2023 Report on Financial Condition

Presentation to: LEOFF Plan 2 Retirement Board

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September 27, 2023

Today's Presentation

- Background on the *Report on Financial Condition* (RFC)
- Current health of the retirement plans
- Projected health
- Financial risks to the plans

Approach to the 2023 RFC

- No longer a joint report with the *Economic Experience Study* (EES)
  - This presentation serves as the 2023 RFC
- 2023 RFC focuses on changes since the 2021 RFC
  - Updated key exhibits
  - Reviewed takeaways and trends
  - See 2021 RFC for additional background and context
- In addition to our annual actuarial valuations, many resources available to evaluate the financial condition of the Washington State retirement systems
  - RFC
  - Commentary on Risk
  - Risk Assessment

Measures We Used for Assessing Plan Health in the RFC

- **Affordability**: Ability to provide adequate funding
  - Can members, employers, local government, and the state pay the amount required to fully fund the plans?
  - Examples: Contribution rate levels, pension contributions relative to state budget
- **Solvency**: Ability to pay for member benefits when due
  - Can the plans pay the benefits that have been earned by members?
  - Are the plans on target to meet future benefit requirements?
  - Example: Funded ratio

Current Plan Health

Affordability: Contribution Rates Are Trending Downward for Most Plans

- As of 2022 AVR, $11.5 billion in deferred asset gains (all plans combined) under asset smoothing method
- Recent funding policy changes decreased Plan 1 UAAL rates
- See Appendix for Plan 2 member rates

Total Employer Contribution Rates[1]			
	2019-21 Biennium	2021-23 Biennium	2023-25 Biennium
System	Collected	Collected	Adopted[3]
PERS	12.68%	10.07%	9.33%
TRS	15.33%	14.24%	9.50%
SERS	13.01%	11.47%	10.73%
PSERS	11.96%	10.21%	9.70%
LEOFF[2]	8.59%	8.53%	8.53%
WSPRS	17.50%	17.66%	17.79%

[1] Excludes DRS administrative expense fee.
[2] No contributions are required for LEOFF 1 when the plan is fully funded.
[3] Rates effective 9/1/2023, and reflect adoptions by PFC and LEOFF 2 Board with adjustments for 2023 Legislative Session changes. Plan 1 UAAL rates may change 9/1/2024. See next slide for additional details.

Affordability: Law Changes Have Impacted Plan 1 UAAL Rates

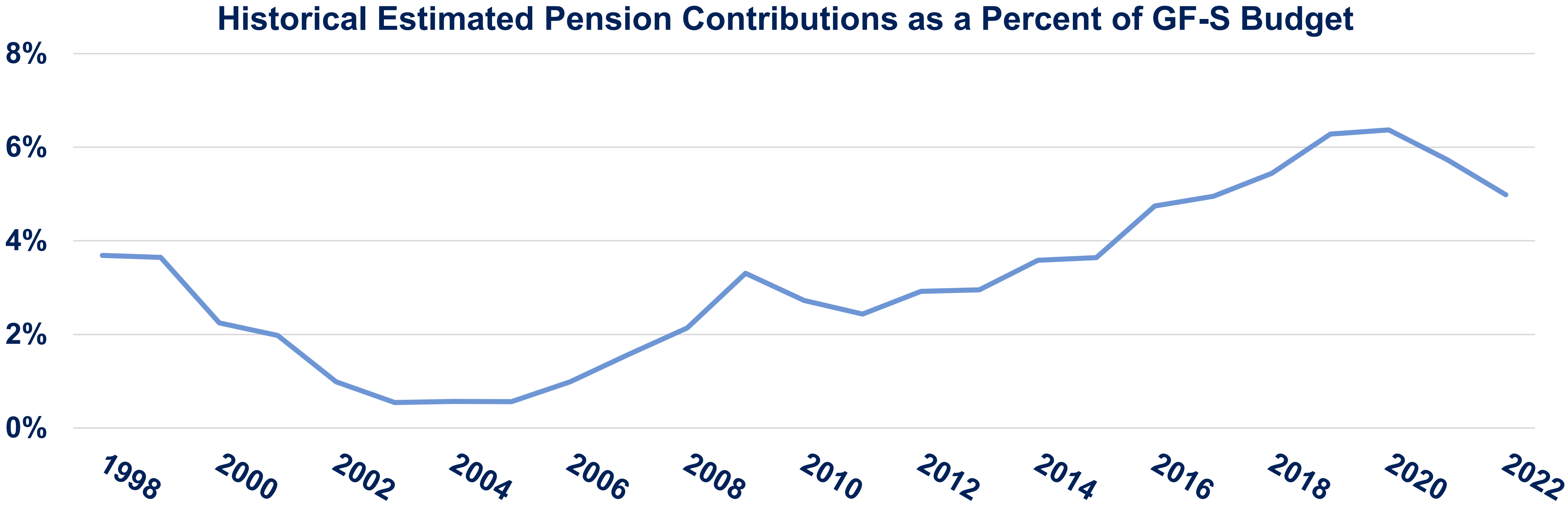
- Two Plan 1 law changes impacted affordability
  - SB 5350 (ad hoc COLA) increased plan costs
  - ESSB 5294 updated funding policy and reduced short-term rates
- Overall, these law changes decreased short-term contribution rates for PERS, TRS, SERS, and PSERS employers

