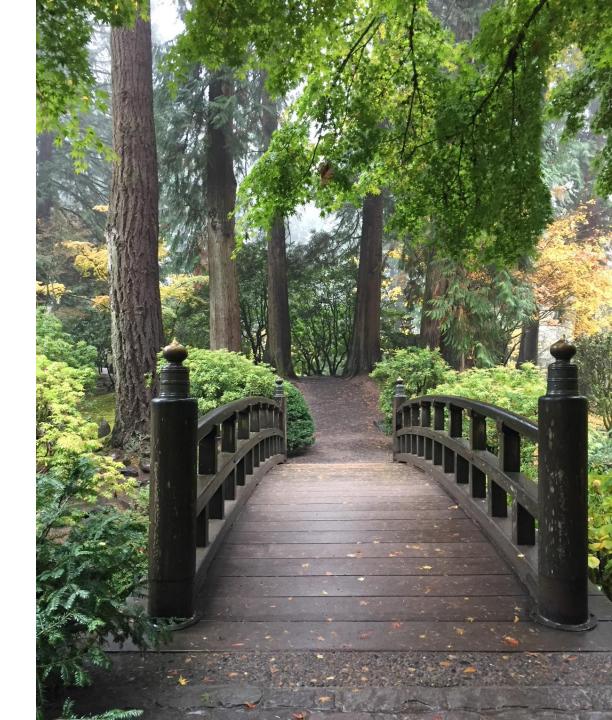
oregon PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM

2019-2021 Budget Presentation

Ways and Means General Government Subcommittee Phase 1 – Day 1

> Kevin Olineck Director



PERS: Agency Presentation Schedule

Day One

System Overview

- Overview and Partnerships
- PERS Board
- Governance and Interdependencies
- Benefit Components
- Benefits and Funding
- Funded Status and Liabilities
- System-Wide Rates and Projections
- Additional Resources

Day Two

Agency Overview

- System Refresher
- Agency Budget vs. Non-Limited
- Mission, Vision, and Values
- Strategic Plan
- Performance and Outcome Measures
- CEM Benchmarking
- Agency Programs
- Agency Overview
- Wrap Up

Day Three

Budget Overview

- System Refresher
- 2017-19 Legislatively Approved Budget
- 2019-21 Major Budget Drivers
- Budget Risks and Environmental Factors
- Agency Changes
- System and Agency Funding
- Policy Option Packages
- Agency Divisions
- Legislatively Approved Budget Comparison
- Key 2019 Legislation
- 10% Budget Reductions

Appendix

- Audit Response Reports
- Recent Changes to Agency Budget and Management
- 2017-19 Long-term Vacancies
- Supervisory Span of Control
- Statewide Policy Packages
- 2019-21 Technology Projects
- Other Funds Ending Balance
- Additional Resources

Day Four

Statutory Reporting

- Preliminary Earnings Crediting Report for Calendar Year 2018
- Senate Bill 1566 (2018) Reports:
 - General Status Update
 - Distribution of SDULF

PERS: Day One

System Overview

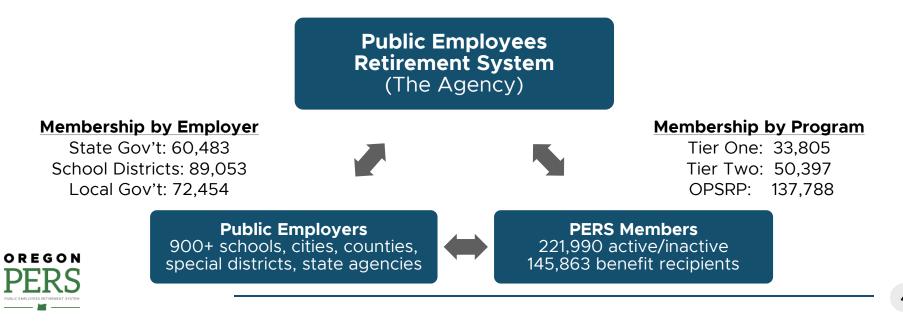


PERS Overview and Partnerships

(as of June 30, 2018)

The Oregon Legislative Assembly is the "Plan Sponsor" for the Oregon Public Employees Retirement System. The legislature determines the benefit structure for participating public employees. Those benefits have been modified over time, generally with benefit enhancements through 1995, but then reducing benefits since, including the creation of the Tier Two program for employees starting in 1996 and then the Oregon Public Service Retirement Program (OPSRP) for employees that started after August 28, 2003.

The legislature established PERS, the agency, to administer the retirement system in partnership with more than 900 public employers, including school districts, special districts, cities, counties, community colleges, universities, and state agencies. PERS collects records and maintains relationships with over 367,000 current and former public employees or their beneficiaries.



