Multiple Agency Fiscal Note Summary

Bill Number: 1459 HB	**Title:** PERS & TRS plan 1 adjustment

Estimated Cash Receipts

NONE

Estimated Operating Expenditures

Agency Name	2023-25				2025-27				2027-29			
	FTEs	GF-State	NGF-Outlook	Total	FTEs	GF-State	NGF-Outlook	Total	FTEs	GF-State	NGF-Outlook	Total
Department of Retirement Systems	1.5	0	0	415,000	.0	0	0	0	.0	0	0	0
Actuarial Fiscal Note - State Actuary	.0	351,500,000	351,500,000	426,100,000	.0	135,000,000	135,000,000	141,200,000	.0	440,700,000	440,700,000	532,600,000
Total $	**1.5**	**351,500,000**	**351,500,000**	**426,515,000**	**0.0**	**135,000,000**	**135,000,000**	**141,200,000**	**0.0**	**440,700,000**	**440,700,000**	**532,600,000**

Estimated Capital Budget Expenditures

Agency Name	2023-25			2025-27			2027-29		
	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: Marcus Ehrlander, OFM	**Phone:** (360) 489-4327	**Date Published:** Final

FNPID 66041

Individual State Agency Fiscal Note

Bill Number: 1459 HB	Title: PERS & TRS plan 1 adjustment	Agency: 124-Department of Retiremen Systems

Part I: Estimates

☐ **No Fiscal Impact**

Estimated Cash Receipts to:

NONE

Estimated Operating Expenditures from:

	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years	2.8	0.2	1.5	0.0	0.0
Account					
Department of Retirement Systems Expense Account-State 600-1	383,000	32,000	415,000	0	0
Total $	383,000	32,000	415,000	0	0

Estimated Capital Budget Impact:

NONE

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

Check applicable boxes and follow corresponding instructions:

☒ If fiscal impact is greater than $50,000 per fiscal year in the current biennium or in subsequent biennia, complete entire fiscal note form Parts I-V.

☐ If fiscal impact is less than $50,000 per fiscal year in the current biennium or in subsequent biennia, complete this page only (Part I).

☐ Capital budget impact, complete Part IV.

☒ Requires new rule making, complete Part V.

Legislative Contact:	David Pringle	Phone: 360-786-7310	Date: 01/19/2023
Agency Preparation:	Amy McMahan	Phone: 360-664-7307	Date: 01/24/2023
Agency Approval:	Tracy Guerin	Phone: 360-664-7312	Date: 01/24/2023
OFM Review:	Marcus Ehrlander	Phone: (360) 489-4327	Date: 01/26/2023

Part II: Narrative Explanation

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

Significant provisions of the bill and any related workload or policy assumptions that have revenue or expenditure impact on the responding agency by section number.

This bill provides an additional ongoing cost of living adjustment (COLA) to be applied to Plan 1 of the Public Employees' Retirement System (PERS) and Teachers' Retirement System (TRS), capped at $110 per month.

Section 2(1) edits 41.32 RCW and provides the formula used to determine the ongoing COLA for TRS Plan 1 retirees. Section 2(2) includes stipulations for the COLA, declaring that it cannot bring the retirement allowance lower than its original amount, exceed 3% of the initial annual adjustment and have a difference of more than 3% from the previous year, nor can it increase the recipient's monthly benefit by more than $110 from the previous year's monthly benefit.

Additionally, Section 3 edits 41.40 RCW to provide the formula used to determine the ongoing COLA for PERS Plan 1 retirees. The stipulations above for TRS Plan 1 retirees are included in this section for PERS Plan 1 retirees as well.

Lastly, Section 6 establishes an effective date of July 1, 2023.

NOTE: due to the complexity of the required modifications to the Department of Retirement Systems' (DRS') automated systems we estimate that we will need to complete almost 2000 hours of system development. Therefore, the agency will not be able to implement these changes by July 1, 2023 so DRS will need to pay a retroactive COLA for July 2023 once the system changes are completed.

II. B - Cash receipts Impact

Cash receipts impact of the legislation on the responding agency with the cash receipts provisions identified by section number and when appropriate, the detail of the revenue sources. Description of the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explanation of how workload assumptions translate into estimates. Distinguished between one time and ongoing functions.

II. C - Expenditures

Agency expenditures necessary to implement this legislation (or savings resulting from this legislation), with the provisions of the legislation that result in the expenditures (or savings) identified by section number. Description of the factual basis of the assumptions and the method by which the expenditure impact is derived. Explanation of how workload assumptions translate into cost estimates. Distinguished between one time and ongoing functions.

Administrative Assumptions:

- The permanent COLA will be considered and applied to all PERS Plan 1 and TRS Plan 1 accounts prospectively.
- Retirees who elected to receive the Auto-COLA can still qualify for the 3% permanent increase.
- The Auto-COLA and the new COLA will be calculated separately and not compounded.
- All prior Uniform, Minimum and Auto COLAs will be included in calculating the new COLA.
- Retirees who fall below the Adjusted Minimum Benefit (AMB) limit or the Minimum COLA (BMI) will continue to receive an adjustment unless the new COLA increases their benefit above the Adjusted Minimum Benefit limit. Eligibility for the minimum COLAs will be determined after the permanent COLA has been applied to the retirement benefit.
- The $110 limit declared in sections 2(2)(d) and 3(2)(d) is applicable to PERS Plan 1 and TRS Plan 1 retirees and survivor beneficiaries receiving a retirement benefit for at least one year by the effective date of July 1, 2023.
- The Office of the State Actuary (OSA) will continue to provide the COLA letter, which will include the calculated CPI amount for the Plan 1 permanent COLA as well.

To implement this legislation, DRS will:

- Confirm project scope and timeline, and conduct project implementation tasks,
- Conduct business analysis and business process design,
- Complete systems changes (which includes defining system requirements, coding system changes in our Linux

applications, testing and deployment),
- Identify impacted members,
- Update agency WACs,
- Update plan guides and all relevant letters, and web pages, and
- Train team members.

To support this implementation, DRS will form a project team that will include a project manager, business analyst, web programmer, Linux programmer, communication consultant, and retirement specialist.

