

State Actuary's Recommendation on Long-Term Economic Assumptions

Presentation to
Pension Funding Council

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Today's Presentation

- Report on Financial Condition
 - Full report available [here](#)
- Economic Experience Study
 - Background
 - Key takeaways
 - State Actuary's recommendation
 - Full report available [here](#)
- Budget impacts
 - Background
 - Impact of adopting recommendation

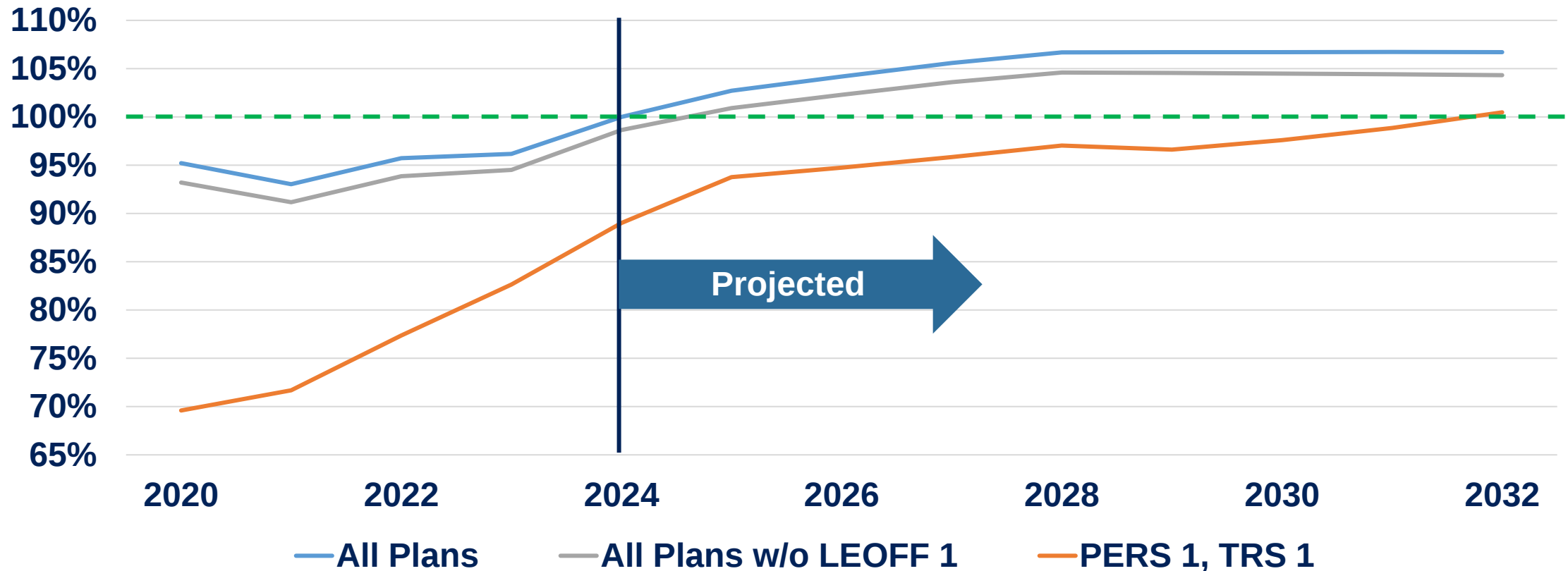


Report on Financial Condition



Funded Ratio Improvement Projected to Continue

- All plans nearing 100% funded
 - Ongoing contributions required for most plans, even with a 100% funded ratio



Contribution Rate Decline Projected to Level Off

- Reflects future experience occurring exactly as assumed
- Smaller portion of the GF-S allocated to pensions
 - ~ 3.5% in FY 2026 vs. ~ 6% in FY 2020

Total Employer Contribution Rates ¹				
	2025-27 Biennium	2027-29 Biennium	2029-31 Biennium	2031-33 Biennium
System	Adopted	Projected	Projected	Projected
PERS	5.38%	4.71%	4.94%	4.93%
TRS	7.54%	6.79%	6.89%	6.60%
SERS	6.87%	5.85%	5.40%	5.28%
PSERS	6.91%	6.87%	7.01%	6.87%
LEOFF ²	8.53%	8.73%	9.32%	9.35%
WSPRS	15.85%	14.71%	10.35%	8.36%

¹Excludes DRS administrative expense fee.

