



**OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM  
BOARD MEETING AGENDA**

**Friday  
May 31, 2019  
10:00 A.M.**

**PERS  
11410 SW 68<sup>th</sup> Parkway  
Tigard, OR**

<b>ITEM</b>		<b>PRESENTER</b>
<b>A. Administration</b>		
1.	April 1, 2019 Board Meeting Minutes	SHENOY
2.	Director's Report	OLINECK
	a. Forward-Looking Calendar	
	b. OPERF Investment Report	
	c. Budget Execution Report	
3.	Board Scorecard Report on Agency Performance Measures	RICKARD, WYNN
<b>B. Administrative Rulemaking</b>		
1.	Notice of Receipt Date Rule	VAUGHN
2.	Notice of Assumed Rate Rule	
3.	Adoption of Student Employees Rule	
<b>C. Action and Discussion Items</b>		
1.	Legislative Update	TAYLOR
2.	IAP TDF Implementation Update	ELLEDGE-RHODES
3.	2020 Retiree Health Insurance Plan Renewals and Rates	CHAVEZ
4.	Overview of Actuarial Methods & Economic Assumptions	MILLIMAN

*Public testimony will be taken on action items at the Chair's discretion.*

*Please contact 503.603.7785 to notify staff of your request to provide testimony at the meeting or submit written testimony to [PERS.Board@state.or.us](mailto:PERS.Board@state.or.us) (three days in advance of the meeting is preferred.)*

<http://www.oregon.gov/PERS/>

**2019 Meetings:** July 26\*    October 4    December 6\*    \*Audit Committee

Stephen Buckley    Steve Demarest    Lawrence Furnstahl, Vice Chair    Christelle deAsis    Sadhana Shenoy, Chair    Kevin Olineck, Director

# OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM BOARD MEETING MINUTES

April 1, 2019

**Board members present:**

Chair Sadhana Shenoy, Vice Chair Lawrence Furnstahl, Stephen Buckley, Christelle deAsis, and Steve Demarest were present.

**Staff present:**

Amanda Marble, Anne Marie Vu, Dean Carson, Deborah Hembree, Elizabeth Rossman, Jessica Williams, Jason Stanley, Jordan Masanga, Katie Brogan, Kevin Olineck, Linda Barnett, Marjorie Taylor, Melanie Chandler, Michiru Farney, Roger Smith, Sam Paris, Stephanie Vaughn, Yong Yang, Yvette Elledge-Rhodes

**Others present:**

Carol Samuels, Clay Moorhead, Charity Taylor, Craig Phillips, Debra Grabler, Deborah Tremblay, Edith Rusch, Greg Hartman, Jeff Gudman, Jennifer Peet, Jim Gaudino, John Skjervem, Liz Moorhead, Matt Larrabee, Marti Skjervem, Michelle Kunec-North, Nancy Brewer, Nate Carter, Ron Vought, Sandra Montoya, Scott Preppernau, Tahni Fagerberg, Tim Nesbitt, Trudy Vidal,

Chair Sadhana Shenoy called the meeting to order at 10:00 a.m.

**ADMINISTRATION**

A.1. MEETING MINUTES OF FEBRUARY 1, 2019

Board member Buckley suggested three changes to add clarification to the February 1, 2019 PERS Board meeting minutes. Board member Furnstahl moved to approve the minutes with the suggested changes submitted from the February 1, 2019 PERS Board meeting. Board member Demarest seconded the approval of the minutes. The motion passed unanimously.

A.2. DIRECTOR'S REPORT

Director Kevin Olineck presented the Director's Report. He highlighted some of the contents of the report, including the completion of Phase I Budget presentations and ongoing Capital Construction Subcommittee meetings with a focus on PERS' System Financing. Olineck outlined some of the concepts being discussed. He noted that there were recommendations made by the Legislative Fiscal Office (LFO) to the committee with respect to PERS. Side accounts, local government cash only side accounts, amortization schedule extensions, rates and assumptions setting were among the topics in the recommendation.

Olineck reviewed the forward looking calendar. He noted that there will be a joint meeting with the Oregon Investment Council (OIC) on Wednesday, June 5, 2019. The October 4 meeting may include a CEM benchmarking presentation on cost effectiveness.

John Skjervem, will be presenting the OPERF investment report later in the meeting.

The proposed 2020 meeting dates are listed in the forward looking calendar. Board members should notify PERS if there are any known conflicts at this time.

The budget execution report showed a projected positive variance of 4.3% of the operating budget. PERS was approved for an increase in non-limited budget of \$100,000,000 through the

DAS Chief Financial Office and the Legislative Fiscal Office in order to meet the needs of the pension expenditures.

### A.3. OREGON INVESTMENT COUNCIL PERFORMANCE REVIEW

John Skjervem, Oregon State Treasury Chief Investment Officer, presented the Oregon Investment Council (OIC) Investment Report of the Oregon Public Employees Retirement Fund (OPERF) for the period ending December 31, 2018. He reviewed the OPERF 20-year net asset value history, current asset allocation, staffing, fees, cost savings, and the IAP target date funds investment performance summary.

### A.4. OSGP ADVISORY COMMITTEE APPOINTMENTS

Roger Smith, Program Manager for Oregon Savings Growth Plan (OSGP) presented. OSGP is requesting the appointment of two new members to fill expiring vacancies and to renew the appointment of three current members for their first and second terms to the OSGP Advisory Committee.

Vice Chair Furnstahl motioned to appoint or reappoint Richard Bailey, Michael Marostica, Mary Jo Evers, Colin Benson and Eugene Bentley to fill OSGP Advisory Committee positions. Board member Buckley seconded. The motion passed unanimously.

### ADMINISTRATIVE RULEMAKING

Stephanie Vaughn, Policy Analysis and Compliance Section Manager, presented.

#### B.1. NOTICE OF STUDENT EMPLOYEE RULE

Staff has begun rulemaking for the Student Employee Rule. This rule will extend the current Chapter 238 standards regarding when a “student employee” designation is appropriate for PERS purposes to OPSRP and provide clarification to address common questions on the subject. No Board action is required.

A rulemaking hearing will be held April 22, 2019, at 2:00 p.m. at PERS headquarters in Tigard. The rule is scheduled to be brought before the PERS Board for adoption at the May 31, 2019 Board meeting.

Board member Steven Demarest requested clarification of the current draft language. The word public may not apply to all institutions and the language may need a modifier. Staff will review and make necessary changes.

#### B.2. ADOPTION OF WAITING TIME PURCHASE RULE

This rule clarifies that the purchase of waiting time employment segment is only allowed if a member also purchases the associated forfeited time. No modifications were made to the rule since notice. No public comment was received on this rule.

Vice Chair Furnstahl moved to adopt modifications to the Waiting Time Purchases rule, as presented. Board member Buckley seconded. The motion passed unanimously.

### B.3. ADOPTION OF MILITARY PURCHASE RULE

The adoption of this rule would update it to conform to SB 200 (2017), which removed the exclusion of periods of service for “active duty for training” from purchase eligibility, and made any type of “active service” eligible for the purchase, for members retiring after August 2, 2017.

In addition to removing the military purchase exception for training time, SB 200 (2017) added the definition of “Uniformed Services” in (1)(d) and used Uniformed Services in place of Armed Forces throughout the rule. These changes are incorporated in the rule. The definitions are in statute and have been appropriately applied.

A request was received to include the calculation of a full cost purchase in the rule but the purchase would be calculated the same as other types, so putting the calculation in this rule would not be appropriate. If clarification of the formula is required, it would be brought forward in a new rule. Chair Shenoy declined to accept public testimony at this time.

Board member Demarest motioned to adopt modifications to the Military Purchases rule, as presented with the walk-in memo. Board member Buckley second the motion. The motion passed unanimously.

### B.4 ADOPTION OF IRC AND SOCIAL SECURITY LIMITATIONS RULE

These are annual modifications to the IRC and Social Security Limitations rules to update them to reflect the 2019 Internal Revenue Code (IRC) and Social Security annual compensation limitations for retirement contributions and benefits. No public comment was received on the rules and no modifications have been made since notice.

Board member Furnstahl moved to adopt modifications to the IRC and Social Security Limitations rules, as presented. Board member Demarest seconded. The motion passed unanimously.

## **ACTION AND DISCUSSION ITEMS**

### C.1. LEGISLATIVE UPDATE

Marjorie Taylor, Senior Policy Director, presented.

Taylor provided an update on legislation impacting PERS statutes, referring to retirement or to PERS. There are 29 bills that have been classified as priority bills that are being watched. There are seven work-after-retirement bills that are still in the process. Many of these bills would allow exceptions to the number of hours they are allowed to work. Other bills include expanding some police and fire designations. There are 16 miscellaneous bills that would define wording in statutes but would not have an impact on the plan. Presentations for the Joint Ways and Means Subcommittee on Capital Construction and the Joint Committee on Information Management and Technology are anticipated.

### C.2. FINAL 2018 EARNINGS CREDITING AND RESERVING

Jessica Williams, Chief Financial Officer and Amanda Marble, Financial Reporting Manager presented final earnings crediting for 2018.

The final crediting rates as presented include:

Tier One member regular accounts:	7.2%
Tier Two member regular accounts	0.23%
Individual Account Program accounts	-0.63%
OPSRP Pension	0.24%

Vice Chair Furnstahl motioned to adopt the final crediting of earnings as presented for calendar year 2018. Board member Demarest seconded. The motion passed unanimously.

### C.3. OVERVIEW OF ACTUARIAL METHODS & ECONOMIC ASSUMPTIONS

Scott Preppernau and Matt Larrabee of Milliman presented economic assumptions and rate-setting methods. The presentation reviewed the non-investment and economic assumptions as well as the long-term investment return assumptions which will be considered in preparation for the July 2019 presentation, where demographic assumptions will be discussed before asking for adoption of the assumptions and methods for the current and next year's advisory valuation. They will come back with those results in September 2019. No Board action was required.

Shenoy adjourned the Board meeting at 12:22 a.m.

Respectfully submitted,



Kevin Olineck, Director

**OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM**  
**DIRECTOR'S REPORT**

KEVIN OLINECK, DIRECTOR

**A LOOK BACK**  
**A LOOK AHEAD**

In many ways it seems surreal that, at this board meeting a year ago, I was appointed as Director of PERS, replacing Steve Rodeman. Though I didn't officially take over until mid-July, this past year has truly been a whirlwind of moving to Oregon, diving right into the deep end with our 2019-21 budget preparation, and currently experiencing the intensity of a long legislative session.

I don't think it would be an understatement to say this past year has been one of the most interesting and demanding of my career. Without the support of both the board, as well as the great staff at all levels of PERS, it would have been much more challenging. I am extremely grateful for this support, given the complexity of both the PERS System and the ecosystem within which PERS the Agency operates, as without such support, I truly would be limited in my ability to be successful amid these hurdles.

I'll spend more time within the July Director's Report articulating what I see as forward progress on many fronts, however, suffice it to say, staff are fully engaged in ensuring we meet the PERS Mission of serving the people of Oregon by administering public employee benefit trusts to pay the right person the right benefit at the right time.

**PERS REFORM**  
**PROPOSALS ARE CRYSTALLIZING**

As noted in my April Director's Report, PERS has been a primary focus in the Legislature, with many options put forth as means of addressing both short- and long-term cost challenges associated with the System. At this juncture, the Capital Construction subcommittee is looking at a proposal that was put forth from the House Speaker and President of the Senate. There are similarities to the proposal set out by the Governor earlier in the Session, though with distinct differences. As this is a very fluid discussion, we will provide you with a more up-to-date review and analysis at this meeting.

The one element of the proposal that has a significant impact to the PERS Board itself is a directive to reamortize the Tier 1 and Tier 2 Unfunded Actuarial Liability over a twenty-two year period. This is set up as a one-time directive, with the Board then reverting to the current twenty-year amortization period. This would position the plan to be more responsive to any future gains or losses subsequent to the upcoming valuation, and would mean there was only a temporary (two-year) period when any amortization basis in the system was longer than the best practice range of 20 years or less.

It is very important to note that if this and other proposals are passed, they will have a significant impact to the agency in our ability to implement these changes, given the degree of complexity associated with certain elements of the proposal, as well as the short timeframes within which to implement. Staff are deeply engaged in understanding the impacts from all aspects; technology, processes, communications, accounting, policies, and rules, just to name a few.

More to come!



*Photo from the Oregon State Legislature website, Senate Photo Gallery.*

## EXECUTIVE LEADERSHIP GROUP CHANGES UNDERWAY

As was noted, Jessica Williams resigned as Chief Financial Officer, effective May 3. While only with PERS for seven months, Jessica brought a lot of changes to the Finance area that will be in effect long after she has departed. We are currently in the process of recruiting a permanent replacement, but are pleased that Tami Dohrman has started, effective May 13, as the interim CFO. Tami has significant senior financial leadership experience across many state agencies and will be supporting finance staff until a permanent CFO is in place.

## STAFF-SUPPORTED EVENTS PERS COMMUNITY ENGAGEMENT

*Over the past few months there were a lot of staff supported events in which PERS staff participated. I am continuously amazed by the level of engagement that staff members show in supporting their community.*

### TULIP SALE SUPPORTING EASTER SEALS

For over 30 years, Easter Seals Oregon has been selling tulips to benefit its programs that provide services to children and adults living with disabilities or experiencing special needs. The tulips are grown at the Wooden Shoe Tulip Farm near Woodburn. Staff were very supportive of this great cause, with over 75 bunches of tulips sold.

### TAKE YOUR CHILD TO WORK DAY

Twenty-three children accompanied their parent to work on April 25. There were many activities for the visitors at the Tigard, as well as the Tualatin, office. These activities brought perspective to the children about the work their parents do in support of the PERS Mission. We received a lot of great comments from the children about the day that they got to spend shadowing their parent. Despite the positive trend to the comments, there was a theme of the children thinking their parent attended too many meetings.

### BLOOD DRIVE

On May 7, PERS staff participated in a blood drive organized by the Red Cross.



We had 17 total donors, 15 units collected, 45 lives potentially saved, and the drive met 100% of its collection goal.

“

“We feel so humbled to have been nominated by our peers for this recognition,” says Katie Davis, speaking for the trio representing PERS as ambassadors.

## PUBLIC SERVICE RECOGNITION WEEK

Katie Davis, Phuongnam Tran, Susan Moen, Saviour Essien, and Paul Iliyn were chosen by their peers to be recognized and participate in special events for Public Service Recognition Week (May 5-11) and State Employee Recognition Day (May 8). The theme was “promoting positivity” and these five individuals were nominated based on positive experiences and interactions shared by their coworkers.

Katie, Phuongnam, and Susan were selected by a peer review committee to represent PERS as ambassadors of public service who exemplify the values of integrity, accountability, excellence, and equity in their everyday work. They were able to attend a reception with Governor Brown at her official residence, Mahonia Hall, in Salem on May 9.



From left to right: Katie Davis, Governor Kate Brown, Phuongnam Tran, and Susan Moen pose together at the May 9 reception at Mahonia Hall.



## PERS Board Meeting Forward-Looking Calendar

### **Wednesday, June 5, 2019, (Joint Meeting with OIC at Treasury)**

*(PERS Board will be joining, the second half of the regular OIC Board meeting 9:00am-1:00pm)*

Overview of Assumption Setting  
Cash Flow Dynamics

### **Friday, July 26, 2019\***

2019 Legislative Session Review  
Adoption of Receipt Date Rule  
Adoption of Valuation Methods and Assumptions  
Adoption of Assumed Rate of Return

### **Friday, October 4, 2019**

Member and Employer Survey Results  
Strategic Plan Update  
System Valuation Results – Advisory Employer Rates  
CEM Benchmarking Cost Effectiveness Presentation

### **Friday, December 6, 2019\***

Board Scorecard Report on Agency Performance Measures  
Valuation Update and Financial Modeling Results  
Adoption of Actuarial Equivalency Factor Tables

### **Proposed 2020 Meeting Dates**

10:00 a.m. Start Times

- Friday, January 31
- Monday, March 30\*
- Friday, May 29
- Friday, July 31\*
- Friday, October 2
- Friday, December 4\*