Part III: Expenditure Detail

III. A - Operating Budget Expenditures

Account	Account Title	Type	FY 2024	FY 2025	2023-25	2025-27	2027-29
600-1	Department of Retirement Systems Expense Account	State	383,000	32,000	415,000	0	0
		Total $	383,000	32,000	415,000	0	0

III. B - Expenditures by Object Or Purpose

	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years	2.8	0.2	1.5		
A-Salaries and Wages	291,000	24,000	315,000		
B-Employee Benefits	92,000	8,000	100,000		
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 $	383,000	32,000	415,000	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 2024	FY 2025	2023-25	2025-27	2027-29
Communications Consultant 5	84,396	0.1	0.0	0.0		
IT Application Develop-Journey	96,888	0.2	0.0	0.1		
IT Application Develop-Snr/Spec	112,176	1.0	0.1	0.6		
IT Business Analyst-Journey	96,888	0.7	0.1	0.4		
IT Project Manager-Mgr	123,636	0.4	0.0	0.2		
Retirement Benefit Specialist 3	61,224	0.5	0.0	0.3		
Total FTEs		2.8	0.2	1.6		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

Acquisition and construction costs not reflected elsewhere on the fiscal note and description of potential financing methods.

NONE

IV. D - Capital FTE Detail: *FTEs listed by classification and corresponding annual compensation. Totals agree with total FTEs in Part IVB.*

NONE

Part V: New Rule Making Required

Provisions of the bill that require the agency to adopt new administrative rules or repeal/revise existing rules.

Relevant WACs will be updated accordingly.

Individual State Agency Fiscal Note

Bill Number: 1459 HB	Title: PERS & TRS plan 1 adjustment	Agency: AFN-Actuarial Fiscal Note - State Actuary

Part I: Estimates

☐ **No Fiscal Impact**

Estimated Cash Receipts to:

NONE

Estimated Operating Expenditures from:

		FY 2024	FY 2025	2023-25	2025-27	2027-29
Account						
All Other Funds-State	000-1	33,400,000	41,200,000	74,600,000	6,200,000	91,900,000
General Fund-State	001-1	156,800,000	194,700,000	351,500,000	135,000,000	440,700,000
	Total $	190,200,000	235,900,000	426,100,000	141,200,000	532,600,000

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: 01/19/2023
Agency Preparation:	Melinda Aslakson	Phone: 360-786-6161	Date: 01/26/2023
Agency Approval:	Matt Smith	Phone: 360-786-6147	Date: 01/26/2023
OFM Review:	Marcus Ehrlander	Phone: (360) 489-4327	Date: 01/26/2023

Part II: Narrative Explanation

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

Significant provisions of the bill and any related workload or policy assumptions that have revenue or expenditure impact on the responding agency by section number.

II. B - Cash receipts Impact

Cash receipts impact of the legislation on the responding agency with the cash receipts provisions identified by section number and when appropriate, the detail of the revenue sources. Description of the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explanation of how workload assumptions translate into estimates. Distinguished between one time and ongoing functions.

II. C - Expenditures

Agency expenditures necessary to implement this legislation (or savings resulting from this legislation), with the provisions of the legislation that result in the expenditures (or savings) identified by section number. Description of the factual basis of the assumptions and the method by which the expenditure impact is derived. Explanation of how workload assumptions translate into cost estimates. Distinguished between one time and ongoing functions.

Part III: Expenditure Detail

III. A - Operating Budget Expenditures

Account	Account Title	Type	FY 2024	FY 2025	2023-25	2025-27	2027-29
000-1	All Other Funds	State	33,400,000	41,200,000	74,600,000	6,200,000	91,900,000
001-1	General Fund	State	156,800,000	194,700,000	351,500,000	135,000,000	440,700,000
		Total $	190,200,000	235,900,000	426,100,000	141,200,000	532,600,000

III. B - Expenditures by Object Or Purpose

	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years					
A-Salaries and Wages					
B-Employee Benefits	190,200,000	235,900,000	426,100,000	141,200,000	532,600,000
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 $	190,200,000	235,900,000	426,100,000	141,200,000	532,600,000

III. C - Operating FTE Detail: *FTEs listed by classification and corresponding annual compensation. Totals 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

Acquisition and construction costs not reflected elsewhere on the fiscal note and description of potential financing methods.

NONE

IV. D - Capital FTE Detail: *FTEs listed by classification and corresponding annual compensation. Totals agree with total FTEs in Part IVB.*

NONE

Part V: New Rule Making Required

Provisions of the bill that require the agency to adopt new administrative rules or repeal/revise existing rules.

SUMMARY OF RESULTS

BRIEF SUMMARY OF BILL: For eligible PERS 1 and TRS 1 annuitants, this bill enacts a Plans 2/3 style Cost-Of-Living Adjustment (COLA) capped at $110 per month and prescribes, beginning July 1, 2023, an increase in the assumed rate of investment return used for pension funding of 7.2 percent for most plans.

COST SUMMARY

Impact on Contribution Rates *(Effective 9/1/2023)* *Due to Benefit Improvements Under this Bill*				
	PERS	**TRS**	**SERS**	**PSERS**
Plan 1 UAAL	0.97%	1.97%	0.97%	0.97%

The cost of the benefit improvement would be separately amortized over the next ten years through increased employer contribution rates. That cost will be offset, in the short-term, by an expected decrease in required contributions for all plans from the higher prescribed rate of return.

Budget Impacts			
(Dollars in Millions)	**2023-2025**	**2025-2027**	**2023-2033**
General Fund-State	$351.5	$135.0	$1,908.0
Local Government	197.9	56.2	1,044.4
Total Employer	**$624.0**	**$197.4**	**$3,328.5**

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

- The long-term cost of a pension plan equals (a) actual benefit payments and expenses minus (b) the actual returns on invested contributions.
- This bill would increase the actual cost of benefit payments for two plans.
  - We estimate the new COLA would increase the PERS 1 and TRS 1 UAAL by approximately $1.4 billion and $1.3 billion respectively.
  - The expected cost of the COLA is most sensitive to the assumed rate of investment return and the longevity of the impacted members. See the **How the Results Change When the Assumptions Change** section for additional information.
- This bill would prescribe a higher assumed long-term rate of investment return for most plans leading to lower expected short-term contribution requirements.
  - Long-term contribution requirements are based on actual long-term returns.
  - See **Appendix A** for additional information on the methods for determining the expected costs from assumption changes.
- Increasing the assumed long-term rate of investment return from 7.0 percent to 7.2 percent would decrease the total PVFB for all impacted plans by $4.1 billion if all assumptions are realized.
- This bill would change some financial risks for the pensions systems. See the **Comments on Risk** section for additional information.

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

WHAT IS THE PROPOSED CHANGE?

Summary of Bill

This bill impacts the following systems:

- 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 Plan 1 (LEOFF).
- Washington State Patrol Retirement System (WSPRS).

This bill provides current and future recipients of retirement benefits in PERS and TRS Plans 1 with a Plans 2/3 style annual, automatic COLA beginning July 1, 2023, and annually thereafter. The annual adjustment cannot:

- Produce a retirement benefit less than the original retirement benefit;
- Exceed 3.0 percent; or
- Increase the monthly retirement benefit by more than $110 from the prior year's monthly benefit.

