

Report on Financial Condition

Presentation to: LEOFF 2 Retirement Board

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"Supporting financial security for generations."

September 29, 2021

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Today's Presentation

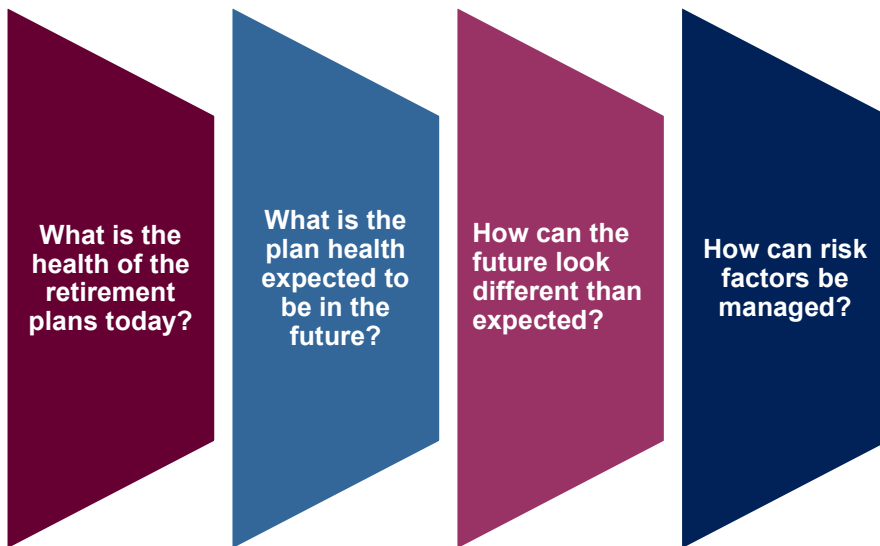
- Highlights of the *Report on Financial Condition*
 - Published jointly with the *Economic Experience Study*
- Link to the full reports included in the Appendix
- Impacts of FY 2021 investment return
- No action required at today's meeting

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Framework for Assessing Financial Condition



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Measures for Assessing Plan Health

- **Affordability:** Ability to provide adequate funding
 - Can members, employers, 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
 - 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



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Current Contribution Rates Declining after Historically High Levels

- Phase-in complete of increased costs due mortality assumption change
- Recent investment returns higher than assumed
- Plan 1 UAAL contribution rates have declined to minimum levels
- For most plans, cost of new hires is less than current members

Total Employer Contribution Rates				
	2015-17	2017-19	2019-21	2021-23
	Biennium	Biennium	Biennium	Biennium
System	Collected	Collected	Collected	Adopted
PERS	11.00%	12.52%	12.68%	10.07%
TRS	12.95%	15.02%	15.33%	14.24%
SERS	11.40%	13.30%	13.01%	11.47%
PSERS	11.36%	11.76%	11.96%	10.21%
LEOFF	8.41%	8.75%	8.59%	8.53%
WSPRS	8.01%	12.81%	17.50%	17.66%

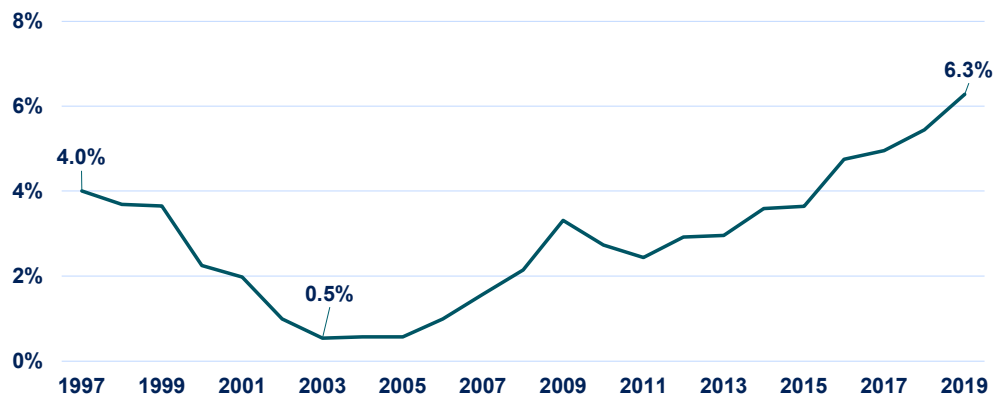
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Pension Contributions Are Larger Portion of State Budget

