



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

**Friday  
July 26, 2019  
10:00 A.M.**

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

ITEM		PRESENTER
<b>A. Administration</b>		
1.	May 31, 2019 Board Meeting Minutes	SHENOY
2.	Director's Report	OLINECK
	a. Forward-Looking Calendar	
	b. OPERF Investment Report	
	c. Budget Execution Report	
3.	OSGP Advisory Committee Appointments	SMITH
<b>B. Administrative Rulemaking</b>		
1.	Adoption of Receipt Date Rule	VAUGHN
<b>C. Action and Discussion Items</b>		
1.	2019 Legislative Session Review and 2019-21 Budget Update	
	a. Session Overview and 2020 Preview	TAYLOR
	b. SB 1049 Implementation Update	ELLEDGE-RHODES
	c. 2019-21 Budget	GABRIEL
2.	Valuation Methods and Assumptions Including Assumed Rate of Return	MILLIMAN
3.	Preliminary Adoption of Assumed Rate Rule	VAUGHN

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

*Please 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:** October 4, December 6\*  
**2020 Meetings:** January 31, March 30\*, May 29, July 31\*, October 2, December 4\*  
 \*Audit Committee planned for post-Board meeting

# OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM BOARD MEETING MINUTES

May 31, 2019

## **Board members present:**

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

## **Staff present:**

Andy Kicza, Anne Marie Vu, Bryan Wynn, Colin Campi, Danielle Keyser, Dean Carson, Denise Helms, Elizabeth Rossman, Janice Richards, Jason Stanley, Jordan Masanga, Karen Chavez, Katie Brogan, Kevin Olineck, Marjorie Taylor, Matt Rickard, Neil Jones, Sam Paris, Stephanie Vaughn, Tami Dohrman, Yong Yang, Yvette Elledge-Rhodes

## **Others present:**

Alex Bowers, Aruna Mash, Amy Crooks, Bob Burket, Carol Samuels, Cindy Moore, David Barenberg, Debra Grabler, Douglas Berg, GayLynn Bath, Gordon Hoberg, Lynn Groff, Hintry Getz, Jardon Jaramillo, Jan Petrilla, Jeff Gudman, Jennifer Cooperman, John Thomas, Josh Eggston, Karl Cheng, Kali Leinenbauch, Kevin McCart, Matt Larrabee, Michelle Kunec-North Michelle Taylor, Molly Buzkson, Nancy Brewer, Nate Carter, Nathan Klinkhammer, Robin Richardson, Scott Preppernau, Shauna Tobiasson, Shelly Taylor, Michelle Kunec-North, Ted Sickinger, Trudy Vidal

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

## **ADMINISTRATION**

### **A.1. MEETING MINUTES OF APRIL 1, 2019**

Board member Buckley suggested that, going forward, any changes made to the PERS Board meeting minutes be specifically listed. Board member Buckley moved to approve the minutes submitted from the April 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. Olineck noted that PERS staff has been preparing for SB1049 implementation. He highlighted some of the contents of the report.

Olineck reviewed the forward looking calendar. The proposed 2020 meeting dates are listed and are scheduled to start at 10:00am. He noted that the joint meeting with the Oregon Investment Council (OIC) will be on Wednesday, June 5, 2019.

OPERF investment report for the periods ending April 2019 showed earnings of 6.09%.

The budget execution report showed a projected positive variance of 4.3% of the operating budget. PERS presented the Phase II Budget. The budget working sessions will be scheduled soon. A fiscal impact statement for SB1049 was put together. There would need to be an end of session bill to fund the project.

### A.3. BOARD SCORECARD REPORT ON AGENCY MEASURES

Olineck noted that PERS is working through all agency measures to refine all processes and measures. These measures were developed about 6 years ago, so it is time for a refresh.

Matt Rickard and Bryan Wynn of the PERS Outcome-Based Management System (POBMS) Council presented the Board Scorecard Report on Agency Performance Measures, of which 54% of the reported measures are in the green range for the first quarter of 2019.

The call center technology is being reviewed, however it brings up more questions as to the benefit of implementing a call back feature. It was reported that 87% of the system downtime was due to long running batches.

The next Board Scorecard will be presented at the December meeting. No board action was required.

### ADMINISTRATIVE RULEMAKING

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

#### B.1. NOTICE OF RECEIPT DATE RULE

Vaughn presented notice of rulemaking for Receipt Date Rule, OAR 459-005-0220, Receipt Date for Reports, Documents, Remittances, Payments, Data, and Requests. This rule will add a receipt date for electronic submissions of data made through PERS Online Member Services. 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. No board action was required.

#### B.2. NOTICE OF ASSUMED RATE RULE

Vaughn presented notice of rulemaking for Assumed Rate Rule, OAR 459-007-0007, Assumed Rate. 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. No board action was required.

#### B.3. ADOPTION OF STUDENT EMPLOYEES RULE

Vaughn presented the adoption of modifications to the Student Employees rule. 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. Board member Demarest motioned to adopt modifications to the Student Employees rule, as presented. Vice Chair Furnstahl seconded the motion. 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 27 that directly impact PERS statutes, or refer to PERS, that have been approved by both chambers, or remain in committees that may take some sort of action on them. The Joint Ways and Means Subcommittee on Capital Construction remains the focus of conversations on

PERS reforms. The Governor, on April 12, and legislature, on May 10, each introduced proposals for discussion.

On May 21, the Joint Ways and Means Capital Construction subcommittee approved an amendment to Senate Bill 1049 that includes a variety of provisions impacting members and employers. SB1049 was approved by the House. The two major pieces are the IAP redirect and the re-amortization of the Tier One/Tier Two UAL over a 22-year period. The amortization of the OPSRP UAL would remain at 16-years. Other provisions are being evaluated by staff. There are a number of bills with provisions that have been incorporated into SB1049.

## C.2. IAP TDF IMPLEMENTATION UPDATE

Yvette Elledge-Rhodes, Deputy Director, presented.

Elledge-Rhodes' update included IAP TDF Implementation background, project end date, budget, project activities, member communications, and staff recommendation of TDF modifications. 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 Retirement Allocation Fund effective December 31, 2019.

It is not clear if this decision is within the board's jurisdiction; Nate Carter and Stephanie Vaughn will seek clarification. The board should at least be aware of, and agree with, the change.

Board member deAsis motioned to adopt the addition of a new 2065 TDF and consolidation of the 2020 TDF into the RAF effective December 31, 2019. Vice Chair Furnstahl seconded the motion. The motion passed unanimously.

## C.3. 2020 RETIREE HEALTH INSURANCE PLAN RENEWALS AND RATES

Furnstahl recused himself from participating in this conversation, given his association with OHSU, and left the room.

Karen Chavez, PERS Health Insurance Program (PHIP) Manager, presented the 2020 PHIP Plans and Rates.

Buckley moved 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. Demarest seconded the motion. The motion passed unanimously.

Furnstahl rejoined the meeting at this time.

## C.4. OVERVIEW OF ACTUARIAL METHODS & ECONOMIC ASSUMPTIONS

Public Testimony on item C.4. Overview of Actuarial Methods & Economic Assumptions was given by Douglas Berg from Eugene; John Thomas (former Board Chair) from Eugene; and Jeff Gudman from Lake Oswego. They were each given 5 minutes to speak. Jeff Gudman read from Exhibit 1.

Scott Preppernau and Matt Larrabee of Milliman presented economic assumptions and system funding methods.

The presentation reviewed inflation and system payroll growth, the assumed rate, and actuarial methods including amortization and collaring policy. At the July 2019 meeting, 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 the 2018 valuations results in October 2019. No board action was required.

Chair Shenoy adjourned the board meeting at 12:22 a.m.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Kevin Olineck".

Kevin Olineck, Director

PERS Testimony  
April 1, 2019  
Citizen Comment

Good morning,

My name is Jeff Gudman. I reside at 4088 Orchard Way in Lake Oswego. I am a 2018 2 term limited as of December 2018 member of the Lake Oswego City Council.

Thank you for the opportunity to offer some thoughts and to also thank you for your service to the residents of Oregon.

Except for schooling I have resided in Oregon my entire life. I have a B.A. in Economics from Pomona College, one of the Claremont Colleges, and an M.B.A. from the University of Pennsylvania, Wharton School of Business. I provide this background information, not to impress, but to let you know that I can speak “number.” Perhaps not “actuarial number”, but “number” none the less. It also means when I read Present Value of Future Normal Costs and Unfunded Actuarial Liability is used for determining the Long Term Contribution Effort, I have some understanding of what that means.

I also want to acknowledge and thank the PERS Board and the members of the PERS team for the excellent and informative website. PERS by the Numbers is very good and is just one example of the great information provided.