²Displayed the average LEOFF 2 adopted rate for the 2027-29 Biennium. No contributions are required for LEOFF 1 when the plan is fully funded.

Economic Experience Study

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Economic Experience Study

- Review of long-term statutory assumptions used for plan funding
 - Inflation
 - General salary growth
 - Membership growth for Plans 1 funding (non-economic)
 - Investment rate of return
- Studies produced during odd-numbered calendar years
 - Per statute, PFC may adopt changes by October 31

Key Considerations

Purpose of Assumptions



**Actuarial Funding
Contribution Rates**

Measurement Period



**Shorter period for Closed Plans
Longer period for Open Plans**

Relevant Data



**Forecasts for Future
vs. Historical Data**

**Actuarial Standards of
Practice**



**Provides Guidance when
Selecting or Recommending
Assumptions**

Professional Judgment

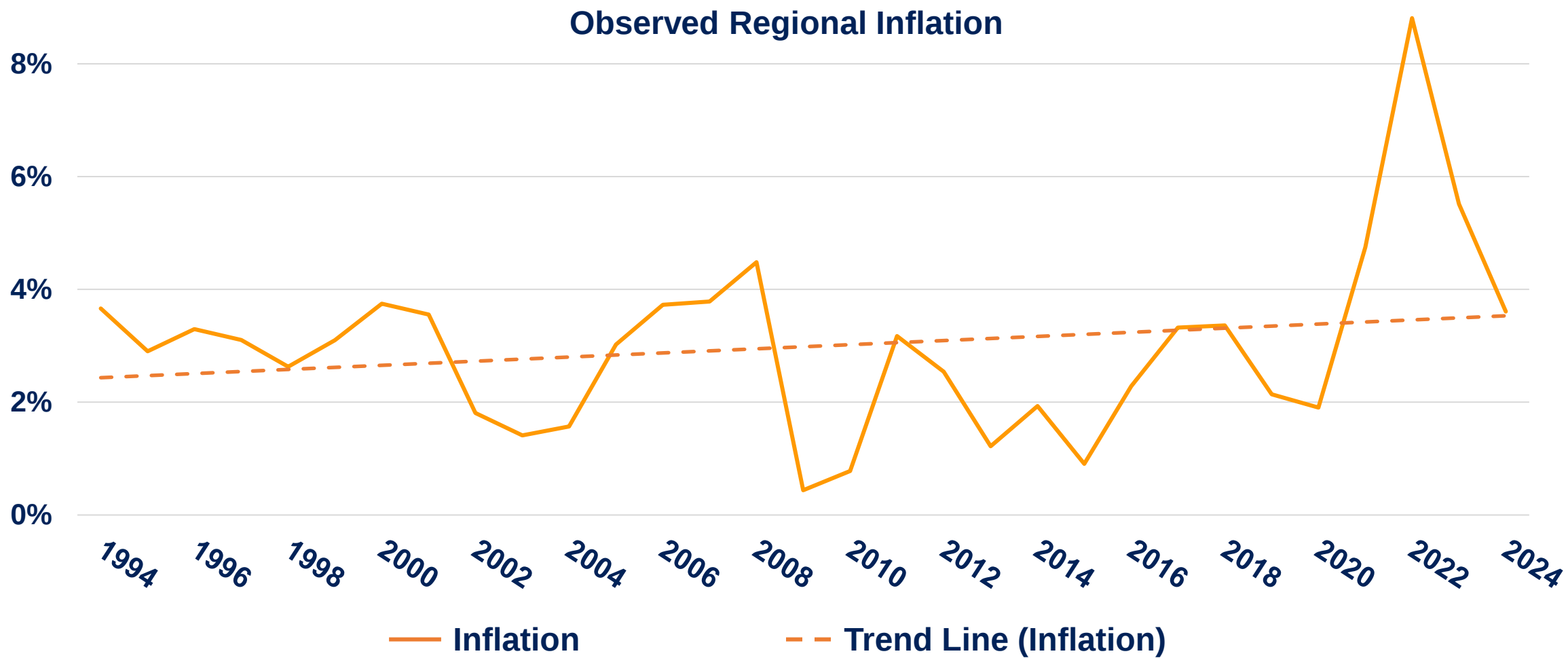


**Based on Education and
Experience**

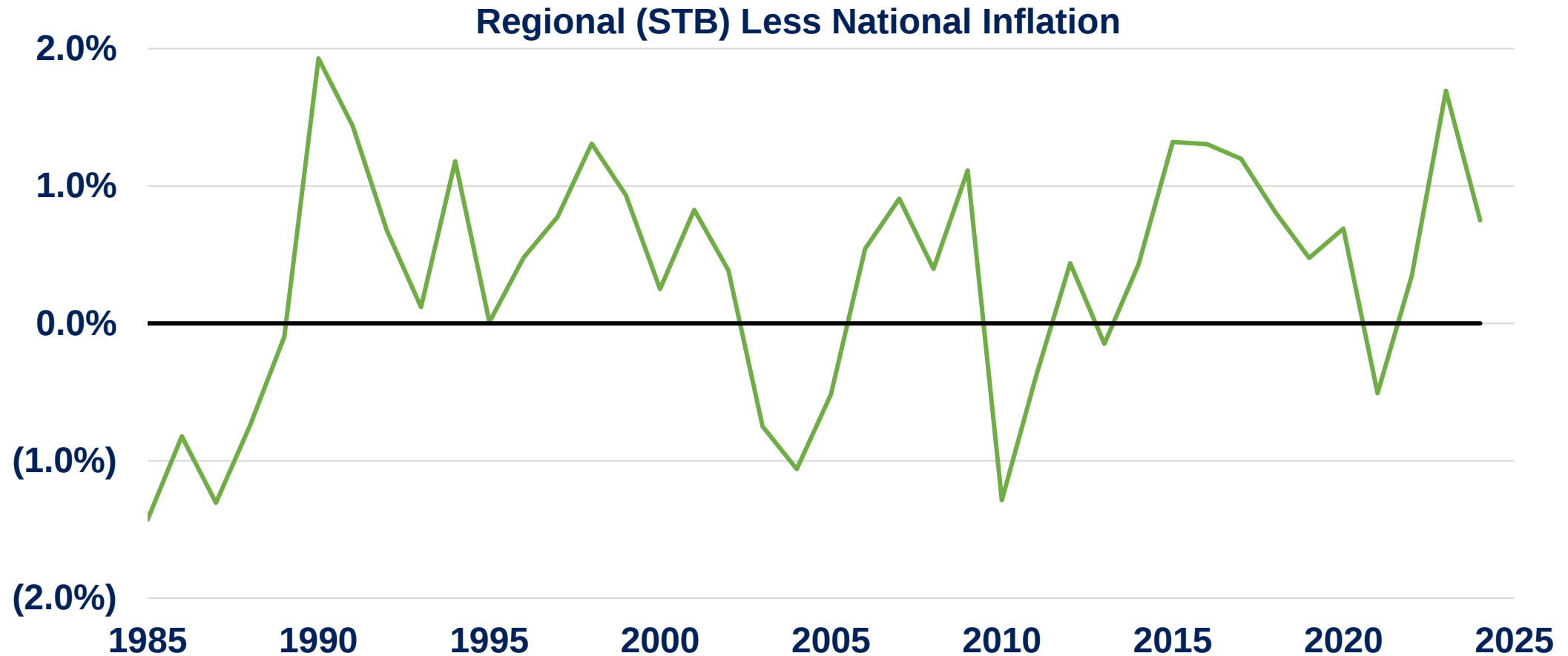
Inflation – Background

- Used to model future post-retirement COLAs and part of general salary growth
 - Based on regional inflation
- We study regional inflation through two components
 - National inflation
 - Regional (Seattle-Tacoma-Bellevue) adjustment