\* Proposed Audit Committee Meetings

\*Audit Committee planned for post-Board meeting



Returns for periods ending APR-2019

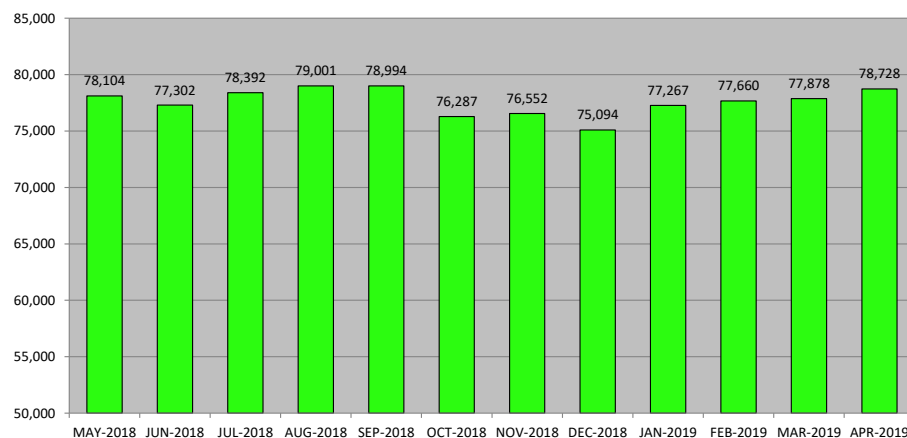
Oregon Public Employees Retirement Fund

OPERF	Regular Account				Historical Performance (Annual Percentage)							
	Policy <sup>1</sup>	Target <sup>1</sup>	\$ Thousands <sup>2</sup>	Actual	Year-To-Date <sup>3</sup>	1 YEAR	2 YEARS	3 YEARS	4 YEARS	5 YEARS	7 YEARS	10 YEARS
Public Equity	32.5-42.5%	37.5%	\$ 26,974,663	35.6%	14.89	2.82	8.79	11.32	6.91	7.11	9.63	11.84
Private Equity	13.5-21.5%	17.5%	\$ 16,174,395	21.3%	0.59	13.63	16.35	13.79	12.05	11.46	13.12	13.65
<b>Total Equity</b>	<b>50.0-60.0%</b>	<b>55.0%</b>	<b>\$ 43,149,058</b>	<b>56.9%</b>								
Opportunity Portfolio	0-3%	0%	\$ 1,694,142	2.2%	1.38	4.74	6.16	7.24	6.03	5.96	8.64	11.60
<b>Total Fixed</b>	<b>15-25%</b>	<b>20.0%</b>	<b>\$ 15,684,502</b>	<b>20.7%</b>								
Real Estate	9.5-15.5%	12.5%	\$ 8,219,485	10.8%	1.81	7.83	7.54	7.86	8.28	9.38	10.47	9.85
Alternative Investments	0-12.5%	12.5%	\$ 7,117,411	9.4%	(0.53)	(4.32)	1.50	3.79	2.37	2.16	2.37	
Cash w/Overlay	0-3%	0%	\$ 764	0.0%	1.33	2.92	2.11	1.79	1.53	1.33	1.19	1.17
<b>TOTAL OPERF Regular Account</b>		<b>100.0%</b>	<b>\$ 75,865,361</b>	<b>100.0%</b>	<b>6.09</b>	<b>5.57</b>	<b>8.25</b>	<b>8.92</b>	<b>6.77</b>	<b>6.95</b>	<b>8.64</b>	<b>10.49</b>
OPERF Policy Benchmark					5.17	4.76	8.21	9.13	6.92	7.25	9.06	10.29
Value Added					0.92	0.81	0.04	(0.20)	(0.14)	(0.30)	(0.42)	0.20
<b>Target Date Funds</b>			<b>2,348,746</b>									
<b>TOTAL OPERF Variable Account</b>			<b>\$ 513,942</b>		<b>16.05</b>	<b>4.62</b>	<b>9.54</b>	<b>11.61</b>	<b>7.21</b>	<b>7.29</b>	<b>9.52</b>	<b>11.65</b>

Asset Class Benchmarks:

Russell 3000	18.60	12.68	12.86	14.74	10.81	11.20	13.37	15.29
OREGON MSCI ACWI EX US IMI NET	13.15	(3.98)	5.66	7.92	3.05	2.96	5.50	8.06
MSCI ACWI IMI NET	16.01	4.28	9.16	11.20	6.78	6.89	9.14	11.32
RUSSELL 3000+300 BPS QTR LAG	(9.55)	2.20	12.91	13.96	11.25	12.16	16.57	17.14
OREGON CUSTOM FI BENCHMARK	3.14	5.05	2.57	2.28	2.00	2.16	2.54	3.97
OREGON CUSTOM REAL ESTATE BENCHMARK	1.92	7.09	7.22	7.41	8.86	9.45	9.82	7.55
CPI +4%	3.05	6.07	6.31	6.30	6.02	5.57	5.57	5.86
91 Day Treasury Bill	0.79	2.18	1.68	1.25	0.97	0.78	0.58	0.45

**Total OPERF NAV**  
(includes Variable Fund asset)  
**One year ending APR-2019**  
(\$ in Millions)



<sup>1</sup>OIC Policy revised June 2015.

<sup>2</sup>Includes impact of cash overlay management.

<sup>3</sup>For mandates beginning after January 1 (or with lagged performance), YTD numbers are "N/A". Performance is reflected in Total OPERF. YTD is not annualized.



# Oregon

Kate Brown, Governor

## Public Employees Retirement System

Headquarters:  
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May 31, 2019

TO: Members of the PERS Board  
FROM: Linda M. Barnett, Budget Officer  
SUBJECT: May 2019 Board Report

### 2017-19 OPERATING BUDGET

Operating expenditures for March 2019 and preliminary expenditures for April 2019 were \$4,069,044 and \$4,125,424, respectively. Final expenditures for April closed in the Statewide Financial Management System (SFMS) on May 17, 2019, and will be included in the July 2019 report to the Board.

- To date, through the first 22 months (or 91.7%) of the 2017-19 biennium, the Agency has expended a total of \$84,575,919 or 83.2% of PERS' adjusted legislatively approved operations budget of \$101,657,012.
- At this time, the Agency's projected positive variance is \$4,617,282 or approximately 4.5% of the operating budget.

### 2017-19 NON-LIMITED BUDGET

The approved budget includes \$11,013,500,093 in total estimated non-limited budget expenditures. Non-limited budget expenditures include benefit payments, health insurance premiums, and third-party administration payments for both the PERS Health Insurance Program and the Individual Account Program (IAP).

### 2019-21 BUDGET

PERS is currently in Phase 2 of the 2019-21 budget presentation to the Ways and Means General Government Subcommittee. In addition to the agency's 2019-21 Governor's budget request of \$110,852,846, PERS has the following additional requests for consideration:

- Oregon Savings & Growth Plan (\$1,698,000) to pay the administrative fees associated with a reporting and contract change;
- Agency Reorganization – Centers of Excellence (\$0) to enhance operational capability of the agency through a restructuring of work streams;
- Work Out of Class Resolution (\$62,006) to resolve three long-standing work-out-of-class positions; this is an extension of reviews done by PERS as part of the reorganization; and
- Individual Account Program (IAP) Project (\$584,892) which completes the Planning Phase activities necessary to complete project planning and obtain a Stage Gate 1 endorsement from the Office of the State Chief Information Officer (OSCIO).

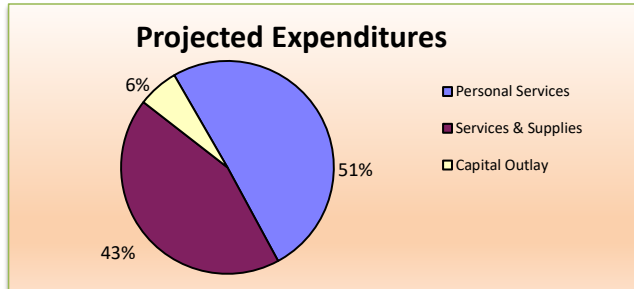
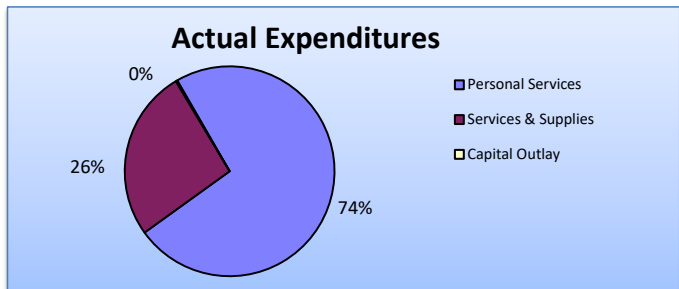
A.2.c. Attachment – 2017-19 Agency-wide Budget Execution Summary Analysis

**2017-19 Agency-wide Budget Execution  
Summary Budget Analysis  
Preliminary Summary For the Month of April 2019**

**Limited - Operating Budget**

**2017-19 Biennial Summary**

Category	Actual Exp. To Date	Projected Expenditures	Total Est. Expenditures	2017-19 LAB	Variance
Personal Services	62,079,080	6,285,536	68,364,616	73,511,089	5,146,473
Services & Supplies	22,296,214	5,410,627	27,706,841	26,851,571	(855,270)
Capital Outlay	200,625	767,648	968,273	1,294,352	326,079
<b>Total</b>	<b>84,575,919</b>	<b>12,463,811</b>	<b>97,039,730</b>	<b>101,657,012</b>	<b>4,617,282</b>



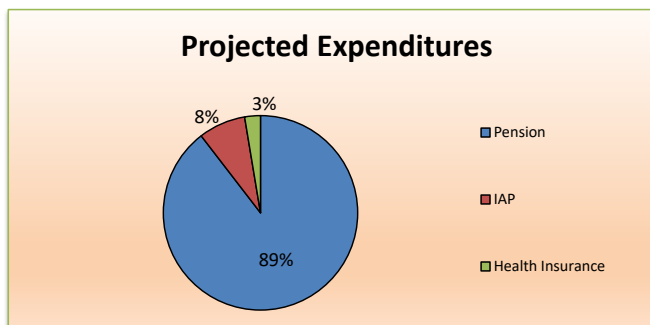
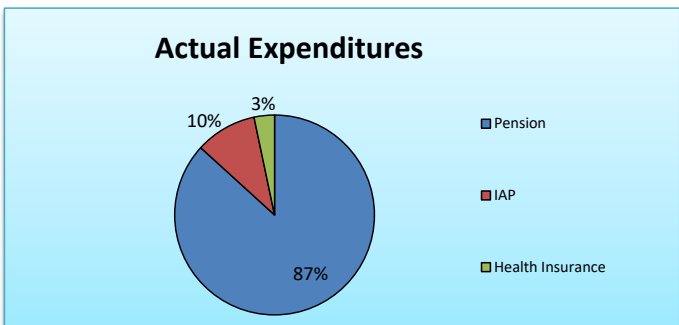
**Monthly Summary**

Category	Actual Exp.	Projections	Variance	Avg. Monthly Actual Exp.	Avg. Monthly Projected Exp.
Personal Services	2,996,270	3,127,474	131,204	2,821,776	3,142,768
Services & Supplies	1,121,154	1,103,830	(17,324)	1,013,464	2,705,314
Capital Outlay	8,000	0	(8,000)	9,119	383,824
<b>Total</b>	<b>4,125,424</b>	<b>4,231,304</b>	<b>105,880</b>	<b>3,844,359</b>	<b>6,231,906</b>

**Non-Limited Budget**

**2017-19 Biennial Summary**

Programs	Actual Exp To Date	Projected Expenditures	Total Est. Expenditures	Non-Limited LAB	Variance
Pension	8,376,382,300	1,215,772,223	9,592,154,523	9,222,000,000	(370,154,523)
IAP	960,281,626	106,347,269	1,066,628,895	1,056,900,000	(9,728,895)
Health Insurance	319,145,494	35,571,181	354,716,675	815,271,000	460,554,325
<b>Total</b>	<b>9,655,809,420</b>	<b>1,357,690,673</b>	<b>11,013,500,093</b>	<b>11,094,171,000</b>	<b>80,670,907</b>





# Oregon

Kate Brown., Governor

## Public Employees Retirement System

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May 31, 2019

TO: Members of the PERS Board  
FROM: POBMS Council  
SUBJECT: Board Scorecard Report on Agency Performance Measures

A key part of PERS' Outcome-Based Management System (POBMS) is a Quarterly Target Review of scorecards that evaluate our effectiveness in a number of Outcome and Process Measures. These measures foster accountability and transparency in key operating areas. The scorecard results help direct strategic planning, resource allocation, and risk assessment.

The attached Board Scorecard Report for first quarter 2019 focuses on several measures we currently track, based on essential business operations. A targeted performance range is created for each measure:

- “Green” – Performance is at or above acceptable levels.
- “Yellow” – Performance is marginally below acceptable levels.
- “Red” – Performance is significantly below; corrective action, such as assigning a problem solving team, should be directed.

Highlights include:

- Three consecutive quarters in the Green range for Appeal Reversal Rate.
- Continued performance in the Green range for Eligibility Reviews Completed.
- An upward or equal trend with two of the eight measures.
- Two of the eight highlighted measures in the Green range.

The next report will be presented at the December 6, 2019 meeting, showing the scorecard results for the first quarter. If you would like us to report on any different measures, please let us know.

A.3. Attachment 1 – *Board Scorecard Report for First Quarter 2019*

# PUBLIC EMPLOYEES RETIREMENT SYSTEM

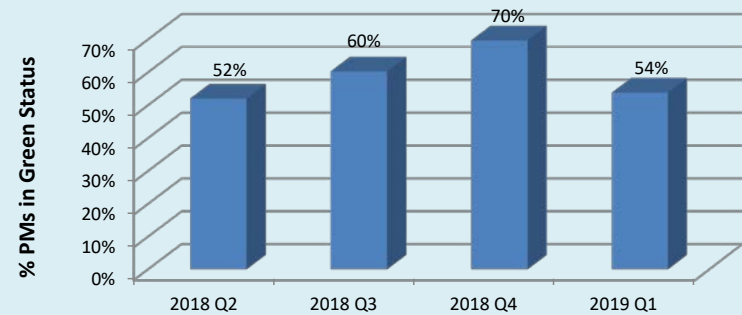
## Outcome-Based Performance Review

### PERS Board Scorecard Report - QTR: 2019 Q1 - Quarter ended March 31, 2019

**Outcome & Process Measure Performance**



**Quarterly Green Performance**



### Operating Processes - Highlighted Measures

	Measure Name	Measure Calculation	RANGE			Target	Desired Perform Trend	Data Collection Frequency	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Trend	Corrective Action & Comments
			Red	Yellow	Green									
OP3c	Estimate KPM	% of estimate requests completed within 30 days of receipt	<75%	75-85	>85%	95%	↑	Quarterly	53.8%	76.0%	90.0%	78.0%	-	High volume season; Primary estimate intake tool crashed; Multiple days of system issues and unavailability.
OP4a	Eligibility review completed	% of applications completed by the eligibility team within 30 days of the effective retirement	<50%	50-70	>70%	80%	↑	Monthly	86.0%	86.0%	82.0%	86.0%	+	
OP5b	Accuracy of calculations	% of sample calculations that are accurate within plus or minus \$5	<95%	95-99	>99%	100%	↑	Monthly	97.5%	99.9%	100.0%	96.7%	-	Final average salary errors; Accounts have been corrected and members notified; Training provided.
OP5c	Timely benefit calculation	% of calculations completed within 15 calendar days from completed application date	<95%	95-99	>99%	100%	↑	Monthly	96.5%	90.2%	95.4%	98.3%	+	Holding for annual rate; Inclement weather; Multiple days of system issues and unavailability.

A.3. Attachment 1

# PUBLIC EMPLOYEES RETIREMENT SYSTEM

## Outcome-Based Performance Review

### Supporting Processes - Highlighted Measures

	Measure Name	Measure Calculation	RANGE			Target	Desired Perform Trend	Data Collection Frequency	Q2 2018	Q3 2018	Q4 2018	Q1 2019	Trend	Corrective Action & Comments
			Red	Yellow	Green									
OP1f	Call Wait Time	Average length of wait before caller reaches live person	>6 minutes	6-4 minutes	<4 minutes	2 minutes	↓	Monthly	17.3	13.2	5.2	10.4	-	Call Volume increase; Down 3 call agents and 1 RC2 ; Recently hired 2 RC1s and RC2 beginning of 2nd QTR.
SP2c	Appeal reversal rate	% of staff determinations that are reversed on appeal	>15%	15-10	<10%	5%	↓	Quarterly	20.0%	8.0%	2.0%	4.8%	-	
SP3h	System uptime	% of time systems are available during the service window	<97%	97-98	>98%	100%	↑	Monthly	97.20%	99.05%	97.31%	93.41%	-	Several long batch runs and the DAS Cert incident account for most of this. An ARS outage and 8 Clarity/FN issues caused the rest.
SP5c	Recruiting / Onboarding	% of employees completing trial service	<85%	85-94	>94%	100%	↑	Quarterly	97%	94%	100%	91%	-	There was one trial service removal.



# Oregon

Kate Brown, Governor

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May 31, 2019

TO: Members of the PERS Board  
FROM: Stephanie Vaughn, Manager, Policy Analysis & Compliance Section  
SUBJECT: Notice of Rulemaking for Receipt Date Rule:  
OAR 459-005-0220, *Receipt Date for Reports, Documents, Remittances, Payments, Data, and Requests*

### OVERVIEW

- Action: None. This is notice that staff has begun rulemaking.
- Reason: Add category for electronic submissions of data made through PERS Online Member Services.
- Policy Issue: None identified.

### BACKGROUND

Receipt dates assist staff in determining timeliness of requests, eligibility, and effective dates. OAR 459-005-0220 outlines when certain types of submissions are considered received by PERS. However, the rule does not currently provide direction on when electronic transmissions of data submitted through PERS Online Member Services (OMS) are deemed received by PERS. The proposed amendment clarifies that the receipt date for electronic transmissions of data is the date the online submission through OMS is successfully saved to PERS' system.

PERS' OMS is a secure online portal, first launched in 2011, that provides members with convenient online access to pension-related information. OMS also allows PERS members to view and update their address/contact information and retiree residency status, as well as initiate certain processes, such as member account withdrawals or data verifications.

The proposed amendment clarifies that the receipt date for electronic submissions of data or requests is the date on which data or a request successfully submitted through OMS is saved to PERS' system. When a member transmits data or a request electronically by clicking a button on an online prompt, the data is immediately saved to PERS' system, and the member's screen will display a confirmation message that the data change or request was saved. The data change or request is immediately loaded into the system workflows that notify relevant PERS staff that the information has been received and triggers any additional work that may be required.

It should be noted that the receipt date is not necessarily the same date as an effective date, which may depend on other legal standards or factors. For example, under Oregon Revised Statutes 238.374, the effective date for a member's Residency Status Certification for tax remedy purposes is January 1 of the year after the receipt date.



PUBLIC COMMENT AND HEARING TESTIMONY

A rulemaking hearing will be held June 25, 2019, at 2:00 p.m. at PERS headquarters in Tigard. The public comment period ends July 2, 2019, at 5:00 p.m.

LEGAL REVIEW

The attached draft rule was submitted to the Department of Justice for legal review and any comments or changes will be incorporated before the rule is presented for adoption.

IMPACT

Mandatory: No, the Board need not adopt the rule modifications.

Benefit: Members and staff will benefit from the updated receipt date requirements.

Cost: There are no discrete costs attributable to the rule.

