

Multiple Agency Fiscal Note Summary

Bill Number: 2825 HB	Title: New PERS, TRS, SERS members
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Estimated Cash Receipts

NONE

Estimated Expenditures

Agency Name	2011-13			2013-15			2015-17		
	FTEs	GF-State	Total	FTEs	GF-State	Total	FTEs	GF-State	Total
Office of the State Actuary	Fiscal note not available								
Department of Retirement Systems	Fiscal note not available								
Actuarial Fiscal Note - State Actuary	.0	0	0	.0	(2,700,000)	(3,300,000)	.0	(7,600,000)	(10,200,000)
Total	0.0	\$0	\$0	0.0	\$(2,700,000)	\$(3,300,000)	0.0	\$(7,600,000)	\$(10,200,000)

Estimated Capital Budget Impact

NONE

Prepared by: Jane Sakson, OFM	Phone: 360-902-0549	Date Published: Preliminary 4/ 3/2012
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* See Office of the Administrator for the Courts judicial fiscal note

** See local government fiscal note

FNPID 32561

FNS029 Multi Agency rollup

Individual State Agency Fiscal Note

Bill Number: 2825 HB	Title: New PERS, TRS, SERS members	Agency: AFN-Actuarial Fiscal Note - State A
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Part I: Estimates

☐ No Fiscal Impact

Estimated Cash Receipts to:

NONE

Estimated Expenditures from:

	FY 2012	FY 2013	2011-13	2013-15	2015-17
Account					
All Other Funds-State 000-1	0	0	0	(600,000)	(2,600,000)
General Fund-State 001-1	0	0	0	(2,700,000)	(7,600,000)
Total S	0	0	0	(3,300,000)	(10,200,000)

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: 04/02/2012
Agency Preparation: Aaron Gutierrez	Phone: 360-786-6152	Date: 04/03/2012
Agency Approval: Matt Smith	Phone: 360-786-6147	Date: 04/03/2012
OFM Review: Jane Sakson	Phone: 360-902-0549	Date: 04/03/2012

Request # HB 2825-1

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.

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.

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.

Part III: Expenditure Detail

III. A - Expenditures by Object Or Purpose

NONE

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.

Actuary's Fiscal Note For HB 2825

SUMMARY OF RESULTS

This bill limits subsidized early retirement for newly hired members in Plans 2/3 of PERS, TRS, and SERS retirement systems. Specifically, it ends eligibility for 2008 ERFs that were adopted with the repeal of gain-sharing.

Impact on Contribution Rates (Effective 7/1/2012)*				
Fiscal Year 2013 State Budget	PERS	TRS	SERS	PSERS
Employee (Plan 2)	0.00%	0.00%	0.00%	0.00%
Total Employer	0.00%	0.00%	0.00%	0.00%

**Please see the remainder of this fiscal note for contribution rate impacts beyond July 1, 2012.*

Budget Impacts			
(Dollars in Millions)	Fiscal Year 2013	2013-2015	25-Year
General Fund-State	\$0.0	(\$2.7)	(\$421.6)
Local Government	\$0.0	(\$2.4)	(\$414.3)
Total Employer	\$0.0	(\$5.7)	(\$960.0)

Note: We use long-term assumptions to produce our short-term budget impacts. Therefore, our short-term budget impacts will likely vary from estimates produced from other short-term budget models.

HIGHLIGHTS OF ACTUARIAL ANALYSIS

We expect the removal of a subsidized early retirement option from new hires in PERS, TRS, and SERS Plans 2/3 will decrease employer costs and Plan 2 contribution rates. We expect a total employer savings of \$960 million over the next 25 years.

We have not included sensitivity analysis or risk analysis in this fiscal note. We may revise this fiscal note in the future to include this additional analysis.

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

Actuary's Fiscal Note For HB 2825

WHAT IS THE PROPOSED CHANGE?

Summary Of Change

This bill impacts the following systems:

- ❖ Public Employees' Retirement System (PERS) Plans 2/3.
- ❖ Teachers' Retirement System (TRS) Plans 2/3.
- ❖ School Employees' Retirement System (SERS) Plans 2/3.

