

Multiple Agency Fiscal Note Summary

Bill Number: 1390 E HB	Title: PERS/TRS 1 benefit increase
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Estimated Cash Receipts

NONE

Estimated Operating Expenditures

Agency Name	2019-21			2021-23			2023-25		
	FTEs	GF-State	Total	FTEs	GF-State	Total	FTEs	GF-State	Total
Department of Retirement Systems	.2	0	52,608	.0	0	0	.0	0	0
Actuarial Fiscal Note - State Actuary	.0	17,100,000	20,100,000	.0	37,500,000	45,200,000	.0	40,600,000	48,700,000
Total \$	0.2	17,100,000	20,152,608	0.0	37,500,000	45,200,000	0.0	40,600,000	48,700,000

Estimated Capital Budget Expenditures

Agency Name	2019-21			2021-23			2023-25		
	FTEs	Bonds	Total	FTEs	Bonds	Total	FTEs	Bonds	Total
Department of Retirement Systems	.0	0	0	.0	0	0	.0	0	0
Actuarial Fiscal Note - State Actuary	.0	0	0	.0	0	0	.0	0	0
Total \$	0.0	0	0	0.0	0	0	0.0	0	0

Estimated Capital Budget Breakout

NONE

Prepared by: Jane Sakson, OFM	Phone: 360-902-0549	Date Published: Final 2/24/2020
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Individual State Agency Fiscal Note

Bill Number: 1390 E HB	Title: PERS/TRS 1 benefit increase	Agency: 124-Department of Retirement Systems
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Part I: Estimates

No Fiscal Impact

Estimated Cash Receipts to:

NONE

Estimated Operating Expenditures from:

	FY 2020	FY 2021	2019-21	2021-23	2023-25
FTE Staff Years	0.0	0.4	0.2	0.0	0.0
Account					
Department of Retirement Systems Expense Account-State 600-1	0	52,608	52,608	0	0
Total \$	0	52,608	52,608	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: 02/24/2020
Agency Preparation: Seth Miller	Phone: 360-664-7304	Date: 02/24/2020
Agency Approval: Mark Feldhausen	Phone: 360-664-7194	Date: 02/24/2020
OFM Review: Jane Sakson	Phone: 360-902-0549	Date: 02/24/2020

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 provides retirees of Plan 1 of the Public Employees' Retirement System (PERS) and Teachers' Retirement System (TRS) who are receiving a monthly benefit on July 1, 2019 a one-time benefit adjustment of three percent multiplied by their monthly benefit, not to exceed \$62.50, effective July 1, 2020.

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 will require a new one-time process to create a permanent increase to PERS Plan 1 and TRS Plan 1 benefits calculated on their current monthly benefit including eligible adjustments.
- Retirees who have the Auto COLA or Age 65 COLA will be eligible for this increase.
 - The Auto COLA or Age 65 COLA will be applied first, and the new increase will be calculated after that.
 - Future Auto COLA or age 65 COLA increases will not include this increase.
- The increase will be included when determining future Adjusted Minimum Benefit (AMB) and Minimum Benefit Increase (BMI) eligibility.
 - Eligibility for the July 2020 minimum increase will be determined before this one-time increase is applied.
 - Since AMBs are applied monthly, some customers may be granted an AMB increase after July 1, 2020. In an effort to prevent overpayments, we will continue to apply as normal and a report will be created after applying the new increase. This report will identify accounts who received an AMB adjustment after July 1, 2020 of less than \$62.50. A manual comparison of the two increases will be conducted. If the new increase results in a larger benefit, the account will be manually adjusted.
- The increase will not be given to PERS Plan 1 and TRS Plan 1 accounts that are receiving a minimum increase (AMB/BMI), or temporary disability retirements.
- All prior Uniform COLAs and gain sharing increases will be included in calculating the increase.
- This increase will not apply to future CPI-Based COLAs, so banking will not apply because this is an increase, not a COLA.

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

BENEFITS/CUSTOMER SERVICE

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

and training materials. RSs will review a report to compare and adjust accounts which may be affected between the effective date of the bill and the retroactive implementation. RSs will provide additional customer service to respond to a higher volume of customer calls when this legislation goes into effect.

Retirement Specialist 3 – 390 hours (salary/benefits) = \$16,031

MEMBER COMMUNICATIONS

DRS Communication team will update publications and the agency’s website to communicate changes to impacted retirees.