RULEMAKING TIMELINE

May 29, 2019	Staff began the rulemaking process by filing a Notice of Rulemaking with the Secretary of State.
May 31, 2019	Secretary of State publishes the Notice in the Oregon Administrative Rules Database. Notice is sent to employers, legislators, and interested parties. Public comment period begins.
May 31, 2019	PERS Board notified that staff began the rulemaking process.
June 25, 2019	Rulemaking hearing to be held at 2:00 p.m. at PERS in Tigard.
July 2, 2019	Public comment period ends at 5:00 p.m.
July 26, 2019	Staff will propose adopting the rule modifications, including any changes resulting from public comment or reviews by staff or legal counsel.

NEXT STEPS

A rulemaking hearing will be held June 25, 2019, at 2:00 p.m. at PERS headquarters in Tigard. The rule is scheduled to be brought before the PERS Board for adoption at the July 26, 2019 Board meeting.

B.1. Attachment 1 - 459-005-0220, *Receipt Date for Reports, Documents, Remittances, Payments, Data, and Requests*

**OREGON ADMINISTRATIVE RULE  
PUBLIC EMPLOYEES RETIREMENT BOARD  
CHAPTER 459  
DIVISION 005 – ADMINISTRATION**

1 **459-005-0220**

2 **Receipt Date for Reports, Documents, Remittances, *[and]* Payments, Data, and**  
3 **Requests**

4 (1) As used in this rule:

5 (a) “Imaged date” means the date on which a report, document, remittance, or  
6 payment is imaged and stored electronically to a dedicated network server.

7 **(b) “OMS” means PERS’ Online Member Services.**

8 **(c) “Online submission date” means the date on which data or a request**  
9 **successfully submitted through OMS is saved to PERS’ system.**

10 ***[(b)](d)*** “Private express carrier” has the same meaning as in ORS 293.660(2).

11 ***[(c)](e)*** “Settlement date” means the date on which the participating Depository  
12 Financial Institution (DFI) or its correspondent is scheduled to be debited or credited by  
13 the Federal Reserve.

14 (2) If the due date of a report, document, remittance, or payment falls on a weekend or  
15 legal holiday, the due date is deemed to be the next business day.

16 (3) **Except as otherwise provided in this rule, any** *[Any]* report, document, or  
17 remittance required by PERS shall be deemed filed and received on the date of the receipt  
18 stamp affixed to the report, document, or remittance when received by PERS. In the case  
19 of a check or cash submission, the payment shall be deemed filed and received on the date  
20 recorded in PERS’ daily cash receipts log or check log.

21 (4) **Except as otherwise provided in this rule, any** *[Any]* report, document,  
22 remittance, or payment that does not display a PERS receipt stamp, or has not been

1 recorded in PERS’ daily cash receipts log or check log, shall be deemed filed and received  
 2 on the imaged date. If the imaged date, cash receipts log date or check log date is later than  
 3 the due date, the report, document, remittance, or payment shall be deemed filed and  
 4 received one business day before the imaged date, cash receipts log date, or check log date.

5 (5) Any report, document, remittance, *[or]* payment, data, or request required by  
 6 PERS which is lost or delayed in transmission *[through USPS or by a private express*  
 7 *carrier]*, shall be deemed filed and received on the date it was mailed or deposited for  
 8 transmittal to USPS or a private express carrier, or the date it was transmitted by fax,  
 9 email, or OMS if the sender:

10 (a) Can establish by evidence satisfactory to PERS<sup>[,]</sup> that the report, document,  
 11 remittance, payment, data, or request was deposited for delivery or transmission on  
 12 or before the date due for filing, and was correctly addressed to PERS.

13 (A) Evidence satisfactory to PERS for USPS or a private express carrier may  
 14 include, *[which includes]* but is not limited to, documentation provided by USPS or the  
 15 private express carrier, *[that the report, document, remittance, or payment was deposited*  
 16 *in the USPS or with a private express carrier]* such as a receipt or delivery  
 17 confirmation. *[before the date due for filing, and was correctly addressed to PERS;]*

18 (B) Evidence satisfactory to PERS for a fax communication or email  
 19 transmission that is lost in transmission may include, but is not limited to, an affidavit  
 20 by the sender verifying that the fax or email was correctly addressed and sent to  
 21 PERS, together with a copy of any activity report from the sender’s fax or electronic  
 22 device, and a duplicate of the original report or document.

1 (C) Evidence satisfactory to PERS for an OMS submission that is lost in  
2 transmission may include, but is not limited to, an affidavit by the member verifying  
3 that the member submitted the data through OMS, together with a printout of the  
4 confirmation message displayed on the member's screen that the online submission  
5 was successful.

6 (b) Files with PERS a duplicate of the lost report, document, remittance, *[or]*  
7 payment, data, or request in accordance with the transmittal requirements of OAR 459-  
8 005-0210 or 459-005-0215; and

9 (c) Satisfies the requirements of subsections (a) and (b) of this section within 30 days  
10 after PERS notifies the sender in writing of failure to receive the report, document,  
11 remittance, or payment.

12 (6) An electronic funds transfer (EFT) shall be deemed received on the settlement date  
13 of the transfer. A settlement date specified by an employer for an EFT shall be no later  
14 than the due date specified by PERS for a remittance or a payment.

15 *[(7) Any report or document that PERS accepts by fax as provided in OAR 459-005-*  
16 *0210 or 459-005-0215, which is:]*

17 *[(a) Transmitted by a fax device to any office of PERS shall be deemed filed and*  
18 *received on the date of transmission as inscribed by the PERS fax device.]*

19 *[(b) Lost in transmission through a fax communication shall be deemed filed and*  
20 *received when originally transmitted if the sender can establish by affidavit the proof of*  
21 *sending and correct addressing, together with a copy of any activity report from the*  
22 *sender's fax device, and a duplicate of the original report or document.]*

1 *[(8) A fax shall be accepted on weekends and holidays as long as the fax is otherwise*  
2 *in compliance with due dates specified in administrative rule.]*

3 *[(9)](7)* Any report or document that PERS accepts by e-mail transmission as  
4 specified in OAR 459-005-0210(5), which is[:]

5 *[(a) T]* transmitted by e-mail to any office of PERS shall be deemed received as of the  
6 *[date PERS receives the transmission]* system-generated date and time stamp that is  
7 displayed on the email header line of the email that is received by PERS.

8 *[(b) Lost in transmission by email shall be deemed filed and received when originally*  
9 *transmitted if the sender can establish by affidavit the proof of sending and correct*  
10 *addressing, together with a copy of any activity report from the sender’s electronic device,*  
11 *and a duplicate of the original report or document.]*

12 (8) An electronic submission of data made through OMS shall be deemed  
13 received on the online submission date.

14 *[(10)](9)* A report, *[or]* document, or data transmitted by fax, *[or]* e-mail, or OMS  
15 must be transmitted in accordance with the provisions of this rule and OAR 459-005-0215,  
16 and must be received by PERS before midnight on the due date.

17 *[(11)](10)* When transmitting a report, document, or *[report]* data by *[use of]* fax,  
18 *[or]* e-mail, or OMS, the sender bears the risk of failure of the transmission.

19 Stat. Auth.: ORS 238.650

20 Stats. Implemented: ORS 238, 238A



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May 31, 2019

TO: Members of the PERS Board  
FROM: Stephanie Vaughn, Manager, Policy Analysis & Compliance Section  
SUBJECT: Notice of Rulemaking for Assumed Rate Rule:  
OAR 459-007-0007, *Assumed Rate*

### OVERVIEW

- Action: None. This is notice that staff has begun rulemaking.
- Reason: Specify the effective date to implement an assumed rate change for PERS transactions.
- Policy Issue: No policy issues have been identified at this time.

### BACKGROUND

The PERS Board reviews the assumed rate in odd-numbered years as part of the Board's adoption of actuarial methods and assumptions. The rate is then adopted in an administrative rule; even though the actual assumed rate will not be determined until the PERS Board's July 26, 2019 meeting, we have to open the relevant rule at this time to allow for adoption at that subsequent meeting. For now, these rule modifications include a blank space; the assumed rate will be filled in once it is adopted by the Board in July 2019.

The rule specifies that the new assumed rate will be effective for PERS transactions with an effective date of January 1, 2020, consistent with this Board's policy decision from 2013 that changes to the assumed rate will be effective January 1 following the Board's adoption of the new rate, giving staff ample time to perform the necessary preparations and communicate with members and employers. A January 1 effective date also provides equitable treatment to all members who retire in a year that a change is adopted, no matter which month they retire. The new assumed rate will be aligned with the new actuarial equivalency factors (AEFs), which will allow for a clear effective date for all transactions that involve calculations using both the latest year-to-date rate and AEF components.

### PUBLIC COMMENT AND HEARING TESTIMONY

A rulemaking hearing will be held June 25, 2019, at 2:00 p.m. at PERS headquarters in Tigard. The public comment period ends July 2, 2019, at 5:00 p.m.

### LEGAL REVIEW

The attached draft rule was submitted to the Department of Justice for legal review and any comments or changes will be incorporated before the rule is presented for adoption.

IMPACT

Mandatory: Yes, the assumed rate determined by the Board must be adopted by rule and clearly describe the effective date of the assumed rate change on PERS transactions.

Benefit: The proposed rule benefits members, employers, and staff by setting forth the assumed rate and a clear effective date for implementing a change in the rate.

Cost: There are no discrete costs directly attributable to specifying the assumed rate in rule.

RULEMAKING TIMELINE

May 29, 2019	Staff began the rulemaking process by filing Notice of Rulemaking with the Secretary of State.
May 31, 2019	Secretary of State publishes the Notice in the Oregon Administrative Rules Database. Notice is sent to employers, legislators, and interested parties. Public comment period begins.
May 31, 2019	PERS Board notified that staff began the rulemaking process.
June 25, 2019	Rulemaking hearing to be held at 2:00 p.m. at PERS in Tigard.
July 2, 2019	Public comment period ends at 5:00 p.m.
July 26, 2019	Staff will propose adopting the rule modifications, including any changes resulting from public comment or reviews by staff or legal counsel.

NEXT STEPS

A rulemaking hearing will be held June 25, 2019, at 2:00 p.m. at PERS headquarters in Tigard. The rule is scheduled to be brought before the PERS Board for adoption at the July 26, 2019 Board meeting.

B.2. Attachment 1 – 459-007-0007, *Assumed Rate*



**OREGON ADMINISTRATIVE RULE  
PUBLIC EMPLOYEES RETIREMENT BOARD  
CHAPTER 459  
DIVISION 007 – EARNINGS AND INTEREST DISTRIBUTION**

1   **459-007-0007**

2   **Assumed Rate**

3       (1) The Board will review the assumed rate in odd-numbered years as part of the  
4 Board’s review and adoption of actuarial assumptions and methods.

5       (2) The Board may adopt a change in the assumed rate at any time. A change in the  
6 assumed rate is effective the first of the year following the Board’s adoption of the change.

7       (3) The assumed rate is set at ~~[7.20]~~ \_\_\_\_ percent, effective on January 1, ~~[2018]~~ 2020.

8       Stat. Auth.: ORS 238.650 & 238A.450

9       Stats. Implemented: ORS 238.255



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May 31, 2019

TO: Members of the PERS Board  
FROM: Stephanie Vaughn, Manager, Policy Analysis & Compliance Section  
SUBJECT: Adoption of Student Employees Rule:  
OAR 459-005-0025, *Student Employee*

### OVERVIEW

- Action: Adopt modifications to the Student Employees rule.
- Reason: Extend the current Chapter 238 standards regarding when a student employee designation is appropriate for PERS purposes to OPSRP and provide clarification to address common questions on the subject.
- Policy Issue: None identified.

### BACKGROUND

Individuals are not eligible to establish membership or to participate in PERS for their student employment under Oregon Revised Statutes (ORS) 238.015 and 238A.005. While the term “student employee” is not defined in statute, PERS has received many questions from both employers and employees over the years regarding how to determine whether an individual is PERS eligible when the person is both a student and an employee, or when the employment is primarily to further the person’s education as a student. To ensure that an employer’s student employee designation is reasonable and consistent for similarly situated persons, PERS established this rule to provide employers with general guidelines on PERS’ administration of the governing statutes.

However, because the existing rule expressly refers to ORS 238.015 (which applies to the Chapter 238 program), and does not reference ORS 238A.005 (which applies to the OPSRP program), the rule applies only to Chapter 238 members. Currently there is no clarification or guidance regarding student employees under OPSRP. The proposed rule amendment adds this reference and moves the rule from Division 10, which is specific to PERS administration under ORS Chapter 238, to Division 5, which applies to PERS administration under both ORS Chapters 238 and 238A. It also updates the rule to accomplish the following: remove references that do not relate to student employees (i.e., inmates and aliens on training visas), remove the reference to a school that was specifically referenced that is no longer in existence, and provide clarification on how to classify a person under certain circumstances that have created confusion in the past.

The rule has also been modified to address concerns raised at the April Board meeting by board member Steve Demarest.

### SUMMARY OF MODIFICATIONS TO RULE SINCE NOTICE

The definition of “school” in subsection (2)(a) was revised to include private schools in order to address the scenario where students enrolled in private schools provide services to public employers as student employees. The word structure was changed to clarify that the terms “public and private” apply to all of the schools listed. Additionally, the Oregon State School for the Blind was removed from the list of institutions because it was closed in 2009.

### PUBLIC COMMENT AND HEARING TESTIMONY

A rulemaking hearing was held April 22, 2019, at 2:00 p.m. at PERS headquarters in Tigard. No members of the public attended. The public comment period ended May 3, 2019, at 5:00 p.m. No public comment was received.

### LEGAL REVIEW

The attached draft rule was submitted to the Department of Justice for legal review and any comments or changes are incorporated in the rule as presented for adoption.

### IMPACT

Mandatory: No, the Board need not adopt the rule modifications.

Benefit: Clarification of administration will benefit employers and staff.

Cost: There are no discrete costs attributable to the rule.

### RULEMAKING TIMELINE

March 29, 2019	Staff began the rulemaking process by filing a Notice of Rulemaking with the Secretary of State.
April 1, 2019	Secretary of State published the Notice in the Oregon Administrative Rules Database. Notice was sent to employers, legislators, and interested parties. Public comment period began.
April 1, 2019	PERS Board notified that staff began the rulemaking process.
April 22, 2019	Rulemaking hearing held at 2:00 p.m. at PERS in Tigard.
May 3, 2019	Public comment period ended at 5:00 p.m.
May 31, 2019	Board may adopt the permanent rule modifications.

### BOARD OPTIONS

The Board may:

1. Pass a motion to “adopt modifications to the Student Employees rule, as presented.”
2. Direct staff to make other changes to the rule or explore other options.

### STAFF RECOMMENDATION

Staff recommends the Board choose Option #1.

Adoption – Student Employees Rule

05/31/19

Page 3 of 3

- Reason: Extend the current Chapter 238 standards regarding when a student employee designation is appropriate for PERS purposes to OPSRP and provide clarification to address common questions on the subject.

If the Board does not adopt: Staff would return with rule modifications that more closely fit the Board's policy direction if the Board determines that a change is warranted.

B.3. Attachment 1 - 459-005-0025, *Student Employee*

OREGON ADMINISTRATIVE RULE  
PUBLIC EMPLOYEES RETIREMENT BOARD  
CHAPTER 459

*[DIVISION 010 – MEMBERSHIP]* DIVISION 005 – ADMINISTRATION

1 **459-~~[010]~~005-0025**

2 **Student Employee**

3 (1) Under ORS 238.015(4) and 238A.005(4)(d), student employees~~[, inmates of a~~  
4 ~~state institution, and aliens on a training or educational visa]~~ are not eligible for  
5 membership in the system by reason of their student employment. A participating  
6 employer is responsible for determining whether ~~[an employee]~~ a person is ineligible for  
7 membership in the system because the ~~[employee]~~ person is a student employee~~[, an~~  
8 ~~inmate of a state institution, or an alien on a training or educational visa]~~.

9 (2) As used in this rule:

10 (a) The term “school” includes the following public and private educational  
11 institutions: ~~[an accredited or certified public or private]~~ a charter school, an  
12 elementary school, a middle school, a junior high school, a high school, a community  
13 college, ~~[or]~~ an institution of higher education, ~~[or]~~ an Oregon education service district,  
14 ~~[or]~~ and the Oregon State School for the Deaf. ~~[or the Oregon State School for the~~  
15 ~~Blind; but]~~

16 ~~[(b) The term “school” does not include:]~~

17 ~~[(A) Private technical, trade or correspondence schools that do not grant~~  
18 ~~educational degrees; and]~~

19 ~~[(B) Course(s) offered by a school that are not applied toward a degree.]~~

20 ~~[(c)]~~(b) The term~~s~~ “~~half-time enrolled~~” or “enrolled at least half-time” means~~s~~ that  
21 the~~[a]~~ person is enrolled in a school as a student ~~[at least 50% of a full-time enrolled~~

1 *status in a school, as defined in subsection (a) of this section,]* on at least a half-time  
2 basis, [and] as determined by the school in which enrolled.

3 (3) A participating employer may *[reasonably]* designate a person *[an employee]* as  
4 a *[“]student employee[”]* if *[the employee is a person]:*

5 (a) The person *[Who]* is enrolled at least half-time in a school *[and whose*  
6 *employment is principally for the purpose of furthering the person’s education]; and [or]*

7 (b) *[Whose]* The employment is principally related to the *[employee’s]* person’s  
8 status as a student, or for the purpose of furthering the person’s education as a  
9 student, e.g. a work-study program, student internship program, etc.