PERS Board – How Is It Constituted

(Oregon Revised Statutes Chapter 238.640)

Five members, appointed by the Governor and confirmed by the Senate (Governor designates who will serve as Board Chair):

- One member is an employee of the state in a management position or holds an elective office in a governing body of a public employer
- One member is retired from a bargaining unit or is currently employed and in a bargaining unit
- Three members with experience in business management, pension management, or investing



PERS: Board of Trustees



Board Chair: Sadhana Shenoy



Vice Chair: Lawrence J. Furnstahl



Christelle Gema deAsis



Stephen Buckley



Steve Demarest



PERS Board – Duties and Authority

(Oregon Revised Statutes Chapters 238.630)

- As trustees of the Public Employees Retirement Fund, directed to administer the system to create and maintain long-term stability and viability
- Publish an actuarial report at least once every two years, evaluating the system's current and prospective assets and liabilities and its financial condition, including the mortality, disability, and other experience of the members and employers
- Adopt actuarial equivalency factor tables at least once every two years, using the best actuarial information on mortality available at the time of adoption
- Publish a Comprehensive Annual Financial Report (CAFR) on an annual basis
- Adopt rules and take all actions necessary to maintain PERS as a federal tax qualified retirement plan
- Employ the Director and set up any other positions under the Director deemed necessary to carry on the duties of the administration of PERS



Translating Duties to Governance

The Board meets six times per year (bi-monthly).

- Set the economic assumptions and rate of return assumption biannually
- Based on results of the actuarial valuation, the board sets the employer contribution rates for the subsequent biennia
- Adopts actuarial equivalency factor tables which define the difference between the normal form of pension and other pension options
- Approves Fund Earnings and Interest Crediting annually
- Sets the Contingency Reserve Allocation annually
- Reviews and approves changes to the plan rules to ensure ongoing compliance with updates to applicable laws and regulations
- Hires the Director and conducts regular performance reviews
- Ensures there is adequate staffing under the Director to carry on the duties of the administration of PERS through adoption of budget requests
- Reviews the PERS Objective Based Management System on a semi-annual basis to ensure the administration of the agency meets its objectives

The Audit Committee meets three times per year.

- The Audit Committee reviews all internal and external audit reports and follows up on action items to address audit findings
- The Audit Committee ensures the Comprehensive Annual Financial Report (CAFR) is published annually



PERS: A System Comprised of Trusts

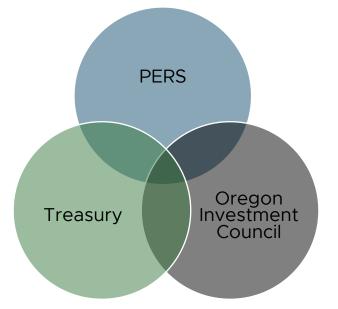
- The Oregon Public Employees Retirement System was created by the Oregon Legislative Assembly in 1945.
- Operations commenced on July 1, 1946

Statutory References for the Agency	
Statute & Chapter	Program
ORS 237 & 238	Tier 1/Tier 2
ORS 238A	Oregon Public Service Retirement Program (OPSRP)
ORS 238A.300 to ORS 238A.457	Individual Account Program (IAP)
ORS 238.500 to 238.585	Judge Member Retirement Program
ORS 238.485 to 238.492	Public Employees Benefit Equalization Fund
ORS 243.410 to 238.420	Retiree Health Insurance Program
ORS 243.401 to 243.507	Deferred Compensation Program: Oregon Savings Growth Plan (OSGP)
ORS 237.414 and 237.470	Social Security Administration Program

Oregon Administrative Rules (Ch. 459) govern the implementation of PERS' statutory responsibilities.



Interdepencies with Other Entities



- For the Tier I, Tier II, OPSRP and IAP Programs, PERS is responsible for maintaining an adequate balance of funds for estimated benefit payments and administrative costs, while being able to maximize amounts invested. PERS provides Treasury with cash flow forecasts, which include an estimated investment buy and sell on each month. Treasury is responsible for managing PERS investments according to policies established by Oregon Investment Council (OIC).
- Similarly, for the Oregon Savings Growth Plan (OSGP), the PERS Board provides oversight of the administration and the OIC is responsible for the oversight of the investment program.



PERS: A History of Complexity

- Between 1945 and 2018 the legislature has approved over 70 changes to PERS plans
- These changes have increased the complexity of the plans and plan administration
- Major recent changes have included:
 - 2003: Establishment of the OPSRP program
 - 2005 -2007: refinement and modification to the 2003 plan changes
 - 2009-2010: changes to data verification processes and the allowance of purchases using pre-tax funds
 - 2011: changes to tax remedy prohibiting PERS from paying a tax remedy increase if a person is not a resident of Oregon or not subject to Oregon personal income tax for those eligible members who retire on or after January 1, 2012
 - 2013: COLA reductions, addition of a temporary annual supplementary payment and elimination of all tax remedy payments for retirees who do not pay Oregon income taxes because they do not live in Oregon
 - 2015: *Moro Decision* Oregon Supreme Court ruling which declared most of the 2013 reforms unconstitutional
 - This decision resulted in the recalculation of 120,000 benefit accounts
 - 2018: reform efforts focused on creating relief programs for employer rate increases. Establishment of the Employer Incentive Fund, the UAL Resolution Program and a side account, funded by various revenue streams, for school district rate relief