I believe that prior to 2003 and the creation of what I call Tier 3 employees and continuing today is a retirement goal for a person with 30 years of service is to achieve 50% of final average salary pension. Social security plus whatever a person has personally set aside either through an IRA or other savings will be in addition to the government service portion. In effect a three-legged retirement stool.

Part of the reason for the challenges PERS faces today is the 50% goal for 30 years of government service was exceeded in the past. In some cases, quite dramatically.

With the creation of Tier 3 we now have a combined defined benefit and defined contribution government service plan. One of the three legs of the retirement stool.

For an employee, not including police and fire, beginning work today and working 30 years, they will receive upon retirement a defined benefit of 1.5% per year of employment times 30 years or 45% of final average salary. The defined contribution portion comes from the 6% IAP dollars (whether or not the employee contributed the 6%).

Again, the long-standing goal being 50% of final average salary for a 30-year employee.

So, how are we doing? If you look at the 6% IAP dollars at actual rates of return since 2003 and at slightly less than the system's projected earnings rate going forward (7.2%) it

appears it will generate at least 16% or more of Final Average Salary for a person whose wages grow at 3.5% year, who retires after 30 years at age 65 and who gets the benefit on withdrawing the funds over their expected lifetime on an annuitized basis. A 45% defined benefit plus 16% defined contribution equals 61% which exceeds the 50% goal.

Unfortunately, PERS by the Numbers and other information on the website does not appear to provide that information. I understand the reluctance of the PERS team to present a specific retirement goal percentage for a new employee given the vagaries of investment returns going forward. It is significantly easier to provide the per cent goal for a defined benefit program. Presenting an explicit goal under the current program or to even state a target or goal might create legal challenges.

Nonetheless, the goal is in place and with a goal of 50% of Final Average Salary for 30 years of service, it will be helpful for this body and the public to know, subject to all the usual assumptions and qualifications whether or not the goal for a new employee will be met, not met or exceeded.

This brings me to my request. The information provided by the PERS staff on the web page and elsewhere is very good and necessary, but it is not sufficient.

**The ask is...Is the goal still 50% for somebody beginning work today and working thirty years. What are the assumptions behind the goal? How soon can this information be generated, brought to this body, debated and subsequently posted to the website?**

We need those numbers to better plan for our future. This also will give additional assurance to the public we are being good stewards of the public's money.

I am recommending you make it possible to better inform not only my past colleagues on council, but all governing bodies in the state. Most importantly our citizens will have a clearer understanding. They are our bosses and the ones to whom we are responsible.

If I am mistaken and that information (the total of the Defined Benefit and Defined Contribution produces a retirement percentage of Final Average Salary of X% for a person starting work today and working 30 years) is available on the web site, I apologize for taking up your time. If I am not mistaken, I hope the information will be provided.

Thank you.



# OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM DIRECTOR'S REPORT

KEVIN OLINECK, DIRECTOR

## NOTEWORTHY CHANGES HIGHLIGHTS OF THE LAST YEAR

**This Director's Report tries to encapsulate, at a high level, noteworthy changes that have taken place since the last board meeting, while providing a retrospective of some significant accomplishments of the past year.**

I noted, in the May Director's Report, that it was at that meeting a year ago, when I was confirmed as Director. I officially began on July 16, 2018 and am very grateful for the opportunity to serve as the PERS Director. In that time, PERS staff have not only made great progress with standard operational initiatives, but also made significant progress on strategic initiatives. The following are three strategic initiatives that deserve to be highlighted, with staff publicly acknowledged for their efforts. I will be highlighting other successes in subsequent Director's Reports.

### PERS BRANDING

One of the most obvious changes within PERS over this past year is our branding initiative. I believe that the new PERS brand is the beginning of many positive communications initiatives. This first step helps to engage and support our members in making informed retirement decisions and engenders a broader role for PERS as a retirement education resource. I believe we have created an identity that will personalize PERS, instill a sense of ownership among our members, and promote the agency as an accessible, comprehensive, and easy-to-use resource.

### CONTINUITY MANAGEMENT/DISASTER RECOVERY

PERS has been working diligently on establishing a Continuity Management Program which encompasses our Continuity of Operations Plan, Business Recovery, and Disaster Recovery Plans. With the assistance of consultants, agency staff have made significant strides in establishing this program. We were successful in having the consultant provide a letter verifying that PERS has established an industry standard program. That said, there is recognition

that, while we now have the basics in place, there is still significant effort required to ensure that we continue to build out our Continuity Management Program.

### INFORMATION SECURITY

Similar to Continuity Management, Information Security is one of the foundational initiatives that PERS needs to have in place. This instills in our stakeholders a sense of trust and confidence, assuring them that the data that we maintain is secure. Working collaboratively with the State Enterprise Security Office, staff made significant strides in building out our Information Security Program, which included changes from both a system and process point of view. We also received an external assessment that culminated in a letter from the assessor stating we have an industry best practice Information Security Program.

### ADDRESSING FINDINGS

As the board is well aware, there have been legislative directives, as well as a Secretary of State Audit, which identified deficiencies in our Continuity Management as well as Information Security Programs. There were many sub-projects that encompassed the work on these two programs and I am very proud of our efforts in addressing those deficiencies. PERS has leapfrogged many other state agencies in our capabilities in both of these program areas and we have plans in place to continue to augment these capabilities.

**PERS Continuity Management Tabletop Exercise**

**OBJECTIVE:** In a "risk-free" simulated environment, validate the PERS Crisis Decision Making and Crisis Communications process and demonstrate an understanding of roles to maintain essential functions during a crisis event.

SCENARIO DESCRIPTION	PARTICIPANTS	BENEFITS
<p>Scenario: PERS experienced an electrical fire in the data center. DAS staff estimates 4-6 weeks to work through risk management and contract repair. TOS Manager estimates another 2-3 weeks to mount racks, place equipment, complete connectivity, bring systems back up, test reliability and restore data. PERS needs to plan for 6-9 weeks without the data center and facility access.</p> <ul style="list-style-type: none"> <li>Move 1: Crisis Decision Making</li> <li>Move 2: Crisis Communications</li> <li>Move 3: Critical Functions Business Continuity Plans</li> </ul> <p><b>Background:</b> PERS experienced an electrical fire in the data center. One of the electrical outlets failed and a fire occurred. The fire suppression system worked well. However the UPS are unusable, wiring is shorted, systems are down, and there is smoke damage and damage to the sheet rock and ceiling tiles caused by the fire department in their effort to extinguish the fire. The fire department has turned the building over to the ISRO with the caveat that the building be inspected for safety.</p>	<p>Executive Leadership Team and Essential Staff responsible for:</p> <ul style="list-style-type: none"> <li>Monthly Pension Roll</li> <li>Approved Retirement Applications</li> <li>Approved Disability Payments</li> <li>Active Health Insurance Eligibility and Subsidies</li> <li>Active Health Insurance Payments to Carriers</li> </ul>	<ul style="list-style-type: none"> <li>Increased awareness of how a single crisis episode can have broad, enterprise-wide impact and consequences</li> <li>Greater understanding of value of proactive and consistent identification, analysis, and prioritization of key internal and external stakeholder relationships</li> <li>Improved understanding of PERS plans and procedures</li> </ul>
<p><b>Move 1: Crisis Decisions</b></p> <p><b>Crisis Decisions:</b> ELT must meet to discuss staffing and next steps. Essential and Non-essential staff have not been working to this point. Only staff currently working are response and recovery personnel.</p>	<p><b>Move 2: Crisis Communications</b></p> <p><b>Communication Challenge:</b> State-wide media amplifies public frustration with the incident as the first of the month quickly approaches. Public pressures toward incident recovery quickly mount, demanding answers and a response to address the evolving crisis. The Governor notifies PERS that they must prepare a briefing on the latest recovery assessment and provide to the public.</p>	<p><b>Move 3: Critical Functions</b></p> <p><b>Physical and IT Challenges:</b> Facility Team deems building still unsafe for use and will require more time. Data center is up and running and essential staff are working from Salem. Non-essential staff are still not working. <b>Systems:</b> OREGON in support of critical functions is up however telephones are not available. There is no VPN access</p>

**Facilitated Discussion and Hotwash**

## **SENATE BILL 1049 (SB1049)**

### **IMPLEMENTATION**

**SB1049 was signed into law on June 11. As will be described within agenda item C.1.b., the agency is working diligently to put into place a plan to implement the different components of the bill, some within some very short time lines.**

The challenge for PERS is to not only implement this bill, but also continue to provide our members and employers with uninterrupted service, while working through the ramifications of SB1049. In addition to providing quality service to our stakeholders, we must also continue to move forward on other important initiatives that can't be deferred. Our work towards implementing an enterprise portfolio management practice will be an important element in being able to balance these competing objectives.

