Multiple Agency Fiscal Note Summary

Bill Number: 1547 E HB	**Title:** Duty-related death benefit

Estimated Cash Receipts

Agency Name	2009-11		2011-13		2013-15	
	GF- State	Total	GF- State	Total	GF- State	Total
Total $						

Local Gov. Courts *						
Local Gov. Other **						
Local Gov. Total						

Estimated Expenditures

Agency Name	2009-11			2011-13			2013-15		
	FTEs	GF-State	Total	FTEs	GF-State	Total	FTEs	GF-State	Total
Office of the State Actuary	.0	0	0	.0	100,000	100,000	.0	200,000	200,000
Department of Retirement Systems	.0	0	0	.0	0	0	.0	0	0
Total	**0.0**	**$0**	**$0**	**0.0**	**$100,000**	**$100,000**	**0.0**	**$200,000**	**$200,000**

Local Gov. Courts *									
Local Gov. Other **									
Local Gov. Total									

Prepared by: Jane Sakson, OFM	**Phone:** 360-902-0549	**Date Published:** Pending Distribution

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

** See local government fiscal note

FNPID 23591

Individual State Agency Fiscal Note

Bill Number: 1547 E HB	Title: Duty-related death benefit	Agency: 035-Office of State Actuary

Part I: Estimates

☐ **No Fiscal Impact**

Estimated Cash Receipts to:

FUND					
Total $					

Estimated Expenditures from:

		FY 2010	FY 2011	2009-11	2011-13	2013-15
Fund						
General Fund-State	001-1	0	0	0	100,000	200,000
Total $		0	0	0	100,000	200,000

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: 03/09/2009
Agency Preparation:	Darren Painter	Phone: 360-786-6155	Date: 03/09/2009
Agency Approval:	Matthew M. Smith	Phone: 360-786-6140	Date: 03/09/2009
OFM Review:	Jane Sakson	Phone: 360-902-0549	Date: 03/09/2009

Request # -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

	FY 2010	FY 2011	2009-11	2011-13	2013-15
FTE Staff Years					
A-Salaries and Wages					
B-Employee Benefits					
C-Personal Service Contracts					
E-Goods and Services					
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:	$0	$0	$0	$0	$0

Part IV: Capital Budget 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.

ACTUARY'S FISCAL NOTE

RESPONDING AGENCY:	CODE:	DATE:	BILL NUMBER
Office of the State Actuary	**035**	**3/6/09**	**EHB 1547**

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 above. We intend this fiscal note to be used by the Legislature during the 2009 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.

SUMMARY OF RESULTS

This bill increases the amount of the duty-related death benefit from $150,000 to $175,000. Current law provides the duty-related death benefit to members of all state retirement systems and other public employees who die from duty-related illnesses or injuries.

Impact on Pension Liability

(Dollars in Millions)	**Current**	**Increase**	**Total**
Today's Value of All Future Pensions	$67,081	$2.6	$67,083
Earned Pensions Not Covered by Today's Assets	$4,957	$0.1	$4,957

Impact on Contribution Rates: (Effective 9/1/2009)

2009-2011 State Budget	**PERS**	**TRS**	**SERS**	**PSERS**	**LEOFF**	**WSPRS**
Employee (Plan 2)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Employer:						
Current Annual Cost	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Plan 1 Past Cost	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
State					0.00%	

Budget Impacts

(Dollars in Millions)	**2009-2011**	**2011-2013**	**25-Year**
General Fund-State	$0.0	$0.1	$3.4
Total Employer	$0.0	$0.4	$9.9

See the Actuarial Results section of this fiscal note for additional detail.

WHAT IS THE PROPOSED CHANGE?

Summary of Benefit Improvement

This bill impacts the following retirement systems and public employees:

- Public Employees' Retirement System (PERS).
- Teachers' Retirement System (TRS).
- School Employees' Retirement System (SERS).
- Public Safety Employees' Retirement System (PSERS).
- Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF).
- Washington State Patrol Retirement System (WSPRS).
- Volunteer Firefighters' Relief and Pension Fund (VFF).
- Members of the Judicial Retirement System (JRS).
- Members of the Higher Education Retirement Plans (HIED).
- State, school district, and higher education employees who aren't members of a state retirement system.