Historical Estimated Pension Contributions as a Percent of GF-S Budget



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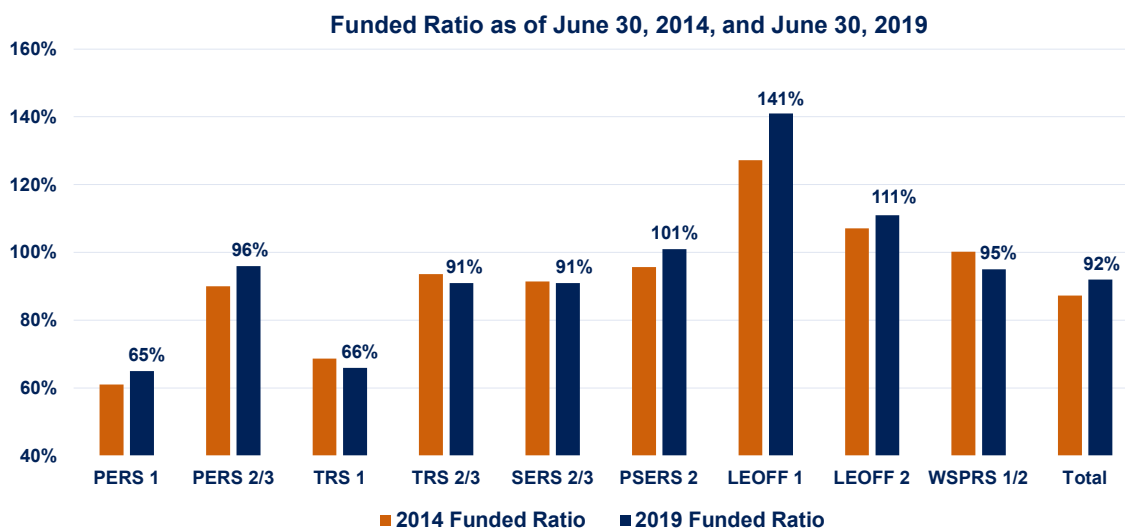
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We Rely on Funded Ratio to Measure Solvency

- Funded ratio compares plan assets to members' earned benefits
- Plan assets reflect past funding plus investment earnings
- Funded ratio >100% means the plan has more assets than earned benefits

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Funded Ratio Generally Increased from 2014



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Plan Financial Health: What Does the Future Hold?

- Continued improvement for future affordability and solvency metrics
 - Assumes actual experience matches assumptions over long term
 - Excludes impact from FY 2021 investment return
- Contribution rates expected to decline
 - Contributions as a percent of General-Fund Budget expected to decline from a high of 6.4% in 2020 to 3.3% in 2028
- All plans on target to reach full funding
 - All open plans projected to have a funded ratio of 95% or higher by 2023
 - PERS 1 and TRS 1 UAAL projected to be paid off in 2027 and 2026, respectively

The Future Might Be Different than We Expect

- OSA's risk assessment model simulates 2,000 different investment return scenarios
- Assess risks under Current Law and "Past Practices"
- Please refer to the RFC for likelihood of various projected affordability and solvency measures
 - Select Measures of Pension Risk table
- Affordability and solvency risk measures have improved
- [Commentary on Risk](#) webpage provides additional risk analysis and sensitivity of financial measures

2021 Was Different than Expected

- June 2021 revenue forecast better outlook than June 2020 revenue forecast
- Investment return on pension assets for FYE June 30, 2021, almost 29%
 - Highest single year return in over 30 years
 - Approximately \$22 billion in investment earnings above assumed
 - Will any be given back through a market downturn?



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AVA Accounts for Unexpected Investment Returns

- Develop Actuarial Value of Assets (AVA) by smoothing past and current asset gains (or losses) from investments
 - Calculate asset gain (or loss) based on 7.4% expected return
 - Smooth gain (or loss) over a period up to 8 years
 - Smoothing method reduces contribution rate and funded status volatility

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Smoothing Annual Investment Returns

