital Budget Impact

NONE

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

Bill Number: 6264 SB Title: LEOFF 2 retirees/annuities	Agency: AFN-Actuarial Fiscal Note - State A
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Part I: Estimates

X 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:		Phone:	Date: 01/13/2016
Agency Preparation:	Aaron Gutierrez	Phone: 360-786-6152	Date: 01/19/2016
Agency Approval:	Lisa Won	Phone: 360-786-6150	Date: 01/19/2016
OFM Review:	Jane Sakson	Phone: 360-902-0549	Date: 01/20/2016

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 allows certain retirees of LEOFF Plan 2 to purchase an additional annuity through the LEOFF Plan 2 trust fund during a temporary window.

COST SUMMARY: This annuity would be based on an actuarially equivalent purchase. As a result, this bill is not expected to impact the actuarial funding of the system.

HIGHLIGHTS OF ACTUARIAL ANALYSIS

This bill does not have an expected cost because we assumed the member is paying the full actuarial value of the additional annuity. However, as the experience of the system emerges, if the purchase payment is more or less than the actual value of the annuity, then savings or costs would emerge and LEOFF Plan 2 contribution rates will decrease or increase accordingly.

For example, costs could emerge if retired members who purchase an annuity live longer than expected. Costs or savings could also emerge if investment returns are lower or higher than expected

In addition, if the administrative factors adopted for this benefit are not based on actuarial equivalence, this bill would result in either a cost or savings to the plan.

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

WHAT IS THE PROPOSED CHANGE?

Summary Of Benefit Improvement/Change

This bill impacts the following systems:

 Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF) Plan 2.

Members of the LEOFF Plan 2 who retired before June 1, 2014, may purchase an additional monthly annuity from the LEOFF Plan 2 trust fund between January 1, 2017 and June 1, 2017.

This annuity purchase must follow the provisions identical to the provisions found in RCW 41.26.463, and are subject to rules adopted by the Department of Retirement Systems (DRS) as well as applicable Internal Revenue Service regulations (e.g. IRC Section 415(c)(1)).

To pay for the annuity, retirees must make a contribution from an eligible retirement plan of at least \$25,000 to the LEOFF Plan 2 trust fund. The resulting annuity will be actuarially equivalent to the additional amount contributed by the retiree.

Retirees may make the contribution through any combination of eligible rollovers or transfers from a tax qualified plan offered by a governmental employer.

Assumed Effective Date: 90 days after session.

What Is The Current Situation?

In 2014, the Legislature passed SB 6201 (Chapter 91, Laws of 2014), allowing members of LEOFF Plan 2 to purchase an additional annuity through the trust fund at the time of retirement. This bill did not include plan retirees.

At retirement, members of all state retirement plans can increase their monthly benefits by purchasing up to five years of additional service credit. The cost of service is based on the annuity factor for the member's age and plan.

Plan 3 members of the Public Employees' Retirement System, the Teachers' Retirement System, and the School Employees' Retirement System currently also have the option to purchase an annuity from the Total Allocation Portfolio at the time of retirement using funds in the defined contribution portion of the member's Plan 3 account.

For more information about the Plans 3 annuity options, please see Chapter 415-111-320 of the Washington Administrative Code.

Who Is Impacted And How?

We estimate this bill could affect all 3,011 LEOFF Plan 2 members who retired before June 1, 2014, with the option of improved benefits.

We estimate this bill will increase the benefits for a typical retired member by providing the option to annuitize their qualified personal retirement savings. Annuitizing their money provides a member security against outliving their assets. Additionally, the purchase of an annuity through DRS will likely cost less than the purchase of the same annuity from a private insurer. A private insurer typically calculates annuities based on a lower interest rate to account for risk and profit.

For example, we estimate a private insurer will provide the annuity based on an interest rate of about 4.0 percent, whereas DRS would provide the annuity based on an interest rate of 7.5 percent. For an average retired member age 61 buying a \$10,000 annual life annuity (including the LEOFF Plan 2 Cost-of-Living Adjustment [COLA]), this means a private insurer would charge about \$216,000, whereas DRS would charge about \$144,000.

WHY THIS BILL DOES NOT HAVE AN EXPECTED COST

Why This Bill Does Not Have An Expected Cost

This bill does not have an expected cost since the retired member would pay the full actuarial value of their annuity purchase. However, if experience differs from the assumptions used to determine the full actuarial value, costs or savings to the plan could arise.

Who Will Pay For Any Costs/Savings If They Arise?

As experience emerges, if the annuity purchase amount, on average, is less/more than the actual value of the annuity, then current LEOFF Plan 2 members and employers will pay for the costs/savings through an increase/decrease in contribution rates.

HOW WE VALUED THESE COSTS

Assumptions We Made

We assumed that the LEOFF Plan 2 Board would adopt annuity purchase administrative factors that maintain actuarial equivalence. In addition, other administrative factors may be required for converting the purchased annuity to the same payment form of the retired member's current benefit.

To determine the purchase price of an annuity, we would need to make several assumptions, primarily:

- ***** Expected rate of investment return.
- **Solution** Expected rate of mortality for the annuitant.
- ***** Expected rate of inflation.