This bill increases the amount of the duty-related death benefit from $150,000 to $175,000.

The engrossed bill differs from the original bill in that the original bill was effective immediately and had an emergency clause.

Effective Date: 90 days after session.

What Is The Current Situation?

The retirement systems and, in some cases, the state general fund pay a lump-sum death benefit for public employees who die as a result of a duty-related injury or illness. The amount of the benefit is currently $150,000. This benefit is provided for all members of PERS, TRS, SERS, PSERS, LEOFF, WSPRS, VFF, JRS, and HIED; and to state, school district and higher education employees who aren't members of a state retirement system. The lump-sum death benefit in VFF includes an additional $2,000.

Who Is Impacted And How?

This bill could affect all 308,267 active members of the systems listed above through improved benefits. In addition, this bill could affect 577 inactive fire fighters of LEOFF who are eligible for the benefit up to five years after separation of service. However, we only expect this benefit to be paid to about one member out of 24,500 members per year.

This bill will increase the lump-sum death benefit by $25,000 for any member that dies as a result of a duty-related injury or illness.

Although this bill does not produce supplemental contribution rate increases in the current biennium, this bill impacts all 165,035 Plan 2 members of these systems through increased contribution rates in future biennia. With the exception of WSPRS members, 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.

WHY THIS BILL HAS A COST AND WHO PAYS FOR IT

Why This Bill Has A Cost

This bill increases the amount of the lump-sum death benefit by $25,000. This increases the present value of future benefits of the affected systems. This bill will not result in more lump-sum death benefits being paid, but when the benefits are paid, the amount will be larger. The change in effective date for this version of the bill does not impact the cost.

Who Will Pay For These Costs?

Each system will subsidize the increase in liability that results from this bill in their normal funding method:

- LEOFF 2: 50 percent member, 30 percent employer, and 20 percent State
- Plan 1: 100 percent employer
- Plan 2: 50 percent member and 50 percent employer
- Plan 3: 100 percent employer

HOW WE VALUED THESE COSTS

We changed the lump-sum duty death benefit to provide a $175,000 benefit in place of the current $150,000 benefit. We assumed no members of JRS will die from a duty-related illness or injury and have excluded these members from this pricing.

Otherwise, we developed these costs using the same assumptions, methods, assets, and data as disclosed in the June 30, 2007 Actuarial Valuation Report (AVR).

We used the Entry Age Normal actuarial funding method to determine the fiscal budget changes for future new entrants. We used the Aggregate actuarial funding method to determine the fiscal budget changes for current plan members.

ACTUARIAL RESULTS

How The Liabilities Changed

This bill will impact the actuarial funding of the plans by increasing the present value of future benefits payable under the plans as shown in the following table.