Communications Consultant 5 – 40 hours (salaries/benefits) = \$2,182

AUTOMATED SYSTEMS

The agency’s Benefit System will need to be modified to apply the adjustment. System testing and user acceptance testing will be needed.

Contracted Programmer time of 61 hours @ \$105 per hour = \$6,405
 IT Business Systems Analyst - Journey – 225 hours (salaries/benefits) = \$13,901
 WaTech* cost of \$500 per week for 7 weeks = \$3,500

Total Estimated Automated Systems Costs = \$23,806

*cost for mainframe computer processing time and resources at WaTech

PROJECT MANAGEMENT

A project manager will be assigned to lead the project team through the planning, execution, implementation, close out and monitoring of the business, systems, communications and administrative rules changes made to meet the provisions of this bill.

Project Manager – 137 hours (salaries/benefits) = \$10,589

ESTIMATED TOTAL COST TO IMPLEMENT THIS BILL: \$52,608

Part III: Expenditure Detail

III. A - Operating Budget Expenditures

Account	Account Title	Type	FY 2020	FY 2021	2019-21	2021-23	2023-25
600-1	Department of Retirement Systems Expense Account	State	0	52,608	52,608	0	0
Total \$			0	52,608	52,608	0	0

III. B - Expenditures by Object Or Purpose

	FY 2020	FY 2021	2019-21	2021-23	2023-25
FTE Staff Years		0.4	0.2		
A-Salaries and Wages		31,604	31,604		
B-Employee Benefits		11,099	11,099		
C-Professional Service Contracts		6,405	6,405		
E-Goods and Other Services		3,500	3,500		
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-					
Total \$	0	52,608	52,608	0	0

III. C - Operating FTE 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 2020	FY 2021	2019-21	2021-23	2023-25
Communications Consultant 5	84,396		0.0	0.0		
IT Business Systems Analyst-Journey	96,888		0.1	0.1		
IT Project Manager-Manager	123,636		0.1	0.0		
Retirement Specialist 3	61,224		0.2	0.1		
Total FTEs			0.4	0.2		0.0

III. D - Expenditures By Program (optional)

NONE

Part IV: Capital Budget Impact

IV. A - Capital Budget Expenditures

NONE

IV. B - Expenditures by Object Or Purpose

NONE

IV. C - Capital Budget Breakout

Identify acquisition and construction costs not reflected elsewhere on the fiscal note and describe potential financing methods

NONE

Part V: New Rule Making Required

Individual State Agency Fiscal Note

Bill Number: 1390 E HB	Title: PERS/TRS 1 benefit increase	Agency: AFN-Actuarial Fiscal Note - State Actuary
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Part I: Estimates

No Fiscal Impact

Estimated Cash Receipts to:

NONE

Estimated Operating Expenditures from:

	FY 2020	FY 2021	2019-21	2021-23	2023-25
Account					
All Other Funds-State 000-1	0	3,000,000	3,000,000	7,700,000	8,100,000
General Fund-State 001-1	0	17,100,000	17,100,000	37,500,000	40,600,000
Total \$	0	20,100,000	20,100,000	45,200,000	48,700,000

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:	Phone:	Date: 02/24/2020
Agency Preparation: Aaron Gutierrez	Phone: 360-786-6152	Date: 02/24/2020
Agency Approval: Luke Masselink	Phone: 360-786-6154	Date: 02/24/2020
OFM Review: Jane Sakson	Phone: 360-902-0549	Date: 02/24/2020

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 - Operating Budget Expenditures

Account	Account Title	Type	FY 2020	FY 2021	2019-21	2021-23	2023-25
000-1	All Other Funds	State	0	3,000,000	3,000,000	7,700,000	8,100,000
001-1	General Fund	State	0	17,100,000	17,100,000	37,500,000	40,600,000
Total \$			0	20,100,000	20,100,000	45,200,000	48,700,000

III. B - Expenditures by Object Or Purpose

	FY 2020	FY 2021	2019-21	2021-23	2023-25
FTE Staff Years					
A-Salaries and Wages					
B-Employee Benefits		20,100,000	20,100,000	45,200,000	48,700,000
C-Professional Service Contracts					
E-Goods and Other 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	20,100,000	20,100,000	45,200,000	48,700,000