System Overview – Benefit Components

Tier One: Members hired before January 1, 1996

Tier Two: Members hired between January 1, 1996 and August 28, 2003

OPSRP: Members hired after August 28, 2003

IAP Account: All members with service after January 1, 2004

	Tier One Pension	Tier Two Pension	OPSRP Pension	IAP Account
Normal retirement age	58 (or 30 yrs); P&F* = age 55 or 50 w/ 25 yrs	60 (or 30 yrs); P&F = age 55 or 50 w/ 25 yrs	65 (58 w/ 30 yrs); P&F = age 60 or 53 w/ 25 yrs	Members receive IAP account at the time of retirement – may select
Early retirement	55 (50 for P&F)	55 (50 for P&F)	55, if vested	distribution option
Benefit calculation methods	Money Match Full Formula Formula +Annuity	Money Match Full Formula	Full Formula	Six account distribution options
Full Formula benefit factor	1.67% general 2.0% P&F	1.67% general 2.0% P&F	1.50% general 1.80% P&F	N/A
Lump-sum vacation payout Included in covered salary for contributions (6%)?	Yes	Yes	No	N/A
Included in Final Average Salary?	Yes	No	No	
Unused sick leave included in Final Average Salary?	Yes	Yes	No	N/A



*"P&F" refers to members who meet statutory definitions of "Police" or "Firefighter" as determined by their employer.

Who Gets Paid How Much?

(as of January 1, 2018)

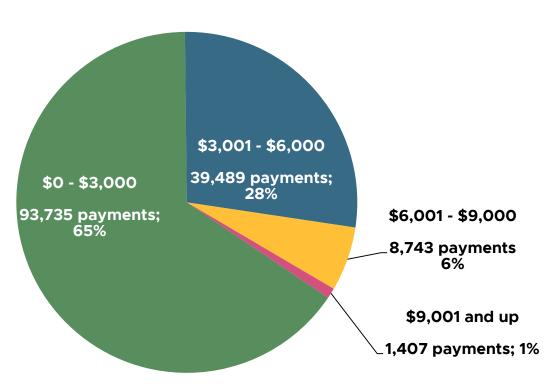
Monthly Benefit (\$)	Number of Retirees	Percent of Benefits Paid	Monthly Benefit (\$)	Number of Retirees	Percent of Benefits Paid
0 - 500	17,458	1.37%	3,001 - 3,500	9,218	8.05%
501 - 1,000	20,508	4.11%	3,501 - 4,000	7,980	8.04%
1,001 - 1,500	17,406	5.83%	4,001 - 4,500	7,086	8.09%
1,501 - 2,000	14,723	6.91%	4,501 - 5,000	6,208	7.93%
2,001 - 2,500	12,801	7.73%	5,001 - 5,500	5,110	7.21%
2,501 - 3,000	10,839	8.00%	5,501 - 6,000	3,887	6.00%
Subtotal	93,735		Subtotal	39,489	
% of total	65.38%	33.95%	% of total	27.54%	45.32%

Monthly Benefit (\$)	Number of Retirees	Percent of Benefits Paid	Monthly Benefit (\$)	Number of Retirees	Percent of Benefits Paid
6,001 - 6,500	2,949	4.95%	9,001 - 10,000	613	1.55%
6,501 - 7,000	2,112	3.83%	10,001 - 11,000	325	0.92%
7,001 - 7,500	1,397	2.72%	11,001 - 12,000	174	0.54%
7,501 - 8,000	1,044	2.17%	12,001 - 13,000	92	0.31%
8,001 - 8,500	723	1.60%	13,001 - 14,000	64	0.23%
8,501 - 9,000	518	1.22%	14,001 and up	139	0.69%
Subtotal	8,743		Subtotal	1,407	
% of total	6.10%	16.49%	% of total	0.98%	4.24%

Who Gets Paid How Much?