High Inflation Has Continued Since Last Study



We Continue to Expect Regional Inflation to Outpace National Inflation



- Over the past 10 and 20 years, the annual average inflation differential was 0.8% and 0.5%, respectively

Inflation

- Higher inflation has persisted since last study
- We expect **national inflation** of 2.3-2.6% per year
- We expect **regional inflation** to exceed national inflation by 0.3-0.7%
- **Recommendation = 3.00% for all plans**
 - Increase from the current 2.75% assumption

General Salary Growth

- Used to model future annual increases in member salaries across all DRS plans due to economic forces
 - We have a separate assumption for salary increases due to demographic forces that varies by DRS system
- Reflects both inflation and real wage growth
 - Per the prior slide, higher expected inflation
 - Little change in forecasts for real wage growth
- **Recommendation = 3.50% for all plans**
 - Increase from the current 3.25% assumption



Membership Growth for Plans 1 Funding

- Used to model population growth for the plans that contribute to the PERS and TRS 1 UAAL
 - UAAL rates are suspended through 2027-29 Biennium
 - Not currently a significant assumption in determining plan funding requirements
- **Recommendation = 1.00%**
 - No change from the current assumption

Investment Rate of Return – Background

- Used to model future annual return on CTF assets, net of investment expenses
- Calculate the present value of benefits and salaries

Capital Market Assumptions & Simulated Returns

WSIB Capital Market Assumptions		
Asset Class	Geometric Return	Target Allocation
Global Equity	6.5%	30%
Tangible Assets	6.4% ↑	8%
Fixed Income	4.9% ↑	19%
Private Equity	8.3% ↓	25%
Real Estate	6.6% ↑	18%
Cash	3.0% ↑	0%

15-Year Simulated CTF Return	
Mean Return	7.2% ↑
60th Percentile	8.2% ↑
Median Return	7.3% ↑
40th Percentile	6.4% ↑

Investment Rate of Return

- Future expected returns are projected to be higher compared to prior study
 - New Capital Market Assumptions
 - Different WSIB model used to simulate future returns
- Considered adjustments to WSIB's simulations but found them to be unneeded or offsetting
- **Recommendation = 7.25% for all plans**
 - No change from the current statutory assumption
 - Increase from prior recommendation of 7.00%

Summary of Long-Term Economic Assumptions

Assumption	Currently Prescribed	Recommended
Inflation	2.75%	3.00%
General Salary Growth	3.25%	3.50%
Investment Return	7.25%*	7.25%
Membership Growth for Plan 1 Funding	1.00%	1.00%

**7.00% in LEOFF 2. The LEOFF 2 Board adopts assumptions for LEOFF 2.*

- The recommended economic assumptions are consistent with each other
- Currently prescribed assumptions are not our best-estimate, but are reasonable

Background on Budget Impacts

- Impact of the assumption change to contribution rates and budgets would start in 2027-29
- Actual long-term costs will ultimately be determined by actual plan experience
- Assumption changes impact the timing and amount of those long-term costs
- If actual experience matches assumed experience but funding is based on assumptions that underestimate plan costs, long-term costs will increase, and the plans will forgo investment earnings on the lost prefunding
 - The longer the plans delay additional contributions under this scenario, the higher the long-term cost
- Conversely, if actual experience does not match assumed experience and funding is based on assumptions that overestimate plan costs, long-term costs will decrease

Adoption of Recommendation – Budget Impacts

Total Employer Preliminary Budget Impacts <i>(Excludes LEOFF 2)</i>			
<i>(Dollars in Millions)</i>	2027-29	2029-31	Total
(a) From Prior EES Recommendation	(\$199.2)	(\$193.8)	(\$393.0)
(b) From Statutory ROR Change	(\$649.6)	(\$649.8)	(\$1,299.4)
Net Impact From Current Law (a-b)	\$450.4	\$456.0	\$906.4

Note: Preliminary analysis subject to change. Actual results may also vary from these preliminary values. We used our recommended long-term economic assumptions to produce these short-term budget impacts. Therefore, our short-term budget impacts will likely vary from estimates produced from other short-term budget models.