III. C - Operating FTE Detail: List FTEs by classification and corresponding annual compensation. Totals need to agree with total FTEs in Part I and Part IIIA

NONE

III. D - Expenditures By Program (optional)

NONE

Part IV: Capital Budget Impact

IV. A - Capital Budget Expenditures

NONE

IV. B - Expenditures by Object Or Purpose

NONE

IV. C - Capital Budget Breakout

Identify acquisition and construction costs not reflected elsewhere on the fiscal note and describe potential financing methods

NONE

Part V: New Rule Making Required

SUMMARY OF RESULTS

BRIEF SUMMARY OF BILL: For all eligible PERS 1 and TRS 1 retirees, this bill enacts a one-time permanent increase equal to 3.0 percent of their benefit, not to exceed a maximum of \$62.50 per month.

COST SUMMARY

Impact on Contribution Rates (Effective 9/1/2020)				
System/Plan	PERS	TRS	SERS	PSERS
Plan 1 UAAL	0.11%	0.23%	0.11%	0.11%

Consistent with [RCW 41.45.070](#), PERS, PSERS, SERS, and TRS employers will fund the cost of this benefit improvement through a supplemental contribution rate starting September 1, 2020. There is no impact to employee rates as a result of this bill.

Budget Impacts			
(Dollars in Millions)	2020-2021	2021-2023	10-Year
General Fund-State	\$17.1	\$37.5	\$212.4
Local Government	\$9.7	\$23.0	\$127.4
Total Employer	\$29.8	\$68.1	\$381.4

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

- ❖ This bill results in a cost to the retirement systems because it provides larger benefits to eligible PERS 1 and TRS 1 annuitants than the benefits provided under current law.
- ❖ Because the increased benefits under this bill were not anticipated or funded during affected members' careers, the bill will increase the UAAL in PERS 1 and TRS 1.
- ❖ Approximately 45 percent of eligible annuitants will receive a 3 percent increase in benefits while the remaining 55 percent will receive the \$62.50 per month cap.
- ❖ Based on the data, assumptions, and methods disclosed in the fiscal note, the bill increases the PERS 1 UAAL by \$129.9 million and the TRS 1 UAAL by \$132.0 million (on a present value basis). Consistent with current funding policy, the increase in the PERS 1 and TRS 1 UAAL rates described in the above table will be collected over a ten-year period.
- ❖ The cost of this bill could vary from our best estimate if actual experience varies from our assumptions. For more information, please see the **How The Results Change When The Assumptions Change** section of the fiscal note.

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

This bill impacts the following systems:

- ❖ Public Employees' Retirement System (PERS) Plan 1.
- ❖ Teachers' Retirement System (TRS) Plan 1.

This bill enacts a one-time permanent increase to monthly retirement benefits for members of the PERS 1 and TRS 1 systems of 3.0 percent multiplied by their monthly benefit, not to exceed \$62.50, for all members who received a monthly benefit on July 1, 2019. Annuitants receiving Basic Minimum, Alternate Minimum, or temporary disability benefits are not eligible for the benefit increase under this bill.

Effective Date: July 1, 2020.

HOW THE ENGROSSED VERSION DIFFERS FROM THE ORIGINAL VERSION

The substitute rolls the dates forward one year and removes the emergency clause.

What Is The Current Situation?

Before it was repealed in 2011, the primary Cost-Of-Living Adjustment (COLA) provided in Plans 1 was the Uniform COLA (UCOLA). The UCOLA was a fixed dollar amount multiplied by the member's total Years Of Service (YOS) and increased annually by 3 percent every July 1. The UCOLA was payable on the first calendar year in which the recipient turned age 66 and had been retired for one year. By July 1, 2010, the UCOLA was \$1.88 per month/per year of service. This amounted to an annual increase of \$677.00 for a recipient with 30 YOS.

Statute specified that future increases to the UCOLA were not a contractual right and the Legislature exercised the option to discontinue the UCOLA for most plan members during the 2011 Legislative Session.

Currently, the PERS and TRS Plans 1 provide automatic COLAs under two types of minimum retirement benefits only: The Basic Minimum and the Alternate Minimum.