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 savings/costs in the future as a result of actuarial gain/loss.

If the retired members who purchase annuities, on average, live shorter/longer than assumed, the system will experience actuarial gains/losses in the future. If the actual rate of investment return is more/less than the assumed rate, the system will experience actuarial gains/losses. For these two assumptions, we will not know whether a gain or loss has occurred until DRS has made all payments under each annuity contract.

The annual COLA for LEOFF Plan 2 annuitant benefits is based in part on the rate of inflation and can be no greater than 3 percent. Thus, lower than expected inflation would result in smaller calculated COLAs on an annuitant's annual benefit and produce a savings for the plan.

Otherwise, we developed these costs using the same assumptions as disclosed in the *June 30, 2014, 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

We developed these costs using the same methods, assets, and data as disclosed in the AVR.

ACTUARIAL RESULTS

No Expected Impact To Liabilities Or Present Value Of Future Salaries (PVFS)

This bill is not expected to change the present value of future benefits payable or the PVFS, so there is no impact on the actuarial funding of the affected plan due to liability or PVFS changes.

No Expected Impact To The Contribution Rates Or Budgets

This bill is not expected to change the contribution rates for members and employers, so there is no expected impact on the actuarial funding of the affected plan due to contribution rate changes.

HOW THE RESULTS CHANGE WHEN THE ASSUMPTIONS CHANGE

To determine the sensitivity of the actuarial results to the best-estimate assumptions selected for this pricing, we varied the following assumptions:

- Mortality Rate We determined the cost to the system if the annuity amount was calculated based on higher mortality rates than what actually occurs over time. In other words, retired members purchasing these annuities live longer than expected. For this sensitivity run we extended the age offset such that the member is assumed to have the mortality experience of a member younger than what we assumed in the 2014 AVR.
- Investment Returns We determined the cost to the system if the annuity amount was calculated based on higher/lower investment returns than what actually occurs over time (investments pay less/more than assumed). For this sensitivity run we used a 7.0/8.0 percent investment return rather than the assumed 7.5 percent.
- All Of The Above We determined the cost to the system if lower than assumed mortality experience occurred in combination with both 7.0/8.0 percent investment returns. The combination of these two sensitivity variations produces an interactive effect.

The table below shows the expected results compared to the three sensitivity runs outlined above. The example shows the financial impact of an average retired member, currently age 61, who purchases an annuity under this bill with \$100,000. When multiple scenarios occur at once, the cost to the plan is different than the sum of each of the two scenarios individually due to interaction between the assumptions. Note that this analysis illustrates how the costs to the plan could change under the different assumption scenarios above.

Financial impacts to the plan could also arise if inflation is less than expected or retired members purchasing benefits under this bill have a shorter life span than expected. Under both of these situations, savings would arise and LEOFF Plan 2 contribution rates would decrease accordingly.

Actuary's Fiscal Note For SB 6264/HB 2487

Sensitivity Example – 61-Year-Old Purchases Retirement Annuity with \$100,000						
Scenario	Cash Paid From Member to Plan	Present Value of Plan Annuity	Cost to the Plan			
1) Expected	\$100,000	\$100,000	\$0			
2) Lower Mortality Than Expected (purchasers live longer)	\$100,000	\$105,884	\$5,884			
3) Lower Asset Returns Than Expected	\$100,000	\$104,917	\$4,917			
4) Higher Asset Returns Than Expected	\$100,000	\$95,508	(\$4,492)			
5) Scenarios 2 and 3	\$100,000	\$111,489	\$11,489			
6) Scenarios 2 and 4	\$100,000	\$100,789	\$789			

Note: Assumes annuity calculation based on 3% COLA and 90%/10% male/female mortality blend.

Another consideration with actuarially equivalent purchases 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 purchase an annuity) resulting in higher costs for the plan. For example, retired members in poor health may be less likely to annuitize their savings, while members in relatively good health may be more likely to do so. Under the provisions of current law, only active members at retirement may purchase an annuity of this kind. While the possibility of anti-selection still exists under current law, the likelihood of anti-selection may be greater under this bill since prospective purchasers of an annuity would likely be older and perhaps in a better position to assess their expected future lifetime.

Since the assumptions used to develop administrative factors include life expectancy, the LEOFF Plan 2 Board could adopt administrative factors that include mortality assumptions to address expected anti-selection, and limit that risk to the plan.

The Board may also want to consider an alternate investment return. Current retirees purchasing an annuity under this bill have a shorter time horizon than active members so an assumed investment return that matches this shorter time horizon may be more appropriate to maintain actuarial equivalence.

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 2016 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. The data on which this fiscal note is based are sufficient and reliable for the purposes of this pricing exercise.
- 4. Use of another set of methods, and assumptions may also be reasonable, and might produce different results.
- 5. We prepared this fiscal note for the Legislature during the 2016 Legislative Session.
- 6. We prepared this fiscal note and provided opinions in accordance with Washington State law and accepted actuarial standards of practice as of the date shown 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 Deputy State 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 is 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.