This bill limits subsidized early retirement for newly hired members in Plans 2/3 of PERS, TRS and SERS. Specifically, it ends eligibility for the 2008 Early Retirement Factors (ERFs) that allowed for unreduced retirement at age 62 with 30 or more years of service. Under this bill, new hires with 30 years of service could retire before age 65 with a 3 percent per year reduction in benefits, but could not receive an unreduced benefit prior to age 65.

The 2008 ERFs are still provided for members hired prior to July 1, 2012.

This bill also requires the Select Committee on Pension Policy to study job classifications in the pension systems. The study does not affect the pricing of the bill.

Effective Date: July 1, 2012.

What Is The Current Situation?

The normal retirement age for Plans 2/3 members is age 65. Early retirement benefits are available to members who have attained age 55 and meet the minimum service requirements of twenty years in Plan 2 or ten years in Plan 3. Under early retirement, pensions are actuarially reduced for each year the member retires prior to attaining age 65.

Alternate early retirement benefits are available to Plans 2/3 members who have attained age 55 and have at least 30 years of service credit. Pensions are reduced for alternate early retirement, but the reduction is less than under early retirement. Alternate early retirement is considered a subsidized form of early retirement because benefits are not actuarially reduced. Statute provides two different sets of alternate early retirement provisions: 2000 ERFs and 2008 ERFs. These provisions differ in pension reductions and retire-rehire restrictions. Eligible members may choose to retire under either provision as follows.

- ❖ **2000 ERFs** – Eligible members may retire and receive a pension reduced by 3 percent for each year the member retires prior to attaining age 65. Members retiring under this provision may return to work in an eligible position for a covered public employer prior to age 65 and, subject to certain restrictions, still receive their full pension.

Actuary's Fiscal Note For HB 2825

- ❖ **2008 ERFs** – Eligible members may retire with unreduced pensions beginning at age 62. Members retiring between ages 55 and 62 have their pension reduced by a specified percentage that is less than the reduction provided under the 2000 ERFs. Members retiring under this provision are generally prohibited from receiving their full pension if they return to work in any capacity for a covered public employer before they reach age 65.

Who Is Impacted And How?

We estimate this bill could affect all 149,626 active members of PERS 2, TRS 2, and SERS 2 and all employers of PERS, TRS, and SERS through lower contribution rates. This bill will not affect member contribution rates in Plan 1 since they are fixed in statute. Additionally, this bill will not affect member contribution rates in Plan 3 since Plan 3 members do not contribute to their employer-provided defined benefit.

This bill would also affect all future new hires in PERS, TRS, and SERS through decreased benefits in the form of limited subsidized ERFs. For example, a future member retiring at age 61 with 30 years of service would have their pension reduced by approximately 12 percent under this bill rather than 2 percent under current law. Under current law, if this member were in Plan 2 and had an average final salary of \$50,000, the early retirement factor for this member would be 0.98 resulting in an initial annual benefit of \$29,400. The early retirement factor under this bill would be 0.88 resulting in an initial annual benefit of \$26,400.

WHY THIS BILL HAS A SAVINGS AND WHO RECEIVES IT

Why This Bill Has A Savings

This bill removes the 2008 subsidized ERFs for new hires. This benefit reduction lowers the liabilities and costs associated with future members. It begins as a small savings (when there aren't many new hires in the system) and becomes a larger savings over time.

Who Will Receive These Savings?

The savings that result from this bill will be divided between members and employers according to standard funding methods that vary by plan:

- ❖ Plan 1: 100 percent employer.
- ❖ Plan 2: 50 percent member and 50 percent employer.
- ❖ Plan 3: 100 percent employer.

Actuary's Fiscal Note For HB 2825

HOW WE VALUED THESE SAVINGS

Assumptions We Made

We assumed future members would retire later (work longer) without the 2008 ERFs. Specifically, we assumed new hires would have a lower rate of retirement after 30 years of service than they do under current law.