Impact on Pension Liability			
(Dollars in Millions)	**Current**	**Increase**	**Total**
Actuarial Present Value of Projected Benefits *(The Value of the Total Commitment to all Current Members)*			
PERS 1	$14,061	$0.0	$14,061
PERS 2/3	20,634	0.7	20,635
PERS Total	**$34,695**	**$0.7**	**$34,696**
TRS 1	11,021	0.0	11,021
TRS 2/3	7,078	0.1	7,078
TRS Total	**$18,099**	**$0.1**	**$18,099**
SERS 2/3	**$2,698**	**$0.2**	**$2,698**
PSERS 2	**$225**	**$0.0**	**$225**
LEOFF 1	4,358	0.1	4,358
LEOFF 2	6,149	1.5	6,151
LEOFF Total	**$10,507**	**$1.6**	**$10,509**
WSPRS 1/2	**$$856**	**$0.0**	**$856**
Unfunded Actuarial Accrued Liability *(The Portion of the Plan 1 Liability that is Amortized to 2024)*			
PERS 1	**$3,609**	**$0.0**	**$3,609**
TRS 1	**$2,288**	**$0.0**	**$2,288**
LEOFF 1	**($939)**	**$0.1**	**($939)**
Unfunded PUC Liability *(The Value of the Total Commitment to all Current Members Attributable to Past Service that is not covered by current assets)*			
PERS 1	$3,990	$0.0	$3,990
PERS 2/3	(2,470)	0.7	(2,469)
PERS Total	**$1,520**	**$0.7**	**$1,521**
TRS 1	2,552	0.0	2,552
TRS 2/3	(1,229)	0.1	(1,229)
TRS Total	**$1,323**	**$0.1**	**$1,323**
SERS 2/3	**($443)**	**$0.2**	**($443)**
PSERS 2	**($2)**	**$0.0**	**($2)**
LEOFF 1	(975)	0.1	(975)
LEOFF 2	(974)	1.5	(972)
LEOFF Total	**($1,949)**	**$1.6**	**($1,947)**
WSPRS 1/2	**($121)**	**$0.0**	**($121)**

Note: Totals may not agree due to rounding.

In addition, this bill increases the pension liability of the VFF pension plan by $128,000.

We did not value the impact of this bill on the following members since we do not currently value them in any of our actuarial valuations:

- 2,854 Volunteer Fire Fighters that are not members of the pension plan;
- Members of HIED; and
- State, school district, and higher education employees who aren't members of the Washington State Retirement Systems.

How Contribution Rates Changed

The increase in the required actuarial contribution rate does not round up to the minimum supplemental contribution rate of 0.01 percent, therefore the bill will not affect contribution rates in the current biennium. However, we will use the un-rounded rate increase to measure the budget changes in future biennia.

Impact on Contribution Rates: (Effective 9/1/2009)

System/Plan	PERS	TRS	SERS	PSERS	LEOFF	WSPRS
Current Members						
Employee (Plan 2)	0.001%	0.000%	0.001%	0.000%	0.005%	0.003%
Employer:						
Normal Cost	0.001%	0.000%	0.001%	0.000%	0.003%	0.003%
Plan 1 UAAL	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
Total	0.001%	0.000%	0.002%	0.000%	0.003%	0.003%
State					0.002%	
New Entrants*						
Employee (Plan 2)	0.001%	0.000%	0.002%	0.001%	0.008%	0.005%
Employer:						
Normal Cost	0.001%	0.000%	0.002%	0.001%	0.005%	0.005%
Plan 1 UAAL	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
Total	0.001%	0.000%	0.002%	0.001%	0.005%	0.005%
State					0.003%	

**Rate change applied to future new entrant payroll and used to determine budget impacts only. Current members and new entrants pay the same contribution rate.*

How This Impacts Budgets And Employees

Budget Impacts

(Dollars in Millions)	**PERS**	**TRS**	**SERS**	**PSERS**	**LEOFF**	**WSPRS**	**Total**
2009-2011							
General Fund	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Non-General Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total State	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**
Local Government	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Employer	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**
Total Employee	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**
2011-2013							
General Fund	$0.0	$0.0	$0.0	$0.0	$0.1	$0.0	$0.1
Non-General Fund	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total State	**$0.1**	**$0.0**	**$0.0**	**$0.0**	**$0.1**	**$0.0**	**$0.2**
Local Government	0.1	0.0	0.0	0.0	0.1	0.0	0.2
Total Employer	**$0.1**	**$0.0**	**$0.1**	**$0.0**	**$0.2**	**$0.0**	**$0.4**
Total Employee	**$0.1**	**$0.0**	**$0.0**	**$0.0**	**$0.2**	**$0.0**	**$0.3**
2009-2034							
General Fund	$0.7	$0.2	$0.5	$0.0	$2.0	$0.0	$3.4
Non-General Fund	1.0	0.0	0.0	0.0	0.0	0.1	1.1
Total State	**$1.6**	**$0.2**	**$0.5**	**$0.0**	**$2.0**	**$0.2**	**$4.5**
Local Government	1.7	0.1	0.6	0.0	2.9	0.0	5.4
Total Employer	**$3.4**	**$0.4**	**$1.1**	**$0.0**	**$4.9**	**$0.2**	**$9.9**
Total Employee	**$2.3**	**$0.2**	**$0.6**	**$0.0**	**$4.9**	**$0.2**	**$8.2**

Note: Totals may not agree due to rounding.