- Final row illustrates anticipated budget impacts of changing current statute
 - Savings in all systems if comparison is performed relative to prior EES recommendation

Adoption of Recommendation – Budget Impacts

Preliminary Budget Impacts <i>(Excludes LEOFF 2)</i>			
	2027-29	2029-31	Total
General Fund-State	\$215.1	\$220.2	\$435.3
Local Government	\$160.3	\$160.9	\$321.2
Total Employer	\$450.4	\$456.0	\$906.4

Note: Preliminary analysis subject to change. Actual results may also vary from these preliminary values. We used our recommended long-term economic assumptions to produce these short-term budget impacts. Therefore, our short-term budget impacts will likely vary from estimates produced from other short-term budget models

- Budget impacts exclude interactions with normal cost minimum contribution rates in statute

Adoption of Recommendation – Contribution Rate Impacts

Preliminary Impact on Contribution Rates					
System/Plan	PERS	TRS	SERS	PSERS	WSPRS
Employee (Plan 2 or WSPRS)	0.78%	0.84%	0.69%	0.65%	0.00%
Employer					
Normal Cost	0.78%	0.84%	0.69%	0.65%	2.73%
Plan 1 UAAL	0.00%	0.00%	0.00%	0.00%	N/A
Total Employer	0.78%	0.84%	0.69%	0.65%	2.73%

Note: Represents expected change in aggregate normal cost rate. Actual contribution rate impacts may vary based on minimum rate at time of contribution rate adoption.

- Rate impacts reflect net impact from current law
 - Investment return assumption reflected in current law
- No contributions required for LEOFF 1

Thank You

For questions, please contact
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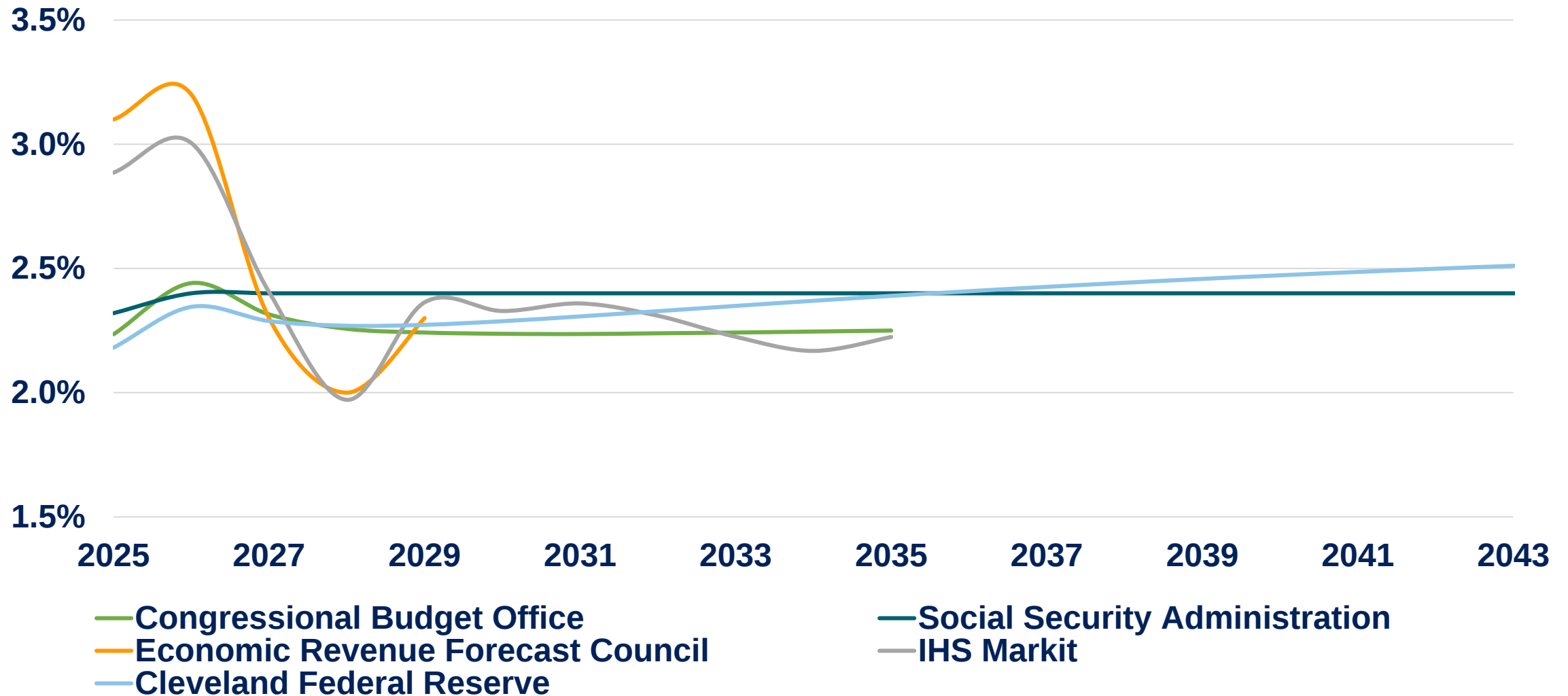