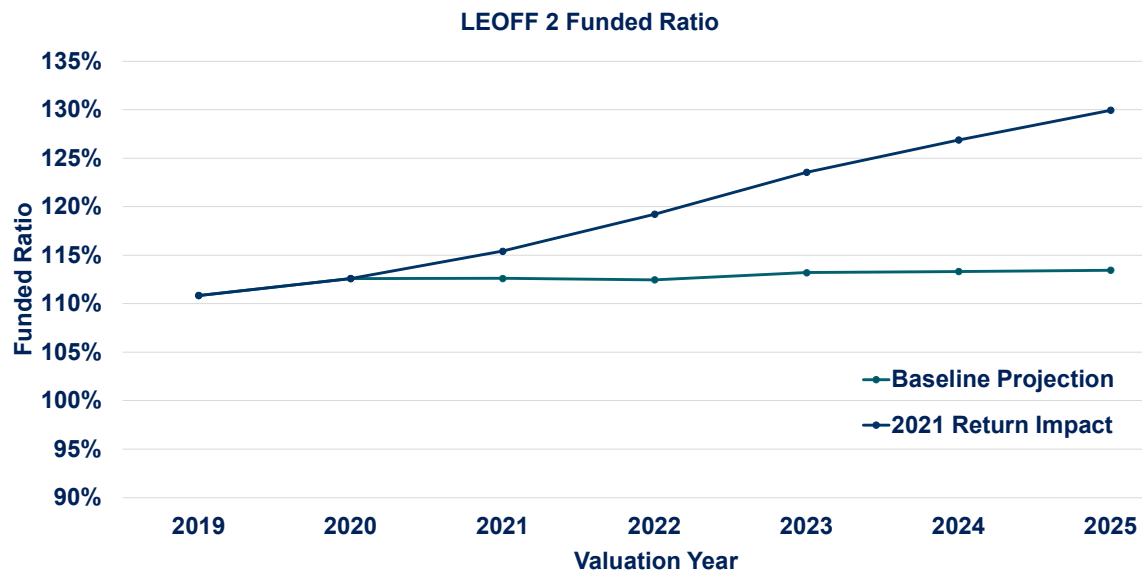
Smoothing Schedule		
LEOFF 2 Rate of Return	Smoothing Period	Annual Recognition
14.4% and up	8 years	12.50%
13.4%-14.4%	7 years	14.29%
12.4%-13.4%	6 years	16.67%
11.4%-12.4%	5 years	20.00%
10.4%-11.4%	4 years	25.00%
9.4%-10.4%	3 years	33.33%
8.4%-9.4%	2 years	50.00%
6.4%-8.4%	1 year	100.00%
5.4%-6.4%	2 years	50.00%
4.4%-5.4%	3 years	33.33%
3.4%-4.4%	4 years	25.00%
2.4%-3.4%	5 years	20.00%
1.4%-2.4%	6 years	16.67%
0.4%-1.4%	7 years	14.29%
0.4% and lower	8 years	12.50%

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2021 Asset Gains Increases LEOFF 2 Funded Ratio



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Reflecting Investment Experience Improves Projected Financial Outcomes

- All open plans projected to have a funded ratio of 100% or higher by 2023
- PERS 1 UAAL projected to be paid off in 2025
- TRS 1 UAAL projected to be paid off in 2024
 - Projected payoff is 2023 if the \$800 million lump sum payment is included
- These projections do not reflect updated EES recommendations

Projected Contribution Rates Reflecting FY 2021 Investment Return—Preliminary

Total Employer Contribution Rates				
	2021-23 Biennium	2023-25 Biennium	2025-27 Biennium	2027-29 Biennium
System	Adopted	Projected	Projected	Projected
PERS	10.07%	8.55%	4.38%	4.38%
TRS	14.24%	13.40%	5.77%	5.24%
SERS	11.47%	10.12%	4.72%	4.72%
PSERS	10.21%	9.76%	5.46%	5.28%
LEOFF	8.53%	8.53%*	7.74%	7.78%
WSPRS	17.66%	17.65%	7.03%	6.88%

*Adopted by the LEOFF 2 Board.

- PERS 1 and TRS 1 contributions projected to end after 2023-25 Biennium
- Projected rates do not reflect updated EES recommendations

Projected Contribution Rates Reflecting FY 2021 Investment Return—Preliminary

Total Employer Contribution Rates				
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	Biennium	Biennium	Biennium	Biennium
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PERS	10.07%	8.55%	4.38%	4.38%
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LEOFF 2 Funding Policy Impacts—Preliminary

Change in Total Employer Projected Contribution Rates—Preliminary			
	2021-23	2023-25	2025-27
	Biennium	Biennium	Biennium
Baseline Projection	8.53%	8.53%	7.74%
Aggregate		5.17%	4.83%
Minimum Rate*		7.71%	7.74%
2021 Return Impact	8.53%	8.53%	7.74%
Aggregate		4.42%	1.90%
Minimum Rate*		7.71%	7.74%

Note: Rates through 2023-25 adopted by the Board and assumed to remain unchanged.