10 *[(4) An employee may be a student employee under the following circumstances:]*

11 *[(a) The employer is a school and the employed person’s principal relationship to*  
12 *the school is as at least a half-time enrolled student.]*

13 *[(b) The employer is not a school, but the person employed is enrolled half time in a*  
14 *school and the work performed for the employer is primarily for the purposes of*  
15 *furthering the person’s course of study at the school, or is otherwise related to the*  
16 *person’s education. For example:]*

17 *[(A) A student intern at the Legislative Assembly who will receive academic credit*  
18 *for the internship is a student employee.]*

19 *[(B) If an employer requires, for reasons legitimately related to the employment of*  
20 *the person, that an employee be at least a half-time enrolled student; the employee is a*  
21 *student employee.]*

1 ~~[(5)](4) A participating employer may not designate a person as a student~~  
2 ~~employee, and must evaluate whether the person is an employee eligible for~~  
3 ~~membership in the system (as determined under OAR 459-010-0030) if:~~  
4 ~~(a) The person is not enrolled at least half-time in a school; and~~  
5 ~~(b) [An employee who is also a student shall be eligible for membership in the~~  
6 ~~system if t] The [employee's] person's [work for the employer is the principal basis for~~  
7 ~~the] employment [relationship and] is not principally related to the person's status as a~~  
8 ~~student, or for the purpose of furthering the person's education as a student.~~  
9 ~~[employee's course of study at a school.]~~  
10 ~~[ For example:]~~  
11 ~~[(a) A full-time employee who attends classes outside of working hours for purposes~~  
12 ~~unrelated to the work performed for the employer is not a student employee, except as~~  
13 ~~provided in section (3) of this rule.]~~  
14 ~~[(b) A full-time employee who is granted administrative time off to attend class and~~  
15 ~~the course is recommended or authorized by the employer to maintain or improve the~~  
16 ~~employee's job performance is not a student employee.]~~  
17 ~~[(c) A full-time employee, or a part-time employee employed in a position which~~  
18 ~~qualifies the employee for active membership in PERS who is taking a course or is~~  
19 ~~enrolled less than half time in a school, is not a student employee, except as provided in~~  
20 ~~section (3) of this rule.]~~  
21 ~~[(6)](5) If a person [an employee] qualifies as a student employee under section (3)~~  
22 ~~of this rule, the [employee] person may be [deemed] designated as a student employee~~  
23 ~~during a temporary break that does not exceed an academic quarter or semester,~~



1 *[between semesters or quarters of study provided that] if* the student employee has  
2 *[declared, or otherwise indicated, the] notified the employer of their* intent to resume at  
3 least half-time *[enrolled status] enrollment* following the break,*[, provided that the*  
4 *break does not exceed an academic quarter or semester, and the employer has a*  
5 *reasonable expectation that the employee shall resume at least a half time enrolled status*  
6 *following the break.]*

7 *[(7)](6)* For *[an employee] a person* whose *[employment relationship with the*  
8 *employer] student employee status* varies from time to time, *[from that as a student*  
9 *employee to not as a student employee,] the person's [majority] principal status*  
10 *[employment relationship] during [a] the school year shall [prevail] be used* in  
11 determining whether *[an employee] a person* is an *ineligible* student employee *or an*  
12 *eligible employee* for that *school* year.

13 *[(8) The employer's policy designating a position or an employment relationship as*  
14 *that of a student employee shall be in writing, and shall reflect the following:]*

15 *[(a) The designation is not primarily for the avoidance of PERS contributions; and]*

16 *[(b) The designation shall be in accordance with applicable laws and regulations*  
17 *pertaining to employment practices.]*

18 Statutory Authority: ORS 238.650

19 Statutes Implemented: ORS 238.015(4) & 238A.005(4)



# Oregon

Kate Brown, Governor

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May 31, 2019

TO: Members of the PERS Board  
FROM: Marjorie Taylor, Senior Policy Director  
SUBJECT: Legislative Update

### **LEGISLATION IMPACTING PERS STATUTES, RETIREMENT, or REFERS to PERS**

As of May 20, 2019, more than 2,700 bills have been introduced for consideration during session. Of those, 27 that directly impact PERS statutes, or refer to PERS, have been approved by both chambers or remain in committees that may take some sort of action on them.

Official information about all legislation is available on the legislative website:

<https://www.oregonlegislature.gov/>

<b>Bill</b>	<b>Bills impacting PERS statutes or refer to PERS</b>
HB 2133	Relating to tax credits for pension income
HB 2155	Relating to connection to federal tax law; prescribing an effective date
HB 2417	Relating to death benefits under the Public Employees Retirement System
HB 2646	Relating to salary under Public Employees Retirement System
HB 2647	Relating to the status in the Public Employees Retirement System of police officers commissioned by universities
HB 2786	Relating to the status of district attorneys in the Public Employees Retirement System
HB 2838	Relating to reemployment of retired members of the Public Employees Retirement System
HB 2861	Relating to the Individual Account Program of the Public Employees Retirement System; declaring an emergency
HB 2972	Relating to retirement of employees of Harney County Health District; declaring an emergency
HB 3101	Relating to university-shared services; declaring an emergency
HB 3123	Relating to bonds to finance pension liabilities; prescribing an effective date
HB 3146	Relating to corrections
HB 3166	Relating to revenue estimates; declaring an emergency; providing for revenue estimate modification that requires approval by a two-thirds majority
SB 29	Relating to public health; declaring an emergency
SB 75	Relating to employer contributions to the Public Employees Retirement System; declaring an emergency
SB 187	Relating to judicial marshals; prescribing an effective date
SB 198	Relating to tax credits for pension income
SB 213	Relating to connection to federal tax law; prescribing an effective date
SB 634	Relating to salary of employees of public charter schools under the Oregon Public Service Retirement Plan
SB 705	Relating to employer contributions to the Public Employees Retirement System
SB 768	Relating to reemployment of retired members of the Public Employees Retirement System
SB 934	Relating to reemployment of retired members of the Public Employees Retirement System; prescribing an effective date
SB 1049	Relating to public employee retirement

<b>Bill</b>	<b>Approved by House and Senate</b>
HB 2118	Relating to consumer price index
HB 2196	Relating to the military
HB 3007	Relating to estates
SB 576	Relating to campus security officers

### **PERS BUDGET PRESENTATION**

In late February, the “Phase 1” budget discussion with the Ways and Means Subcommittee on General Government included overviews of PERS, the system and agency, and highlights of agency budget structure and requests.

We are prepared to participate in “Phase 2” of the agency budget discussion when requested to do so. We will share additional funding requests to address administrative fees for the Oregon Savings Growth Plan; agency reorganization and resolution of work-out-of-class positions; and planning for the Individual Account Program Project.

Depending on legislative action, we will also acknowledge the cost – financial and human resources – for anticipated implementation of any significant PERS reform legislation.

### **SUBCOMMITTEE on CAPITAL CONSTRUCTION**

The Joint Ways and Means Subcommittee on Capital Construction remains the focus our conversations on PERS reforms. The Governor, on April 12, and legislature, on May 10, each introduced proposals for discussion.

On May 21, the subcommittee approved an amendment to Senate Bill 1049 that includes a variety of provisions impacting members and employers. Major pieces include:

- Reamortization of Tier One/Tier Two UAL over 22 years instead of 20; OPSRP at 16
- \$100M General Fund appropriation to Employer Incentive Fund
- Revenue from sports betting to Employer Incentive Fund
- Employee Contribution (IAP Redirect) to new “Employee Pension Stability Accounts(EPSA)”
  - For employees with salary of \$2500/month or more
  - Tier One/Two = 2.5% to EPSA; 3.5% to IAP
  - OPSRP = 0.75% to EPSA; 5.25% to IAP
- Final Average Salary limit for all members to \$195,000
- Employee choice of Target Date Fund investment for IAP
- Elimination of hour limits and exceptions for work after retirement in calendar years 2020-2024

Access Capital Construction videos and materials here:

<https://olis.leg.state.or.us/liz/2019R1/Committees/JWMCC/Overview>



# Oregon

Kate Brown, Governor

## Public Employees Retirement System

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May 31, 2019

TO: Members of the PERS Board  
FROM: Yvette Elledge-Rhodes, Deputy Director  
SUBJECT: IAP TDF Implementation Update

### **BACKGROUND**

At the September 20, 2017 Oregon Investment Council (OIC) meeting, the OIC adopted a new Target-Date Fund (TDF) investment strategy for the Individual Account Program (IAP), effective January 1, 2018. This decision resulted in changes to the IAP investment structure by establishing TDFs in five-year vintages that reflect gradually more conservative investment mixes as a member ages.

As reported at the December 7, 2018 Board meeting, the OIC's move to TDFs continues to be integrated into IAP operations through ongoing project work.

### **PROJECT END DATE**

The project end date was originally planned for May 30, 2019, to coincide with the mailing of member annual statements – the first time TDF data has been published for members. However, due to some data challenges, the project team has moved the project end date to September 30, 2019.

### **BUDGET**

The original budget request for technology requirements for implementation of earnings crediting and a TDF history table was \$200,000. After reviewing the database and reporting requirements, it was determined that PERS needs additional development assistance to complete this work and allocated \$65,000 of the normal operating budget directly to this project.

### **PROJECT ACTIVITIES**

- The critical tools needed for tracking TDF history and prior-year earnings were completed by 12/31/18.
- Successfully locked TDF history for all accounts as of 12/31/2018. This is needed to calculate prior year earnings if there are any adjustments to accounts.
- Successfully credited 2018 annual earnings to all 10 target date funds.
- All other tools and reports needed for TDF are in process and scheduled to be completed by 9/30/19.
- Data transfers and processes between Voya and PERS continue to be reviewed for efficiency and accuracy.
- Working with Oregon State Treasury (OST) to clarify how the Retirement Allocation Fund (RAF) earnings crediting, administration fees and the inclusion of distributed accounts are currently handled and how this might change in the future to segregate the distributed

accounts from the RAF. PERS will be bringing any proposed changes to the July Board meeting.

## **COMMUNICATIONS**

On May 13, 2019, Member Annual Statements were mailed to almost 267,000 members.

This will be the first time that age-based TDF returns will be included in the statements. To answer some anticipated questions:

- An [insert](#) with IAP TDF information was included with all 2018 Member Annual Statements.
- Member Annual Statements Frequently Asked Questions were added to the PERS website.
- PERS continues to partner with OST and Alliance Bernstein (AB), Glide Path Managers, to communicate this change. OST's spring 2019 "[Invested for You](#)" newsletter for public workers and retirees is now available online. This twice-yearly publication aims to "promote better understanding about Oregon public trust funds, and is written specifically for Oregon Public Employees Retirement Fund (OPERF) beneficiaries."

## **BOARD ACTION - TDF MODIFICATIONS**

On January 31, 2019, PERS met with OST staff and AB to review AB's experience with TDF management, IAP investments and administration. They also provided a more comprehensive review of AB's role in managing PERS IAP Custom Target Date Funds and reviewed the relationship between the various stakeholders in the process.

AB recommended that PERS consider the addition of a new TDF and the consolidation of another into the RAF. This is normally done every five years. Specifically:

- Add a new 2065 TDF (for dates of birth in 1998 or later)
- Consolidate the 2020 TDF into the Retirement Allocation Fund
- Both changes would be effective 12/31/19

## **STAFF RECOMMENDATION**

Staff recommends the Board pass a motion to adopt the addition of a new 2065 TDF and the consolidation of the 2020 TDF into the RAF effective December 31, 2019.

PERS staff will update the Board in the fall as project implementation concludes.



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May 31, 2019

TO: Members of the PERS Board  
FROM: Karen Chavez, PERS Health Insurance Program Manager  
SUBJECT: PERS Health Insurance Program (PHIP) 2020 Plans and Rates

### **CURRENT PHIP PLANS OFFERED**

PHIP contracts with five Contracted Health Plans (CHPs) for Medical, Dental, and Prescription Drug Plans (PDP), allowing participants a range of choices while maintaining stability of the overall program. Currently, contracts that are in place are as follows:

1. Kaiser Permanente NW
  - a. Medicare Advantage - Senior Advantage HMO Plan/Part D PDP
  - b. Traditional HMO Core Value Non-Medicare Plan/PDP
  - c. \$3,000 HSA-qualified High Deductible Health Plan (HDHP) Non-Medicare Plan/PDP
  - d. DMO Dental Plan
2. Moda Health Plan/ Delta Dental Plan of Oregon
  - a. Medicare Supplement – Moda Health Medicare Supplement Plan/Part D PDP
  - b. Indemnity Dental Plan with passive PPO
3. PacificSource Community Health Plans, Inc.
  - a. Medicare Advantage - Medicare Essentials RX 803 HMO Plan/Part D PDP
4. Providence Health Assurance
  - a. Medicare Advantage - Medicare Align Group HMO Plan/Part D PDP
  - b. Medicare Advantage - Medicare Flex Group HMO-POS Plan/Part D PDP
5. UnitedHealthcare
  - a. Medicare Advantage - Medicare Advantage PPO plan/Part D PDP
  - b. \$1,000 Deductible Core Value Non-Medicare Plan/PDP Plan
  - c. \$3,000 HSA-qualified High Deductible Health Plan (HDHP) Non-Medicare Plan/PDP

PHIP is a voluntary insurance plan where eligible members pay most, if not all, of their own premiums for the plan of their choice. In addition to the premium, PERS retirees also cover the cost of program administration. The premium rates that members pay are inclusive of these costs.

## **RENEWAL PROCESS**

There were several factors influencing the PHIP renewal process, including:

- The integration of UnitedHealthcare (UHC) as a new CHP to the program;
- The impacts of taxes and fees that are being revisited by both state government and as part of the federal Affordable Care Act (ACA);
- Proposed Centers for Medicare and Medicaid Services (CMS) changes for 2020 and the potential impacts on 2021, which significantly influenced the discussions for the 2020 Renewal; and
- Consideration of plan design and benefit improvements in response to Member Services interaction with PHIP members.

In an effort to ensure positive outcomes for the renewal process, PHIP began working with our CHPs in November 2018, asking preliminary questions about potential benefit changes and the legislative and regulatory landscape.

This was the first contract renewal process for UHC. After being awarded a contract in 2018, PHIP staff, consultants, PHIP's third party administrator, and UHC worked collaboratively for the 2019 plan year when benefits would begin. Overall, implementation of UHC into PHIP was a success.

Other factors that impacted this renewal cycle include uncertainty about the implementation of taxes at the state and federal levels. For example, the Affordable Care Act Health Insurance Tax (HIT) has been in moratorium for 2019, but so far, that moratorium has not been extended to 2020.

The timing when PHIP must finalize its rates, and uncertainty over the fate of the HIT for 2020, leaves PHIP in a difficult situation. PHIP has advised each of its CHPs, who are impacted by the HIT, to include it in their 2020 rates. In the event it goes into a moratorium for 2020, PHIP will get a credit from the CHPs for the amount of the tax that will be collected in 2020. Furthermore, at the state level, PHIP's non-Medicare and dental plans are affected by a State of Oregon premium tax which has increased from 1.5% in 2019 to 2% in 2020 and extended through 2026 (HB 2010). Each of these taxes directly impact our members, as the insurance carriers pass the assessments through to its policyholders through an increase in premiums.

All CHPs provided rates in the face of uncertainty regarding proposed Centers for Medicare and Medicaid Services (CMS) and Health and Human Services (HHS) changes for 2020. The two drivers of the uncertainty were in regards to Network Performance Fees and Point of Service Rebates. This uncertainty created a challenge for CHPs as each had to decide whether or not to include funding in their rates to cover contingencies which could impact rates either positively or negatively, depending upon CMS/HHS actions.

A review of the CMS Advance Notice, released in February 2019, provided an indication of possible changes, including proposed modifications related to the processing of pharmacy rebates. The final CMS Call Letter, released in April 2019, confirmed changes to the rebate process without procedures defined. Final guidance is expected in 2019, with timing to occur

after the PHIP required approval of final rates, and much later than has occurred in prior years. This added complexity to finalization of the PHIP 2020 Renewal.

Following several exchanges with the CHPs, they presented their proposals and final rate offers in early May 2019. The 2020 premium rate changes were finalized and outlined by plan provider and type of coverage for both Medicare and non-Medicare enrollees. The submissions were reviewed by PHIP staff and its consultants, with oversight from PERS' Interim Chief Administrative Officer, PERS' Assistant Chief Operations Officer, PERS Director, PHIP's Board Liaison, Steve Demarest., and PHIP Retiree Advisor, Tom Jovich.

Two primary benefit focus areas for the 2020 Renewal were identified:

- Facilitate the addition of a benefit covering hearing aids.
- Review pharmacy benefit modifications with two goals in mind:
  - Retain 'Actuarial Equivalence' above the standard Medicare Part D benefit; and
  - Modernize and create a market-competitive benefit structure with the potential to increase adherence and decrease member cost.

## **2020 PLAN RENEWAL OVERVIEW**

### *Medical*

Small benefit changes were made across all CHP Medicare plans. The most significant change was the negotiation of a hearing aid benefit. No changes were made to PHIP non-Medicare plans.

PHIP proposes implementing a hearing aid benefit for Medicare plans beginning in 2020. For years, PHIP members have shared their need for a hearing aid benefit with PHIP staff. As part of their renewal bid, PacificSource, Providence, and Moda will use TruHearing as a provider and will administer the benefit that PHIP requested.

Kaiser Permanente and UHC will not contract the benefit to TruHearing, but will administer the benefit internally by converting proposed member cost share to an allowance that members can use towards hearing aids.

### *Pharmacy*

Since its inception in 2006, the PHIP Part D prescription drug coverage has remained creditable under CMS guidelines. This means it has been actuarially equivalent, or better than the standard Medicare Part D prescription drug coverage. As a result of the Affordable Care Act and Bipartisan Budget Act, the standard Part D program's member exposure in the coverage gap has been slowly diminishing and it is anticipated it will be completely eliminated by next year. When that occurs, it is probable that PHIP will no longer be actuarially equivalent to the standard Medicare Part D benefit, thus making PHIP's Part D plan no longer creditable. During the 2020 renewal, PHIP began exploring changes to the pharmacy benefit such as moving it to a more standard "tiered drug plan" similar to those in the commercial market.