## **BUDGET**

### **SIGNIFICANT OPERATIONAL CHANGES**

Our budget was finalized as House Bill 5032. On June 12, the Legislative Fiscal Office (LFO) presented their proposal to the Joint Ways & Means General Government subcommittee with those proposals being approved by the full Joint Ways & Means Committee on June 14. Our budget was passed on June 29, as recommended by LFO, and is awaiting the Governor's approval.

While we will be covering the budget in item C.1.c, I thought it important to note the following significant operational changes that were made to our 2019-21 biennium budget proposal.

#### **CENTERS OF EXCELLENCE REORGANIZATION**

The LFO recommended we return in the February 2020 short session to seek approval on the Centers of Excellence Reorganization. The positions we were going to use to finance the reorganization were abolished as part of the LFO recommendations, as were the extra funds requested to deal with long-standing Work out of Class staffing issues. Additionally, our request to permanently fund our Communications Officer position was not approved. I am in discussions with the LFO to understand what the agency needs to do in order to resolve all of these staffing issues.

#### **RISK & SECURITY MANAGEMENT**

At the December 2018 Emergency Board meeting, the agency was given approval to hire two FTEs to assist in our ongoing risk and security management program. One FTE was for the Information Security Program (ISS8), while another was for the Continuity Management Program (OPA3). The agency had, subsequently, put forth a revised budget proposal, based on the Deloitte assessment, to further enhance the staffing required to run these programs. These additional FTEs were not approved. Additionally, the LFO recommended the funding required for external support for the

programs was to be "unscheduled" until such time as the agency could submit third party assessments evaluating whether we had established industry standard Cyber Security, Disaster Recovery, and Business Continuity Programs. We provided these letters to the LFO prior to the end of June and are hoping to have these funds scheduled and released in our next quarterly allotment.

The agency was requesting funding to build out an Enterprise Risk Management program and that resource request was denied. This impacts our ability to have a process in place that will ensure the agency has appropriately identified and rated all our enterprise risks as well as our ability to make sound risk-based decisions.

#### **DEFERRED MAINTENANCE**

The agency had originally requested the recommended amount - 2% of the value of the building or \$625,000. Prior to the LFO recommendations being finalized, we were able to provide the LFO with a detailed engineering report that articulated a greater need than the \$625,000. The LFO subsequently recommended that we receive \$1.1 million to deal with these deferred maintenance items.

#### **BUSINESS INNOVATION PROGRAM**

Our request to begin work on our long-term Enterprise Architecture was denied, however, we will be incorporating elements of this work into our SB1049 efforts to ensure that, to the greatest extent possible, we can build towards a more modern system architecture that will serve us well beyond the implementation of this bill.

#### **SCHOOL DISTRICT UNFUNDED LIABILITY PROGRAM**

In the Governor's Recommended Budget, the Governor had put in a request for \$100 million to fund the School District Unfunded Liability Program. This request was not approved. However, as part of SB 1049, there was a recommendation to provide \$100 million to the Employer Incentive Fund (which applies to all employers and not just school districts). The funds were ultimately approved.

**CHANGES**

**IN THE EXECUTIVE LEADERSHIP GROUP**

I am pleased to announce Richard Horsford joined us as our new Chief Financial Officer, effective July 11. Richard comes to us with CFO experience from the Social Services Sector and will be a strong addition to our Executive Leadership Team. I am excited to have him on board as we move into the 2019-21 biennium. I'd like to thank Tami Dohrman, who was our interim CFO for the past three months, for her leadership during that time, and her assistance with Richard's onboarding.

**SAFETY**

**ENSURING A SAFE WORK ENVIRONMENT**

While we did not have any specific staff-supported events this past month, there were three staff training sessions that are worthy of noting. The first was active shooter training, conducted by the Tigard Police Department. Second, we held CPR and automated external defibrillator (AED) training for staff in June. Finally, we also conducted our annual Fire and Evacuations Drills. All these trainings are geared toward ensuring we have a safe work environment at PERS.

**AWARD**

**RETIREMENT ADVISOR COUNCIL AWARD**

On June 18, Member Engagement and Communications Director Dean Carson was invited to Denver for the annual meeting of the Retirement Advisor Council to accept an award: PERS' 2018 Expo was recognized as an "Award-Winning Financial Wellness Program" and received a "2019 Excellence Award: Financial Wellness Program." As part of this honor, Dean was interviewed about the Expo in front of over a hundred attendees—retirement and financial advisors, plan sponsors, and other financial experts—and discussed PERS' successes and challenges in organizing the Expo. Attendees were impressed by the scale of the Expo, and asked insightful questions about how PERS reaches younger members, partnering with our record keeper (Voya), and plans to grow the Expo in the future.

“

I was most proud to speak about the hard work our staff undertakes to truly honor our members' public service by helping them understand their retirement benefits."

-Dean Carson,  
Member Engagement and  
Communications Director



Clockwise from bottom: Dean Carson, answering questions about the Expo in front of an audience of over a hundred retirement and financial advisors, plan sponsors, and other financial experts; Carson, being interviewed about the PERS Expo; Carson, receiving the certificate from Robert Jennings, Moderator, on behalf of the Retirement Advisor Council.

## **PERS Board Meeting Forward-Looking Calendar**

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

Member and Employer Satisfaction Survey Results  
Agency Strategic Plan Overview  
System Valuation Results – 2021-2023 Advisory Employer Rates  
CEM Benchmarking Cost Effectiveness Presentation  
Actuarial Contract Renewal

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

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

### **Friday, January 31, 2020**

Annual Report of Director's Financial Transactions  
Legislative Preview/Update  
Preliminary Earnings Crediting and Reserving

### **Monday, March 30, 2020\***

Legislative Session Review  
Final Earnings Crediting  
Agency Budget Preview for Next Biennium

### **Friday, May 29, 2020**

Board Scorecard Report on Agency Performance Measures  
Retiree Health Insurance Plan Renewals and Rates  
Agency Budget Development for Next Biennium

\*Audit Committee planned for post-Board meeting

Returns for periods ending MAY-2019

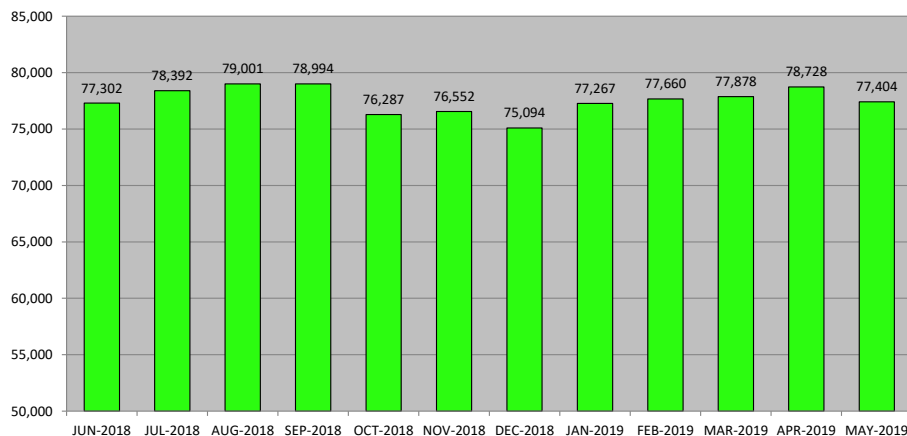
Oregon Public Employees Retirement Fund

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%	\$ 24,682,446	33.1%	8.41	(3.48)	4.70	9.15	5.26	5.44	10.23	10.16
Private Equity	13.5-21.5%	17.5%	\$ 16,595,793	22.2%	3.86	13.96	17.03	15.00	12.94	12.17	13.64	14.02
<b>Total Equity</b>	<b>50.0-60.0%</b>	<b>55.0%</b>	<b>\$ 41,278,239</b>	<b>55.3%</b>								
Opportunity Portfolio	0-3%	0%	\$ 1,702,553	2.3%	2.73	5.02	6.35	7.21	6.16	4.94	8.99	10.69
<b>Total Fixed</b>	<b>15-25%</b>	<b>20.0%</b>	<b>\$ 16,207,479</b>	<b>21.7%</b>	<b>4.94</b>	<b>5.97</b>	<b>3.09</b>	<b>3.11</b>	<b>2.68</b>	<b>2.63</b>	<b>3.27</b>	<b>5.78</b>
Real Estate	9.5-15.5%	12.5%	\$ 8,219,395	11.0%	2.88	6.95	7.40	8.29	8.59	9.43	10.82	9.83
Alternative Investments	0-12.5%	12.5%	\$ 7,210,439	9.7%	(0.98)	(3.91)	0.60	3.86	2.63	1.92	2.05	
Cash w/Overlay	0-3%	0%	\$ 10,445	0.0%	1.67	3.03	2.22	1.87	1.59	1.38	1.24	1.16
<b>TOTAL OPERF Regular Account</b>		<b>100.0%</b>	<b>\$ 74,628,549</b>	<b>100.0%</b>	<b>5.15</b>	<b>3.50</b>	<b>6.95</b>	<b>8.58</b>	<b>6.50</b>	<b>6.51</b>	<b>9.06</b>	<b>9.84</b>
OPERF Policy Benchmark					4.21	3.35	7.20	8.76	6.68	6.83	9.58	9.68
Value Added					0.94	0.15	(0.25)	(0.17)	(0.18)	(0.33)	(0.52)	0.16
<b>Target Date Funds</b>			<b>2,309,043</b>									
<b>TOTAL OPERF Variable Account</b>			<b>\$ 466,721</b>		<b>9.21</b>	<b>(1.98)</b>	<b>5.18</b>	<b>9.28</b>	<b>5.56</b>	<b>5.56</b>	<b>10.01</b>	<b>9.94</b>