PERS 1 and TRS 1 UAAL Rates for 2023-25 Biennium				
	Before 2023 Legislative Session		After 2023 Legislative Session*	
	FY 2024	FY 2025	FY 2024	FY 2025
PERS 1 UAAL	3.85%	3.85%	2.97%	2.47%
TRS 1 UAAL	6.46%	6.46%	1.44%	1.44%

**Reflecting SB 5350 and ESSB 5294.*

Affordability: Contributions as Percent of GF-S Budget Starting to Trend Downward

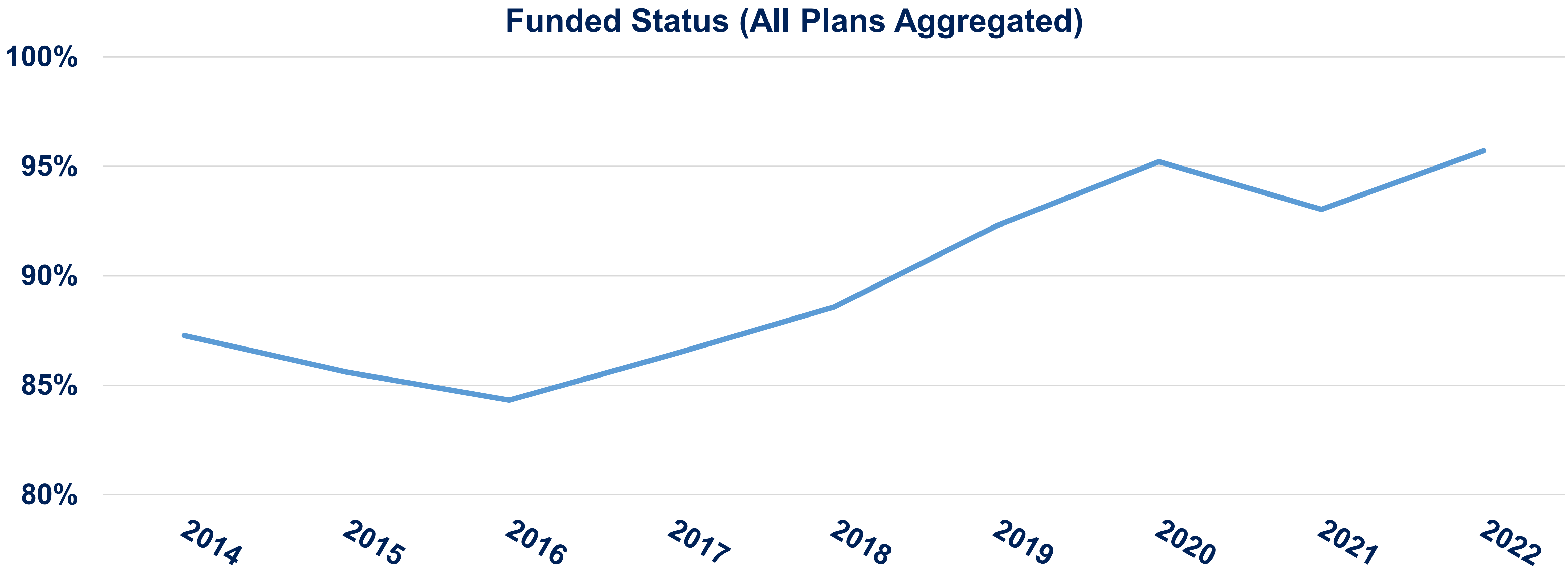
- Began trending downward in the 2019-21 Biennium
  - See 2021 RFC for background on historical trends