PHIP reviewed four options in comparison to the current benefit for reasons including:

- maintaining actuarial equivalency of the standard Part D program;



- gaining a competitive advantage over competition in the individual market;
- giving new members continuity into retiree health coverage from employer plans,
- reducing member costs; and
- increasing member drug adherence.

Ultimately, PHIP recommends keeping the current drug benefit design for one more year. CMS has not clearly defined new procedures for handling rebates and may make changes to how CHP's can populate drug tiers in 2021. Consequently, making a coverage change now could negatively impact the stability of the program. Additionally, PHIP is cognizant of how constant, year-after-year changes in benefits disrupt membership.

#### *Dental*

PHIP considered several changes to the dental plan design however ultimately decided only to implement a new *Health Through Oral Wellness* benefit program under the Delta Dental Plan of Oregon.

#### *Taxes*

Based on current legislation, various taxes are set to be imposed in 2020. However, the taxes will impact each CHP differently based on their corporate structure and tax status. Uncertainty remains as to whether the taxes will be put in place. Based on the information to date, and the timeline to approve rates, PHIP recommends including the taxes in the rate calculations, where applicable.

### **RATE STABILIZATION ACTIONS**

Periodically, PHIP has made an effort to minimize year-over-year rate fluctuations by adding either a surcharge or subsidy to a proposed rate. For 2020, Providence Health Assurance (PHA) proposed an 8.7% and 9.0% decrease in rates for their two Medicare Advantage plans, Align and Flex, respectively. The decrease in rates for PHA are the result of assumptions made about potential increases in CMS funding and bearing the risks associated with the potential movement of Rx rebates to be processed at point of service. PHIP is concerned that, should PHA's assumptions be proven wrong, PHIP members enrolled in a PHA plan could be negatively impacted in 2021.

### **RATE STABILIZATION RESERVE - SUBSIDY FUND**

PERS Policy 2.01.08.03.001 states that under a fully insured arrangement, upon the recommendation of the PHIP Advisory Committee and with PERS Board approval, a Rate Stabilization Reserve (RSR) - Subsidy Fund may be established to stabilize health insurance premiums.

Subsidies, using funds from the RSR and Surcharges, adding to the RSR, have been used in the past when rates have been artificially low or at times when rates were exceptionally high. PHIP created the RSR - Subsidy Fund to ensure participants were not significantly impacted by premium fluctuations and to ease them into a more sustainable level of premium increases.

**2020 PROPOSED RATE SURCHARGE**

PHIP believes it is in the best interest of its members to stabilize rates, especially in light of the fact that premiums are generally paid by members out of their retirement benefit. Utilizing the RSR - Subsidy Fund process for the PHA enrollees provides a tool to reduce rate instability. In 2020, PHIP proposes adjusting the PHA rates by collecting a \$15 surcharge. The surcharge monies, to be deposited in PHIP’s existing reserve account, will be used to stabilize future rate impacts without changing the competitive position of PHA in 2020.

**2020 Providence Medicare Advantage Plan Rates and Surcharges**

Medicare Advantage Plan	Rates without Surcharge	Percent Rate Change	Surcharge	Rates with Surcharge	Percent Rate Change
Flex	\$227.89	-9.0%	\$15	\$242.89	-3.1%
Align	\$272.46	-8.7%	\$15	\$287.46	-3.7%

The original rates proposed by PHA are outlined in the above chart as well as the proposed “surcharged” rates. Even with the surcharge, the PHA rates represent a reduction from current rates. Using this methodology allows PHA plans to remain competitively priced compared to other PHIP CHPs, while maintaining the same ranking relative to our other CHPs as in their original proposal. Surcharges for other CHPs are not recommended

**SUMMARY OF ACTION REQUIRING BOARD APPROVAL**

- PHIP will continue to contract with Kaiser Permanente NW, PacificSource Health Plans, Providence Health Assurance, Moda Health Plan, and UnitedHealthcare for medical, prescription drugs, and dental (where applicable) insurance coverage for eligible retired Medicare and non-Medicare members, spouses, and eligible dependents.
- Upon approval of the board, PHIP will collect a \$15 surcharge as outlined in the chart above to be used to mitigate the potential rate impacts for PHIP members.
- PHIP recommends adopting the premium rates as outlined in item c.3. Attachment 1: PHIP 2020 Proposed Rates.

**BOARD OPTIONS**

The Board may:

1. Pass a motion to “approve the proposed PHIP RFP contract awards, benefits, surcharges and rates for the 2020 Plan Year as presented in Item C.3.Attachment 1: PHIP 2020 Proposed Rates”; or
2. Direct staff to make changes to these terms or explore other options.

**STAFF RECOMMEDATION**

Staff recommends the Board approve the contract renewals, benefits and rates for 2020 as presented in Option #1

C.3. Attachment 1 - *PHIP 2020 Proposed Rates*

C.3. Attachment 2 - *PHIP Membership*



**PHIP 2020 PROPOSED RATES**  
**2019 vs. 2020 Contracted Health Plan Rates**

Effective January 1, 2020

**SUMMARY**

	Enrollment as of March 2019	Current Monthly 2019 Rates	2020 Proposed Monthly Medical/RX and Dental Rates	Percentage Change 2020 vs. 2019
<b>Medicare Plans</b>				
Kaiser Permanente Northwest Sr. Advantage Medical / Rx	10,143	\$ 233.68	\$ 244.33	4.6%
Moda Health Medicare Supplement Medical / Rx	25,774	\$ 292.09	\$ 309.01	5.8%
PacificSource Medicare Advantage Essentials Medical / Rx	1,226	\$ 257.37	\$ 259.70	0.9%
Providence Medicare Advantage Align Medical / Rx	8,807	\$ 298.51	\$ 287.46	-3.7%
Providence Medicare Advantage Flex Medical / Rx	3,995	\$ 250.56	\$ 242.89	-3.1%
UnitedHealthcare Medicare Advantage PPO Medical / Rx	6,467	\$ 257.42	\$ 295.10	14.6%
<b>Non-Medicare Plans</b>				
<b>Core Value</b>				
Kaiser Permanente Core Value HMO Medical / Rx	417	\$ 944.15	\$ 918.55	-2.7%
UnitedHealthcare Core Value 1000 PPO Medical / Rx	1,180	\$ 1,025.49	\$ 1,150.51	12.2%
<b>HDHP</b>				
Kaiser Permanente HDHP 3000 Medical / Rx	88	\$ 561.59	\$ 545.25	-2.9%
UnitedHealthcare HDHP 3000 Medical / Rx	199	\$ 737.90	\$ 827.86	12.2%
<b>Dental Plans</b>				
Kaiser Permanente Northwest Dental HMO Plan	4,755	\$ 64.84	\$ 67.43	4.0%
Delta Dental of Oregon Premier Dental with Passive PPO	33,103	\$ 61.92	\$ 64.46	4.1%

**Notes to Rate Sheet:**

- Rates illustrated are "Adult" only premium (retiree or spouse)
- Child rates are calculated as a percentage of the "Adult" rate as follows:
  - Child with Medicare coverage = 80%
  - Child with non-Medicare Coverage = 30%
  - Child with dental coverage = 40%
- Medical / Rx rates do not include any PERS administrative fees



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### PHIP Membership

Program Enrollment (March 2019)	Non- Medicare Core Value & HDHP Plans	Medicare	Totals
<b>Covered Lives</b>	1,884	56,412	58,296
Retirees (or Surviving Spouses)	1,183	46,433	47,616
Spouses/Dependents	701	9,979	10,680
Average Age of Enrolled Retirees	57	76	76

Health Plan Membership Enrollment			
Medicare		Non-Medicare (Core Value & HDHP Plans)	
Kaiser	10,143	Kaiser	505
United HealthCare	6,467	United HealthCare	1,379
Moda Medicare Supplement	25,774		
PacificSource	1,226		
Providence - Medicare Flex	3,995		
Providence- Medicare Align	8,807		
<b>Dental</b>		<b>Dental</b>	
Kaiser Dental	4,502	Kaiser Dental	253
Delta Dental	31,980	Delta Dental	1,123

Statutory Health Insurance Premium Subsidies (March 2019)	
Retirees Receiving Retirement Health Insurance Account (RHIA)	44,377
Retirees Receiving Retiree Health Insurance Premium Account (RHIPA)	948
RHIA Payment - \$60 Per Member Per Month (PMPM)	\$2,662,620
RHIPA Monthly Payment - \$383 (avg) PMPM	\$362,776
<b>Total Monthly Premium Paid to Health Plans</b>	<b>\$19,699,798</b>





# Economic Assumptions & Actuarial Methods

## OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

Presented by:

**Matt Larrabee, FSA, EA**  
**Scott Preppernau, FSA, EA**

May 31, 2019

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# Three-Meeting Process – Assumptions & Methods

- April 1: Background on current key assumptions and methods
  - Assumed rate
  - Amortization period for unfunded actuarial liability (UAL)
  - Contribution rate collaring policy
- **Today: Economic assumptions, system funding methods**
  - Inflation and system payroll growth
  - Assumed rate – data from Treasury’s consultant, Milliman’s model
  - Actuarial methods, including amortization and collaring policy
- July 26: Demographic assumptions, Board decisions
  - Member-specific assumptions based on study of recent PERS experience
  - Assumptions and methods adopted will be used for:
    - 12/31/2018 actuarial valuation with advisory 2021-2023 contribution rates
    - 12/31/2019 actuarial valuation with 2021-2023 contribution rates proposed for adoption

# Two-Year Rate-Setting Cycle

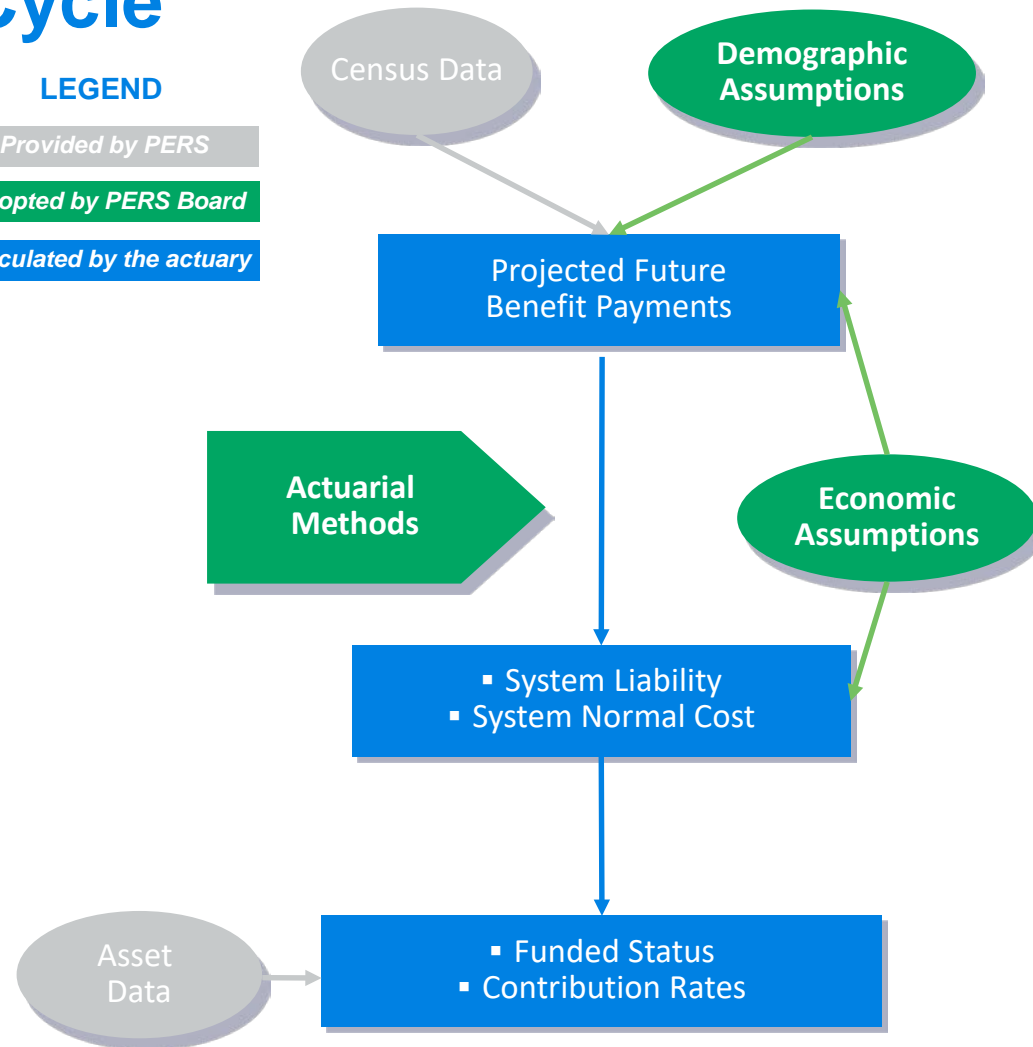
## LEGEND

*Provided by PERS*

*Adopted by PERS Board*

*Calculated by the actuary*

- **July 2019: Assumptions & methods adopted by Board in consultation with the actuary**
- October 2019: System-wide 12/31/18 actuarial valuation results
- December 2019: Advisory 2021-2023 employer-specific contribution rates
- July 2020: System-wide 12/31/19 actuarial valuation results
- September 2020: Disclosure & adoption of employer-specific **2021-2023 contribution rates**



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# Valuation Process and Timeline

- Actuarial valuations are conducted annually
  - Alternate between “rate-setting” and “advisory” valuations
  - The next valuation as of 12/31/2018 will be advisory
- Board adopts contribution rates developed in rate-setting valuations, and those rates go into effect 18 months subsequent to the valuation date

Valuation Date	Employer Contribution Rates
12/31/2015	—————→ July 2017 – June 2019
12/31/2017	—————→ July 2019 – June 2021
12/31/2019	—————→ July 2021 – June 2023

# Board Objectives - Methods & Assumptions

- Transparent
- Predictable and stable rates
- Protect funded status
- Equitable across generations
- Actuarially sound
- 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.

# The Fundamental Cost Equation

- Long-term program costs are the contributions, which are governed by the “fundamental cost equation”:

$$\begin{aligned} & \textit{BENEFITS} = \\ & \textit{CONTRIBUTIONS} + \\ & \textit{EARNINGS} \end{aligned}$$

# Governance Structure

- Benefits:
  - Plan design set by Oregon Legislature
  - Subject to judicial review
- Earnings:
  - Asset allocation set by OIC
  - Actual returns determined by market
- Contributions:
  - Funding, including methods & assumptions, set by PERS Board
  - Since contributions are the balancing item in the fundamental cost equation, PERS Board policies primarily affect the **timing** of contributions
  - Different actuarial methods and assumptions produce different projected future contribution patterns



# Review of Non-Investment Economic Assumptions

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# Assumptions to Be Reviewed

	12/31/2017 Valuation “Current” Assumptions
Inflation	2.5%
Real Wage Growth	<u>1.0%</u>
System Payroll Growth	3.5%
<u>Administrative Expenses:</u>	
- OPSRP	\$6.5 million
- Tier 1/ Tier 2	\$37.5 million

# Economic Assumptions

## Inflation

- The inflation assumption affects other assumptions, including system payroll growth, investment return, and health care inflation
- Inflation can vary significantly over time
- One estimate of future inflation can be derived from yields of Treasury securities and Treasury Inflation Protected Securities (TIPS)
- Social Security’s current “intermediate cost” 30-year average inflation assumption is **2.58%**
- In our opinion, the current assumption of **2.5%** is reasonable

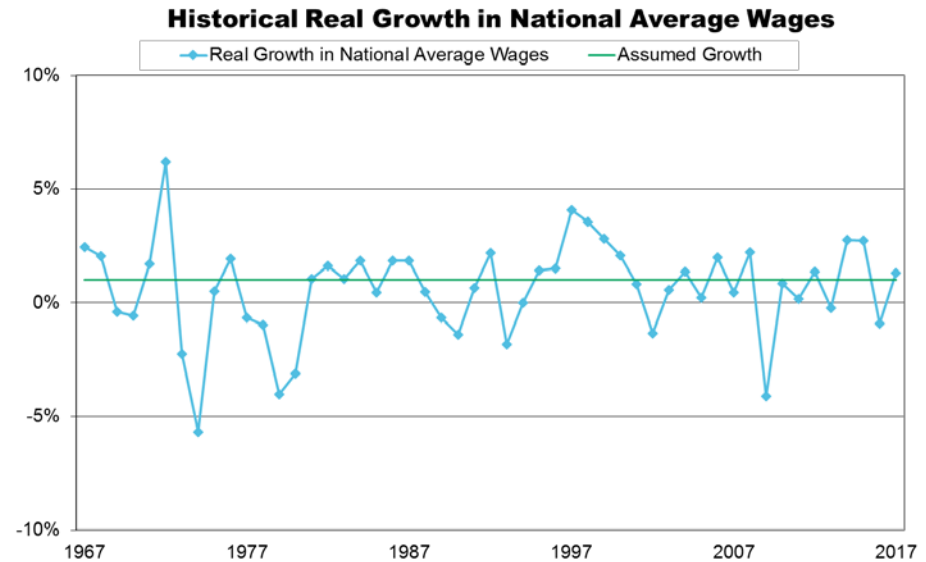
Period Ending 12/31/2018	Average Inflation
10 years	1.80%
20 years	2.16%
30 years	2.48%
40 years	3.33%

As of 12/31/2018	10 Year	30 Year
Treasury Yield	2.69%	3.02%
TIPS Yield	<u>0.98%</u>	<u>1.21%</u>
<b>“Breakeven” Inflation</b>	<b>1.71%</b>	<b>1.81%</b>

# Economic Assumptions

## Real Wage Growth

- An individual member's assumed annual salary increase is composed of:
  - Inflation
  - Real wage growth
  - Individual merit/longevity component
- Real wage growth represents the increase in wages in excess of inflation for the entire group due to improvements in productivity and competitive market pressures
- Social Security's long-term "intermediate cost" real wage growth assumption is 1.2%
- In our opinion, the current assumption of **1.0%** is reasonable



Most Recently Available	Average Real Wage Growth
10 Years	0.59%
20 Years	0.92%
30 Years	0.82%
40 Years	0.65%



# Economic Assumptions

## System Payroll Growth

- Overall system payroll growth is assumed to equal the sum of:
  - Inflation
  - Real wage growth
- The system payroll growth assumption determines the shape of the curve of payments to amortize the unfunded liability
- Given that in our opinion both an inflation assumption of 2.5% and a real wage growth assumption of 1.0% are reasonable, the current system payroll growth assumption of **3.5%** is also reasonable in our opinion

Trailing Period	Average Annualized Growth in Valuation Payroll
5 Years	3.3%
10 Years	2.7%
14 Years	3.5%

# Economic Assumptions

## Administrative Expenses

- Actual administrative expenses for recent years are shown below

(\$ millions)	Tier 1/Tier 2		OPSRP	
Year	Actual Expenses	% of Beginning of Year Assets	Actual Expenses	% of Beginning of Year Assets
2014	\$30.1	0.06%	\$5.0	0.30%
2015	\$31.5	0.06%	\$5.7	0.28%
2016	\$35.8	0.07%	\$5.9	0.25%
2017	\$35.1	0.07%	\$5.9	0.20%
2018	\$29.1	0.05%	\$7.6	0.18%

- Overall, 2018 admin expenses were 0.06% of total assets
- Proposed assumed annual expenses for 2019 and 2020:

Tier 1/Tier 2:               \$32.5 million  
 OPSRP:                       \$8.0 million

# Assumptions to Be Reviewed

	12/31/2017 Valuation Assumptions	12/31/2018 Valuation Proposed* Assumptions
Inflation	2.5%	2.5%
Real Wage Growth	<u>1.0%</u>	<u>1.0%</u>
System Payroll Growth	3.5%	3.5%
<u>Administrative Expenses:</u>		
- OPSRP	\$6.5 million	\$8.0 million
- Tier 1/Tier 2	\$37.5 million	\$32.5 million

No explicit assumption is made for investment-related expenses, which are accounted for implicitly in the analysis of the long-term investment return assumption.