The Basic Minimum is a fixed dollar amount per month multiplied by the member's total YOS and increases on July 1 every year by the dollar amount of the UCOLA. The Basic Minimum is currently \$62.35*. If a member's benefit falls below this amount, they receive the UCOLA annual increase, which is \$2.46 per month per year of service as of July 1, 2019.

The Alternate Minimum is a fixed dollar amount per month (currently \$1,957.15*) that increases by 3 percent each year. Eligible members must have at least:

- ❖ 20 YOS and be retired for at least 25 years, or
- ❖ 25 YOS and be retired for at least 20 years.

An optional Consumer Price Index (CPI)-based COLA is available to the Plans 1 members who elect it at retirement. The optional COLA was first made available in 1990 and provides an annual percentage increase in the retirement allowance. The increase is based on changes in the CPI for Urban Wage Earners and Clerical Workers for the Seattle area, up to a maximum of 3 percent per year. The optional COLA begins one year after retirement—regardless of age or service—and is in addition to any other COLAs received. Members who elect the optional COLA receive an actuarially reduced retirement allowance to offset the expected cost of the COLA over their lifetime.

In the 2018 Legislative Session, the Legislature passed [SSB 6340](#) (Chapter 151, Laws of 2018), which provided a 1.5 percent COLA capped at \$62.50 for Plans 1 members not receiving a minimum benefit who had been retired for a year as of July 1, 2018. This one-time COLA went into effect on July 1, 2018.

**As of July 1, 2019. Note: The Alternate and Basic Minimum amounts are adjusted if the member elects voluntary payment options upon retirement. Throughout this fiscal note, we refer to the Basic and Alternate Minimum amounts prior to any voluntary reductions.*

Who Is Impacted And How?

As of June 30, 2018, we expect this bill would affect retirement benefits of approximately 33,500 out of the 46,900 PERS 1 annuitants and 29,500 out of the 33,400 TRS 1 annuitants. This bill will increase the benefits for a typical annuitant by providing a one-time COLA during retirement. The table below shows the number of annuitants expected to receive a 3 percent increase and the \$62.50 per month cap. Most eligible annuitants would receive the \$62.50 per month increase. Annuitants receiving less than approximately \$2,085 per month (\$25,000 per year) would receive a 3 percent COLA.

Estimated Members Impacted as of June 30, 2018		
	PERS 1	TRS 1
Total Annuitants in System	46,900	33,400
Annuitants not Receiving Minimum Benefit	33,500	29,500
Annuitants to receive 3.0% COLA	14,000	13,300
Annuitants to receive \$62.50 per month cap	19,500	16,200

This bill impacts all PERS, the Public Safety Employees' Retirement System (PSERS), the School Employees' Retirement System (SERS), TRS, and employers through increased Unfunded Actuarial Accrued Liability (UAAL) contribution rates. This bill will not affect member contribution rates.

WHY THIS BILL HAS A COST AND WHO PAYS FOR IT

Why This Bill Has A Cost

This bill has a cost because it provides larger benefits for eligible PERS and TRS Plans 1 annuitants than the benefits provided under current law.

Who Will Pay For These Costs?

The costs that result from this bill will be paid by employers of PERS, PSERS, SERS, TRS and according to the standard funding method. PERS, PSERS, and SERS employers make PERS 1 UAAL payments, whereas TRS employers make TRS 1 UAAL payments.

HOW WE VALUED THESE COSTS

Assumptions We Made

We developed these costs using the same assumptions as disclosed in the [June 30, 2018, Actuarial Valuation Report](#) (AVR), [Projection Disclosures](#), and [Risk Assessment Assumption Study](#) available on our website.

We also made an adjustment for assumed demographic changes from the valuation date, June 30, 2018, to the effective date of this bill, July 1, 2020. Based on projections of the 2018 AVR, which take into account expected mortality and new retirements, we estimate the total annuitant population on July 1, 2020, will be approximately 4 percent smaller in both PERS 1 and TRS 1.

How We Applied These Assumptions

The fiscal impact of this bill represents the change in projected contributions. To estimate the fiscal impact of this bill, we compared projected pension contributions under current law to the projected contributions we expect under this bill. The projected pension contributions reflect contributions collected over current members as well as future hires payroll.