The savings from removing some subsidized early retirement benefits for new hires assumes the continuation of these benefits for new hires under current law. According to current law, if the courts, through a final court action, reinstate gain-sharing benefits, the 2008 ERFs are removed prospectively by operation of law. Should this occur, then the expected savings attributed to this bill would be eliminated for periods beyond the effective date of that action.

Please see Appendix A for further details on the assumption changes we made for this pricing.

How We Applied These Assumptions

We calculated the cost of this bill by comparing the current situation ("base") to the expected scenario if this bill passed ("pricing").

The base is a projection where all new hires have access to the 2008 ERFs. Based on this projection we observe both the required contribution rates and the projected payroll. The multiplication of these two items results in the base fiscal costs.

The pricing is a projection where all new hires do not have access to the 2008 ERFs (and therefore retire later on average). Based on this projection we observe the new required contribution rates and projected payroll. The multiplication of these two items results in the pricing fiscal costs.

We then compare the pricing fiscal costs to the base fiscal costs to determine the expected savings from this bill.

Otherwise, we developed these costs using the same methods as disclosed in the *June 30, 2010, Actuarial Valuation Report (AVR)*.

Special Data Needed

We developed these costs using the same assets and data as disclosed in the AVR. In addition, we recognized investment returns of 21.14 percent through June 30, 2011, when estimating projected asset values.

Actuary's Fiscal Note For HB 2825

ACTUARIAL RESULTS

How The Liabilities Changed

This bill does not change the present value of future benefits payable to current members so there is no impact on pension liability for current members. We include the estimated impact of benefit changes for new hires in the budget impact section.

Impact on Pension Liability – Current Members			
<i>(Dollars in Millions)</i>	Current	Increase	Total
Actuarial Present Value of Projected Benefits			
<i>(The Value of the Total Commitment to all Current Members)</i>			
PERS 1	\$12,721	\$0.0	\$12,721
PERS 2/3	26,041	0.0	26,041
PERS Total	\$38,762	\$0.0	\$38,762
TRS 1	\$9,305	\$0.0	\$9,305
TRS 2/3	9,111	0.0	9,111
TRS Total	\$18,416	\$0.0	\$18,416
SERS 2/3	\$3,461	\$0.0	\$3,461
Unfunded Actuarial Accrued Liability			
<i>(The Portion of the Plan 1 Liability that is Amortized According to Funding Policy)*</i>			
PERS 1	\$3,094	\$0.0	\$3,094
TRS 1	\$1,345	\$0.0	\$1,345
Unfunded Projected Unit Credit Liability			
<i>(The Value of the Total Commitment to all Current Members Attributable to Past Service that is Not Covered by Current Assets)</i>			
PERS 1	\$3,238	\$0.0	\$3,238
PERS 2/3	(2,202)	\$0.0	(2,202)
PERS Total	\$1,036	\$0.0	\$1,036
TRS 1	\$1,439	\$0.0	\$1,439
TRS 2/3	(886)	\$0.0	(886)
TRS Total	\$554	\$0.0	\$554
SERS 2/3	(\$296)	\$0.0	(\$296)

How The Present Value Of Future Salaries (PVFS) Changed

This proposal does not change the PVFS of the current members. We include the estimated PVFS impact of later assumed retirement for new hires in the budget impact section.

How Contribution Rates Changed

This bill does not impact benefits for current members so there is no 2013 supplemental contribution rate required for the current biennium.

We used the rounded employer rate changes shown below for the Plans 2/3 Normal Cost (NC) to measure the budget changes in future Fiscal Years (FY).