\*No action is needed on “proposed” assumptions today, since all assumptions and methods will be adopted at the July 2019 Board meeting

# Long-Term Investment Return Assumption

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# Long-Term Investment Return Assumption

- Uses of the investment return assumption
  - As a “discount rate” for establishing the:
    - Actuarial accrued liability, which is a net present value
    - Associated unfunded actuarial liability, also called the UAL or actuarial shortfall
  - Guaranteed crediting level for regular Tier 1 active member account balances
  - Annuitization rate for converting member account balances to lifetime money match monthly benefits



Reflecting expectations for both investment earnings and benefit levels for certain members, the assumption helps set a reasonable and appropriate budgeting glide path for projected employer contribution rates

# Use of the Assumed Rate

## 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:

$$\begin{array}{ccccc} \mathbf{B} & = & \mathbf{C} & + & \mathbf{E} \\ \mathbf{BENEFITS} & & \mathbf{CONTRIBUTIONS} & & \mathbf{EARNINGS} \\ \textit{Present value of} & & \textit{Employer funds to pay} & & \textit{Future returns on} \\ \textit{earned benefits} & & \textit{for pension benefits} & & \textit{investment funds} \\ \text{Set by: Oregon Legislature} & & \text{Set by: PERS Board} & & \text{Managed by: Oregon Investment Council} \end{array}$$

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

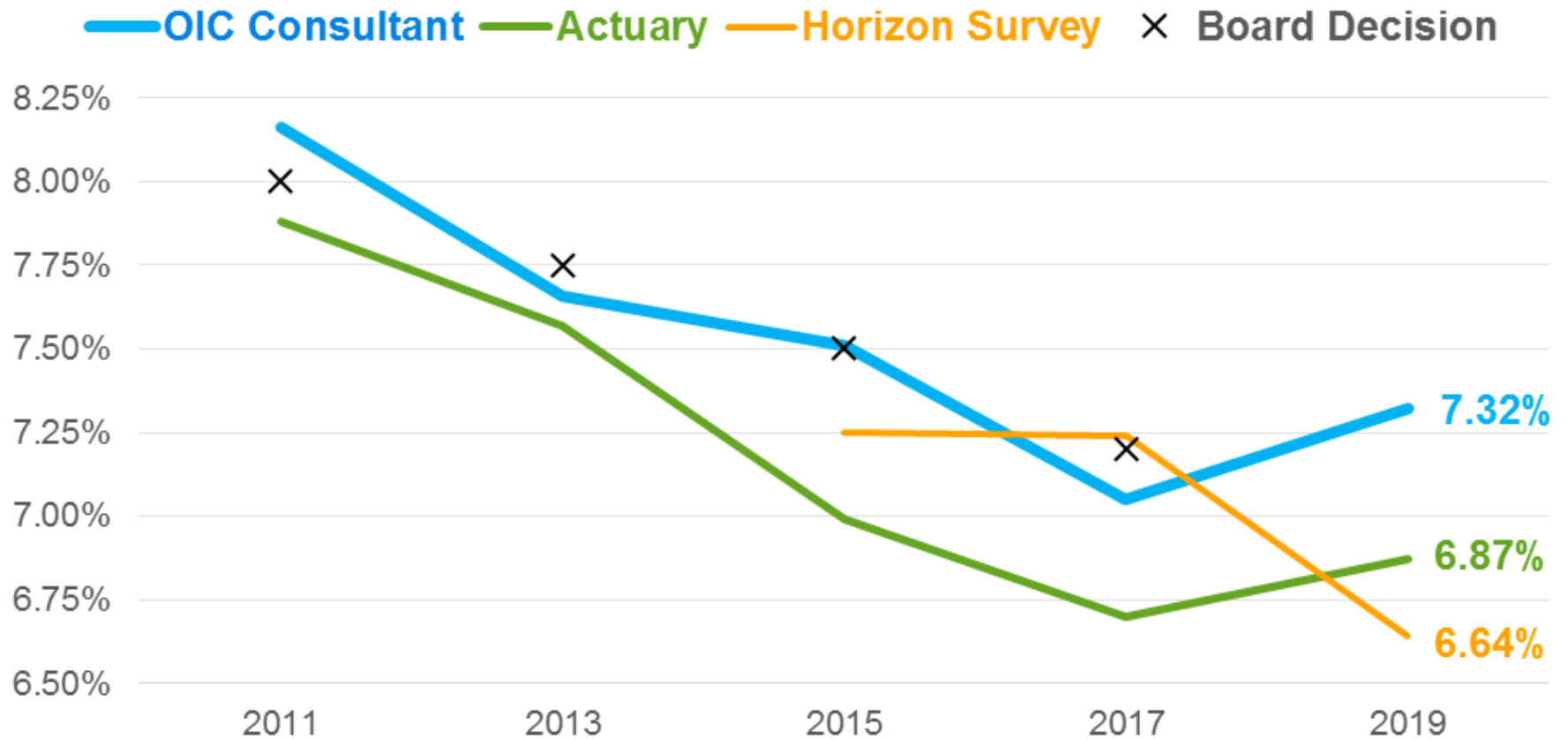
- “B” is predictable with a relatively high degree of certainty
- “E” is the unpredictable **actual** future investment return on PERS assets
- “C” is the balancing item --- it must provide to “B” what “E” fails to cover
- The **assumed rate** is the Board's estimate of “E” to prudently set “C”
- The Board's decision on “E” does **not** affect actual future earnings

# Investment Return 50<sup>th</sup> Percentile Outlooks

- We applied a standard mean/variance model to calculate 50<sup>th</sup> percentile return estimates based on capital market outlook assumptions from three sources
  - Milliman
  - Callan – Consultant to OIC
  - 2018 Horizon survey of capital market assumptions (survey of 34 advisors)
- Estimates do not reflect any possible “alpha” due to selected managers potentially outperforming market benchmarks over the long term, net of fees
- Today’s speakers are not credentialed investment advisors
  - We are presenting Milliman capital market outlook model results based on assumptions developed by Milliman’s credentialed investment professionals

Details on each set of capital market outlook assumptions are in the Appendix

# Investment Return 50<sup>th</sup> Percentile Outlooks





# Investment Return 50<sup>th</sup> Percentile Outlooks

- Estimates are based on OIC's target long-term asset allocation
  - Current actual allocation differs somewhat from the target allocation
- Callan and Horizon estimates are calibrated over a shorter investment timeframe than Milliman's estimates
  - Also reflect lower level of assumed inflation

	Milliman	Callan	Horizon
Median Annualized Return	6.87%	7.32%	6.64%
Assumed Inflation	2.50%	2.25%	2.24%
Timeframe Modeled	20 years	10 years	10 years

The median returns shown above are geometric annualized average returns over the timeframes indicated above for each provided set of capital market assumptions

# Investment Return 50<sup>th</sup> Percentile Outlooks

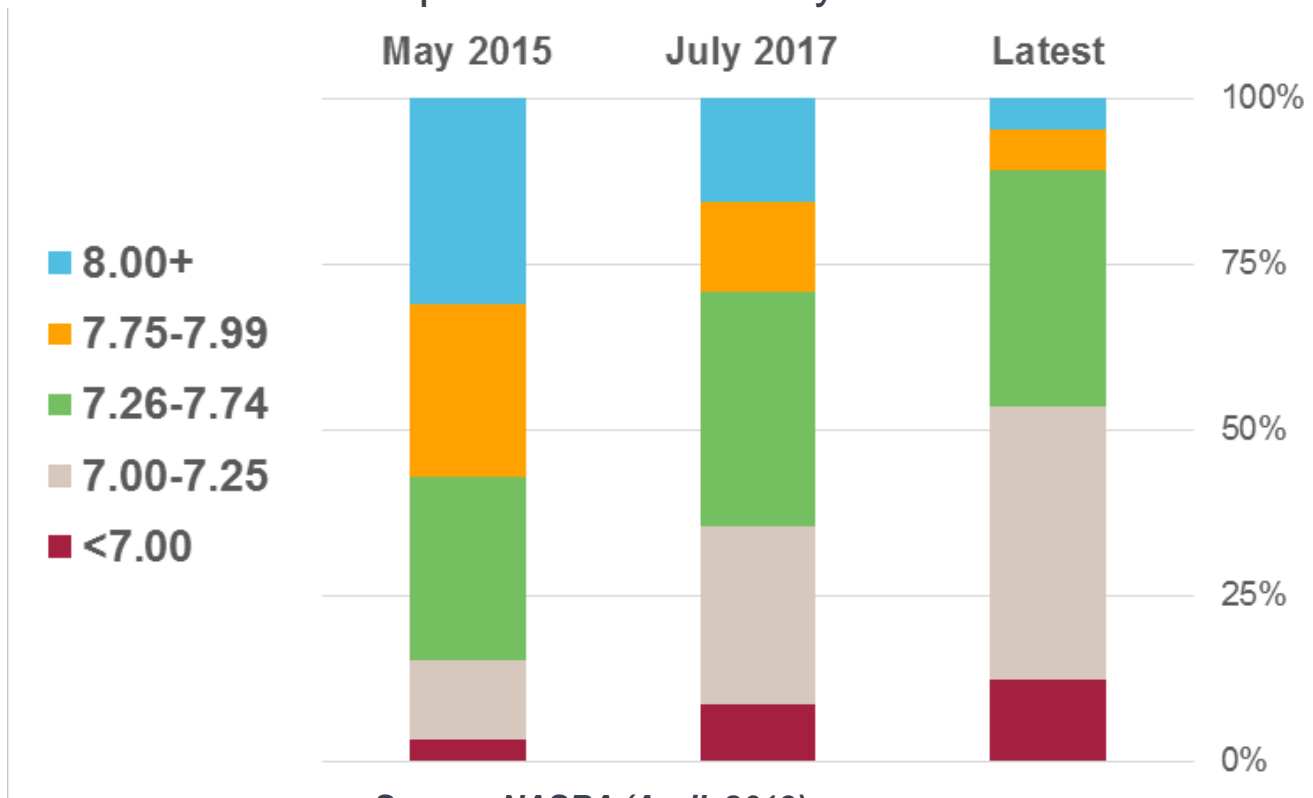
- Capital market outlooks change over time
  - Milliman outlook updated every six months
  - Recent changes and key factors shown below for Milliman model of PERS asset allocation

Milliman 20-year outlook	May 2015	May 2017	May 2019
Median Annualized Return	6.99%	6.70%	6.87%
US Public Equity	6.74%	6.36%	6.36%
Non-US Public Equity	6.89%	6.90%	7.11%
Private Equity	7.97%	7.82%	8.33%
US Core Fixed Income	4.00%	3.49%	4.07%
US Short-term Bonds	3.61%	3.38%	3.68%
Real Estate	5.84%	5.51%	5.55%

Asset category returns shown above are 20-year annualized geometric mean returns

# Comparison to Peer Systems

- There is a downward trend in public plan return assumptions, with a current median assumption for large public systems of **7.25%**
- Over 50% of the 129 systems tracked by the NASRA Public Fund Survey reduced their assumption over last 2-3 years



Source: NASRA (April, 2019)

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# Effects of Lowering the Assumed Return

- A lower investment return assumption would produce higher calculated liabilities and contribution rates
- Liabilities are net present values, as of the valuation date, of a benefit payment projection that stretches far into the future
  - Changing the assumption modifies the projected balance of the fundamental cost equation between future investment earnings and future contributions
    - The actual balance will depend on actual investment earnings, not on the assumed return adopted by the PERS Board
    - The effect of lowering the assumed return to 7.00% is estimated as a 1.7% of payroll increase in the uncollared system average base employer contribution rate
- For PERS, such an assumption change would also lower benefits for future retirements calculated under Money Match

# Considerations in Setting the Return Assumption

- In our opinion, the current 7.20% long-term future investment return assumption is reasonable based on current data from the capital market outlook models, the guiding principles, and Actuarial Standards of Practice
- Callan, the primary investment consultant to the OIC, currently estimates a long-term return above the current assumption
  - The PERS Board could still elect to reduce the assumption for conservatism, if desired
  - We would not recommend increasing the return assumption at this time, given the uncertainty in future outlooks and the influence of the point-in-time measurement at year-end 2018
- At the July meeting, we will ask the Board to adopt an assumption for use in the upcoming valuations

# Actuarial Methods

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# Key Actuarial Methods

	12/31/2017 Valuation Methods	12/31/2018 Valuation Proposed* Methods
Cost Allocation Method	Entry Age Normal	No change
Shortfall Amortization Method	Level percent of pay, layered fixed periods:  Tier 1/Tier 2: 20 years OPSRP: 16 years RHIA/RHIPA: 10 Years	No change
Rate Collar	Limits change in based contribution rate to larger of 20% of current rate or 3.00% of payroll; Collar widens incrementally when funded status below 70%	No change

\*No action is needed on “proposed” methods today, since all assumptions and methods will be adopted at the July 2019 Board meeting

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# Cost Allocation Method

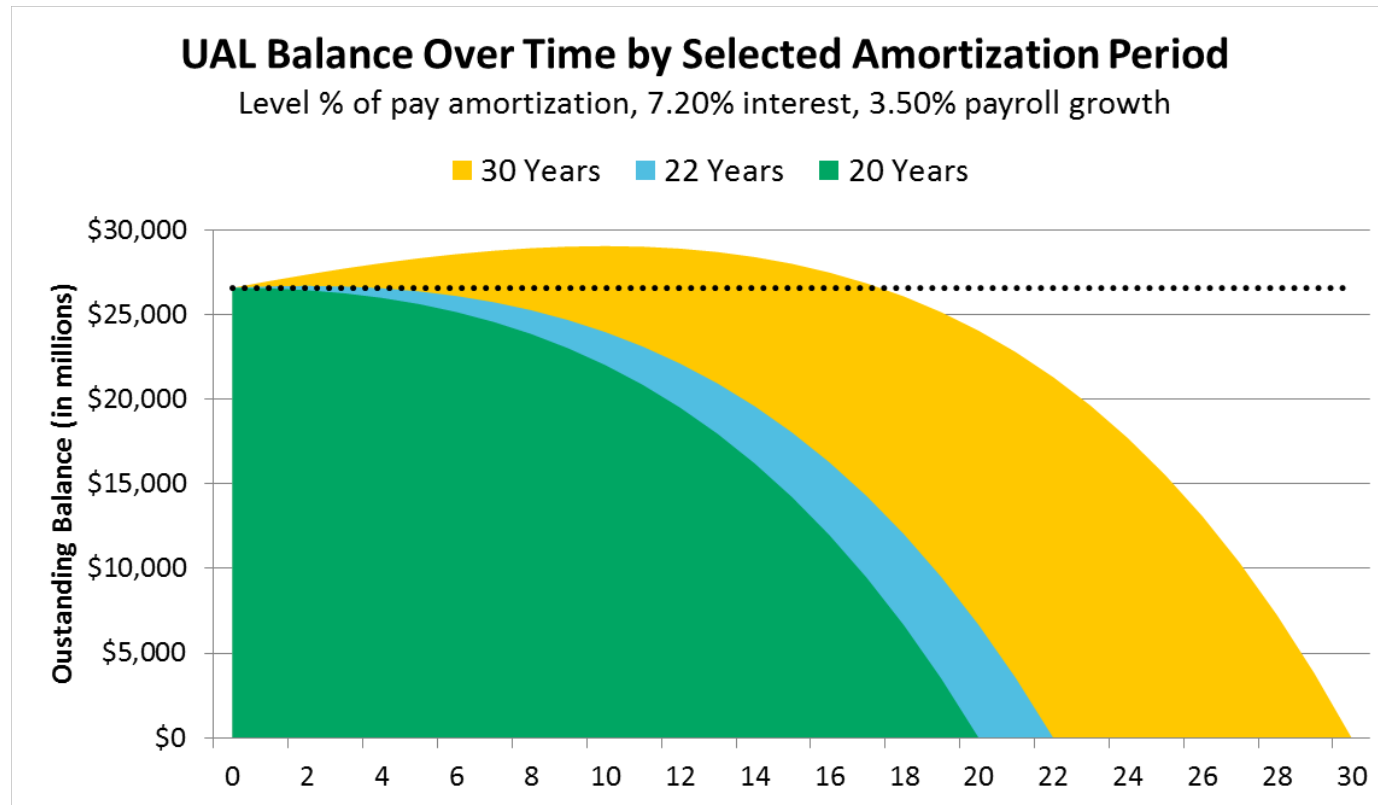
- Rates are calculated to pre-fund retirement benefits during a member's working career if all assumptions are met
- The present day value of projected future benefits allocated to a particular working year is the Normal Cost
- The present day value of projected future benefits allocated to prior years is the Accrued Liability
- The division between past, current & future service is done through use of an actuarial cost allocation method
- PERS currently uses GASB-compliant cost allocation method of Entry Age Normal (EAN)
  - We recommend no change to the cost allocation method