The Legislature reserves the right to amend or repeal the COLA under this bill and no member or beneficiary has a contractual right to future benefits not previously granted, according to Sections 2 (4) and 3 (4).

To be eligible for a COLA on July 1, 2023, annuitants must already be receiving a monthly benefit on July 1, 2022. Annuitants receiving Basic Minimum, Alternate Minimum, or temporary disability benefits are not eligible for the benefit increase under this bill. Members who retired after July 1, 2022, or who have not yet retired, would be eligible for a COLA on July 1 after their retirement allowance has been in effect for at least one year.

This bill modifies the Revised Code of Washington (RCW) 41.45.035 to prescribe the long-term economic assumption for the investment rate of return from 7.0 percent to 7.2 percent, for all Department of Retirement Systems (DRS) administered retirement plans except LEOFF 2, effective July 1, 2023.

Effective Date: This bill has an emergency clause and is effective July 1, 2023.

In this summary, we only include changes pertinent to our actuarial fiscal note. See the legislative bill report for a complete summary of the bill.

What Is the Current Situation?

In the 2022 Legislative Session, the Legislature passed Senate Bill (SB) 5676 (Chapter 52, Laws of 2022) which provided a one-time 3 percent COLA capped at

$110.00 per month for Plans 1 members not receiving a Minimum benefit who had been retired for a year as of July 1, 2022. This one-time COLA went into effect on July 1, 2022.

For a review of the current situation and brief history of law changes related to Plan 1 COLAs, please see the corresponding section of our fiscal note for SB 5676.

Every two years, the state actuary reviews and may recommend changes to the long-term economic assumptions used for pension funding. The last report was published in 2021.

By October 31, of every odd year, the Pension Funding Council (PFC) has an opportunity review the state actuary's recommendations and may adopt changes to long-term economic assumptions. Any changes adopted by the PFC are subject to revision by the Legislature.

The PFC adopted the latest recommendation to lower the Investment Rate of Return assumption to 7.0 percent following the most recent Economic Experience Study (EES) (2021 EES) in their October 28, 2021, meeting. The prior Investment Rate of Return assumption was 7.5 percent.

The PFC also adopts pension contribution rates biennially during the summer of every even year. On July 25, 2022, the PFC adopted contribution rates effective July 1, 2023 (and September 1, 2023, for certain plans) for the 2023-25 Biennium. The Council adopted these rates as the first step of a planned three-biennia phase-in to a lower Rate of Return assumption. The remaining steps of the phase-in were not defined. See the PFC Rate Adoption motion dated July 25, 2022, for further details.

Who Is Impacted and How?

COLA Provisions

As of June 30, 2021, we expect this bill would increase the retirement benefits for approximately 56,100 out of the total 73,400 PERS and TRS Plans 1 annuitants (76 percent) who are not receiving the Basic or Alternate Minimum benefits. Additionally, approximately 1,300 future annuitants would be eligible for the annual benefit increase upon retirement. All eligible annuitants would receive an annual, Consumer Price Index (CPI)-based benefit increase of up to 3.0 percent per year which cannot exceed $1,320 annually.

Additionally, all active and terminated vested members of Plans 1 are eligible for this COLA at retirement. The following table summarizes the estimated headcounts under this bill.

Estimated Headcounts *(As of 6/30/2021)*	PERS 1	TRS 1
Current and Future Annuitants	**43,800**	**30,900**
Current Annuitants Receiving Minimum Benefits	13,500	3,800
Current Annuitants Not Receiving Minimum Benefits	29,200	26,900
Future Annuitants	1,100	200
Estimated Percent Impacted Under Bill*	**69%**	**88%**

**Estimate includes annuitants not receiving minimum benefits and future annuitants (active members and members who terminated but have not commenced benefits).*

We assume annuitants receiving a Minimum benefit and temporary disability benefits will not be impacted, since the annual increase to the Minimum benefit is expected to exceed the COLA provided under this bill. However, per input provided by DRS, members who elected to receive an optional COLA upon retirement would be eligible for this bill's COLA.

This bill impacts all PERS, TRS, SERS, and PSERS employers through increased Unfunded Actuarial Accrued Liability (UAAL) contribution rates. This provision of this bill will not affect member contribution rates.

Prescribed Investment Rate of Return Assumption

We expect the prescribed change to the Investment Rate of Return assumption to impact all employers and Plan 2 members (PERS, TRS, SERS, PSERS, and WSPRS) through a short-term decrease to future contribution rates. With the exception of WSPRS members, this bill would not affect member contribution rates in Plan 1 since they are fixed in statute. Additionally, this bill would 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

The COLA provision of 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.

The increase to the assumed rate of investment return proposed in the bill would lower the Present Value of Future Benefit (PVFB) payments of the plans and result in lower short-term contribution requirements because a larger share of future pension costs would be assumed to come from investment returns. Actual returns will emerge and ultimately determine, all else equal, the long-term contribution requirements of the pension systems. For this reason, under current Office of the State Actuary (OSA) practices for determining the budget impacts of recommended or prescribed changes to assumptions, we do not attribute long-term budget savings (or costs) to the assumption change. See **Appendix A** for additional information.

Who Will Pay for These Costs?

PERS, TRS, SERS, PSERS

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

Any change to contribution requirements 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.

In addition, the TRS Plans 2/3 cost-sharing may be subject to the current member maximum contribution rates. The current member maximum contribution rate is 8.64 percent for TRS 2. This maximum rate would not change as a result of this bill. Costs/savings above the member maximum contribution rate are fully assumed by the employer.

WSPRS

Any change to contribution requirements from this bill would be divided according to the standard funding method of 50 percent member and 50 percent employer, subject to the member maximum contribution rate. The current member maximum contribution rate is 8.61 percent. This maximum rate would not change as a result of this bill. Costs/savings above the member maximum contribution rate are fully assumed by the employer.

LEOFF 1

This bill is not expected to impact LEOFF 1 funding requirements due to the plan's current funding levels. As of the *2021 Actuarial Valuation Report* (AVR), the plan has 146 percent funded status using a 7.0 percent assumed rate of return. This funded status, measured at June 30, 2021, would improve using a 7.2 percent assumed rate of return at that measurement date.

HOW WE VALUED THESE COSTS

We modeled the current law cost of the retirement systems using our most recent AVR (June 30, 2021, AVR) as well as the assumptions and methods found on our Projections webpage. To analyze the impact of this bill, we then adjusted the following assumptions and methods.