*Represents a minimum contribution rate at 90% of the Entry Age Normal Cost (EANC) rate based on plan funding policy.

Funding Policy Changes Added Protections in Mid 2000s

- 131% funded ratio across all plans in 2000, declined to 99% in 2005
 - Funding shortfall, market downturn, and increased benefits
- New funding policies implemented
 - Asset smoothing period increased to a maximum of 8 years (2003)
 - Minimum employer and employee contribution rates (2006)
 - SCPP sponsored legislation

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Managing Risks We Can Control



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Report on Financial Condition: Concluding Comments

- Improved affordability and solvency metrics
 - Contribution rates are beginning to decline after some of the highest in plan history
 - Funded ratios improving
- FY 2021 investment return improves projected financial outcomes
- Managing pension risks requires
 - Regular monitoring
 - Making necessary adjustments
 - Applying discipline and a long-term view when considering benefit changes and contribution requirements

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Questions?



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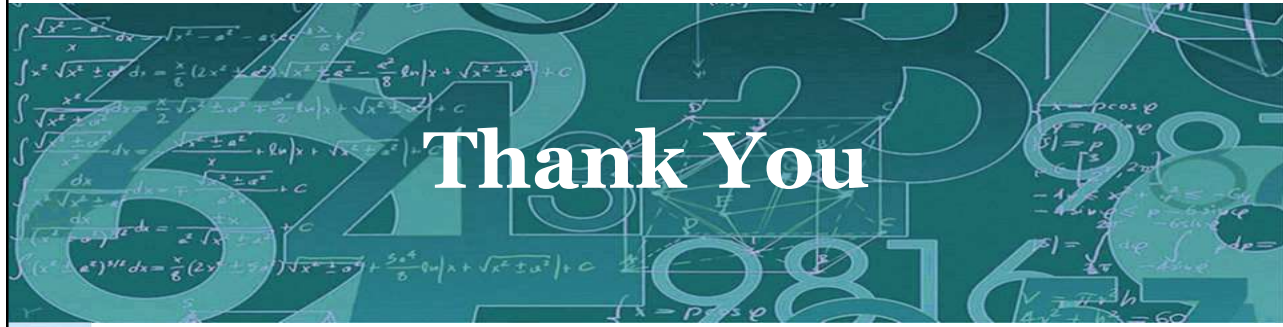
Questions? Please Contact: The Office of the State Actuary

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Thank You

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Appendix

- 2021-23 Contribution Rates
- Projected Employee Contribution Rates
- Projection Assumptions and Disclosures
- Please see the full [2021 Report on Financial Condition](#) for more information



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2021-23 Contribution Rates

Adopted 2021-23 Contribution Rates				
System	Employee	Employer		
	Normal Cost	Normal Cost	UAAL	Total
PERS	6.36%	6.36%	3.71%	10.07%
TRS	8.05%	8.05%	6.19%	14.24%
SERS	7.76%	7.76%	3.71%	11.47%
PSERS	6.50%	6.50%	3.71%	10.21%
LEOFF	8.53%	8.53%	0.00%	8.53%
WSPRS	8.61%	17.66%	N/A	17.66%

Projected Employee Contribution Rates

Employee Contribution Rates				
	2021-23	2023-25	2025-27	2027-29
	Biennium	Biennium	Biennium	Biennium
System	Adopted	Projected	Projected	Projected
PERS ¹	6.36%	4.84%	4.38%	4.38%
TRS	8.05%	7.21%	5.77%	5.24%
SERS	7.76%	6.41%	4.72%	4.72%
PSERS	6.50%	6.05%	5.46%	5.28%
LEOFF	8.53%	8.53%	7.74%	7.78%
WSPRS ²	8.61%	8.61%	7.03%	6.88%

Note: Members in Plan 3 do not make contributions to their defined benefit.

¹Plan 1 members' contribution rate is statutorily set at 6.0%.

²Current WSPRS member contribution rates are at the maximum for the plan.

- Projected rates include FY 2021 investment return
- Does not reflect updated EES recommendations

Projection Assumptions and Disclosures

- The future contribution and rate impacts presented here are preliminary and will change with updates to the underlying data, assumptions, and method
- Analysis based on our [2019 Actuarial Valuation Report](#) and [Projection Assumptions](#)
- We relied on the total CTF time-weighted investment return for FY 2021 of 28.68%
 - Results will change when dollar-weighted system-specific returns are used in the 2021 AVR
- Assumed all future returns beyond 2021 matched the current long-term assumption of 7.5% (7.4% in LEOFF 2)