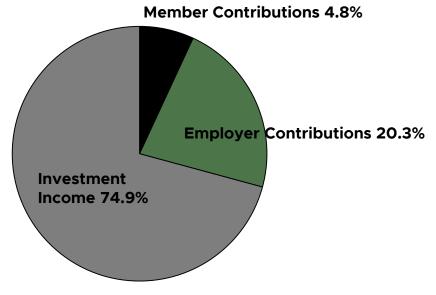
(as of January 1, 2018)

- 143,374 Benefit Payments
- Average annual benefit: \$31,097
- Median annual benefit: \$24,692





PERS Funding Sources and Funded Status



Revenue by source (1970-2017)

	Calendar Year (as of December 31)								
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Funded Status									
Including side accounts Excluding side accounts	86% 76%	87% 78%	82% 73%	91% 82%	96% 86%	84% 76%	79% 71%	75% 69%	80% 73%



Who Is Eligible to Retire?*

(as of June 30, 2018)

Employer Group	Tie	Tier One		Tier Two		OPSRP		OPSRP		Total Members in Employer Group	% of Members Eligible to Retire
	Actives	Inactives	Actives	Inactives	Actives	Inactives					
State Agencies & Universities	4,514	2,989	3,955	1,639	6,180	1,480	20,757	60,688	34.20%		
School Districts	5,205	3,397	5,282	2,964	8,861	2,864	28,573	90,011	31.74%		
Local Govt.	3,973	2,436	3,660	2,055	5,330	1,535	18,989	61,851	30.70%		
Community Colleges	622	593	732	577	1,533	811	4,868	11,381	42,77%		
Eligible to retire	14,314	9,415	13,629	7,235	21,904	6,690					
Judges							65	199	32.66%		
TOTAL	23	,729	20	20,864 28,594		73,252	224,130	32.68%			

* Reflects the number of members eligible to retire (including those eligible for reduced benefits) based on: age 55 or 30 years of service for general service members; age 50 or 25 years of service for police & firefighters; and age 60 for judge members.



The PERS Funding Equation

At the end of each calendar year, the PERS actuaries calculate the system's funded status using the following basic equation:



present value of earned benefits

employer funds to pay pension benefits

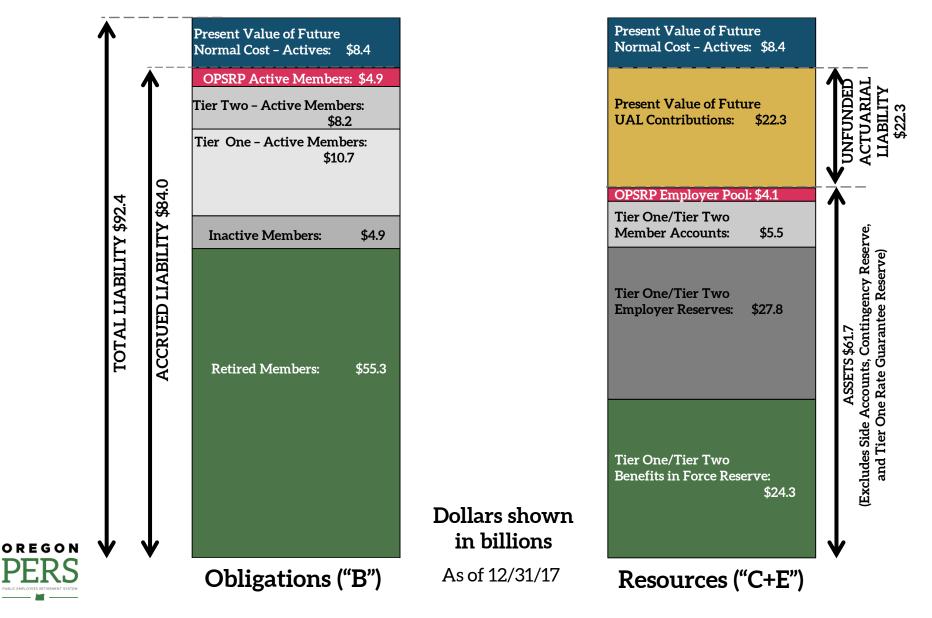
future returns on invested funds

Set by: Oregon Legislature Set by: PERS Board

Managed by: Oregon State Treasury & Oregon Investment Council

Every two years, the PERS Board adjusts contributions so that, over time, those contributions will be sufficient to fund the benefits earned, if earnings follow assumptions.

Problem: the "B" and "C+E" Don't Align



Funded Status and Unfunded Actuarial Liability (UAL)

System-total Pension Funded Status (\$ billions)									
Valuation date:	12/31/2015	12/31/2016	12/31/2017						
Assumed return:	7.50%	7.20%	7.20%						
Actuarial liability	\$ 76.2	\$ 81.0	\$ 84.1						
Assets (excluding side accounts)	54.4	55.7	61.8						
UAL (excluding side accounts)	\$ 21.8	\$ 25.3	\$ 22.3						
Funded status (excluding side accounts)	71%	69%	73%						
Side account assets	<u>\$ 5.6</u>	<u>\$ 5.4</u>	<u>\$ 5.6</u>						
UAL (including side accounts)	\$ 16.2	\$ 19.9	\$ 16.7						
Funded status (including side accounts)	79%	75%	80%						

Sources of the 2017 UAL Change

(Excluding Side Accounts)