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

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

HOW THE RESULTS CHANGE WHEN THE ASSUMPTIONS CHANGE

To determine the sensitivity of the actuarial results to the best-estimate assumptions used in this pricing, we varied the duty-related death assumption for LEOFF 2. We chose LEOFF 2 for our sensitivity testing for two reasons:

1. We developed our current duty-related death assumptions for LEOFF 2 in 2006 and 2007 in response to new laws for duty-related injuries and illnesses. We have not had sufficient experience in the plan to determine if these assumptions are accurate in the long-term. As a result, there is a higher risk for this pricing with LEOFF 2.

2. If we experience any catastrophic events impacting duty-related injuries or illnesses that result in death, we expect this will affect our law enforcement officers and fire fighters. A single catastrophic event, while short-term, could add a significant cost to the plan, particularly with lump-sum benefits.

We changed the duty-related death assumption by doubling the rate of deaths that we expect will result from a duty-related injury or illness. We did not increase our mortality assumptions, only the number of deaths that are duty-related. The next table shows our current assumptions ("Base Assumptions") and increased assumptions ("Sensitivity Assumptions").

	Base Assumptions	Sensitivity Assumptions
Duty Death Rate	0.0376%	0.0752%
Occupational Disease Death Rate (Fire Fighters only)		
Age 20-49	14.742%	29.484%
Age 50+	27.393%	54.786%

The result of increasing the rate of deaths from a duty-related injury or illness is detailed in the following table. We compare the assumptions used in this bill ("Best Estimate Pricing") with the increased assumptions ("Sensitivity Pricing") to show the sensitivity of this pricing bill on the duty-related death assumptions.

(Dollars in Millions)	Best Estimate Pricing	Sensitivity Pricing
Liability Increase	$1.5	$2.4
Contribution Rate Increase		
Employee	0.005%	0.008%
Employer	0.003%	0.005%
State	0.002%	0.003%
Budget Impacts		
2009-2011		
General Fund - State	$0.0	$0.0
Total Employer	$0.0	$0.3

There is also a possibility that fewer duty-related deaths will occur than we assume for LEOFF 2 in the future. If we tested lower rates, we would expect lower costs than our pricing of this bill shows.

ACTUARY'S CERTIFICATION

The undersigned hereby certifies that:

1. The actuarial cost and asset valuation 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 draft fiscal note for the Legislature during the 2009 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 on page 1 of this fiscal note.

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

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 liability. The normal cost is determined for the entire 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 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).

Projected Benefits: Pension benefit amounts which 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.

Individual State Agency Fiscal Note

Bill Number: 1547 E HB	Title: Duty-related death benefit	Agency: 124-Department of Retirement Systems

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: 03/09/2009
Agency Preparation:	Chris Lamb	Phone: 360-664-7282	Date: 03/10/2009
Agency Approval:	Cathy Cale	Phone: 360-664-7305	Date: 03/10/2009
OFM Review:	Ryan Black	Phone: 360-902-0417	Date: 03/10/2009

Request # 09-056-1

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.

This bill increases the current duty-related death benefit for public employees from $150,000 to $175,000.

The increase applies to members of the Law Enforcement Officers' and Fire Fighters' Retirement System (LEOFF), Teachers' Retirement System (TRS), School Employees' Retirement System (SERS), Public Safety Employees' Retirement System (PSERS), Public Employees' Retirement System (PERS), and the Washington State Patrol Retirement System (WSPRS). This increase would take effect 90 days after adjournment of the session in which the bill is passed.

This change does not have a fiscal impact on the Department of Retirement Systems.

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

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.