- ❖ To determine the projected contributions under current law, or the “base”, we relied on the AVR. For current members, contribution rates from the AVR are multiplied by future payroll.
- ❖ To determine the projected costs under this bill, we modified the programming to reflect the increased benefits from the one-time COLA under this bill. We adjusted our valuation such that all currently retired members not already receiving a COLA through the Basic or Alternate Minimum monthly benefit, receive a one-time 3 percent COLA subject to a \$62.50 monthly cap. We then multiplied the respective new contribution rates reflecting these changes by future payroll.

To reflect the impact of assumed demographic changes to the Plans 1 populations, we reduced the liability impact from this bill by 4 percent for both plans. This adjustment decreased the UAAL rounded supplemental rate in TRS Plan 1 by one basis point but did not impact the rounded rate in PERS Plan 1.

Lastly, we amortized the cost of this benefit improvement over a fixed ten-year period, consistent with PERS and TRS Plan 1 funding policy for benefit improvements.

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

Special Data Needed

There was no special data needed for this pricing.

ACTUARIAL RESULTS

How The Liabilities Changed

This bill will impact the actuarial funding of PERS 1 and TRS 1 by increasing the present value of future benefits payable to the members. The impact of the increasing present value of future benefits payable for current members is shown below.

Impact on Pension Liability			
<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	\$11,999	\$129.9	\$12,129
TRS 1	\$8,598	\$132.0	\$8,730
Unfunded Actuarial Accrued Liability			
<i>(The Portion of the Plan 1 Liability that is Amortized According to Funding Policy)*</i>			
PERS 1	\$4,563	\$129.9	\$4,693
TRS 1	\$3,050	\$132.0	\$3,182
Unfunded Entry Age Accrued 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	\$4,749	\$129.9	\$4,879
TRS 1	\$3,183	\$132.0	\$3,315

*Note: Totals may not agree due to rounding.
PERS 1 and TRS 1 are amortized over a ten-year period.

How The Assets Changed

This bill does not change current asset values, so there is no impact on the actuarial funding of the affected plans due to asset changes.

How The Present Value Of Future Salaries (PVFS) Changed

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

How Contribution Rates Changed

The rounded increase in the required actuarial contribution rate results in the supplemental contribution rate shown on page one that applies in the current biennium. This fixed rate is collected for a ten-year period consistent with how benefit improvements are funded in PERS 1 and TRS 1 under [RCW 41.45.070](#).

Impact on Contribution Rates (Effective 9/1/2020)				
System/Plan	PERS	TRS	SERS	PSERS
Current Members				
Employee (Plan 2)	0.00%	0.00%	0.00%	0.00%
Employer				
Normal Cost	0.00%	0.00%	0.00%	0.00%
Plan 1 UAAL	0.11%	0.23%	0.11%	0.11%
Total	0.11%	0.23%	0.11%	0.11%
New Entrants*				
Employee (Plan 2)	0.00%	0.00%	0.00%	0.00%
Employer				
Normal Cost	0.00%	0.00%	0.00%	0.00%
Plan 1 UAAL	0.11%	0.23%	0.11%	0.11%
Total	0.11%	0.23%	0.11%	0.11%

**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	Total
2020-2021					
General Fund	\$2.0	\$13.3	\$1.5	\$0.2	\$17.1
Non-General Fund	3.0	0.0	0.0	0.0	3.0
Total State	\$5.0	\$13.3	\$1.5	\$0.2	\$20.1
Local Government	5.7	2.7	1.0	0.3	9.7
Total Employer	\$10.7	\$16.1	\$2.5	\$0.5	\$29.8
Total Employee	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2021-2023					
General Fund	\$5.0	\$28.5	\$3.4	\$0.6	\$37.5
Non-General Fund	7.5	0.0	0.0	0.1	7.6
Total State	\$12.6	\$28.5	\$3.4	\$0.7	\$45.1
Local Government	14.3	5.8	2.2	0.7	23.0
Total Employer	\$26.8	\$34.3	\$5.5	\$1.4	\$68.1
Total Employee	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
2020-2030					
General Fund	\$27.4	\$163.1	\$18.5	\$3.5	\$212.4
Non-General Fund	41.1	0.0	0.0	0.5	41.6
Total State	\$68.5	\$163.1	\$18.5	\$4.0	\$254.0
Local Government	77.9	33.4	11.8	4.3	127.4
Total Employer	\$146.3	\$196.5	\$30.3	\$8.3	\$381.4
Total Employee	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0

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 to the systems. The combined effect of several changes to the systems could exceed the sum of each proposed change considered individually.