(\$ billions)	UAL Increase
Expected UAL increase/(decrease) during 2017	\$ 1.1
2017 actual investment performance	(4.3)
Contingency Reserve transfer	(0.5)
Actual demographic experience different than assumed	0.7
Total	\$ (3.0)

- The <u>expected UAL increase/(decrease)</u> is the change, based on 12/31/2016 valuation results, that was projected to occur during 2017 due to the effects of the rate collar and other constraints on employer rate increases if all actual 2017 experience followed that valuation's assumptions
- The 2017 investment gain reflects actual OPERF returns of over 15% compared to the assumed 7.20% return
- The above changes are in addition to the \$3.5 billion increase during 2016, which was driven by assumption changes and the expected UAL increase



Side Accounts Explained

When an employer makes a lump-sum payment to prepay part or all of its unfunded actuarial liability (UAL), the money is placed in a special account called a "side account."

This account is attributed solely to the employer making the payment and is held separate from other employer reserves. Most employers with side accounts issued pension obligation bonds (POBs) and provided the bond proceeds to PERS as a UAL lump-sum deposit to fund their side account.

A few employers funded their side accounts with lump-sum payments from other sources, such as savings from internal operations. PERS does not track individual employer costs associated with POBs.

Side accounts become a part of the "trust" and, consequently, these accounts can not be refunded to the employer.

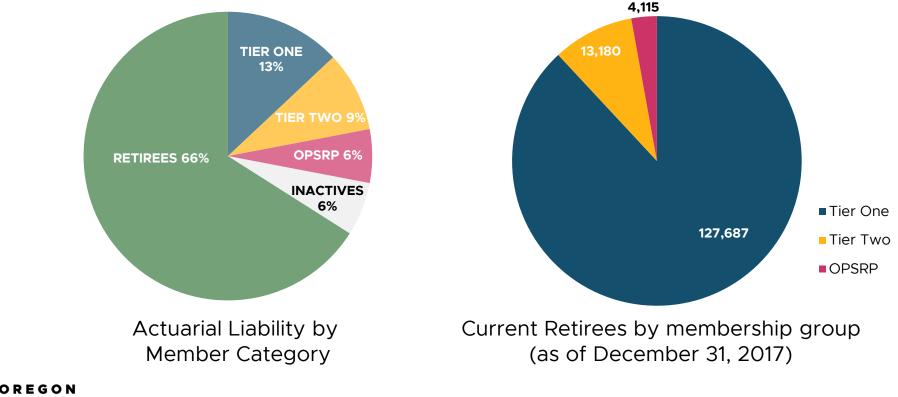
As of December 31, 2017, 145 employers have side accounts. Of these, 38 employers have multiple side accounts: one city, two special districts, two community colleges, and 33 school districts.



Actuarial Accrued Liabilities

(as of December 31, 2017)

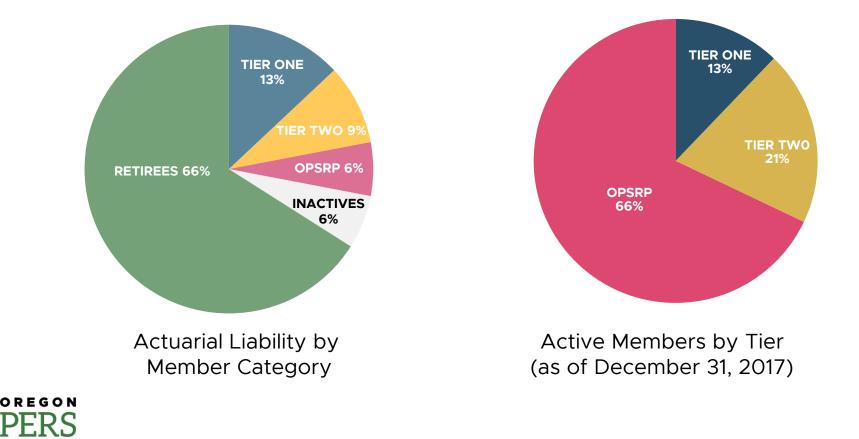
Approximately 72% of PERS' total accrued liability is for members who are no longer working in PERS-covered employment (retired and inactive members).