Note: We rely on actual GF-S budgets found in the Washington State Economic and Revenue Forecast reports. We also rely on pension contributions found in Annual Comprehensive Financial Reports and our AVRs. To estimate GF-S contributions, we apply our historical assumed fund splits to the applicable year. See Plan Maturity Measures on our Commentary on Risk webpage for details.

Solvency: Funded Ratio Has Trended Upward since 2016

- Impacted by changes in assumptions and plan/asset experience



Affordability and Solvency Continue to Improve since our Last RFC

- Affordability continues to improve
  - 2023-25 Biennium collected rates generally lower than prior two biennia
  - Contributions as a percent of GF-S budget have started to decline
  - Other affordability measures (e.g., maturity) not updated for 2023 RFC
    - See our Commentary on Risk webpage for additional measures
- Solvency continues to improve
  - Funded ratios (all plans combined) have increased since the 2021 RFC

Projected Plan Health

Affordability: Contribution Rates Expected to Continue Downward Trend

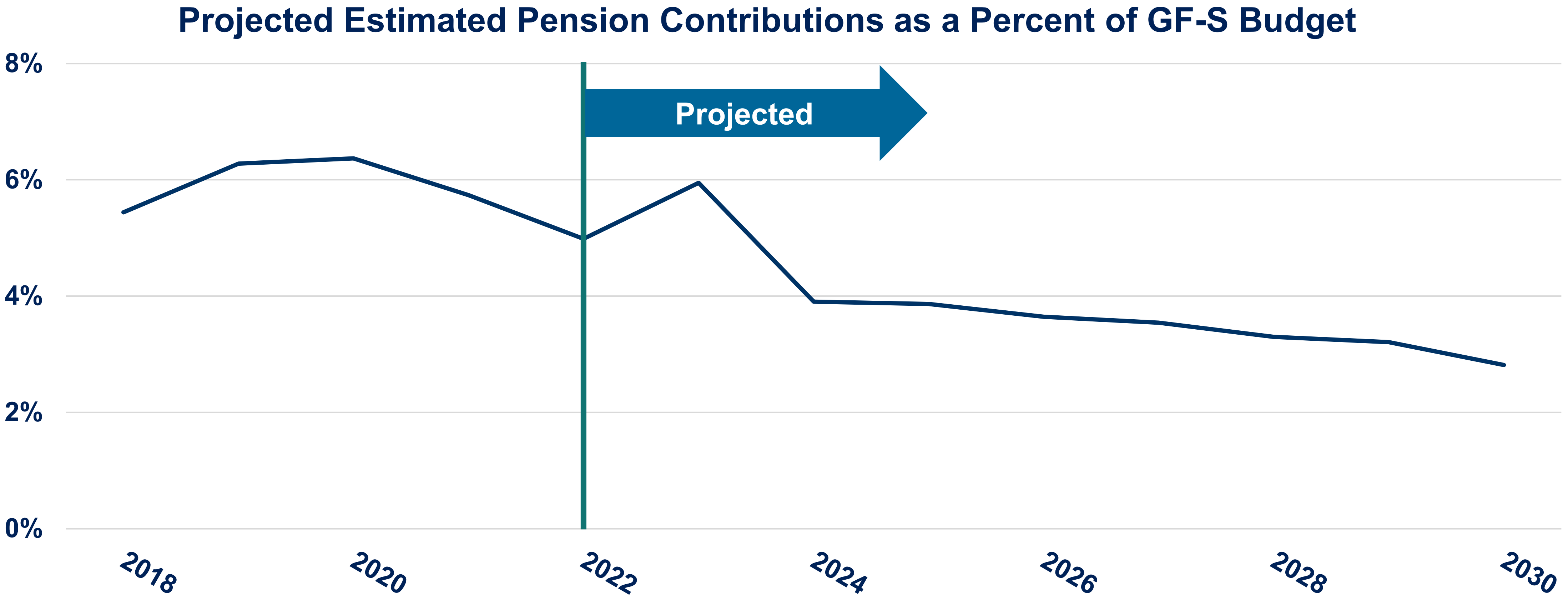
- In large part due to the recognition of past, deferred investment gains
- PERS 1 and TRS 1 UAAL both expected to be paid off by FY 2027
- See Appendix for Plan 2 member rates