Actuary's Fiscal Note For HB 2825

Contribution Rate Change By Year			
FY	PERS 2/3	TRS 2/3	SERS 2/3
2013	0.00%	0.00%	0.00%
2014	(0.01%)	(0.03%)	(0.01%)
2015	(0.01%)	(0.03%)	(0.01%)
2016	(0.04%)	(0.07%)	(0.02%)
2017	(0.04%)	(0.07%)	(0.02%)
2018	(0.06%)	(0.12%)	(0.04%)
2019	(0.06%)	(0.12%)	(0.04%)
2020	(0.07%)	(0.15%)	(0.06%)
2021	(0.07%)	(0.15%)	(0.06%)
2022	(0.09%)	(0.17%)	(0.08%)
2023	(0.09%)	(0.17%)	(0.08%)
2024	(0.11%)	(0.20%)	(0.08%)
2025	(0.11%)	(0.20%)	(0.08%)
2026	(0.11%)	(0.21%)	(0.09%)
2027	(0.11%)	(0.21%)	(0.09%)
2028	(0.12%)	(0.21%)	(0.09%)
2029	(0.12%)	(0.21%)	(0.09%)
2030	(0.12%)	(0.22%)	(0.09%)
2031	(0.12%)	(0.22%)	(0.09%)
2032	(0.12%)	(0.23%)	(0.10%)
2033	(0.12%)	(0.23%)	(0.10%)
2034	(0.13%)	(0.23%)	(0.09%)
2035	(0.13%)	(0.23%)	(0.09%)
2036	(0.13%)	(0.24%)	(0.09%)
2037	(0.13%)	(0.24%)	(0.09%)

The Plans 2/3 normal cost rates decrease for all impacted systems. TRS experiences the largest future rate savings from the removal of the 2008 ERFs because TRS has the highest utilization of subsidized early retirement under current law, followed by PERS, and then SERS.

Actuary's Fiscal Note For HB 2825

How This Impacts Budgets And Employees

Budget Impacts					
(Dollars in Millions)	PERS	TRS	SERS	PSERS	Total
Fiscal Year 2013					
General Fund	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Non-General Fund	0.0	0.0	0.0	0.0	0.0
Total State	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Local Government	0.0	0.0	0.0	0.0	0.0
Total Employer	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Total Employee	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2013-2015					
General Fund	(\$0.4)	(\$2.1)	(\$0.2)	\$0.0	(\$2.7)
Non-General Fund	(0.6)	0.0	0.0	0.0	(0.6)
Total State	(\$1.0)	(\$2.1)	(\$0.2)	\$0.0	(\$3.3)
Local Government	(1.1)	(1.1)	(0.2)	0.0	(2.4)
Total Employer	(\$2.1)	(\$3.2)	(\$0.4)	\$0.0	(\$5.7)
Total Employee	(\$1.6)	(\$0.8)	(\$0.2)	\$0.0	(\$2.5)
2012-2037					
General Fund	(\$87.0)	(\$309.5)	(\$25.1)	\$0.0	(\$421.6)
Non-General Fund	(124.1)	0.0	0.0	0.0	(124.1)
Total State	(\$211.1)	(\$309.5)	(\$25.1)	\$0.0	(\$545.7)
Local Government	(225.8)	(157.3)	(31.2)	0.0	(414.3)
Total Employer	(\$436.9)	(\$466.9)	(\$56.3)	\$0.0	(\$960.0)
Total Employee	(\$304.0)	(\$233.9)	(\$34.6)	\$0.0	(\$572.5)

Note: Totals may not agree due to rounding. We use long-term assumptions to produce our short-term budget impacts. Therefore, our short-term budget impacts will likely vary from estimates produced from other short-term budget models.

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

As with the costs developed in the actuarial valuation, the emerging costs will vary from those presented in the AVR or this fiscal note to the extent that actual experience differs from the actuarial assumptions.

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 2012 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 Fiscal Note For HB 2825

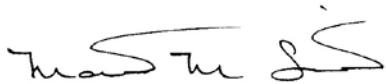
ACTUARY'S CERTIFICATION

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, assumptions, and data may also be reasonable, and might produce different results.
5. We prepared this fiscal note for the Legislature during the 2012 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.



Matthew M. Smith, FCA, EA, MAAA
State Actuary

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Actuary's Fiscal Note For HB 2825

APPENDIX A – ASSUMPTIONS WE MADE

In addition to the assumption changes outlined in the body of this fiscal note, we updated the new entrant profile used in our projection system for both the “base” and “pricing” projections.