Assumptions We Made

COLA Provisions

The COLA provisions of the bill were valued, and displayed, using the Investment Rate of Return assumption consistent with current law (7.0 percent). The 7.2 percent prescribed Rate of Return assumption under this bill becomes effective July 1, 2023, and we assume applies to measurement dates on or after that date. See the **How the Results Change When the Assumptions Change** section for information on how the results of the fiscal note would change using different assumed rates of return including an assumed rate of 7.2 percent.

Assumed Growth of COLA: We assumed 3 percent growth in the annual COLA provided under this bill, subject to the maximum monthly benefit increase of $110. We expect annual COLA growth to, on average, meet the 3 percent maximum for the expected duration of the liabilities. The annual COLA provided under this bill is CPI-based, and our current regional CPI assumption is 2.75 percent per year. However, the first year of CPI growth captured under this bill is expected to be 8.81 percent. Based on the provisions of this bill, excess CPI growth is accumulated, or "banked" for future years when applicable CPI falls below 3 percent. This means that the initial bank will be approximately 5.81 percent (8.81 percent inflation in Calendar Year 2022 reduced for a 3 percent COLA provided on July 1, 2023).

In effect, we assume the banked excess will provide a maximum 3 percent COLA for the plans' expected durations.

This assumption exceeds our current regional inflation (and COLA) assumption of 2.75 percent. Please see the **How the Results Change When the Assumptions Change** section for information on how results would look under a 2.75 percent COLA growth assumption.

Actual CPI growth could be below our assumption, and in some circumstances, produce growth below the maximum 3 percent or $110 monthly benefit increase. For this pricing, we assume constant 3 percent growth and applied the $110 monthly maximum when impacted members reach that limit.

Demographic Adjustments: We made an adjustment for assumed demographic changes from the valuation date, June 30, 2021, to the effective date of this bill, July 1, 2023. Based on 2021 AVR projections, which account for expected mortality and new retirements, and our professional judgement, we estimate the annuitant population on July 1, 2023, will be approximately 6 percent smaller in PERS and TRS Plans 1. We considered making an adjustment based on the reduction in benefits instead of headcount.

Prescribed Investment Rate of Return Assumption

Consistent with the provisions of this bill, we assumed a 7.2 percent investment rate of return for plans impacted under this bill. This is an increase from the

7.0 percent assumption under current law. See the **Actuarial Results** section for details on how this changes actuarial measurements at June 30, 2021.

We do not expect current law Plan 1 UAAL contribution rates to be impacted by the prescribed change to the Investment Return assumption in the next two biennia, because Plan 1 UAAL contribution rates are expected to remain at the Plan 1 minimums and are not impacted by this bill. As such, we attribute no Plan 1 budgetary costs/savings in the next two biennia due to the prescribed assumption change. See **Appendix C** for additional information.

This bill is not expected to impact LEOFF 1 funding requirements due to the plan's current funding levels. As result, we did not display the impacts to LEOFF 1 under this bill.

How We Applied These Assumptions

The fiscal impact of this bill represents the change in projected contributions under the methods we applied. 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. As noted earlier, we don't expect future long-term contribution requirements to change as a result of a higher assumed rate of return. Therefore, we display no budget impacts beyond the next four fiscal years for the provision of the bill that increases the assumed rate of return. **See Appendix A** for additional information.

The projected pension contributions reflect contributions from the current members as well as future hires. For more detail, please see **Appendix B**.

COLA Provisions

To determine the projected costs under this bill, we modified the programming to reflect the increased benefits from the COLA under this bill. We adjusted our valuation such that all current (future retired) members not already receiving a COLA through the Basic or Alternate Minimum monthly benefit, receive an annual COLA subject to a $110 monthly cap.

To reflect the impact of assumed demographic changes to PERS and TRS Plans 1 populations, we reduced the liability impact from this bill by 6 percent for both plans.

We amortized the cost of the COLA provision, using assumptions disclosed in the **Assumptions We Made** section, over a fixed ten-year period, consistent with Plans 1 current law funding policy for post-2009 benefit improvements.

Prescribed Investment Rate of Return Assumption

We applied the prescribed Investment Return assumption change from 7.0 percent to 7.2 percent to value certain actuarial measurements under the prescribed assumption. We then used those measurements to estimate the change in 2025-2027 contribution rates from the higher assumed rate of return prescribed in this bill. We expect no change in 2023-2025 contribution rates because the bill does not revise the contribution rates adopted by the PFC for that period.

ACTUARIAL RESULTS

How the Liabilities Changed

COLA Provisions

This bill would impact the actuarial funding of PERS and TRS Plans 1 by increasing the PVFB payable to the members. The impact of increasing these benefits for current members is shown below.

Impact on Pension Liability *(As of 6/30/2021)* *Due to COLA Provisions*			
(Dollars in Millions)	**Current**	**Increase**	**Total**
Actuarial Present Value of Projected Benefits *(The Value of the Total Commitment to All Current Members)*			
PERS 1	$11,393	$1,370.9	$12,764
TRS 1	$8,263	$1,341.0	$9,604
Unfunded Actuarial Accrued Liability *(The Portion of the Plan 1 Liability that is Amortized According to Funding Policy)**			
PERS 1	$2,884	$1,370.9	$4,255
TRS 1	$1,848	$1,341.0	$3,189
Unfunded Entry Age Accrued Liability *(The Value of the Total Commitment to All Current Members Attributable to Past Service that is Not Covered by Current Assets)*			
PERS 1	$3,303	$1,365.5	$4,669
TRS 1	$2,256	$1,339.3	$3,595

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

Prescribed Investment Rate of Return Assumption

This bill would impact the actuarial funding of PERS, TRS, SERS, PSERS, LEOFF Plan 1, and WSPRS by decreasing the PVFB payable to the members. The impact of the decreasing PVFB payable for current members is shown below.

Readers should exercise caution when interpreting these measurements given the nature of the change. See **Appendix A** for additional information.