Asset Class Benchmarks:

Russell 3000	10.92	2.50	8.60	11.55	8.60	9.25	13.32	13.93
OREGON MSCI ACWI EX US IMI NET	7.11	(7.14)	1.21	6.51	1.97	1.45	6.49	6.08
MSCI ACWI IMI NET	9.06	(2.35)	4.80	8.86	5.13	5.16	9.65	9.59
RUSSELL 3000+300 BPS QTR LAG	(5.28)	6.99	15.55	15.73	12.54	13.20	17.34	17.68
OREGON CUSTOM FI BENCHMARK	4.80	6.02	3.04	2.77	2.41	2.35	2.79	4.04
OREGON CUSTOM REAL ESTATE BENCHMARK	2.33	6.82	7.44	7.55	8.97	9.53	9.88	7.59
CPI +4%	3.61	5.86	6.38	6.23	5.94	5.54	5.62	5.85
91 Day Treasury Bill	1.02	2.26	1.77	1.32	1.03	0.83	0.62	0.47

**Total OPERF NAV**  
(includes Variable Fund asset)  
One year ending MAY-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.

Returns for periods ending JUN-2019

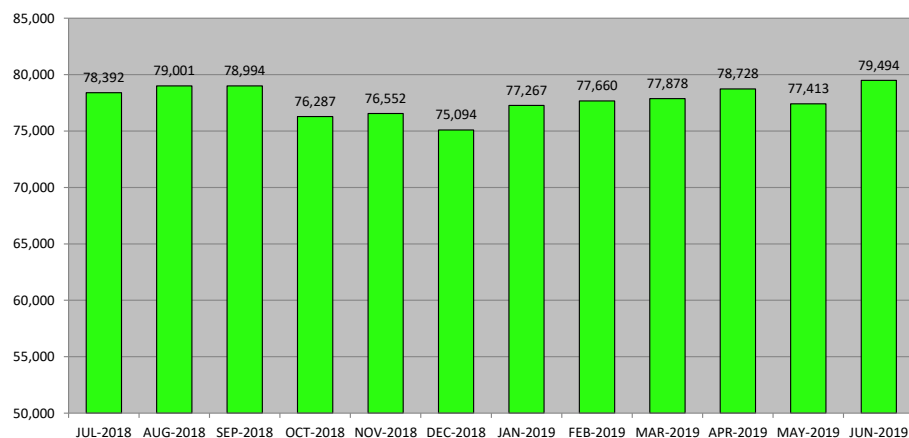
Oregon Public Employees Retirement Fund

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%	\$ 26,783,551	35.0%	15.38	3.63	7.60	11.68	7.42	6.27	10.46	10.87
Private Equity	13.5-21.5%	17.5%	\$ 16,516,650	21.6%	4.63	15.03	16.39	15.11	12.24	11.69	12.83	14.49
<b>Total Equity</b>	<b>50.0-60.0%</b>	<b>55.0%</b>	<b>\$ 43,300,201</b>	<b>56.5%</b>								
Opportunity Portfolio	0-3%	0%	\$ 1,705,836	2.2%	1.54	3.55	5.40	6.65	5.84	4.49	8.28	10.60
<b>Total Fixed</b>	<b>15-25%</b>	<b>20.0%</b>	<b>\$ 15,962,777</b>	<b>20.8%</b>	<b>6.18</b>	<b>7.24</b>	<b>3.74</b>	<b>2.98</b>	<b>3.15</b>	<b>2.81</b>	<b>3.31</b>	<b>5.69</b>
Real Estate	9.5-15.5%	12.5%	\$ 8,291,318	10.8%	2.92	5.85	7.24	7.59	8.40	9.12	10.36	10.03
Alternative Investments	0-12.5%	12.5%	\$ 7,329,823	9.6%	(0.50)	(2.65)	0.84	4.13	2.88	1.88	2.02	
Cash w/Overlay	0-3%	0%	\$ 22,270	0.0%	2.01	3.22	2.34	1.94	1.68	1.44	1.27	1.16
<b>TOTAL OPERF Regular Account</b>		<b>100.0%</b>	<b>\$ 76,612,224</b>	<b>100.0%</b>	<b>7.88</b>	<b>6.52</b>	<b>7.96</b>	<b>9.34</b>	<b>7.24</b>	<b>6.65</b>	<b>8.87</b>	<b>10.17</b>
<b>OPERF Policy Benchmark</b>					<b>7.98</b>	<b>7.20</b>	<b>8.19</b>	<b>9.78</b>	<b>7.67</b>	<b>7.23</b>	<b>9.38</b>	<b>10.33</b>
Value Added					(0.10)	(0.68)	(0.23)	(0.43)	(0.43)	(0.58)	(0.51)	(0.15)
<b>Target Date Funds</b>			<b>2,391,833</b>									
<b>TOTAL OPERF Variable Account</b>			<b>\$ 489,763</b>		<b>16.22</b>	<b>4.91</b>	<b>8.17</b>	<b>11.83</b>	<b>7.80</b>	<b>6.44</b>	<b>10.26</b>	<b>10.66</b>

Asset Class Benchmarks:

Russell 3000	18.71	8.98	11.84	14.02	10.93	10.19	13.79	14.67
OREGON MSCI ACWI EX US IMI NET	13.33	0.26	3.94	9.17	4.13	2.25	6.53	6.78
MSCI ACWI IMI NET	16.07	4.56	7.80	11.42	7.38	6.03	9.90	10.32
RUSSELL 3000+300 BPS QTR LAG	(0.80)	12.01	14.57	16.86	13.13	13.64	15.98	19.38
OREGON CUSTOM FI BENCHMARK	5.90	7.15	3.64	2.55	2.83	2.54	2.82	4.06
OREGON CUSTOM REAL ESTATE BENCHMARK	2.74	6.55	6.83	7.01	8.13	9.03	9.55	8.46
CPI +4%	3.97	5.71	6.34	6.12	5.85	5.50	5.64	5.77
91 Day Treasury Bill	1.24	2.31	1.84	1.38	1.08	0.87	0.65	0.49

**Total OPERF NAV**  
(includes Variable Fund asset)  
One year ending JUN-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:  
11410 S.W. 68<sup>th</sup> Parkway, Tigard, OR  
Mailing Address:  
P.O. Box 23700  
Tigard, OR 97281-3700  
(503) 598-7377  
TTY (503) 603-7766  
[www.oregon.gov/pers](http://www.oregon.gov/pers)

July 26, 2019

TO: Members of the PERS Board  
FROM: Tamara Dohrman, Interim CFO  
SUBJECT: July 2019 Board Report

### 2017-19 OPERATING BUDGET

Operating expenditures for May 2019 and preliminary expenditures for June 2019 were \$4,043,356 and \$7,051,665 respectively. Final expenditures for June closed in the Statewide Financial Management System (SFMS) on July 12, 2019, and will be included in the October 2019 report to the board.

- To date, the Agency has expended a total of \$88,619,275 or 87.2% of PERS' adjusted legislatively approved operations budget of \$101,657,012. PERS will continue to pay invoices for goods received and for services rendered as of June 30, 2019 in the following months up until December 31, 2019.
- At this time, the Agency's projected positive variance is \$4,536,753 or approximately 4.5% of the operating budget.