Appendix

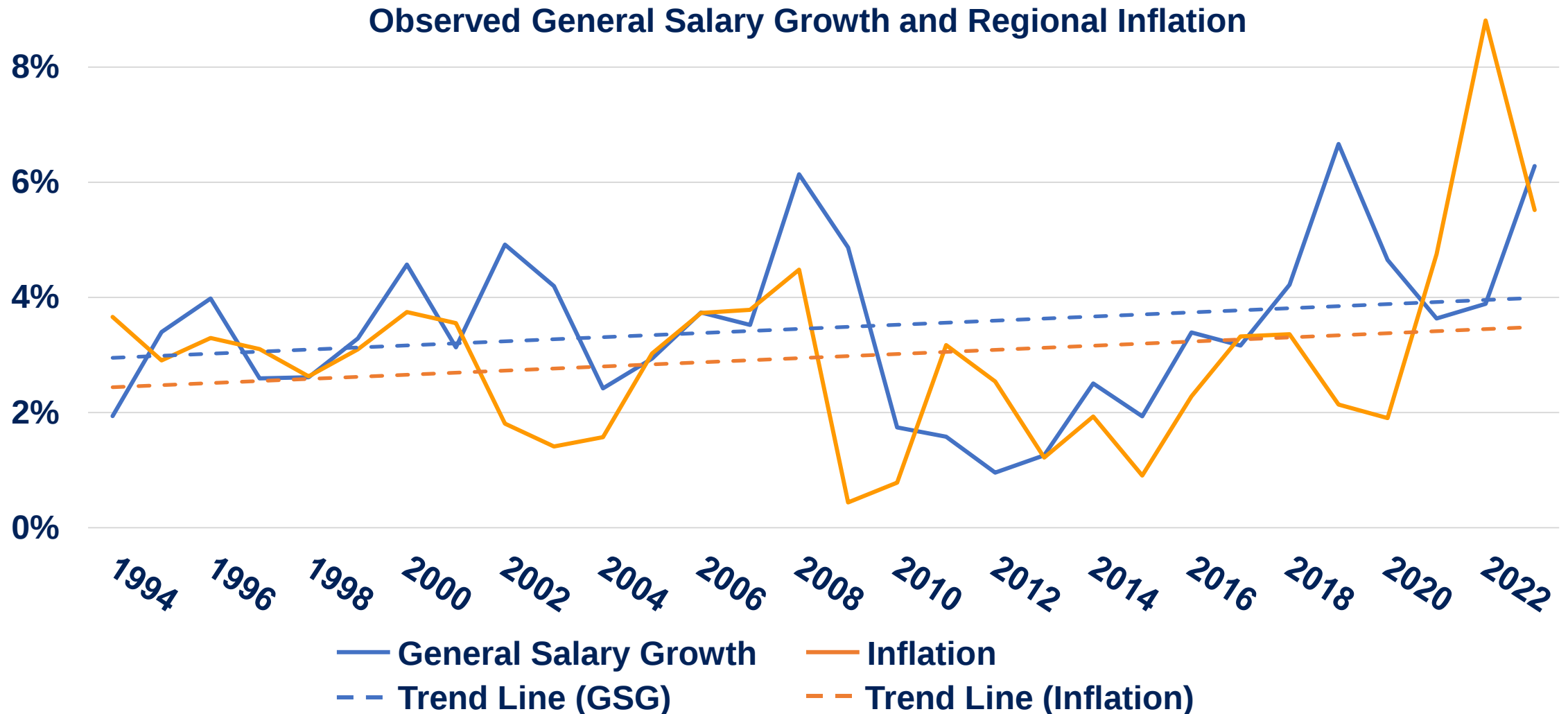
- Supporting information on EES recommendation
 - Please see the EES report for all applicable disclosures
 - Please see the RFC report for all applicable disclosures
- Contribution rate comparison
- Other states' economic assumptions
- Historical economic assumptions for Washington State pension systems
- Disclosures on contribution rate and budget impacts