Impact on Pension Liability *(As of 6/30/2021)* *Due to Prescribed Investment Rate of Return Assumption*			
(Dollars in Millions)	**Current**	**Increase**	**Total**
Actuarial Present Value of Projected Benefits *(The Value of the Total Commitment to All Current Members)*			
PERS 1	$11,393	($192.1)	$11,201
PERS 2/3	$63,347	($2,065.8)	$61,281
TRS 1	$8,263	($144.0)	$8,119
TRS 2/3	$29,256	($1,175.4)	$28,080
SERS 2/3	$9,906	($316.9)	$9,589
PSERS 2	$2,060	($98.4)	$1,961
LEOFF 1	$4,209	($63.4)	$4,146
WSPRS 1/2	$1,889	($58.7)	$1,831
Unfunded Actuarial Accrued Liability *(The Portion of the Plan 1 Liability that is Amortized According to Funding Policy)**			
PERS 1	$2,884	($192.1)	$2,692
TRS 1	$1,848	($144.0)	$1,704
LEOFF 1	($2,110)	($63.4)	($2,174)
Unfunded Entry Age Accrued Liability *(The Value of the Total Commitment to All Current Members Attributable to Past Service that is Not Covered by Current Assets)*			
PERS 1	$3,303	($190.6)	$3,113
PERS 2/3	$2,588	($1,346.8)	$1,241
TRS 1	$2,256	($143.6)	$2,112
TRS 2/3	$2,214	($603.6)	$1,611
SERS 2/3	$701	($196.8)	$504
PSERS 2	$26	($36.2)	($10)
LEOFF 1	($1,934)	($63.40	($1,997)
WSPRS 1/2	$137	($41.1)	$96

Note: Totals may not agree due to rounding.
**PERS 1 and TRS 1 are amortized over a ten-year period.*
LEOFF 1 must be amortized by June 30, 2024.

How the Assets Changed

This bill does not change current asset values or the asset values used in the actuarial measurement we relied upon for this fiscal note, so there would be no impact on the actuarial funding of the affected plans due to asset changes.

How the Present Value of Future Salaries (PVFS) Changed

COLA Provisions

The benefit improvement provisions of this bill do not change the PVFS, so there would be no impact on the actuarial funding of the affected plans due to PVFS changes.

Prescribed Investment Rate of Return Assumption

The assumption change under this bill would impact the actuarial funding of PERS, TRS, SERS, PSERS, LEOFF Plan 1, and WSPRS by decreasing the PVFS of the members. The impact of the decreasing PVFS for current members is shown below.

Present Value of Future Salaries *(As of 6/30/2021)* *Due to Prescribed Investment Rate of Return Assumption*			
(Dollars in Millions)	**Current**	**Increase**	**Total**
Actuarial Present Value of Future Salaries *(The Value of the Future Salaries Expected to be Paid to Current Members)*			
PERS 2	$83,598	($1,210.3)	$82,388
PERS 3	$25,861	($397.5)	$25,463
PERS 2/3	$109,459	($1,607.8)	$107,851
TRS 2	$27,074	($503.9)	$26,570
TRS 3	$56,632	($866.0)	$55,766
TRS 2/3	$83,706	($1,369.9)	$82,336
SERS 2	$9,959	($139.5)	$9,820
SERS 3	$11,358	($154.2)	$11,204
SERS 2/3	$21,317	($293.7)	$21,023
PSERS 2	$7,031	($110.5)	$6,921
WSPRS 1/2	$1,244	($18.1)	$1,226

Under current law, the UAAL added from post-2009 benefit improvements is separately amortized over ten years of covered system payroll. That projected payroll would change due to the prescribed assumption as well. However, we exclude the changes from the table above because they are not used to determine budgetary impacts. Plan 1 contribution rates remain at their respective minimums when we account for the impact of the assumption change on the present value of projected salaries for Plan 1 UAAL.

How Contribution Rates Changed

COLA Provisions

The rounded increase in the required UAAL contribution rate results in the supplemental contribution rates shown in the following table which apply in the current biennium. This fixed rate is collected for a ten-year period consistent with how benefit improvements are funded in Plans 1 under the Revised Code of Washington (RCW) 41.45.070.

Impact on Contribution Rates *(Effective 9/1/2023)* *Due to COLA Provisions*				
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	0.97%	1.97%	0.97%	0.97%
Total Employer	**0.97%**	**1.97%**	**0.97%**	**0.97%**
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	0.97%	1.97%	0.97%	0.97%
Total Employer	**0.97%**	**1.97%**	**0.97%**	**0.97%**

**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.*

For more detail on how this COLA provision can impact projected UAAL rates, please see **Appendix C.**

Prescribed Investment Rate of Return Assumption

As discussed in the **How We Applied These Assumptions** section, we expect no change to contribution rates in the 2023-25 Biennium due to the assumption change since the bill does not revise the contribution rates adopted by the PFC for that period.

The impacts summarized in the table below estimate the change in contribution rates for the 2025-27 Biennium due to the assumption change. We used these rates in conjunction with the Plan 1 UAAL supplemental contribution rates in the previous table to estimate the budget impacts disclosed in this fiscal note.

2025-27 Biennium—Impact on Contribution Rates *Due to Prescribed Investment Rate of Return Assumption*					
System/Plan	**PERS**	**TRS**	**SERS**	**PSERS**	**WSPRS**
Current Members					
Employee (Plan 2 or WSPRS)	(0.979%)	(0.392%)	(0.908%)	(0.593%)	0.000%
Employer					
Normal Cost	(0.979%)	(1.451%)	(0.908%)	(0.593%)	(4.308%)
Plan 1 UAAL	0.000%	0.000%	0.000%	0.000%	0.000%
Total Employer	**(0.979%)**	**(1.451%)**	**(0.908%)**	**(0.593%)**	**(4.308%)**
New Entrants*					
Employee (Plan 2 or WSPRS)	(0.287%)	(0.393%)	(0.292%)	(0.335%)	0.000%
Employer					
Normal Cost	(0.287%)	(0.393%)	(0.292%)	(0.335%)	(1.079%)
Plan 1 UAAL	0.000%	0.000%	0.000%	0.000%	0.000%
Total Employer	**(0.287%)**	**(0.393%)**	**(0.292%)**	**(0.335%)**	**(1.079%)**

**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.*

As of the current measurement date of the valuation, the TRS and WSPRS employers are expected to receive a larger share of savings under the change in the Investment Rate of Return assumption due to member rate maximums. Please see the **Who Will Pay for These Costs** section for additional details.