Total Employer Contribution Rates[1]				
	2023-25 Biennium	2025-27 Biennium	2027-29 Biennium	2029-31 Biennium
System	Adopted[4]	Projected	Projected	Projected
PERS[2]	9.08%	7.25%	5.75%	5.15%
TRS[2]	9.50%	9.12%	8.77%	7.35%
SERS[2]	10.48%	8.40%	6.71%	5.52%
PSERS[2]	9.45%	8.65%	7.93%	7.08%
LEOFF[3]	8.53%	8.22%	8.02%	8.05%
WSPRS	17.79%	16.97%	11.83%	8.03%

[1] *Excludes DRS administrative expense fee.*
[2] *For plans contributing to PERS 1 UAAL, we averaged PERS 1 UAAL rates for FYs 2024 and 2025.*
[3] *No contributions are required for LEOFF 1 when the plan is fully funded.*
[4] *Rates effective 9/1/2023 and reflect adoptions by PFC and LEOFF 2 Board with adjustments for 2023 Legislative Session changes.*

Affordability: Contribution as a Percent of GF-S Budget Also Expected to Continue Downward Trend

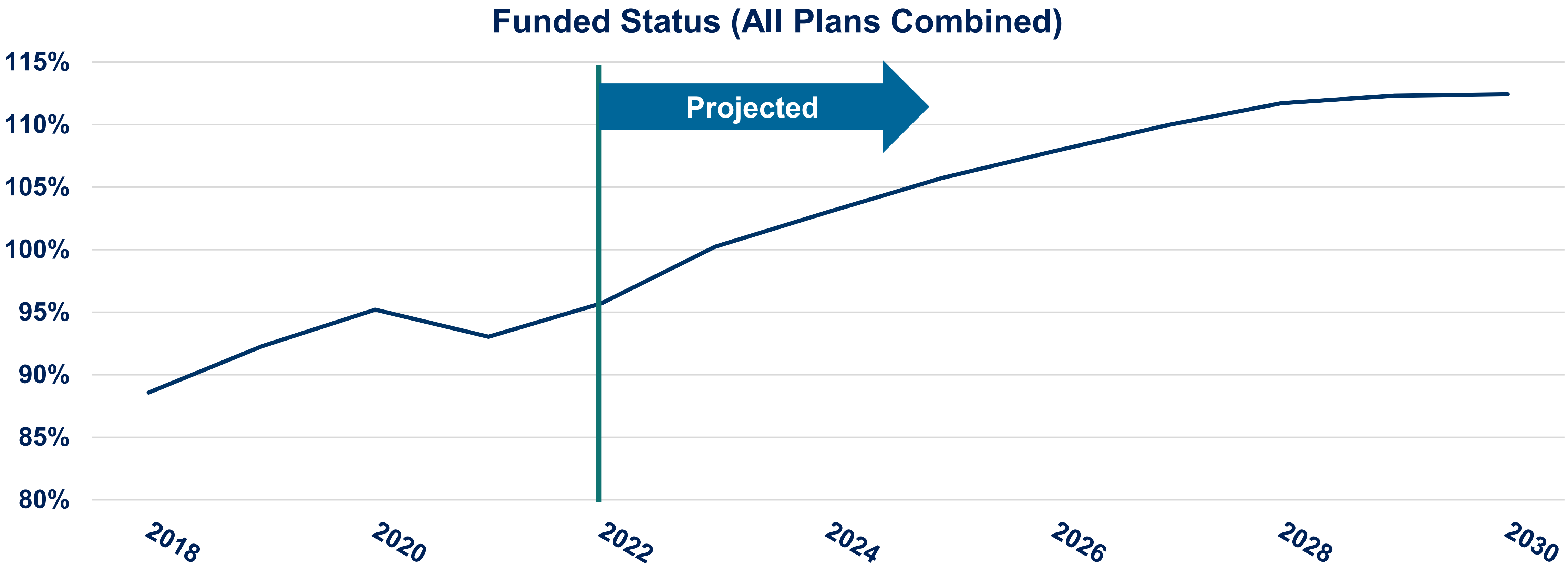
- Budget projected to increase; pension contribution rates decreasing