### 2017-19 NON-LIMITED BUDGET

The approved budget includes \$10,980,719,086 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 LEGISLATIVELY ADOPTED BUDGET

The agency's Legislatively Adopted Budget for 2019-21 (House Bill 5032) was approved by the Legislature on June 29. PERS' operating limitation totaling \$163,356,188 was approved, which includes \$39,059,714 related to the passage of SB 1049 and \$11,539,472 related to SB 1566. This limitation was specifically allocated among the agency's divisions in line with our organizational structure:

- \$9,088,250 for Central Administration;
- \$48,143,077 for Financial and Administrative Services Division;
- \$52,744,509 for Information Services Division;
- \$43,958,241 for Operations Division; and
- \$9,422,111 for Compliance, Audit and Risk Division.

Budget Execution Report

7/26/2019

Page 2 of 2

The adopted budget also consists of \$12,504,627,192 in Other Funds Non-Limited budget, which represents benefit payments, health insurance premiums, and third-party administration payments for both the PERS Health Insurance Program and the Individual Account Program.

Minor budget impacts were also included in House Bill 5050, requiring PERS to reimburse the Department of Administrative Services for two positions related to implementation work on SB 1049. More detailed information on the 2019-21 Legislatively Adopted Budget can be found in Item C.1.c.

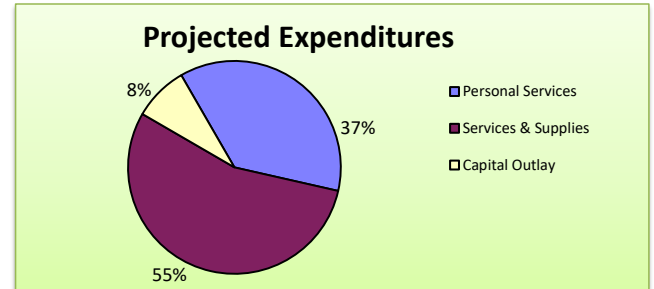
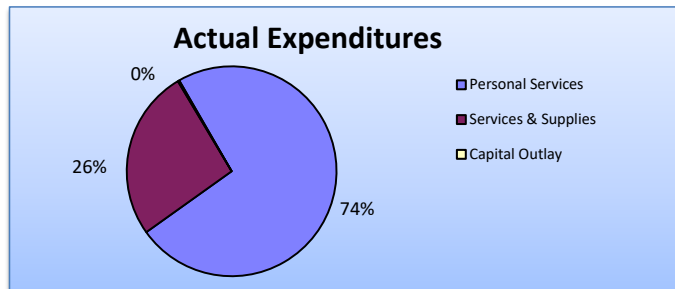
*A.2.c. Attachment – 2017-19 Agency-wide Budget Execution Summary Analysis*

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

**Limited - Operating Budget**

**2017-19 Biennial Summary**

Category	Actual Exp. To Date	Projected Expenditures	Total Est. Expenditures	2017-19 LAB	Variance
Personal Services	65,110,067	3,135,549	68,245,616	73,511,089	5,265,473
Services & Supplies	23,300,483	4,659,425	27,959,908	26,851,571	(1,108,337)
Capital Outlay	208,725	706,010	914,735	1,294,352	379,617
<b>Total</b>	<b>88,619,275</b>	<b>8,500,984</b>	<b>97,120,259</b>	<b>101,657,012</b>	<b>4,536,753</b>



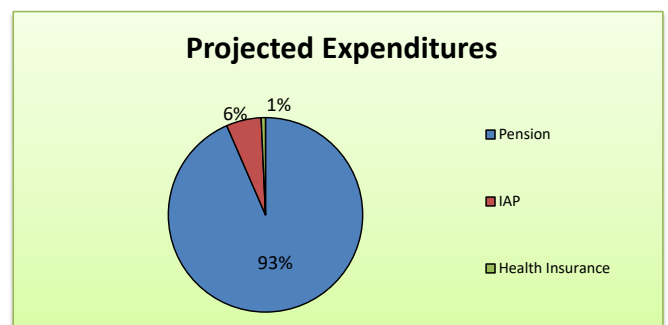
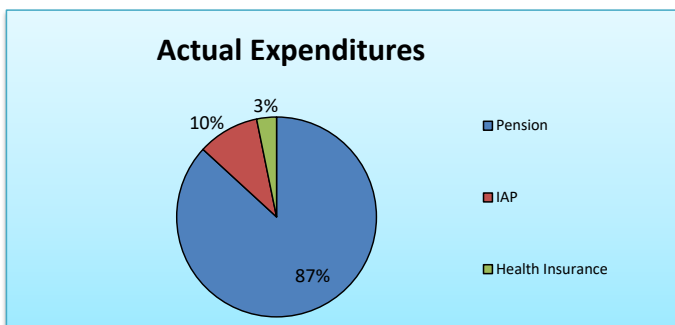
**Monthly Summary**

Category	Actual Exp.	Projections	Variance	Avg. Monthly Actual Exp.	Avg. Monthly Projected Exp.
Personal Services	3,030,987	3,137,290	106,303	2,830,872	3,135,549
Services & Supplies	1,004,269	1,008,049	3,780	1,013,064	4,659,425
Capital Outlay	8,100	8,100	0	9,075	706,010
<b>Total</b>	<b>4,043,356</b>	<b>4,153,439</b>	<b>110,083</b>	<b>3,853,011</b>	<b>8,500,984</b>

**Non-Limited Budget**

**2017-19 Biennial Summary**

Programs	Actual Exp To Date	Projected Expenditures	Total Est. Expenditures	Non-Limited LAB	Variance
Pension	8,779,899,404	811,401,392	9,591,300,796	9,222,000,000	(369,300,796)
IAP	1,008,361,301	50,481,600	1,058,842,901	1,056,900,000	(1,942,901)
Health Insurance	324,392,173	6,183,215	330,575,388	815,271,000	484,695,612
<b>Total</b>	<b>10,112,652,878</b>	<b>868,066,207</b>	<b>10,980,719,085</b>	<b>11,094,171,000</b>	<b>113,451,915</b>





# Oregon

Kate Brown, Governor

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Headquarters:  
11410 S.W. 68<sup>th</sup> Parkway, Tigard, OR  
Mailing Address:  
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Tigard, OR 97281-3700  
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TTY (503) 603-7766  
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July 26, 2019

TO: Members of the PERS Board  
FROM: Roger Smith, Deferred Compensation Program Manager  
SUBJECT: Appoint Advisory Committee Member for the Oregon Savings Growth Plan

### OVERVIEW

- Action: Appoint to the Oregon Savings Growth Plan (OSGP) Advisory Committee, one new member to fill an unexpired vacancy triggered by a resignation.
- Reason: The Advisory Committee consists of seven members appointed by the PERS Board.

### BACKGROUND

ORS 243.505 provides an Advisory Committee for OSGP that consists of seven members with knowledge of deferred compensation plans. According to that statute (attached), the Committee shall study and advise the Public Employees Retirement Board on policies and procedures and such other matters as the board may request.

Advisory Committee members must be OSGP participants and have knowledge of the current program. One member shall be retired from state service. Two members shall be participants with separate local government plan sponsors who offer OSGP. Four members shall be employees of separate state agencies.

Appointment is for a three year term of office, but a member serves at the pleasure of the board. If there is a vacancy during an unexpired term, the board's appointment will become immediately effective for the unexpired term.

Currently, the Advisory Committee includes the following members:

Name	Position	Employer	Term	Term End Date
Richard Bailey	State	Oregon Institute of Technology	Second	June 2020
Michael Marostica	State	Department of Corrections	First	June 2022
Colin Benson	State	Department of Justice	First	June 2022
<b>Vacant</b>	<b>State</b>	<b>Unexpired term (Thomas Poon resignation)</b>		<b>June 2022</b>
Mary Jo Evers	Local Government	Ontario School District	First	June 2022
Celeste VanCleave	Local Government	Central Linn School District	Second	June 2020
Eugene Bentley	Retired	Retired	First	June 2022

The criteria used in selecting Advisory Committee members includes;

1. Current participation in OSGP;
2. Meeting the qualifications for the vacancy to be filled;
3. Possessing a mixture of expertise, knowledge, and experience useful to the Advisory Committee;
4. Sincere interest in promoting and improving the deferred compensation program; and
5. Willing and able to work in a group setting to review and recommend policies governing the program.

#### RECOMMENDED APPOINTMENTS

Staff recommends appointing Christine Valentine to fill an unexpired term vacated as a result of Thomas Poon's resignation.

#### BOARD ACTION

The board's option for appointments to the OSGP Advisory Committee are:

1. Accept the recommendation to appoint Christine Valentine to an unexpired vacancy.
2. Request staff to solicit further applications for review.

#### STAFF RECOMMENDATION

Staff recommends the board to adopt Option 1.

- Reason: Staff believes Christine Valentine meets the criteria and service needs of the Advisory Committee.