Actuarial Accrued Liabilities

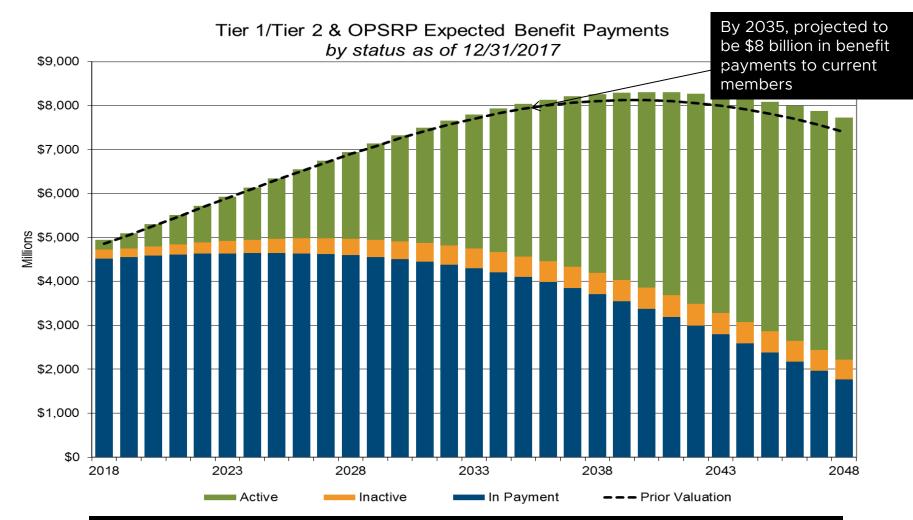
(as of December 31, 2017)

Although OPSRP members make up 68% of the active working population they are 6% of the accrued liability.



Projected Benefit Payments

OREGON



As illustrated by the dotted line, projected benefit payments did not change significantly between the prior and current actuarial valuation.

Board Principles on Rate Setting

When setting employer contribution rates, the PERS Board considers the following objectives and principles:

- Transparent process and inputs
- Predictable and stable employer contribution rates
- Protect funded status to secure future benefit payments
- Equitable across generations of taxpayers funding the system
- Actuarially sound fully fund the system if assumptions are met
- GASB compliant

Some of the objectives can conflict, particularly in periods with significant volatility in investment return or projected benefit levels. Overall system funding policies should seek an appropriate balance between conflicting objectives.



Employer Contribution Rate Setting Cycle

Actuarial valuations are conducted annually, but alternate between "advisory" and "rate setting": e.g., the December 31, 2016, valuation results were used to project employer rates, but the December 31, 2017, valuation was used to set actual rates for the 2019-2021 biennium.

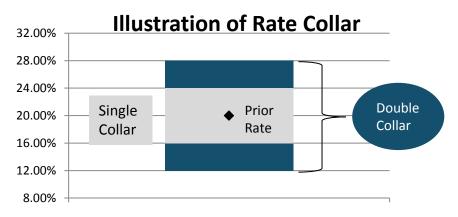
Once employer rates are adopted by the PERS Board (in the fall of the even-numbered year), they become effective the following July 1 of the odd-numbered year (18 months after the valuation date).

Valuation Date	Employer Contribution Rates
12/31/2017	July 2019 – June 2021
12/31/2019	July 2021 – June 2023
12/31/2021	July 2023 – June 2025



Current Rate Collar Design

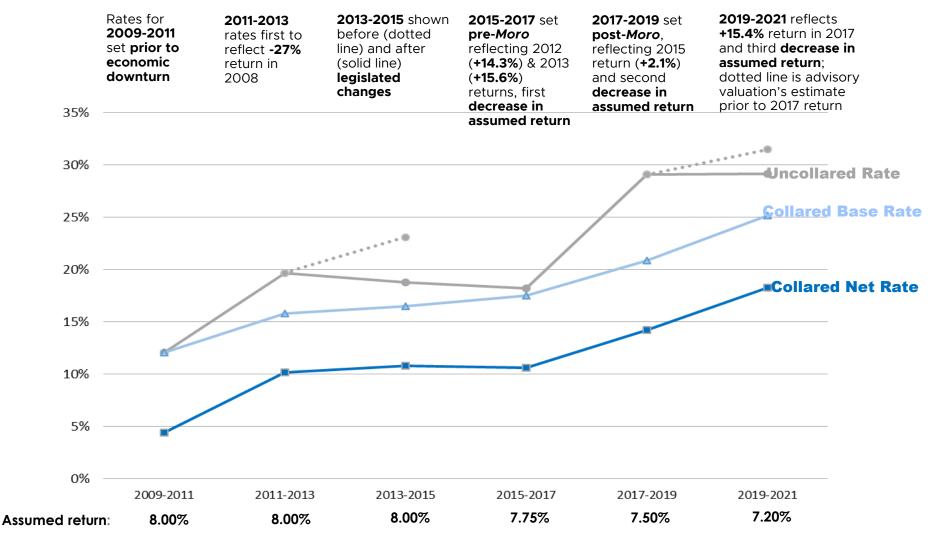
- The maximum change typically permitted by the rate collar is: 20% of the rate currently in effect (3% of payroll minimum collar width)
- If funded status is 60% or lower, the width of the rate collar doubles 40% of rate currently in effect (6% of payroll minimum collar width)
- If the funded status is between 60% and 70%, the rate collar's width is pro-rated between the single-collar and double-collar widths



 Collars limit the biennium to biennium increase in the UAL Rate for each individual employer (or pool, if an employer participates in one)