In order to ensure that we ran the same new entrant population through each projection (regardless of the percent going into Plan 2 versus Plan 3), we updated our new entrant profile for this pricing. This updated new entrant profile is a weighted average of two-thirds of our current Plan 2 new entrant database and one-third of our current Plan 3 new entrant database. This updated new entrant profile in our projection system allows us to consistently project the same future members to the pension system no matter what percent goes into Plan 2 or Plan 3.

Below, we show the new entrant profiles we used for PERS, TRS, and SERS in our projections.

New Entrant Profiles											
PERS				TRS				SERS			
Age	Salary	Sex	Weight	Age	Salary	Sex	Weight	Age	Salary	Sex	Weight
24	\$34,000	M	10.5%	25	\$50,533	M	6.7%	24	\$19,167	M	3.0%
24	\$34,000	F	10.5%	25	\$50,533	F	15.6%	24	\$19,167	F	12.1%
29	\$38,800	M	9.8%	29	\$53,400	M	8.6%	29	\$20,400	M	2.6%
29	\$38,800	F	9.8%	29	\$53,400	F	20.0%	29	\$20,400	F	10.3%
34	\$41,133	M	7.3%	34	\$55,300	M	4.5%	34	\$19,433	M	2.6%
34	\$41,133	F	7.3%	34	\$55,300	F	10.6%	34	\$19,433	F	10.6%
39	\$41,700	M	5.8%	39	\$55,467	M	3.0%	39	\$18,733	M	3.2%
39	\$41,700	F	5.8%	39	\$55,467	F	7.1%	39	\$18,733	F	12.9%
44	\$41,733	M	5.3%	44	\$56,067	M	2.7%	44	\$18,767	M	3.1%
44	\$41,733	F	5.3%	44	\$56,067	F	6.4%	44	\$18,767	F	12.4%
49	\$42,200	M	4.5%	49	\$56,733	M	2.0%	49	\$19,467	M	2.2%
49	\$42,200	F	4.5%	49	\$56,733	F	4.7%	49	\$19,467	F	9.0%
57	\$43,433	M	6.7%	56	\$62,767	M	2.4%	57	\$19,467	M	3.2%
57	\$43,433	F	6.7%	56	\$62,767	F	5.7%	57	\$19,467	F	12.7%

We altered retirement assumptions for future members with at least 30 years of service. The following table shows the changed retirement rates, by system, under this bill. Retirement rates for members with less than 30 years of service were not changed and are not displayed in the table.

Actuary's Fiscal Note For HB 2825

Retirement Rates For Future Members With At Least 30 Years Of Service								
PERS 2/3			TRS 2/3				SERS 2/3	
Service >= 30			Service = 30		Service > 30		Service >= 30	
Age	Male	Female	Male	Female	Male	Female	Male	Female
55	0.1067	0.1144	0.1912	0.1658	0.1221	0.1044	0.1067	0.1144
56	0.0991	0.0991	0.1835	0.1835	0.1374	0.1221	0.0991	0.0991
57	0.1067	0.1067	0.1988	0.2081	0.1451	0.1391	0.1067	0.1067
58	0.1225	0.1050	0.2400	0.2200	0.1575	0.1525	0.1225	0.1050
59	0.1503	0.2124	0.2854	0.2305	0.1614	0.1941	0.1503	0.2124
60	0.1253	0.1324	0.3218	0.2524	0.1947	0.1747	0.1253	0.1324
61	0.1781	0.1742	0.3606	0.3300	0.1981	0.2013	0.1781	0.1742
62	0.3033	0.2667	0.4833	0.4833	0.3500	0.3167	0.3033	0.2667
63	0.2333	0.2333	0.4000	0.4167	0.2667	0.2833	0.2333	0.2333
64	0.5833	0.5833	0.5333	0.4833	0.5333	0.4833	0.5333	0.5333

Otherwise, we developed these costs using the assumptions as disclosed in the AVR.

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. The method does not produce an unfunded actuarial accrued liability. The normal cost is determined for the actuarial accrued group rather than on an individual basis.

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 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 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.

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.