Note: We relied on the June 2022 Washington State Economic and Revenue Forecast for the short-term GF-S forecast. All other projected assumptions, including long-term GF-S growth, rely on data, assumptions, and methods consistent with a modified version of our most recent Projections Model (2021 Valuation Projections Model). Use of another report can lead to different results but the long-term trend is not expected to change.

Solvency: Funded Ratios Expected to Continue Trending Upward

- All plans expected to reach/exceed 100% in the next five years
- Ongoing contributions still required for most plans



Affordability and Solvency
Both Expected to Continue to Improve

- Similar trends and takeaways as the 2021 RFC
- Affordability and solvency are both expected to continue improving
  - Downward trend in contribution rates and contributions as a percent of budget
  - Upward trend in funded status
  - PERS 1 and TRS 1 UAAL both expected to be paid off by FY 2027
- **Important Note**: Projections are based on assumptions as well as benefit provisions, funding policy, and methods defined in current law (where applicable). Actual experience may vary.
  - Assumes full actuarially required contributions are collected

Financial Risks to Plans

How Can the Future Look Different than Expected?

- As discussed in the 2021 RFC, three main factors materially influence our projections
  - Investment experience
  - Choices made by policy makers
  - Demographic experience
- See 2021 RFC for additional information

Emerging Financial Risks to the Plans since the 2021 RFC

- Updated Plan 1 funding policy (ESSB 5294)
  - Improves short-term affordability but solvency could worsen
  - Less assets available than previously expected to offset future, adverse economic scenarios
  - UAAL more likely to re-emerge as a result (see fiscal note for additional detail)
  - For more info on Plan 1 Funding Policy, see our Plan 1 Funding Policy Review
- Two Additional Ad Hoc COLAs since our Last RFC
  - Four Ad Hoc COLAs added during last six legislative sessions
  - Decreases affordability and solvency of these plans
  - Improves purchasing power of PERS 1 and TRS 1 retirees

How Can Risk Factors Be Managed?

- Health of retirement plans cannot be completely controlled
  - Membership demographics, actual return on investments, pandemics, etc.
- Legislature and policy makers can manage some risks
  - Adopting adequate contribution rates based on reasonable assumptions
  - If benefit enhancements are enacted, ensure they are affordable and sustainable
- OSA plays a role too
  - Regularly revisit assumptions
    - Economic studies conducted every two years; demographic every six years
  - Continual review of affordability and solvency measures
    - Currently studying Risk Assessment model and updating measures
  - Actuarial fiscal notes and risk analysis on proposed plan changes

Summary of *Report on Financial Condition*

- Current and projected plan health
  - Affordability and solvency metrics are improving
  - Contribution rates are trending downward for most plans
  - Contributions as a Percent of GF-S Budget are trending downward
  - Funded ratios are trending upward
- Managing financial risks to retirement plans
  - Regular monitoring
  - Making necessary adjustments in a timely manner
  - Applying discipline and a long-term view when considering benefit enhancements and contribution requirements

Questions?