How This Impacts Budgets and Employees

Budget Impacts						
(Dollars in Millions)	**PERS**	**TRS**	**SERS**	**PSERS**	**WSPRS**	**Total**
2023-2025						
General Fund	$49.0	$263.2	$30.0	$9.3	$0.0	$351.5
Non-General Fund	73.4	0.0	0.0	1.2	0.0	74.6
Total State	**$122.4**	**$263.2**	**$30.0**	**$10.5**	**$0.0**	**$426.1**
Local Government	122.4	46.4	24.5	4.5	0.0	197.9
Total Employer	**$244.8**	**$309.7**	**$54.5**	**$15.1**	**$0.0**	**$624.0**
Total Employee	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**
2025-2027						
General Fund	$10.4	$110.2	$9.9	$5.4	($0.9)	$135.0
Non-General Fund	15.6	0.0	0.0	0.7	(10.1)	6.2
Total State	**$26.0**	**$110.2**	**$9.9**	**$6.1**	**($11.0)**	**$141.2**
Local Government	26.0	19.4	8.1	2.6	0.0	56.2
Total Employer	**$52.1**	**$129.6**	**$18.0**	**$8.7**	**($11.0)**	**$197.4**
Total Employee	**($177.3)**	**($24.2)**	**($22.0)**	**($9.8)**	**$0.0**	**($233.3)**
2023-2033						
General Fund	$252.3	$1,436.8	$160.6	$59.2	($0.9)	$1,908.0
Non-General Fund	378.5	0.0	0.0	7.6	(10.1)	376.0
Total State	**$630.8**	**$1,436.8**	**$160.6**	**$66.8**	**($11.0)**	**$2,284.1**
Local Government	630.8	253.5	131.4	28.6	0.0	1,044.4
Total Employer	**$1,261.7**	**$1,690.3**	**$292.0**	**$95.4**	**($11.0)**	**$3,328.5**
Total Employee	**($177.3)**	**($24.2)**	**($22.0)**	**($9.8)**	**$0.0**	**($233.3)**

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.

For more detail on Budget Impacts, by individual provisions of the bill, please see **Appendix D.**

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 following table displays our latest risk measurements as of June 30, 2021. The figures in this table were not reproduced for this bill but we may update this fiscal note prior to the end of the 2023 Legislative Session to reflect updated figures. For more information, please see our Risk Assessment, Commentary on Risk, and Glossary webpages.

Select Measures of Pension Risk *(As of 6/30/2021)* Excludes the Impacts of this Bill		
	FY 2022-41	FY 2042-71
Affordability Measures		
Chance of Pensions Double their Current Share of GF-S*	1%	2%
Chance of Pensions Half their Current Share of GF-S*	44%	42%
Solvency Measures		
Chance of PERS 1, TRS 1, in Pay-Go**	<1%	2%
Chance of Open Plan in Pay-Go**	<1%	1%
Chance of PERS 1, TRS 1, Total Funded Status Below 60%	5%	1%
Chance of Open Plans Total Funded Status Below 60%	20%	31%

**Pensions approximately 4.9% of current GF-S budget; does not include higher education.*
***When today's value of annual pay-go cost exceeds $50 million.*

In terms of risk, we expect this bill would improve short-term affordability risk measures and worsen solvency risk measures.

- The bill would improve short-term affordability if the higher prescribed Investment Rate of Return assumption leads to lower short-term contribution requirements. However, selecting a higher Investment Return assumption inherently decreases the likelihood of achieving those returns. As an example, our office summarized the simulated future investment returns as shown in the 2021 EES (Appendix D) and a 7.2 percent return was considered a 55th percentile return (or 45 percent likelihood of being achieved) while a 7.0 percent return was between a 50th and 55th percentile return. We plan to update this analysis when we complete our next EES report this summer.

  If actual future long-term investment returns fall below 7.2 percent, future contribution requirements, all else equal, would increase and could worsen long-term affordability and solvency risk.

- The increased benefits in PERS 1 and TRS 1 worsens affordability and solvency risk measures by increasing the plans' exposure to certain risks. The PERS and TRS Plans 1 become less affordable by requiring higher UAAL contributions over the next ten years. In addition, the increased plan benefits due to the new COLA would increase the amount of insolvency should insolvency (pay-go) occur in the future.

  If these risks materialize for PERS and TRS Plans 1, the Legislature may exercise their reservation of rights in the bill and repeal the COLA prospectively. In the event the Legislature repeals the COLA, these risks would effectively transfer from the pension plan to the members resulting in lower future retirement benefits for impacted retirees (and less protection from future inflation).

HOW THE RESULTS CHANGE WHEN THE ASSUMPTIONS CHANGE

The best estimate results of the COLA provisions of the bill can vary under a different set of assumptions. To determine the sensitivity of the actuarial results to the best estimate assumptions or methods selected for this pricing, we performed sensitivity on the following three assumptions: COLA Growth, Mortality, and Investment Rate of Return.

The three scenarios shown below are provided for illustrative purposes only. The actual cost of this bill may vary from our best estimate and may fall outside the range of cost identified in this section.

Unless noted otherwise, each sensitivity was performed using data, assets, assumptions, and methods disclosed in the **How We Valued These Costs** section of this fiscal note. Additionally, each sensitivity is independent of the other with no interaction effects.

COLA Growth Assumption (for PERS and TRS Plans 1)

The following table summarizes the impacts if we were to change our best estimate COLA Growth assumption from 3 percent to 2.75 percent.

COLA Growth—Impact on Rates and Employer Budgets *Due to COLA Provisions*		
(Dollars in Millions)	**Best Estimate 3.00% COLA**	**2.75% COLA**
Impact on Contribution Rates		
PERS 1*	0.97%	0.91%
TRS 1	1.97%	1.84%
10-Year Impact to Total Employer Budgets		
PERS*	$1,935	$1,815
TRS	$1,922	$1,796

**PERS, SERS, and PSERS employers pay PERS Plan 1 UAAL contribution rate.*

Mortality Assumptions (for PERS and TRS Plans 1)

If members of PERS 1 and TRS 1 live longer than expected (Double Mortality Improvement), the costs of this bill will be more than expected. Conversely, if members of PERS 1 and TRS 1 live shorter than expected (No Mortality Improvement), the costs of this bill will be less than expected.

The table below outlines how the liability impacts attributable to the COLA provision change when we assume higher or lower rates of future mortality than our best estimate.

Mortality Sensitivity—Impact on Pension Liability *Due to COLA Provisions*			
(Dollars in Millions)	**No Mortality Improvement**	**Best Estimate Mortality Improvement**	**Double Mortality Improvement**
Actuarial Present Value of Projected Benefits *(The Value of the Total Commitment to All Current Members)*			
PERS 1	$1,286	$1,371	$1,460
TRS 1	$1,264	$1,341	$1,421
Percent Change from Best Estimate			
PERS 1	(6%)	-	6%
TRS 1	(6%)	-	6%

Investment Rate of Return Assumptions (for PERS and TRS Plans 1)

If the plan realizes investment returns higher than the best estimate long-term assumption of 7.0 percent per year, then the costs of the COLA under this bill would be less than expected. Conversely, if the plan realizes investment returns lower than the best estimate long-term assumption of 7.0 percent per year, then the costs of the COLA would be more 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 current assumption, or equals the prescribed 7.2 percent assumption effective July 1, 2023.