# Shortfall Amortization Periods

- A key part of contribution rate calculations is amortization of Tier 1 / Tier 2 shortfalls over twenty years as a level percentage of payroll
  - As part of changes made in a prior experience study, UAL as of December 31, 2013 was re-amortized over twenty years
  - Subsequent gains or losses, including loss as of December 31, 2015, amortized over twenty years from the rate-setting valuations in which they are recognized
- Twenty years avoids significant negative amortization, where shortfall actually increases in the initial “pay down” years even if assumptions are met and contributions are made
  - The following slide illustrates pay down of a \$26.6 billion shortfall over periods of 20, 22 or 30 years at current assumptions

# Remaining Balance for 20/22/30 Year Periods



## Current policy

- Tier 1 / Tier 2: **20 years**
- OPSRP: **16 years**

- **Why 20 years or less?** If actual experience matches the assumption...
  - with 22 years zero progress is made in decreasing the initial UAL until year 3
  - with 30 years the UAL has increased by about 9% after the first decade, and zero progress is made in decreasing the initial UAL until year 18

# Shortfall Amortization and Stress Testing

- Results of updated “stress testing”, similar to shown in December financial modeling presentation

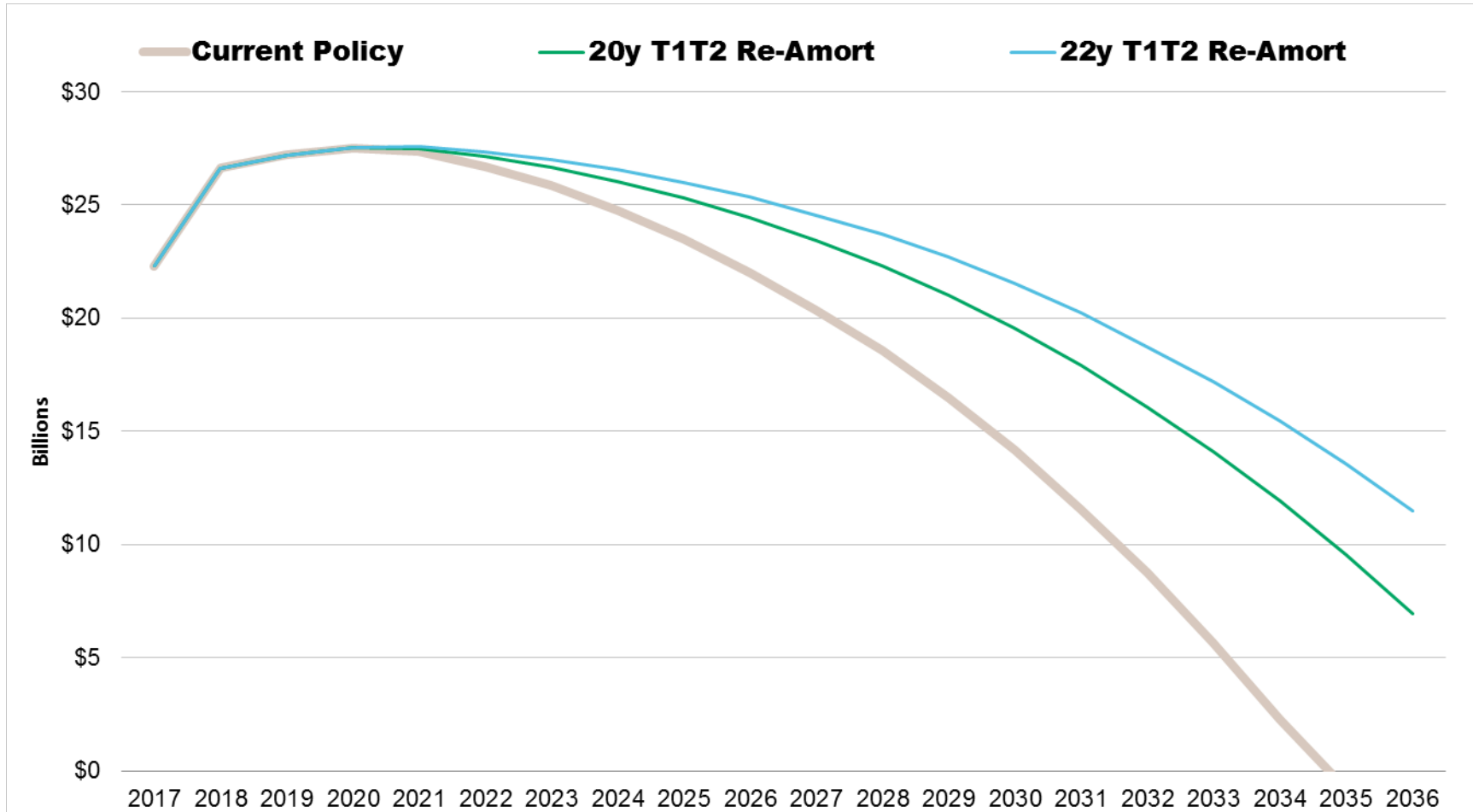
Likelihood of Event Occurring at Some Point in Next 20 Years			
Amortization Policy:	Baseline	20 Year T1T2 Re-Amort	22 Year T1T2 Re-Amort
Funded Status > 100%	64%	55%	52%
Funded Status < 60%	60%	64%	66%
Funded Status < 40%	8%	12%	14%
Base Rate < 10% of Pay	41%	31%	32%
Base Rate > 30% of Pay	87%	80%	76%
Base Rate > 40% of Pay	52%	44%	39%

*Funded Status excluding side accounts; Base rate excluding retiree healthcare*

<b>Median Year-end 2036 UAL</b>	<b>\$3.1 B</b>	<b>\$13.5B</b>	<b>\$17.9B</b>
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# Unfunded Actuarial Liability (excl. Side Accounts)

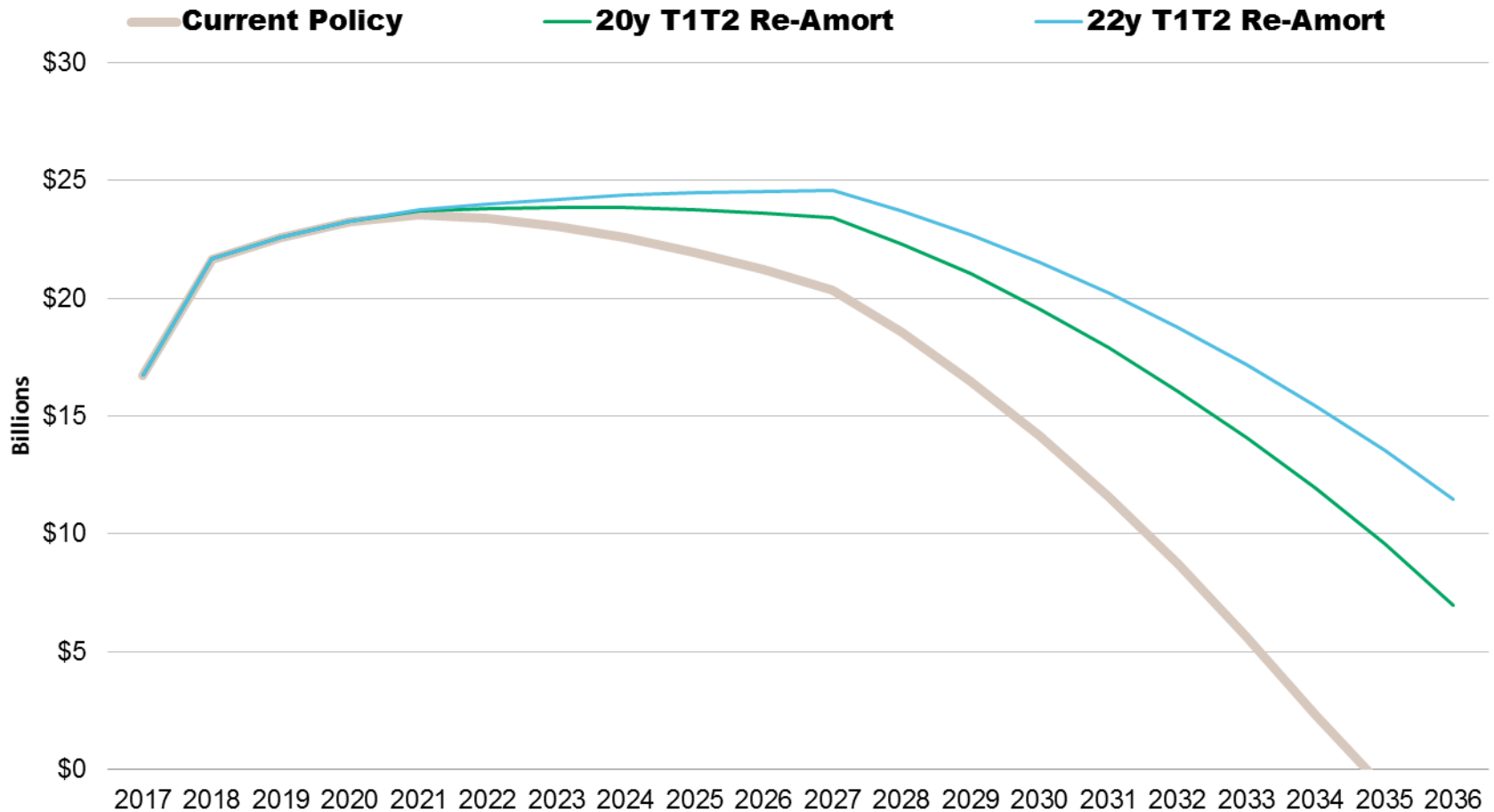
- +7.20% actual annual future return



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# Unfunded Actuarial Liability (incl. Side Accounts)

- +7.20% actual annual future return



# Rate Collar

- Rate collar originally established by PERS Board after the 2003 reforms
  - Initially used in the 12/31/04 (advisory) and 12/31/05 (rate-setting) valuations
  - Development process included stochastic (i.e., 10,000 scenario) analysis

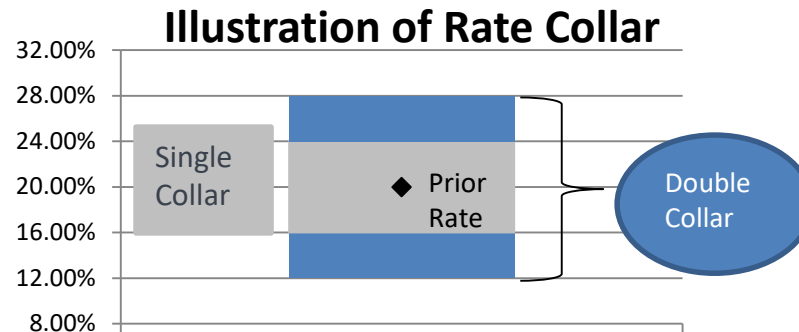
## High Concept:

- Transparently calculate the actuarially needed **uncollared rate** that would return PERS to 100% funded status over the selected amortization period if future experience matches assumptions
- If uncollared rate is well above the current rate charged, limit the initial rate increase to within a specified range (“collar”) of current rate
- The **collared rate** can temporarily be below the uncollared rate
  - New rate charged to employers will be partway toward the uncollared rate
  - Collaring systematically spreads large increases across multiple biennia
- The collar width should be calibrated to balance competing objectives
  - Too wide: same as having no collar, insufficiently stable or predictable
  - Too narrow: harms funded status, generationally inequitable, actuarially unsound

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# Rate Collar - Current Design

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



Collars are calculated at a rate pool level and limit the biennium to biennium increase in the UAL Rate for a given rate pool

Additional technical detail regarding the rate collar was provided  
in our April 1, 2019 presentation

# Agenda for July Meeting

- Review demographic assumptions
  - Member-specific assumptions based on study of recent PERS experience
- Adopt all methods and assumptions for use in:
  - 12/31/2018 actuarial valuation with advisory 2021-2023 contribution rates
  - 12/31/2019 actuarial valuation with 2021-2023 contribution rates proposed for adoption





# Appendix

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# Certification

This presentation discusses actuarial methods and assumptions for use in the valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”). For the most recent complete actuarial valuation results, including cautions regarding the limitations of use of valuation calculations, please refer to our formal Actuarial Valuation Report as of December 31, 2017 (“the Valuation Report”) published on September 28, 2018. The Valuation Report, including all supporting information regarding data, assumptions, methods, and provisions, is incorporated by reference into this presentation. The statements of reliance and limitations on the use of this material is reflected in the actuarial report and still apply to this presentation. The Valuation Report, along with prior presentations to the PERS Board, including the December 2018, February 2019, and April 2019 presentations to the PERS Board should be referenced for additional detail on the assumptions, methods, and plan provisions underlying this presentation.

In preparing this presentation, we relied, without audit, on information (some oral and some in writing) supplied by the System’s staff as well as capital market expectations provided by Callan and information presented to the Oregon Investment Council. This information includes, but is not limited to, statutory provisions, employee data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised.

Milliman’s work product was prepared exclusively for Oregon PERS for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning PERS’ operations, and uses PERS’ data, which Milliman has not audited. It is not for the use or benefit of any third party for any purpose. To the extent that Milliman’s work is not subject to disclosure under applicable public records laws, Milliman’s work may not be provided to third parties without Milliman’s prior written consent. Milliman does not intend to benefit or create a legal duty to any third party recipient of its work product. Any third party recipient of Milliman’s work product who desires professional guidance should not rely upon Milliman’s work product, but should engage qualified professionals for advice appropriate to its own specific needs.

The consultants who worked on this assignment are pension actuaries. Milliman’s advice is not intended to be a substitute for qualified legal or accounting counsel. The signing actuaries are independent of the plan sponsors. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

# Appendix

## Actuarial Basis

### Capital Market Assumptions - Milliman

For assessing the expected portfolio return under Milliman's capital market assumptions, we considered the Oregon PERS Fund to be allocated among the model's asset classes as shown below. This allocation is based on the Oregon Investment Council's Statement of Investment Objectives and Policy Framework for the Oregon PERS Fund, as revised April 2018, and changes adopted in April 2019.

	<b>Annual Arithmetic Mean</b>	<b>20-Year Annualized Geometric Mean</b>	<b>Annual Standard Deviation</b>	<b>Policy Allocation</b>
US Large/Mid-Cap Equity	7.35%	6.30%	15.50%	16.17%
US Small Cap Equity	8.35%	6.68%	19.75%	1.35%
US Micro-Cap Equity	8.86%	6.79%	22.10%	1.35%
Non-US Developed Equity	8.30%	6.91%	17.95%	13.47%
Emerging Markets Equity	10.35%	7.69%	25.35%	4.23%
Non-US Small Cap Equity	8.81%	7.25%	19.10%	1.92%
Private Equity	11.95%	8.33%	30.00%	17.50%
US Core Fixed Income	4.14%	4.07%	3.90%	9.60%
US Short-Term Bonds	3.70%	3.68%	2.10%	9.60%
US Bank/Leveraged Loans	5.40%	5.19%	6.85%	3.60%
High Yield Bonds	6.13%	5.74%	9.35%	1.20%
Real Estate	6.19%	5.55%	12.00%	10.00%
Global REITs	8.29%	6.69%	19.30%	2.50%
Timber	6.36%	5.61%	13.00%	1.13%
Farmland	6.87%	6.12%	13.00%	1.13%
Infrastructure	7.51%	6.67%	13.85%	2.25%
Commodities	5.34%	3.79%	18.70%	1.13%
Hedge Fund of Funds - Diversified	4.28%	4.06%	6.90%	1.50%
Hedge Fund Event-Driven	5.89%	5.59%	8.10%	0.37%
US Inflation (CPI-U)		2.50%	1.65%	N/A
<b>Fund Total (reflecting asset class correlations)</b>	<b>7.55%</b>	<b>6.91%*</b>	<b>12.14%</b>	<b>100.00%</b>

\* Reflects 0.10% average reduction to model passive investment expenses. The model does not try to assess the actual investment expenses for active management. The model's 20-year annualized geometric median is **6.87%**.

# Appendix

## Actuarial Basis

### Capital Market Assumptions - Callan

For assessing the expected portfolio return under Callan's capital market assumptions, we applied the assumptions shown below provided by Callan.

	<b>10-Year Annualized Geometric Mean</b>	<b>Annual Standard Deviation</b>	<b>Policy Allocation</b>
Broad US Equity	7.15%	17.97%	<b>16.25%</b>
Global ex-US Equity	7.25%	21.10%	<b>16.25%</b>
OIC Private Equity	9.18%	26.30%	<b>17.50%</b>
Private Real Estate	7.03%	12.21%	<b>12.50%</b>
US Fixed Income	3.75%	3.75%	<b>20.00%</b>
Diversifying Strategies	6.15%	10.97%	<b>7.50%</b>
Illiquid Alternatives	7.38%	12.56%	<b>7.50%</b>
Risk Parity	6.50%	11.00%	<b>2.50%</b>
Inflation	2.25%	1.50%	<b>N/A</b>
<b>Fund Total (reflecting asset class correlations)</b>	<b>7.39%*</b>	<b>12.49%</b>	<b>100.00%</b>

\* 10-year annualized geometric median is 7.32%.