National Inflation Forecasts Are Mostly in the Range of 2.3%-2.5%



General Salary Growth Has Been Volatile and Typically Lags Inflation



WSIB CMAs and Target Asset Allocation

WSIB Capital Market Assumptions (CMAs)						
Asset Class	Expected 1-Year Return*			Standard Deviation		
	2025	2023	Difference	2025	2023	Difference
Global Equity	8.0%	8.1%	(0.1%)	18.0%	19.0%	(1.0%)
Tangible Assets	7.1%	7.0%	0.1%	12.0%	12.0%	0.0%
Fixed Income	5.1%	4.6%	0.5%	6.0%	6.0%	0.0%
Private Equity	11.0%	11.1%	(0.1%)	25.0%	25.0%	0.0%
Real Estate	7.4%	7.3%	0.1%	13.0%	13.0%	0.0%
Cash	3.0%	2.5%	0.5%	2.1%	2.0%	0.1%

**Reflects arithmetic returns. Geometric returns are lower but have similar differences between 2025 and 2023.*

WSIB CTF Target Asset Allocation	
	2025 & 2023 EES
Global Equity	30%
Tangible Assets	8%
Fixed Income	19%
Private Equity	25%
Real Estate	18%
Cash	0%
Total	100%

Simulated CTF Investment Returns

15-Year Simulated Annual Investment Returns*			
	2025	2023	Difference
Mean Return	7.19%	7.06%	0.13%
70th Percentile	9.13%	8.94%	0.19%
60th Percentile	8.22%	7.92%	0.30%
Median Return	7.33%	7.02%	0.31%
40th Percentile	6.42%	6.11%	0.31%
30th Percentile	5.44%	5.15%	0.29%

Note: Differences may not agree due to rounding. Figures are based on unique simulations and may differ slightly from those contained in the WSIB CMA White Paper.

**Displayed simulations vary based on the simulation model used. Consistent with WSIB CMA studies, the 2023 simulations rely on a downside log-stable distribution while 2025 figures rely on unique non-normal distribution simulations.*

Contribution Rate Comparison

Contribution Rates (2025-27 Biennium)					
System/Plan	PERS	TRS	SERS	PSERS	WSPRS
Total Employer					
Current Law	5.38%	7.54%	6.87%	6.91%	15.85%
With Recommended Assumptions	6.16%	8.38%	7.56%	7.56%	18.58%
Plan 2 Member					
Current Law	5.38%	7.54%	6.87%	6.91%	8.75%
With Recommended Assumptions	6.16%	8.38%	7.56%	7.56%	8.75%

Note: Current Law rates already reflect 7.25% investment return assumption. Actual contribution rate impacts may vary based on minimum rate at time of contribution rate adoption. WSPRS member contribution rates are subject to a cap, which is currently 8.75%.