**ORS 243.505 Deferred Compensation Advisory Committee**

- (1) The Deferred Compensation Advisory Committee shall be appointed by the Public Employees Retirement Board, consisting of seven members with knowledge of deferred compensation plans.
- (2) At the direction of the board, the committee shall advise the Public Employees Retirement Board on policies and procedures and such other matters as the board may request.
- (3) The term of office of each member is three years, but a member serves at the pleasure of the board. Before the expiration of the term of a member, the board shall appoint a successor, whose term begins on July 1 next following. A member is eligible for reappointment. If there is a vacancy for any cause, the board shall make an appointment to become immediately effective for the unexpired term.
- (4) A member of the Deferred Compensation Advisory Committee is entitled to compensation and expenses as provided in ORS 292.495.
- (5) The Deferred Compensation Advisory Committee shall select one of its members as chairperson and another as vice chairperson, for such terms and with duties and powers necessary for the performance of the functions of such offices as the committee determines.
- (6) A majority of the members of the committee constitutes a quorum for the transaction of business.
- (7) The Deferred Compensation Advisory Committee may meet at a place, day and hour determined by the committee. The committee also may meet at other times and places specified by the call of the chairperson or of a majority of the members of the committee. [1991 c.618 §10; 1997 c.179 §19; 1999 c.406 §1]

**OAR 459-050-0025**

**Deferred Compensation Advisory Committee**

- (1) The seven members of the Deferred Compensation Advisory Committee provided for under ORS 243.505, shall be subject to the following qualifications and limitations:
  - (a) Each member shall be a participant in a deferred compensation plan established under ORS 243.401 to 243.507, and shall have knowledge of the Program.
  - (b) Four members shall be participants in the state deferred compensation plan.
  - (c) Two members shall be participants in a local government deferred compensation plan.
  - (d) One member shall be a retired deferred compensation plan participant.
  - (e) No two members may be employed by the same state agency or local government except that a member who transfers employment to the employer of another member may continue to serve

on the Advisory Committee, but only for the balance of the term of appointment of the transferring member.

(f) No member may serve more than two consecutive full terms.

(g) No member may be an employee of PERS during the term of appointment.

(2) The Advisory Committee shall study and advise the Board on all aspects of the Program, including but not limited to:

(a) The Program fee structure and procedures;

(b) State and federal legislative issues relative to the administration of deferred compensation plans;

(c) The administration of the catch-up and the financial hardship provisions in Section 457 of the Internal Revenue Code;

(d) Ways and means to inform and educate eligible employees about the Program;

(e) The expressed desires of eligible employees as to the Program; and

(f) The actuarial characteristics of eligible employees.

(3) Upon the request of the OIC, the Advisory Committee shall study and advise the Board on the following:

(a) Investment programs, including options and providers; and

(b) Information furnished by the OIC or the State Treasurer concerning the types of available investments, the respective balance of risk and return of each investment, and the administrative costs associated with each investment.

(4) The Advisory Committee shall meet at least four times during a calendar year.

(5) A majority of the Advisory Committee shall constitute a quorum for transacting business. However, the Advisory Committee may establish such other procedures for conducting business that it deems necessary.

(6) Pursuant to the Public Meetings Law, ORS 192.610 to 192.690, the Deferred Compensation Manager shall distribute to the Advisory Committee, and other interested parties, an agenda for a regular meeting a reasonable time prior to the meeting.

(7) Nominations of candidates for the Advisory Committee shall be made as follows:

(a) Notice of a position on the Advisory Committee expected to become vacant upon the expiration of a term of appointment shall be published not later than April 15 of each calendar year.

(b) Persons interested in serving on the Advisory Committee must apply in writing to the Manager not later than May 15 following the publication of a vacancy.

(c) The Manager shall review the written applications of interested persons for completeness, accuracy, and satisfaction of the minimum requirements of the vacant position on the Advisory Committee.

(d) A committee consisting of the Manager and two members of PERS executive or managerial staff designated by the PERS Executive Director shall review the acceptable applications and recommend to the Board candidates for appointment to the Advisory Committee that:

(A) Reflect a cross section of state agencies, participating local governments, and classification levels;

(B) Reflect a mixture of expertise, knowledge, and experience useful to the Advisory Committee;

(C) Appear to have a sincere interest in the Program; and

(D) Appear to be willing and able to work in a group setting to review and recommend policies governing the Program.

(e) In the event of a vacancy for an unexpired term, the Manager may select applications from the most recent list of interested persons established under subsection (c) of this section and the applications of other persons as deemed appropriate for consideration. A committee consisting of the Manager and two members of PERS executive or managerial staff designated by the PERS Executive Director shall review the selected applications and recommend to the Board candidates for appointment to the Advisory Committee. The appointment shall be immediately effective for the remainder of the unexpired term. If no candidate is recommended or appointed, the vacancy must be filled under the provisions of subsections (a) through (d) of this section.

Stat. Auth: ORS 243.470

Stats. Implemented: ORS 243.505

Hist.: PERS 2-1993, f. & cert. ef. 9-23-93; PERS 2-1995, f. 10-13-95, cert. ef. 11-1-95; PERS 5-2000, f. & cert. ef. 8-11-00; PERS 3-2007, f. & cert. ef. 1-23-07; PERS 11-2014, f. & cert. ef. 7-25-14



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July 26, 2019

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

### OVERVIEW

- Action: Adopt modifications to the Receipt Date rule.
- 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.

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 and relevant PERS staff notified.

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 was held June 25, 2019, at 2:00 p.m. at PERS headquarters in Tigard. No members of the public attended. The public comment period ended July 2, 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: 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 published the Notice in the Oregon Administrative Rules Database. Notice was sent to employers, legislators, and interested parties. Public comment period began.
May 31, 2019	PERS Board notified that staff began the rulemaking process.
June 25, 2019	Rulemaking hearing held at 2:00 p.m. at PERS in Tigard.
July 2, 2019	Public comment period ended at 5:00 p.m.
July 26, 2019	Board may adopt the permanent rule modifications.

### BOARD OPTIONS

The board may:

1. Pass a motion to “adopt modifications to the Receipt Date 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.

- Reason: Add category for electronic submissions of data made through PERS Online Member Services.

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.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



# Oregon

Kate Brown, Governor

## Public Employees Retirement System

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Mailing Address:  
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Tigard, OR 97281-3700  
(503) 598-7377  
TTY (503) 603-7766  
[www.oregon.gov/pers](http://www.oregon.gov/pers)

July 26, 2019

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

### **LEGISLATION IMPACTING PERS**

As of July 1, 2019, the following bills that impact PERS statutes were approved by the legislature and Governor. The agency is in various stages of implementation of these changes to our statutes. Information will be provided to members and employers as we resolve details of these programs.

Additional information is available on the legislative website:

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

Bill Number	Brief Summary
<b>Technical Changes</b>	
HB 2118	<i>Relating to consumer price index</i> – Standardizes the use of Consumer Price Index for purposes in PERS and other statutes.
SB 213	<i>Relating to connection to federal tax law</i> – A perennial bill that conforms PERS statutes to the Internal Revenue Code and other provisions of federal tax law.
<b>Changes in Terminology</b>	
HB 3007	<i>Relating to estates</i> – Changes terminology in certain PERS statutes from “an affidavit” to “a small estate affidavit.”
HB 3146	<i>Relating to corrections</i> – Changes terminology in certain PERS statutes generally from “inmate” to “adult in custody.”
<b>Program Changes</b>	
HB 2196	<i>Relating to the military</i> – Defines certain past, current, and future employees of the Oregon Military Department as “firefighters” for the purpose of PERS benefits.
HB 2417	<i>Relating to death benefits under the Public Employees Retirement System</i> – Establishes an alternate death benefit for surviving spouses of Tier One and Tier Two members who die before retirement.
HB 2972	<i>Relating to retirement of employees of Harney County Health District</i> – Allows Harney County Health District to offer an alternative retirement program to PERS. Also allows Tier One and Tier Two PERS retirees employed by and licensed, registered, or certified to provide health services in the Harney County Health District to work unlimited hours.
SB 576	<i>Relating to campus security officers</i> - Also allows Tier One and Tier Two PERS retirees employed as “special campus security officers” at public universities or “security officers” at community colleges, to work unlimited hours.
SB 1049	<i>Relating to public employee retirement</i> – PERS Reform legislation including provisions that impact members and employers.

### **PERS BUDGET – HOUSE BILL 5032**

House Bill 5032, the PERS agency budget, was sent to the Governor for consideration on June 29. PERS and other agencies, whose budgets were not approved by July 1, began operations in the 2019-2021 biennium under House Bill 5048 – the “continuing resolution.”