Return Sensitivity—Impact on Pension Liability *Due to COLA Provisions*				
	Investment Rate of Return Assumption			
(Dollars in Millions)	**6.0%**	**Best Estimate 7.0%**	**Prescribed 7.2%**	**8.0%**
Actuarial Present Value of Projected Benefits *(The Value of the Total Commitment to All Current Members)*				
PERS 1	$1,521	$1,371	$1,343	$1,241
TRS 1	$1,486	$1,341	$1,314	$1,215
Percent Change from Best Estimate				
PERS 1	11%	-	(2%)	(9%)
TRS 1	11%	-	(2%)	(9%)

ACTUARY'S CERTIFICATION

The undersigned certifies that:

1. The actuarial assumptions, methods, and data used are reasonable for the purposes of this pricing exercise. The use of another set of assumptions, methods, and data may also be reasonable and might produce different results.
2. The risk analysis summarized in this Actuarial Fiscal Note (AFN) involves the interpretation of many factors and the application of professional judgment.
3. We prepared this AFN based on our current understanding of the bill as of the date shown in the footer. If the bill or our understanding of the bill changes, the results of a future AFN based on those changes may vary from this AFN. Additionally, the results of this AFN may change after our next annual update of the underlying actuarial measurements.
4. We prepared this AFN 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 AFN.

We prepared this AFN to support legislative deliberations during the 2023 Legislative Session. This AFN may not be appropriate for other purposes.

We advise readers of this AFN to seek professional guidance as to its content and interpretation, and not to rely on this communication without such guidance. Please read the analysis shown in this AFN as a whole. Distribution of, or reliance on, only parts of this AFN could result in its misuse and may mislead others.

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

While this AFN 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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APPENDIX A

Determining the Expected Costs of Assumption Changes

Determining the change to actuarial measurements, and the associated budget impacts, due to an assumption change requires careful consideration of many factors. To name a few, the applicable law for AFNs, the intended use and users of the fiscal note, applicable Actuarial Standards of Practice (ASOPs), and the Code of Professional Conduct (the Code) that applies to actuaries practicing in the U.S.

Current Law

RCW 44.44.040 sets the requirements for AFNs. Two items of note include a requirement to provide actuarially determined contribution requirements and increased requirements due to the cost of "increased benefits" over biennial periods including a 25-year period.

We don't consider assumption changes to be a source of increased benefits unless the underlying benefit provision(s) is tied to an assumption.

Furthermore, the determination of actuarially required contributions requires the professional actuarial services of an actuary. Those services are subject to applicable ASOPs and the Code. ASOPs and the Code impact how an actuary would interpret and apply the requirements of RCW 44.44.040.

Assumptions in Relation to Actual Costs

The long-term cost of a pension plan equals (a) actual benefit payments and expenses minus (b) the actual returns on invested contributions.

Assumptions are necessary for actuaries to estimate future benefit payments and expenses as well as future returns on invested contributions. They impact the timing and amount of contributions, but don't determine the actual long-term cost of a pension plan. Actual long-term experience determines the long-term cost of a pension plan.

As a result, current OSA practices attribute the impact of most assumption changes to short-term periods only. There may be cases when, given the nature of a particular assumption, a long-term attribution may be appropriate.

Current OSA Practices

Under current OSA practices for evaluating the budgetary impacts from recommended or prescribed assumption changes, OSA shows the budgetary impacts from a recommended or prescribed assumption change for the first four fiscal years only. This approach recognizes the short-term budgetary impacts of assumption changes but attributes the long-term budgetary impacts to the actual source(s). We applied this practice to the assumed rate of return prescribed under this bill.

OSA established these practices during the 2011-13 Biennium and applies the method to OSA recommended assumption changes regardless of their expected short-term budgetary impact. We apply this method to recommendations made to the PFC and when we disclose the contribution rate and budget impacts of those recommendations.

A period longer than four years could also be appropriate. For example, the use of six years (for consistency with the Six Year Budget Outlook) or eight years (for consistency with the maximum deferral of an annual investment gain/loss under the current asset smoothing method) may also be appropriate. However, we are not recommending a change to this practice and have not evaluated, at this time, the reasonability of extending this period.

When we first implemented this method, we selected a four-year period based on input from our clients (including the PFC workgroup) on the desired length of the period. The current period also now aligns with the four-year balanced budget requirement.

Other Considerations Specific to this Bill

This bill prescribes an increase to the assumed rate of return. Expected returns are based, in part, on the expected performance of the Commingled Trust Fund (CTF) in the future. The asset allocation of the CTF is a key factor in estimating future returns. Higher returning asset classes (with higher risk) are generally expected to return more than lower returning asset classes (with lower risk). A professionally managed portfolio, like the CTF, has access to a broad range of asset classes and can implement a portfolio that benefits from cross asset-class correlation and diversification benefits.

The Washington State Investment Board (WSIB) has not changed their target asset allocations in the CTF or their Capital Market Assumptions (CMAs) since 2021.

WSIB plans to update their CMAs later this year. OSA will review the economic assumptions, including assumed returns, and make recommendations to the PFC this summer. OSA has not changed their recommended return assumption of 7.0 percent at this time.

The higher prescribed rate of return in this bill does not appear to be attributed to any change in the asset allocation of the CTF, change to WSIB's CMAs, or recommendations from OSA. As such, we believe the higher assumed returns under this bill are solely the result of legislative prescription.

Professional Considerations

Actuaries are professionally responsible for their work products and must take reasonable steps to ensure their work products are not used to mislead other parties. This work product, an AFN, is a public document used by many stakeholders including, for example, legislators, legislative staff, DRS, the Office of Financial Management, employers, plan members, organizations that represent plan members, and the public. OSA takes extra care to consider how our work products may be used and intend for them to inform decision making.

AFNs typically inform the affordability and level of risk of enacting changes to the pension systems. The 25-year budget impact requirement serves as a reminder that pension plans are long-term financial security systems that provide, in most cases, contractual lifetime payments.

If we were to attribute the long-term budget savings from the legislatively prescribed higher rate of investment return to the assumption increase itself, it could lead to the adoption of a new benefit in Plan 1 that is not sustainable in the long run. As noted above, the higher prescribed rate of return in this bill does not appear to be attributed to any change in asset allocation, change to CMAs, or recommendations from OSA.

APPENDIX B

How We Applied These Assumptions

We estimated the fiscal impact of this bill by comparing projected pension contributions under this bill to contributions under current law consistent with the methods in this fiscal note. The projected pension contributions reflect contributions from the current members as well as future hires.

To determine the projected contributions under current law, we relied on our base model described in the **How We Valued These Costs** section. For current members, contribution rates from the base model are multiplied by future payroll. For future hires, contribution rates under the Entry Age Normal Cost method are multiplied by future new entrant payroll.