Comments On Risk

Our office performs annual risk assessments to help us demonstrate and assess the effect of unexpected experience on pension plans. The risk assessment allows us to measure how affordability and funded status can change if investment experience, expected state revenue growth, and inflation do not match our long-term assumptions. Our annual risk assessment also considers past practices, for funding and benefit enhancements, and their impact on pension plan risk if those practices continue.

The table below displays our latest risk measurements as of June 30, 2018. The figures in this table were not reproduced for this bill. For more information, please see our [Risk Assessment](#) and [Commentary on Risk](#) webpages and the **Glossary**.

Select Measures of Pension Risk as of June 30, 2018		
	FY 2019-38	FY 2039-68
Affordability Measures		
Chance of Pensions Double their Current Share of GF-S*	<1%	1%
Chance of Pensions Half their Current Share of GF-S*	55%	52%
Solvency Measures		
Chance of PERS 1 or TRS 1 in Pay-Go**	8%	12%
Chance of Any Open Plan in Pay-Go**	<1%	1%
Chance of PERS 1, TRS 1 Total Funded Status Below 60%	22%	18%
Chance of Open Plans Total Funded Status Below 60%	21%	27%

*Pensions approximately 5.9% of current GF-S budget; does not include higher education.

**When today's value of annual pay-go cost exceeds \$50 million.

Increasing PERS 1 and TRS 1 annuitant benefits will increase the chance of those plans entering pay-go status as well as increase the cost of benefits required if the plan enters pay-go. We expect the short-term impact to funded status from this bill to be an immediate reduction of the PERS and TRS Plans 1 funded status by approximately 1 percent each.

Similar to [SSB 6340](#) passed in 2018, this bill provides a one-time, permanent increase in benefits for eligible annuitants. If the Legislature develops a repeated pattern of providing similar ad-hoc COLAs in the future, it could have a significant impact to short-term budgets, projected Plan 1 pay-off dates, and the pension risk measures. Furthermore, the Office of the State Actuary may be required to reflect an assumption of future COLAs when preparing the financial reporting under the Government Accounting Standards Board requirements.

HOW THE RESULTS CHANGE WHEN THE ASSUMPTIONS CHANGE

The best estimate results can vary under a different set of assumptions. To determine the sensitivity of the actuarial results to the best estimate assumptions selected for this pricing we varied the following assumptions:

- ❖ Future Investment Return.
- ❖ Mortality.
- ❖ System Membership Growth.

If the plan realizes investment returns higher than the prescribed long-term assumption of 7.5 percent per year, then the costs of this bill will be less than the costs shared on page one of this fiscal note. Conversely, if the plan realizes investment returns lower than the prescribed long-term assumption of 7.5 percent per year, then the costs of this bill will be more expensive.

Similar to changes in investment returns, if members of PERS 1 and TRS 1 live longer than expected, the costs of this bill will be more expensive than the costs shared on page one. Conversely, if members of PERS 1 and TRS 1 live shorter than expected, the costs of this bill will be less expensive.

The table below outlines how the liability impacts attributable to this bill change when we assume the investment return is 1 percent lower or higher than the prescribed assumption.

Impact of Higher/Lower Assumed Returns on Pension Liability			
(Dollars in Millions)	Higher 8.5%	Best Estimate 7.5%	Lower 6.5%
PERS 1	\$123.7	\$129.9	\$136.8
Percent Change from Best Estimate	(4.8%)		5.3%
TRS 1	\$125.6	\$132.0	\$139.1
Percent Change from Best Estimate	(4.8%)		5.3%

Likewise, the table below outlines how the liability impacts attributable to this bill change when we assume higher or lower rates of future mortality than our best estimate for service retirees and beneficiaries. For higher mortality, we assumed members experience mortality as if they were one year older than their current age under our best estimate. Similarly, for lower mortality, we assumed members experience mortality as if they were one year younger.

Impact of Higher/Lower Assumed Mortality on Pension Liability			
(Dollars in Millions)	Higher Mortality	Best Estimate	Lower Mortality
PERS 1	\$127.9	\$129.9	\$131.7
Percent Change from Best Estimate	(1.5%)		1.4%
TRS 1	\$130.2	\$132.0	\$133.7
Percent Change from Best Estimate	(1.4%)		1.3%

If the liability increase from this bill is more or less than expected, it will be funded through higher/lower UAAL contributions as defined in [RCW 41.45.010](#). This can occur up to and beyond the ten-year supplemental rate period as required to fund the estimated cost of the bill. Under current law, the supplemental rate described on page one, or how long that supplemental rate is collected, will not change if the liability increase from this bill is more or less than expected.