In addition to positions and budget authority included in HB 5032, several positions in the Department of Administrative Services (DAS) were acknowledged for their close work with PERS on the implementation of Senate Bill 1049. House Bill 5050 requires PERS to reimburse DAS for those positions in IT and procurement.

### **SENATE BILL 1049 - REPORTING**

The PERS Board is required, by SB 1049, to report to the Joint Ways and Means Committee at least 30 days in advance of making changes to actuarial methods and assumptions. The report must outline any proposed changes and the associated, actuarially determined impact to the total and accrued liability of the system and employer rates.

Similar to board approval and reporting of earnings crediting each year, PERS is prepared to report preliminary board action taken today on actuarial methods and assumptions, which will be finalized at the October 4, 2019 board meeting when the December 31, 2018 system valuation will also be presented.

### **2019-2020 INTERIM and 2020 LEGISLATIVE SESSION**

Interim legislative committees will meet in mid-September, November, and January before the 2020 Legislative Session is convened. We are not currently aware of presentations that must be made during these “legislative days” but will be prepared to do so if asked.

A budget note in HB 5032 requires PERS and DAS to report during the February 2020 legislative session on the implementation of SB 1049 to the Committees on Ways and Means and Information Management and Technology.

The reports from PERS and DAS are to include:

- Update on project scope, schedule, and budget, and total cost of ownership;
- Identification of costs associated with one-time solutions versus permanent solutions;
- Independent quality assurance reporting on the project;
- Impact of Senate Bill 1049 (2019) information technology project on routine agency operations;
- Any exceptions from administrative rules, policies or procedures, or statutes granted to PERS by the Department of Administrative Services; and
- Other information that helps inform the Legislature on the status of the project or issues that have arisen as the result of the project.



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TTY (503) 603-7766  
[www.oregon.gov/pers](http://www.oregon.gov/pers)

July 26, 2019

TO: Members of the PERS Board  
FROM: Yvette Elledge-Rhodes, Deputy Director  
SUBJECT: SB 1049 Implementation Update

Senate Bill 1049 was signed into law by the Governor on June 11. Prior to, and following that date, PERS staff have been focused on building out a budget and implementation plan that will allow us to successfully implement SB 1049 in an efficient and effective manner.

### COMMUNICATIONS

We are building out a suite of communications materials to help members and employers understand the impacts of this legislation. These include the following tasks:

- Our website has been updated to have a [micro site](#) devoted to SB 1049 and a new GovDelivery notification set up for members and employers to keep up to date – it's a great information resource. ([Sign up for GovDelivery.](#))
- Member Services and Employer Services are gathering questions so we can ensure our communication materials answer the key needs of our stakeholders.
- The communication production team is working with the data to create visual examples.
- A generic presentation was developed and presented to both an All State Agency Director meeting, as well as an All State Agency Human Resources Director meeting.

### PROJECT PLANNING

We are developing our overall implementation approach and governance committees. A steering committee, core team, and sub-teams have been set-up to tackle each element of SB 1049, as well as to integrate change management and internal communications. This will be managed as one, comprehensive, program with the following five individual projects under the SB 1049 Implementation Program:

<u>Project</u>	<u>Effective Date</u>
Employer Programs Project	Effective 7/1/2019
Salary Cap Project	Effective 1/1/2020
Work After Retirement Project	Effective 1/1/2020
Member Redirect Project	Effective 7/1/2020
Member Choice Project	Effective 1/1/2021

A budget of approximately \$39 million was approved to implement all the various aspects of SB 1049. One important item is that the budget provides the agency with six positions on a permanent

SB 1049 Implementation Update

July 26, 2019

Page 2 of 2

basis to enable us to administer the changes on a long-term basis, with an additional 37 limited duration positions to assist in the implementation efforts. These positions provide PERS with back-up resources for staff that will be dedicated to project implementation efforts as well as for additional workload resources.

The SB 1049 implementation budget is as follows:

External Project Management:	\$2,500,000
External Quality Assurance:	\$2,500,000
Information Technology Applications (Architecture/Development/Testing/Software/Consultants, etc.)	\$25,992,000
Staffing	\$7,567,714
Contingency	<u>\$500,000</u>
<b>Total</b>	<b>\$ 39,059,714</b>

In the last few weeks, PERS has been supported by other state agencies, in particular the Office of the State Chief Information Officer (OSCIO), Department of Administrative Services (DAS) Procurement and Facilities, as well as the Department of Justice (DOJ). We are already having regular meetings with these groups and they are actively engaged in assisting us. In fact, some of these staff will be working here at PERS on a part-time basis, to facilitate quicker decisions as we work towards some very near implementation deadlines.



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July 26, 2019

TO: Members of the PERS Board  
FROM: Greg Gabriel, Senior Financial Analyst  
SUBJECT: 2019-21 PERS Agency Budget Update (HB 5032)

**House Bill 5032, the PERS agency budget, was approved by the House and Senate before the end of session on June 30, 2019. At the time of this memo being finalized, the budget had not been signed by the Governor. Therefore, as of July 1, PERS is funded by a continuing resolution (House Bill 5048) for the first portion of the 2019-2021 biennium.**

- Operating Budget (Limited) \$163,356,188
- Benefit / Health Payments (Non-Limited) \$12,504,627,192
- Positions 419
- FTE 414.32

The operating budget is \$61.7 million or 60.7% above the 2017-19 Legislatively Approved Budget of \$101.7 million. This increase can be attributed to the passage of Senate Bill 1049, which approves a one-time expenditure of \$39.1 million for implementation costs. There is an additional \$11.5 million of approved limitation related to SB 1566(2018) and the School Districts Unfunded Liability Fund (SDULF). The Agency's core operating costs increased by \$11.1 million or 10.9% due to increased program staffing, associated payroll costs and State Government Service Charges.

The Non-Limited Budget for benefit payments increased by \$1.5 billion or 13.7% more than the 2017-19 Legislatively Approved Budget. This increase is due to growing retirements and benefit payments in all programs: Tier 1, Tier 2, Oregon Public Service Retirement Program (OPSRP), Individual Account Program (IAP) and the PERS Health Insurance Program (PHIP).

**The Agency received approval for the following policy packages related to operations for the 2019-21 biennium:**

**Package 081/082** – 2018 E-Board Reconciliation September and December (\$640,257 / 3.0 FTE)

**Package 082** – Oregon Savings Growth Plan (\$1,698,000 / 0.0 FTE)

**Package 102** – PERS Production Data Center Migration (\$1,715,318 / 0.0 FTE)

**Package 103** – Financial & Administrative Services Strategic Fulfillment (\$357,679 / 1.0 FTE)

**Package 104** – Maintaining Current Service Levels (\$1,045,185 / 6.0 FTE)

**Package 106** – Risk & Security Management (\$638,291 / 0.0 FTE)

**Package 107** – Deferred Maintenance Requirement of SB 1067 (2017) (\$1,161,555 / 0.0 FTE)

**The Agency received additional policy package recommendations approved by the Legislative Fiscal Office (LFO), most of which are related to the passage of SB 1049.**

**LFO Packages:**

**Package 090** – Removes \$644,528 in the Operations Division (OD) and the Financial and Administrative Division (FASD) for unneeded Temporary Services and Services and Supplies.

**Package 801** – Establishes \$11.5 million in FASD (Limited) and \$11.5 million in Tier1/2 (Non Limited) appropriations for expenditure authority for SDULF (SB 1566 2018). Additionally there is a \$1 placeholder approved for Employer Incentive Fund (EIF) and SDULF to establish the funds.

**Package 802** – Approves \$2.5 million or 10% of project funding as requested for Project Management and Administration related to SB 1049.

**Package 803** – Approved \$2.5 million or 10% of project funding as requested for Quality Assurance and Testing related to SB 1049.

**Package 804** – Approves \$25.9 million for information technology applications. This includes all third party contractors as requested for both temporary and permanent solutions related to SB 1049.

**Package 805** – Approves \$984,598 and six positions (5.44 FTE) for the permanent positions requested related to SB 1049, which will be part of the regular operating limitation (500 series).

**Package 805** Approves \$5.6 million and 37 positions (33.60 FTE) for all limited duration positions related to SB 1049. These funds will fall under a newly developed division called Core Retirement System Applications (900 series). This also approves \$1.9 million expenditure authority for Actuarial, Legal and Communications contracts related to the bill.

**Package 806** – Approves \$500,000 for a Contingency Reserve for SB 1049 implementation.

**Package 812** – Removes \$631,523 in Vacant Position Elimination. Removes two vacant PEMF positions from FASD and OD that have been vacant and one OS1 position in the Information Services Division (ISD).