Questions? Please Contact: The Office of the State Actuary

[leg.wa.gov/OSA](leg.wa.gov/OSA); state.actuary@leg.wa.gov

360-786-6140, PO Box 40914, Olympia, WA 98504

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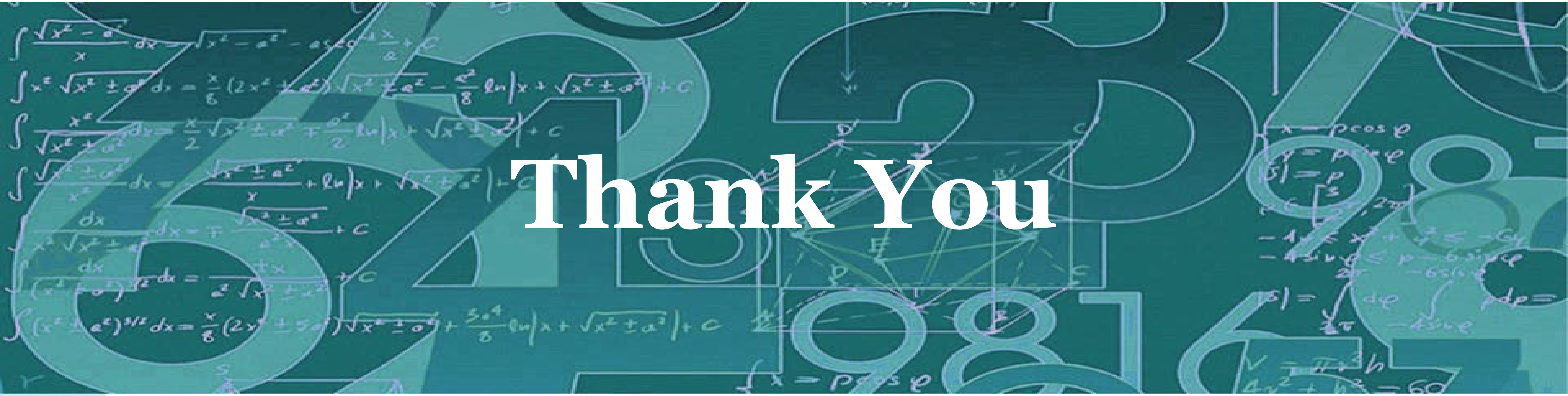

Appendix

- 2023-25 Contribution Rates
- Historical Funded Ratios by Plan
- Plan 2 Member Contribution Rates
- Disclosure on Projections Model
- Actuary’s Certification of the 2023 RFC

2023-25 Contribution Rates

2023-25 Biennium Contribution Rates *Displayed Rates Effective 9/1/2023*				
	Employee	Employer[1]		
System	Normal Cost	Normal Cost	UAAL[3]	Total
PERS[2]	6.36%	6.36%	2.97%	**9.33%**
TRS[2]	8.06%	8.06%	1.44%	**9.50%**
SERS[2]	7.76%	7.76%	2.97%	**10.73%**
PSERS	6.73%	6.73%	2.97%	**9.70%**
LEOFF[4]	8.53%	8.53%	0.00%	**8.53%**
WSPRS	8.74%	17.79%	N/A	**17.79%**

[1]Excludes DRS administrative expense fee.
[2]Plan 1 members' contribution rate is statutorily set at 6.0%. Members in Plan 3 do not make contributions to their defined benefit.
[3]ESSB 5294 (2023 Legislative Session) prescribed lower PERS 1 UAAL rates for FY 2025. The UAAL rate is 2.47% for FY 2025.
[4]LEOFF 2 contribution rates. No member or employer contributions are required for LEOFF Plan 1 when the plan is fully funded.

Historical Funded Ratios by Plan

Funded Status on an Actuarial Value Basis											
(Dollars in Millions)	PERS		TRS		SERS	PSERS	LEOFF		WSPRS	Total	Interest Rate
	Plan 1	Plan 2/3	Plan 1	Plan 2/3	Plan 2/3	Plan 2	Plan 1	Plan 2	Plan 1/2		
Accrued Liability	$11,047	$55,247	$8,041	$23,195	$8,712	$1,173	$4,204	$17,336	$1,669	$130,623	
Valuation Assets	8,294	53,863	6,472	21,254	8,026	1,180	6,376	17,985	1,576	125,026	
Unfunded Liability	**$2,753**	**$1,384**	**$1,569**	**$1,941**	**$686**	**($7)**	**($2,172)**	**($648)**	**$93**	**$5,597**	
Funded Ratio											
2022	**75%**	**97%**	**80%**	**92%**	**92%**	**101%**	**152%**	**104%**	**94%**	**96%**	**7.0%**
2021	71%	95%	73%	90%	91%	98%	146%	104%	92%	93%	7.0%
2020	69%	98%	71%	93%	93%	101%	148%	113%	97%	95%	7.5%
2019	65%	96%	66%	91%	91%	101%	141%	111%	95%	92%	7.5%
2018	60%	91%	63%	90%	89%	96%	135%	108%	93%	89%	7.5%
2017	57%	89%	60%	91%	88%	95%	131%	109%	92%	86%	7.5%
2016	56%	87%	61%	89%	87%	94%	126%	105%	91%	84%	7.7%
2015	58%	88%	64%	92%	89%	95%	125%	105%	98%	86%	7.7%
2014	61%	90%	69%	94%	91%	96%	127%	107%	100%	87%	7.8%