# Appendix

## Actuarial Basis

### Capital Market Assumptions - Horizon

For assessing the expected portfolio return under an additional set of capital market assumptions, we applied the assumptions from the 2018 Survey of Capital Market Assumptions published by Horizon Actuarial Services, LLC. According to the survey report, the 10-year return assumptions shown below represent an average of the expectations for 34 investment advisors responding to the survey.

	<b>10-Year Annualized Geometric Mean</b>	<b>Annual Standard Deviation</b>	<b>Policy Allocation</b>
US Equity – Large Cap	6.07%	16.39%	<b>16.17%</b>
US Equity – Small/Mid Cap	6.57%	20.20%	<b>5.20%</b>
Non-US Equity – Developed	6.71%	18.67%	<b>15.40%</b>
Non-US Equity – Emerging	7.64%	24.89%	<b>4.24%</b>
US Corporate Bonds – Core	3.37%	5.71%	<b>14.40%</b>
US Corporate Bonds – High Yield	4.78%	10.24%	<b>4.80%</b>
US Treasuries (Cash Equivalents)	2.48%	2.74%	<b>4.80%</b>
Real Estate	5.90%	13.86%	<b>12.25%</b>
Hedge Funds	4.96%	7.87%	<b>1.87%</b>
Commodities	3.97%	17.60%	<b>1.12%</b>
Infrastructure	6.56%	14.74%	<b>2.25%</b>
Private Equity	8.33%	22.16%	<b>17.50%</b>
Inflation	2.24%		<b>N/A</b>
<b>Fund Total (reflecting asset class correlations)</b>	<b>6.70%*</b>		<b>100.00%</b>

\* 10-year annualized geometric median is **6.64%**.

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# System-Average Weighted Pension-Only Rates

**2009-2011**  
rates set prior to economic downturn

**2011-2013**  
rates first to reflect -27% return in 2008

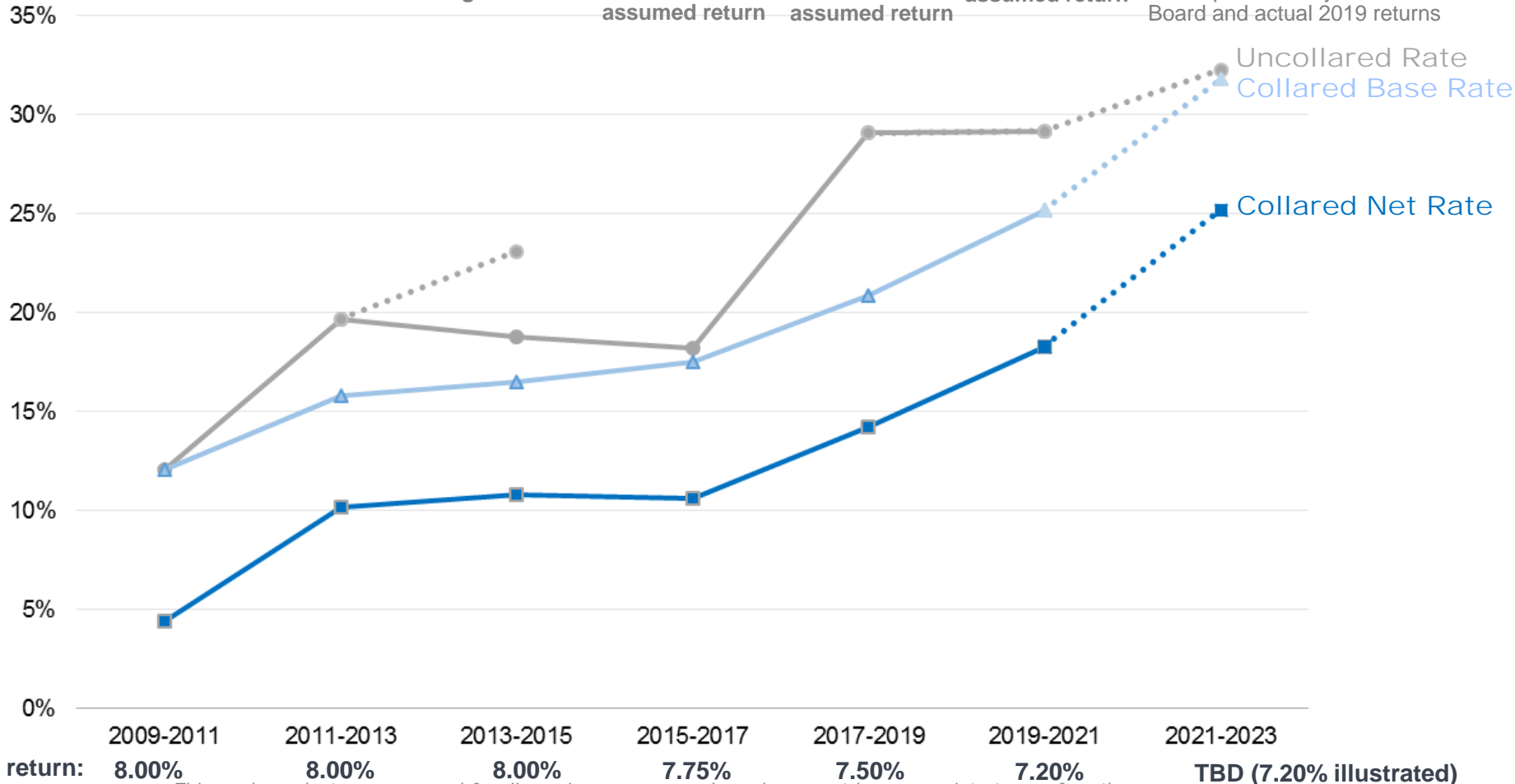
**2013-2015**  
shown before (dotted line) and after (solid line) legislated changes

**2015-2017** set pre-Moro reflecting 2012 (+14.3%) & 2013 (+15.6%) returns, first decrease in assumed return

**2017-2019** set post-Moro, reflecting 2015 return (+2.1%) and second decrease in assumed return

**2019-2021** reflects +15.4% return in 2017 and third decrease in assumed return

**2021-2023** are preliminary estimates, based on published 2018 return of +0.48% and assumed 2019 return of 7.2%, final rates will depend on assumptions set by PERS Board and actual 2019 returns



Assumed return:

2009-2011

2011-2013

2013-2015

2015-2017

2017-2019

2019-2021

2021-2023

8.00%

8.00%

8.00%

7.75%

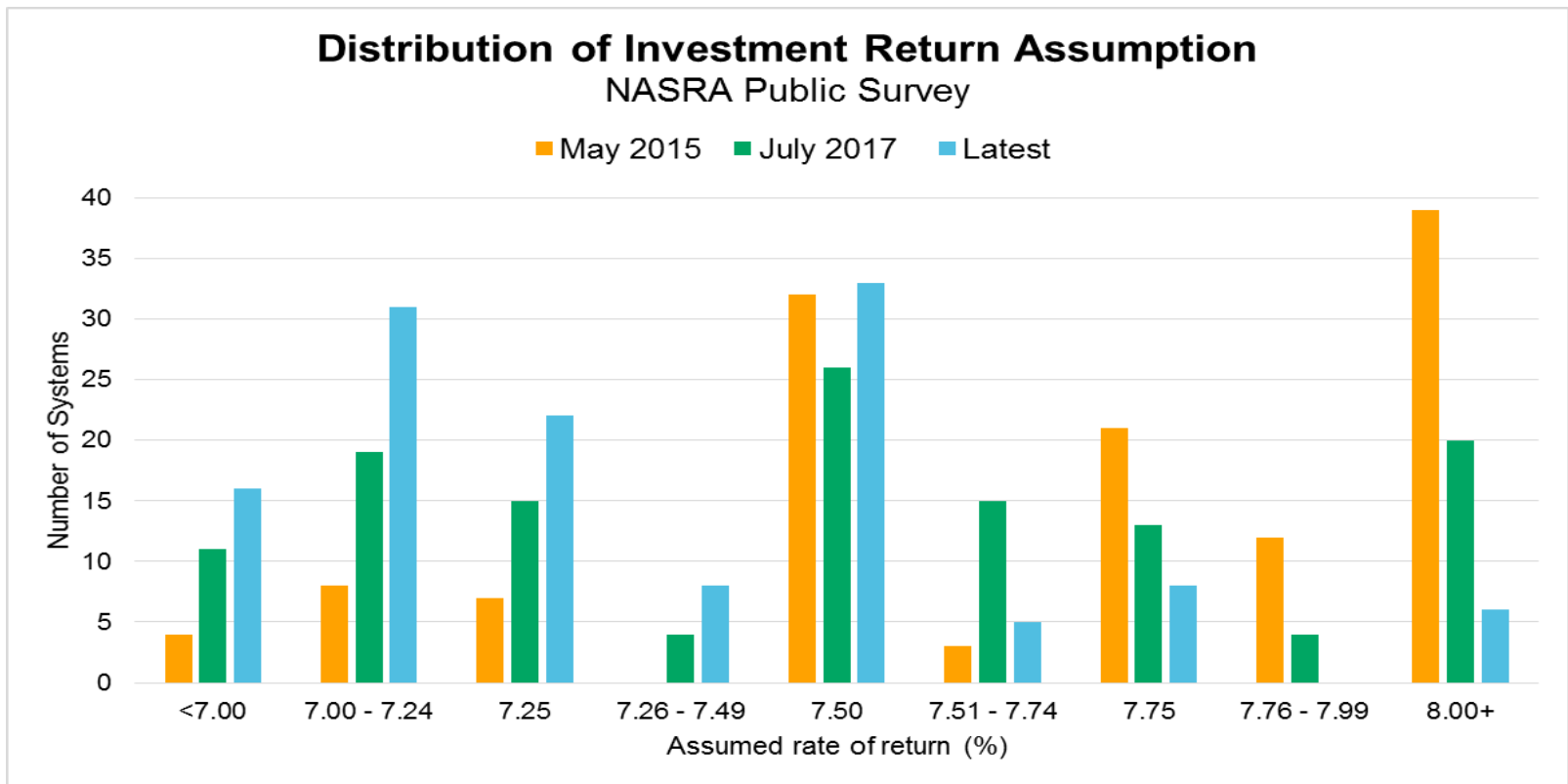
7.50%

7.20%

TBD (7.20% illustrated)

# Comparison to Peer Systems

- There is a downward trend in public plan return assumptions, with a current median assumption for large public systems of **7.25%**
- Over 50% of the 129 systems tracked by the NASRA Public Fund Survey reduced their assumption over last 2-3 years



Source: **NASRA (April, 2019)**

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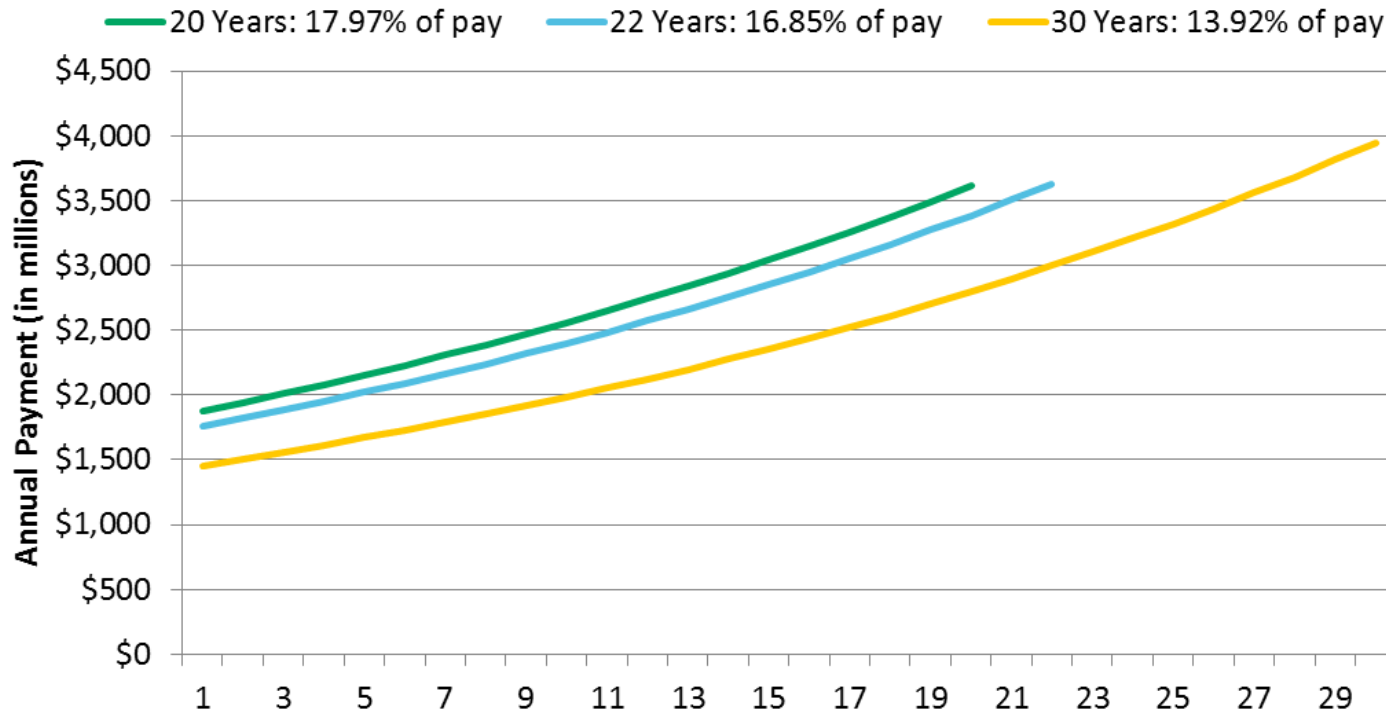
# Illustration of UAL Amortization Periods

## Current policy

- Tier 1 / Tier 2:  
**20 years**
- OPSRP:  
**16 years**

### Annual UAL Payments by Selected Amortization Period

Level % of pay amortization, 7.20% interest, 3.50% payroll growth



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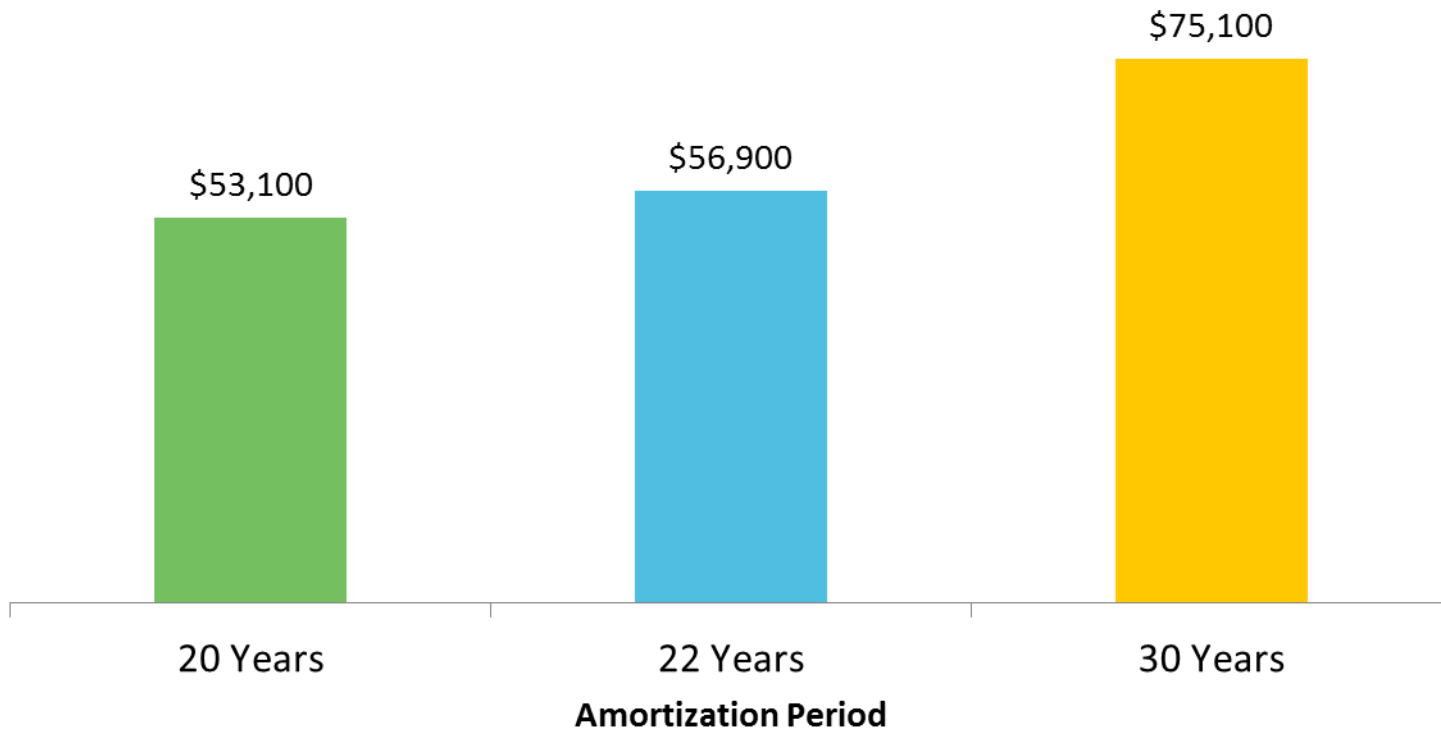


# Illustration of UAL Amortization Periods

## Current policy

### Total Repayment (\$M) by Selected Amortization Period

Level % of pay amortization, 7.20% assumed return, 3.50% payroll growth



- Tier 1 / Tier 2:  
**20 years**
- OPSRP:  
**16 years**