For example, if future investments return 6.5 percent instead of 7.5 percent per year, the costs associated with this bill will increase by approximately \$7.0 million for PERS 1 and TRS 1 on a present value basis. Therefore, the ten-year funding of the supplemental rate, under this example, would fall short of collecting the full cost of this bill and the remaining unfunded costs from this bill would be funded through higher UAAL contributions.

We relied on the economic assumptions adopted by the Pension Funding Council to calculate the UAAL rate increase to fund this benefit improvement. Updates to the economic assumptions were recommended as part of our [2019 Economic Experience Study](#) but were not adopted. Recommendations included lowering the assumed rate of return from 7.5 percent to 7.4 percent and the TRS Plan 2/3 system growth assumption from 1.25 percent to 0.95 percent. The TRS Plan 2/3 system growth assumption can impact the UAAL rate calculation since all TRS

employers pay the TRS UAAL rate. A lower system growth assumption means less anticipated future salaries to fund the benefit improvement and therefore a higher UAAL rate might be needed. The table below shows the UAAL rate increase under the current and recommended set of economic assumptions.

UAAL Rate Under Different Economic Assumptions		
	Current Economic Assumptions	Recommended Economic Assumptions
PERS 1	0.11%	0.11%
TRS 1	0.23%	0.24%

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 2020 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 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. The risk analysis summarized in this fiscal note involves the interpretation of many factors and the application of professional judgment. We believe that the data, assumptions, and methods used in our risk assessment model are reasonable and appropriate for the purposes of this pricing exercise. The use of another set of data, assumptions, and methods, however, could also be reasonable and could produce different results.
6. We prepared this fiscal note for the Legislature during the 2020 Legislative Session.
7. 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.



Luke Masselink, ASA, EA, 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 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 EAN Liability: The excess, if any, of the present value of benefits calculated under the EAN cost method over the valuation assets. This is the portion of all benefits earned to date that are not covered by plan assets.

GLOSSARY OF RISK TERMS

Affordability Risk: Measures the affordability of the pension systems. Affordability risk measures the chance that pension contributions will cross certain thresholds with regards to the General Fund and contribution rates.

“Current Law”: Scenarios in which assumptions about legislative behavior are excluded. These scenarios show projections regarding the current state of Washington statutes.

Funded Status: The ratio of a plan's current assets to the present value of earned pensions. There are several acceptable methods of measuring a plan's assets and liabilities. In financial reporting of public pension plans, funded status is reported using consistent measures by all governmental entities. According to the Government Accounting Standards Board (GASB), the funded ratio equals the actuarial value of assets divided by the actuarial accrued liability calculated under the allowable actuarial methods.

Optimistic: A measurement of the pension system under favorable conditions (above expected investment returns, for example). Optimistic refers to the 75th percentile, where there is a 25 percent chance of the measurement being better and 75 percent chance of the measurement being worse. Very optimistic refers to the 95th percentile.

“Past Practices”: Scenarios in which assumptions regarding legislative behavior are introduced. These assumptions include actual contributions below what are actuarially required and improving benefits over time. These scenarios are meant to project past behavior into the future.

Pay-Go: The trust fund runs out of assets, and payments from the General Fund must be made to meet contractual obligations.

Pessimistic: A measurement of the pension system under unfavorable conditions (below expected investment returns, for example). Pessimistic refers to the 25th percentile, where there is a 75 percent chance of the measurement being better and 25 percent chance of the measurement being worse. Very pessimistic refers to the 5th percentile.

Premature Pay-Go: Pay-go payments, measured in today's value, which might be considered “significant” in terms of the potential impact on the General Fund.

Risk Tolerance: The amount of risk an individual or group is willing to accept with regards to the likelihood and severity of unfavorable outcomes.

Solvency Risk: Measures the risk metrics of the pension systems, including the chance that the pension systems will prematurely run out of assets, the amount of potential pay-go contributions, and the chance that the funded status will cross a certain threshold.