Note: Totals may not agree due to rounding. Liabilities valued using the EAN cost method. Assets valued using the actuarial smoothing method.

Plan 2 Member Contribution Rates

Employee Contribution Rates[1]						
	2019-21 Biennium	2021-23 Biennium	2023-25 Biennium	2025-27 Biennium	2027-29 Biennium	2029-31 Biennium
System	**Collected**	**Collected**	**Adopted[3]**	**Projected**	**Projected**	**Projected**
PERS 2[1]	7.90%	6.36%	6.36%	5.78%	4.83%	4.83%
TRS 2[1]	7.77%	8.05%	8.06%	8.18%	7.43%	6.73%
SERS 2[1]	8.25%	7.76%	7.76%	6.93%	5.79%	5.20%
PSERS 2	7.20%	6.50%	6.73%	7.18%	7.01%	6.76%
LEOFF 2	8.59%	8.53%	8.53%	8.22%	8.02%	8.05%
WSPRS 1/2[2]	8.45%	8.61%	8.74%	8.74%	8.74%	8.03%

[1] Plan 1 members' contribution rate is statutorily set at 6.0%. Members in Plan 3 do not make contributions to their defined benefit.
[2] Current WSPRS member contribution rates are at the plan maximum.
[3] Rates effective 9/1/2023 and reflect adoptions by PFC and LEOFF 2 Board with adjustments for 2023 Legislative Session changes.

Disclosure on Projections Model

- Unless noted otherwise, we relied on data, assumptions, methods from our 2021 Valuation Projections Model to project plan health
  - We included the liabilities and funding policy changes from the Ad Hoc COLA (SB 5350) and Plan 1 Funding Change (ESSB 5294) bills which became law following the 2023 Legislative Session
  - Our projections reflect known asset returns through June 30, 2022
- In our projections, we made no assumption regarding the phase-in of the costs associated with the current 7% investment return assumption beyond the 2023-25 Biennium
  - PFC adopted a cost phase-in over three biennia, with the costs fully phased in with the 2027-29 Biennium
  - Our projections reflect the full impact of the current 7% return assumption starting in the 2025-27 Biennium

Actuary's Certification of the 2023 RFC

This presentation summarizes the results of OSA's analysis on the financial condition of the Washington State retirement systems, pursuant to RCW 41.45.030. The primary purpose of this presentation is to assist the PFC in evaluating whether to adopt changes to the long-term economic assumptions identified in RCW 41.45.035. This RFC may not be appropriate for other purposes. Please replace this presentation with our next RFC when available.

We relied on information gathered from our 2021 RFC, 2021 and 2022 AVRs, 2021 Valuation Projections Model, and fiscal note analysis on SB 5350 and ESSB 5294 to prepare this presentation. We believe that this information, along with the assumptions and methods used to conduct our analysis, is reasonable and appropriate for the primary purpose stated above. The use of another set of data, assumptions, and methods, however, could also be reasonable and could produce materially different results. In our opinion, all methods, assumptions, and calculations are in conformity with generally accepted actuarial principles and applicable standards of practice as of the date of this presentation.

Matthew M. Smith (FCA, EA, MAAA) and Kyle Stineman (ASA, MAAA) served as the reviewing and responsible actuaries for this RFC. They meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein and are available to offer extra advice and explanation as needed.