System-Wide Weighted Pension-Only Rates





Uncollared Pension Rates – System-Wide

Excludes Retiree Health Care, IAP Contributions, Rate Collar, Side Accounts

	12/31/2015 2017 - 2019 Final			12/31/2017 2019 – 2021 Final			
		Payroll			Payroll		
	Tier 1 / Tier 2	OPSRP	Weighted Average ¹	Tier 1 / Tier 2	OPSRP	Weighted Average ¹	
Normal Cost	15.07%	8.56%	11.79%	15.27%	8.92%	11.59%	
Tier 1/Tier 2 UAL	16.02%	16.02%	16.02%	16.18%	16.18%	16.18%	
OPSRP UAL	1.27%	1.27%	1.27%	1.45%	1.45%	1.45%	
Uncollared Rate	32.36%	25.85%	29.08%	32.90%	26.55%	29.22%	
Increase				0.54%	0.70%	0.14%	



Collared Pension Base Rates – System-Wide

Excludes Retiree Health Care & IAP Contributions, Side Account Offsets

	12/31/2015 2017 - 2019 Final			12/31/2017 2019 – 2021 Final			
	Payroll			Payroll			
	Tier 1 / Tier 2	OPSRP	Weighted Average ¹	Tier 1 / Tier 2	OPSRP	Weighted Average ¹	
Uncollared Rate	32.36%	25.85%	29.08%	32.90%	26.55%	29.22%	
Collar Limitation	(8.23%)	(8.23%)	(8.23%)	(3.99%)	(3.99%)	(3.99%)	
Collared Base Rate	24.13%	17.62%	20.85%	28.91%	22.56%	25.23%	
Increase				4.78%	4.94%	4.38%	

Increases that will be effective July 2019 are limited by the collar.



Collared Pension Net Rates – System-Wide

Excludes Retiree Health Care & IAP Contributions

	12/31/2015 ¹ 2017 - 2019 Final			12/31/2017 ¹ 2019 – 2021 Final			
		Payroll			Payroll		
	Tier 1 / Tier 2	OPSRP	Weighted Average ²	Tier 1 / Tier 2	OPSRP	Weighted Average ²	
Collared Base Rate	24.13%	17.62%	20.85%	28.91 %	22.56%	25.23%	
Side Account (Offset)	(6.14%)	(6.14%)	(6.14%)	(6.51%)	(6.51%)	(6.51%)	
SLGRP Charge/(Offset)	(0.48%)	(0.48%)	(0.48%)	(0.40%)	(0.40%)	(0.40%)	
Collared Net Rate	17.51%	11.00%	14.23%	22.00%	15.65%	18.32%	
Increase				4.49%	4.65%	4.09%	

Rates vary by employer, as only some employers have side accounts.

Changes in side account offsets are not collared.

1 For this exhibit, adjustments are assumed not to be limited due to an individual employer reaching a 0.00% contribution rate.

2 Weighting based on the pool's payroll levels (Tier 1/Tier 2, OPSRP) as of the valuation date.



Projected 2019-2021 Contributions

(\$ millions)	Projected 2017-19 Payroll*	(A) Projected 2017-19 Contribution	Projected 2019-21 Payroll*	(B) Projected 2019-21 Contribution	(B - A) Projected Contribution Increase
State Agencies	\$ 5,920	\$ 820	\$ 6,350	\$ 1,125	\$ 305
School Districts	6,630	925	7,100	1,300	375
All Others	_7,650	1,130	8,200	<u> 1,540</u>	410
Total	\$ 20,200	\$ 2,875	\$ 21,650	\$ 3,965	\$ 1,090

Collared net rates are used to project 2019-2021 contributions. The advisory valuation had a projected contribution increase of \$1,415 million, compared to a projected increase of \$1,090 million in this valuation.

* Assumes payroll grows at 3.50% annually based on 12/31/2017 active member census. The collared net rate applied to this payroll reflects the proportional payroll composition (Tier 1/Tier 2 vs. OPSRP) as of the relevant rate-setting valuation dates.



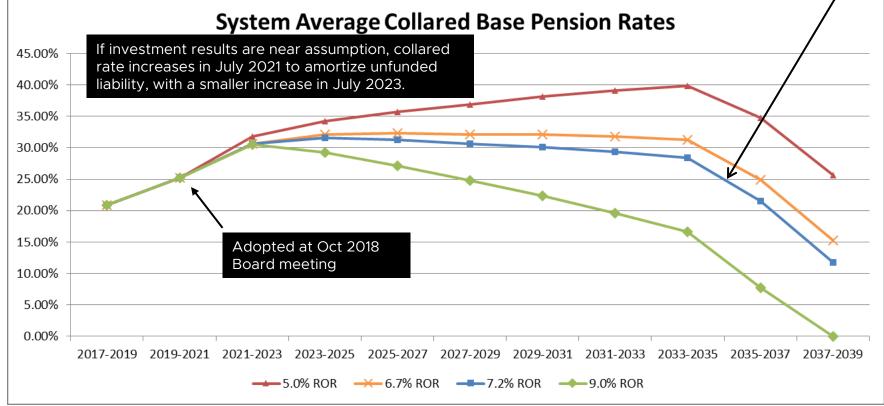
Collared Base Pension Rates

Current Rate Setting Structure

At assumed return:

- Rate declines after 2023-2025 as new OPSRP members replace retiring Tier 1/Tier 2 members
- Significant rate drops at 7/1/2035 after large portion of current UAL completes amortization

The steady return model illustrates impact of consistently achieving the assumed 7.20% return (blue line) and three alternative returns

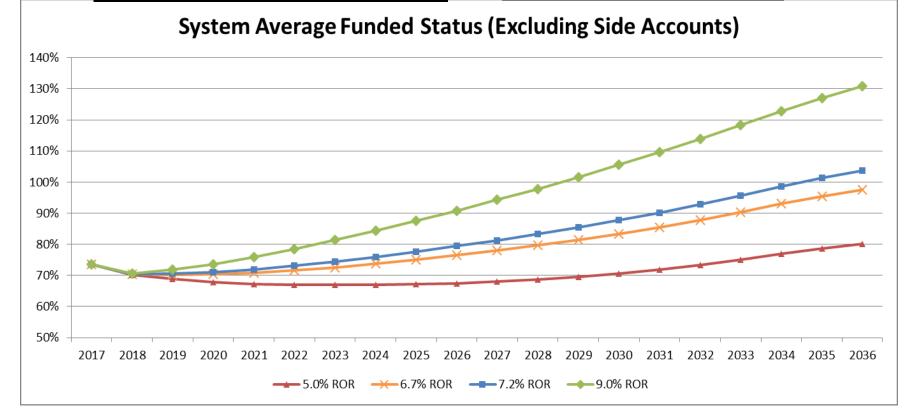




System Funded Status Current Rate Setting Structure

Funded status declines at 12/31/2018 to reflect estimated 2018 underperformance. At 7.2% actual return, funded status then remains stable in initial years while rates are collared, before improving steadily.

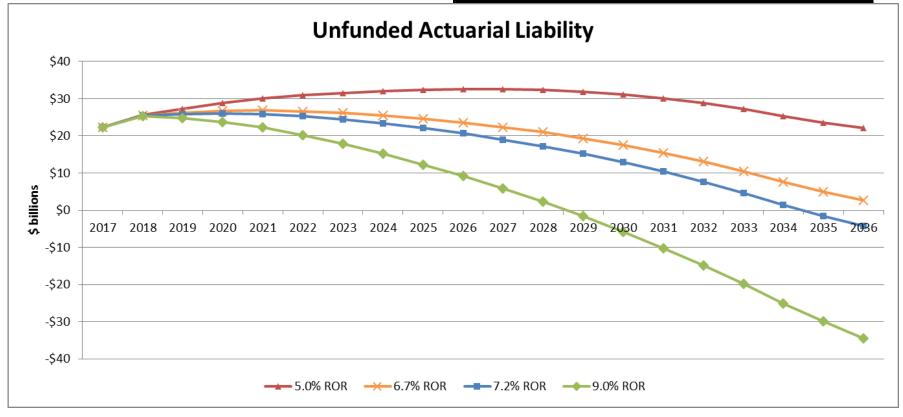
Funded status reaches 100% in 2035 in the model when actual investment returns equal 7.2%





UAL (Unfunded Actuarial Liability) Current Rate Setting Structure

UAL in dollar terms increases at 12/31/2018 to reflect estimated 2018 underperformance. At a 7.2% actual return, UAL then grows slightly, before declining and being fully amortized by 2035.





Additional Resources

Milliman December 31, 2017 System Valuation

Annual actuarial report of the system assets and liabilities

https://www.oregon.gov/pers/Documents/Financials/Actuarial/2018/Actuarial-Valuation.pdf

Comprehensive Annual Financial Report (CAFR) – Fiscal Year End June 30, 2018

• Report of all funds over which the PERS Board exercises authority https://www.oregon.gov/pers/Documents/Financials/CAFR/2018-CAFR.pdf

PERS by the Numbers – Updated October 2018

• Summary of information about system demographics, benefits, funding, revenue, and history

https://www.oregon.gov/pers/Documents/General-Information/PERS-by-the-Numbers.pdf

PERS Agency Strategic Plan – 2018-2023

• Agency-established priorities and plan to achieve the core mission https://www.oregon.gov/pers/Documents/Strategic-Plan.pdf

PERS Agency Website

PERS website

https://www.oregon.gov/pers/Pages/index.aspx



oregon PERS

PUBLIC EMPLOYEES RETIREMENT SYSTEM

Thank You

Kevin Olineck PERS Director 2019

www.oregon.gov/pers