- “With Recommended Assumptions” provided for illustrative purposes only. Any changes to the economic assumptions will not affect contribution rates until the 2027-29 Biennium

Other States' Economic Assumptions

Economic Assumptions for Public Plans Outside Washington				
Plan Name	Inflation*	General Salary Growth	Investment Return	Date of Valuation
Washington 2025 EES Recommendation	3.00%	3.50%	7.25%	
Washington Currently Prescribed Assumptions	2.75%	3.25%	7.00% LEOFF 2 7.25% Other Plans	
Alaska PERS & Teachers	2.50%	2.75%	7.25%	6/30/2023
California PERS	2.30%	2.80%	6.80%	6/30/2024
California Teachers	2.75%	3.50%	7.00%	6/30/2024
Colorado PERA	2.30%	3.00%	7.25%	12/31/2023
Florida Retirement System	2.40%	3.50%	6.70%	7/1/2024
Idaho PERS	2.30%	3.05%	6.30%	6/30/2024
Iowa PERS	2.60%	3.25%	7.00%	6/30/2024
Missouri State Employees	2.25%	2.75%	6.95%	6/30/2024
Ohio PERS	2.35%	2.75%	6.90%	12/31/2024
Oregon PERS	2.40%	3.40%	6.90%	12/31/2023
Wisconsin Retirement System	2.40%	3.00%	5.40%	12/31/2023
Selected Public Plans Outside WA – Average	2.41%	3.07%	6.77%	
Selected Public Plans Outside WA – Minimum	2.25%	2.75%	5.40%	
Selected Public Plans Outside WA – Maximum	2.75%	3.50%	7.25%	

Note: Data gathered from the National Association of State Retirement Administrators (NASRA) as of June 2025. This data reflects the assumptions prescribed by each plan, which may not match the actuary's recommended assumption. There may also be a timing lag between the date of valuation and when the assumptions were actually last studied.

**Selected public plans outside Washington primarily use a national inflation assumption rather than a regional assumption. We expect inflation in the STB region to be higher than the national average.*

Historical Economic Assumptions for Washington State Pension Systems

Historical Economic Assumptions for Washington State Pension Systems				
Valuation Years	Inflation	General Salary Growth	Investment Return	Membership Growth for Plan 1 Funding
1989 - 1994	5.00%	5.50%	7.50%	0.75% TRS 1.25% PERS
1995 - 1997	4.25%	5.00%	7.50%	0.90% TRS 1.25% PERS
1998 - 1999	3.50%	4.00%	7.50%	0.90% TRS 1.25% PERS
2000 - 2008	3.50%	4.50%	8.00%	0.90% TRS 1.25% PERS
2009 - 2010	3.50%	4.50% LEOFF 2 4.00% Other Plans	8.00%	0.90% TRS 1.25% PERS
2011 - 2012	3.00%	3.75%	7.5% LEOFF 2 7.9% Other Plans	0.80% TRS 0.95% PERS
2013 - 2014	3.00%	3.75%	7.5% LEOFF 2 7.8% Other Plans	0.80% TRS 0.95% PERS
2015	3.00%	3.75%	7.5% LEOFF 2 7.7% Other Plans	0.80% TRS 0.95% PERS
2016	3.00%	3.75%	7.5% LEOFF 2 7.7% Other Plans	1.25% TRS 0.95% PERS
2017 - 2020	2.75%	3.50%	7.4% LEOFF 2 7.5% Other Plans	1.25% TRS 0.95% PERS
2021 - 2023	2.75%	3.25%	7.00%	1.00% TRS/PERS
2024	2.75%	3.25%	7.00% LEOFF 2 7.25% Other Plans	1.00% TRS/PERS

Note: Values represent prescribed assumptions, which may not necessarily match OSA's recommended assumptions.

Disclosures on Contribution Rate and Budget Impacts

- We prepared these contribution rate and budget impacts to assist the Pension Funding Council when selecting long-term economic assumptions in 2025. It may not be appropriate for other purposes. Please replace with updated analysis when available.
- Unless noted otherwise, this pricing uses the same assumptions, methods, and data as the 2023 Actuarial Valuation Report.
- 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.
- The models used are appropriate for the purpose of this pricing. We are not aware of any known weaknesses or limitations of the models that have a material impact on the results.
- Matthew M. Smith (FCA, EA, MAAA) served as the reviewing and certifying actuary of these pricing results. He is available to offer extra advice and explanations as needed.