To determine the projected costs under this bill, we modified the base model described above to reflect the provisions of the bill, and assumptions noted above. We then multiplied the respective new contribution rates reflecting these changes by future payroll.

APPENDIX C

UAAL Contribution Rates

The following tables display how the projected UAAL rates are expected to change under the COLA provision of this bill. Please note that the amortization of benefit improvement produces employer rate increases that are fixed over a ten-year period and may be paid off after the Base UAAL rates.

PERS Plan 1 Projections											
Fiscal Year	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**
Current Law											
Base UAAL Rates*	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	0.00%	0.00%	0.00%	0.00%
Benefit Improvement Rates	0.35%	0.35%	0.35%	0.35%	0.35%	0.35%	0.25%	0.25%	0.14%	0.14%	0.00%
Total UAAL Rates**	**3.85%**	**3.85%**	**3.85%**	**3.85%**	**3.85%**	**3.85%**	**3.75%**	**0.25%**	**0.14%**	**0.14%**	**0.00%**
Under Bill											
Base UAAL Rates*	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	0.00%	0.00%	0.00%	0.00%
Benefit Improvement Rates	0.35%	1.32%	1.32%	1.32%	1.32%	1.32%	1.22%	1.22%	1.11%	1.11%	0.97%
Total UAAL Rates**	**3.85%**	**4.82%**	**4.82%**	**4.82%**	**4.82%**	**4.82%**	**4.72%**	**1.22%**	**1.11%**	**1.11%**	**0.97%**

**Excludes separately amortized benefit improvements.*
***Total UAAL Rate = Base UAAL + Benefit Improvement Rate.*

TRS Plan 1 Projections											
Fiscal Year	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**	**2033**
Current Law											
Base UAAL Rates*	5.75%	5.75%	5.75%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Benefit Improvement Rates	0.71%	0.71%	0.71%	0.71%	0.71%	0.71%	0.50%	0.50%	0.27%	0.27%	0.00%
Total UAAL Rates**	**6.46%**	**6.46%**	**6.46%**	**0.71%**	**0.71%**	**0.71%**	**0.50%**	**0.50%**	**0.27%**	**0.27%**	**0.00%**
Under Bill											
Base UAAL Rates*	5.75%	5.75%	5.75%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Benefit Improvement Rates	0.71%	2.68%	2.68%	2.68%	2.68%	2.68%	2.47%	2.47%	2.24%	2.24%	1.97%
Total UAAL Rates**	**6.46%**	**8.43%**	**8.43%**	**2.68%**	**2.68%**	**2.68%**	**2.47%**	**2.47%**	**2.24%**	**2.24%**	**1.97%**

**Excludes separately amortized benefit improvements.*
***Total UAAL Rate = Base UAAL + Benefit Improvement Rate.*

The above tables are based on a projection of a June 30, 2021, measurement date and do not reflect the impacts from increasing the assumed rate of investment return from 7.0 percent to 7.2 percent effective June 30, 2023.

APPENDIX D

Budget Impacts

The following tables separate the expected budget impacts between their attributing provisions.

COLA Provisions

Budget Impacts *Due to COLA Provisions*					
(Dollars in Millions)	**PERS**	**TRS**	**SERS**	**PSERS**	**Total**
2023-2025					
General Fund	$49.0	$263.2	$30.0	$9.3	$351.5
Non-General Fund	73.4	0.0	0.0	1.2	74.6
Total State	**$122.4**	**$263.2**	**$30.0**	**$10.5**	**$426.1**
Local Government	122.4	46.4	24.5	4.5	197.9
Total Employer	**$244.8**	**$309.7**	**$54.5**	**$15.1**	**$624.0**
Total Employee	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**
2025-2027					
General Fund	$56.6	$307.5	$34.9	$11.5	$410.5
Non-General Fund	84.8	0.0	0.0	1.5	86.3
Total State	**$141.4**	**$307.5**	**$34.9**	**$13.0**	**$496.8**
Local Government	141.4	54.3	28.6	5.6	229.8
Total Employer	**$282.8**	**$361.8**	**$63.5**	**$18.5**	**$726.6**
Total Employee	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**
2023-2033					
General Fund	$298.5	$1,634.1	$185.7	$65.3	$2,183.5
Non-General Fund	447.7	0.0	0.0	8.4	456.1
Total State	**$746.2**	**$1,634.1**	**$185.7**	**$73.7**	**$2,639.6**
Local Government	746.2	288.4	151.9	31.6	1,218.0
Total Employer	**$1,492.4**	**$1,922.5**	**$337.5**	**$105.2**	**$3,857.7**
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.

Prescribed Investment Rate of Return Assumption

The budget impacts table for the prescribed Investment Rate of Return assumption (below) shows ten-year impacts for display purposes only. The impacts for the period 2023-2033 are equivalent to the 2025-2027 period. We include the ten-year impact in the table below so that the reader may combine both tables in this appendix to calculate the total budget impact disclosed in the **How This Impacts Budgets and Employees** section.

Budget Impacts *Due to Prescribed Investment Rate of Return Assumption*						
(Dollars in Millions)	**PERS**	**TRS**	**SERS**	**PSERS**	**WSPRS**	**Total**
2023-2025						
General Fund	$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
Total State	**$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
Total Employer	**$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**
2025-2027						
General Fund	($46.1)	($197.3)	($25.0)	($6.1)	($0.9)	($275.5)
Non-General Fund	(69.2)	0.0	0.0	(0.8)	(10.1)	(80.1)
Total State	**($115.4)**	**($197.3)**	**($25.0)**	**($6.9)**	**($11.0)**	**($355.6)**
Local Government	(115.4)	(34.8)	(20.5)	(2.9)	0.0	(173.6)
Total Employer	**($230.7)**	**($232.2)**	**($45.5)**	**($9.8)**	**($11.0)**	**($529.2)**
Total Employee	**($177.3)**	**($24.2)**	**($22.0)**	**($9.8)**	**$0.0**	**($233.3)**
2023-2033						
General Fund	($46.1)	($197.3)	($25.0)	($6.1)	($0.9)	($275.5)
Non-General Fund	(69.2)	0.0	0.0	(0.8)	(10.1)	(80.1)
Total State	**($115.4)**	**($197.3)**	**($25.0)**	**($6.9)**	**($11.0)**	**($355.6)**
Local Government	(115.4)	(34.8)	(20.5)	(2.9)	0.0	(173.6)
Total Employer	**($230.7)**	**($232.2)**	**($45.5)**	**($9.8)**	**($11.0)**	**($529.2)**
Total Employee	**($177.3)**	**($24.2)**	**($22.0)**	**($9.8)**	**$0.0**	**($233.3)**

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.