**Below is the Agency overview by separated by operating division of the Legislatively Adopted Budget for 2019-21:**

	<b>CENTRAL ADMIN</b>	<b>FINANCIAL &amp; ADMIN SRVCS</b>	<b>INFORMATION SERVICES</b>	<b>OPERATIONS</b>	<b>COMPLIANCE AUDIT &amp; RISK</b>	<b>TOTAL</b>
<b>BUDGET</b>	5,549,108	44,640,486	26,144,003	39,438,343	8,524,534	<b>124,296,474</b>
<b>POSITIONS</b>	21	64	70	207	20	<b>382</b>
<b>FTE</b>	20.92	63.52	69.76	206.52	20.00	<b>380.72</b>
<b>SB 1049</b>	3,539,142	3,502,591	26,600,506	4,519,898	897,577	<b>39,059,714</b>
<b>POSITIONS</b>	4	4	3	22	4	<b>37</b>
<b>FTE</b>	3.84	3.64	2.76	19.68	3.68	<b>33.60</b>
<b>AGENCY TOTAL</b>	9,088,250	48,143,077	52,744,509	43,958,241	9,422,111	<b>163,356,188</b>
<b>POSITIONS</b>	25	68	73	229	24	<b>419</b>
<b>FTE</b>	24.76	67.16	72.52	226.20	23.68	<b>414.32</b>



# Valuation Methods & Assumptions

## OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

Presented by:

**Matt Larrabee, FSA, EA**

**Scott Preppernau, FSA, EA**

July 26, 2019

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# Three-Meeting Process – Assumptions & Methods

- April 1: Background on current key assumptions and methods
  - Long-term investment return assumption (assumed rate)
  - Amortization period for unfunded actuarial liability (UAL)
  - Contribution rate collaring policy
- May 31: 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 direction to actuary**
  - **Member-specific assumptions based on study of recent PERS experience**
  - **Review methods for reflecting new legislative provisions**
  - **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 proposed final 2021-2023 contribution rates**

# Today's Agenda

- Background
- Recently passed legislation Senate Bill 1049
- Recap of economic assumptions and actuarial methods
  - Includes long-term investment return assumption
  - Reviewed in detail at last Board meeting
- Projected effects of legislation and investment return
- Overview of demographic assumptions
- Estimated effect of assumptions

# Executive Summary

- Since last meeting, we analyzed PERS member census and are recommending updates to certain demographic assumptions
  - Combined, those recommendations are estimated to have a:
    - “Change” of \$0.0 billion the UAL (rounded to the nearest \$100 million)
    - 0.3% of payroll increase in the system-average advisory 2021-2023 uncollared rate
- In our financial modeling, SB 1049’s most visible impact is reamortization
  - How SB 1049 is implemented in certain areas will affect actuarial calculations
  - Some of those areas have open issues from our perspective
- Callan’s and Milliman’s capital market outlooks for future investment return are slightly higher than at the last review two years ago
  - We recommend the Board not increase the assumed rate from the current 7.2%
  - The Board should give consideration to decreasing the rate to 7.1% or 7.0%
    - A decrease to 7.1%/7.0% is estimated to increase the:
      - UAL as of December 31, 2018 by \$0.9/\$1.8 billion
      - System-average advisory 2021-2023 uncollared rate by 0.7%/1.4% of payroll

# Background

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# Two-Year Rate-Setting Cycle

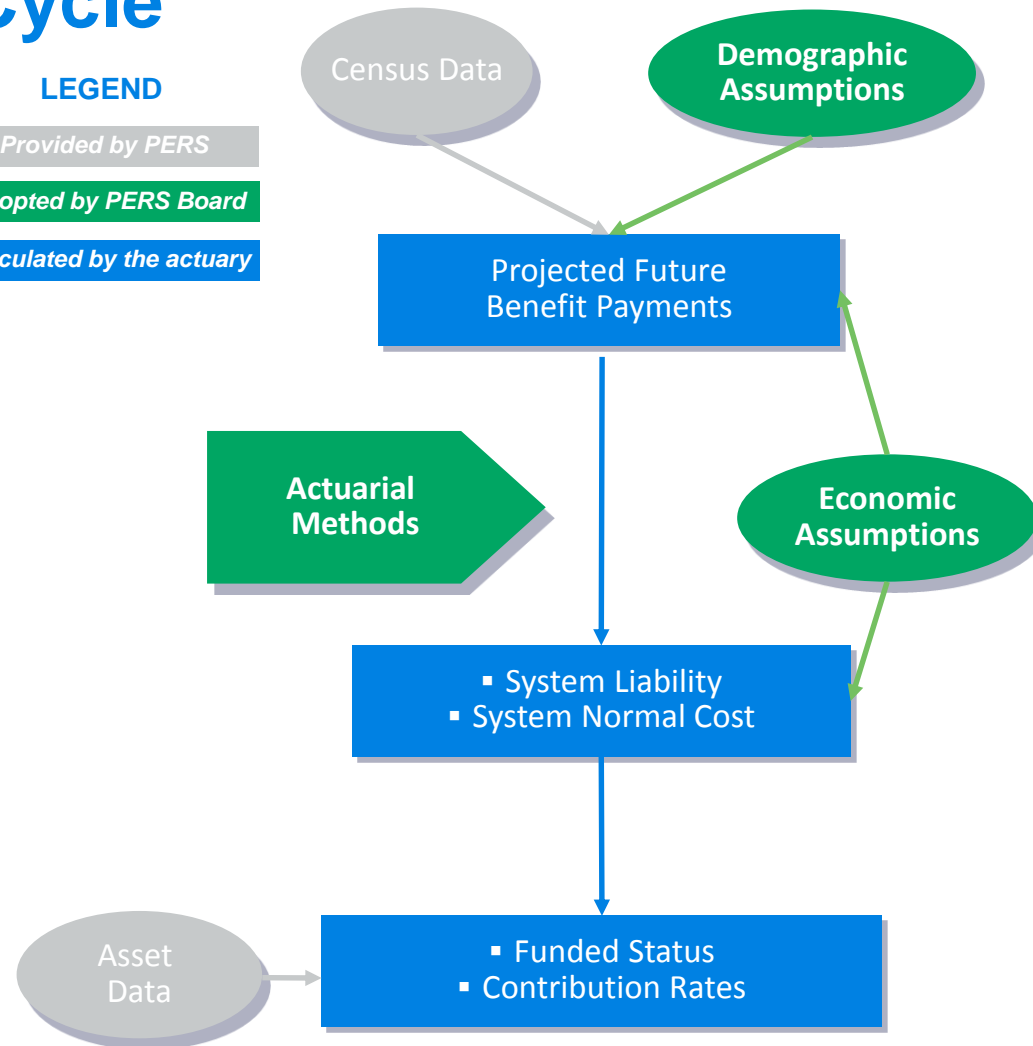
- **July 2019: Assumptions & methods adopted by Board in consultation with the actuary**
- October 2019: System-wide 12/31/18 actuarial valuation results
- December 2019: Advisory 2021-2023 employer-specific contribution rates
- July 2020: System-wide 12/31/19 actuarial valuation results
- September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

## LEGEND

*Provided by PERS*

*Adopted by PERS Board*

*Calculated by the actuary*



# 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

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# 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”:

$$\mathbf{BENEFITS = CONTRIBUTIONS + EARNINGS}$$

# 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



# Recent Legislation

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# Senate Bill 1049

- Senate Bill 1049 signed into law in June
- The legislation made a number of changes to PERS, many centered on funding/financing of the System's benefits:
  - Redirects portion of member contributions to fund DB benefits
  - Requires a one-time re-amortization of Tier 1/Tier 2 UAL
  - Work after retirement provisions
  - Limits future salary included in Final Average Salary
  - Requires 30 day advance reporting from PERS Board to Legislature on changes to actuarial methods and assumptions
  - Requires study prior to issuing new Pension Obligation Bonds
  - Provides for employee choice in IAP
  - Modifies some provisions for employers making side account deposits, Employer Incentive Fund, School District Fund

# Additional Detail on Key Provisions

- Member redirected contribution
  - Tier 1/Tier 2: 2.5% of salary (3.5% goes to IAP)
  - OPSRP: 0.75% of salary (5.25% goes to IAP)
  - Members with less than \$2,500 monthly salary (indexed) exempt
- One-time re-amortization of Tier 1/Tier 2 UAL
  - Board directed to employ 22-year re-amortization for current cycle
  - Choice of future methods reverts to Board
- Work after retirement
  - Removes hours limits, charges contributions on payroll of rehired retirees
  - Applies for a 5-year period
- Limits on future salary
  - Salary for Final Average Salary limited to \$195,000 (indexed)

# Considerations for Methods/Assumptions

- How will member redirect interact with employer contribution?
- How will work after retirement changes affect system?
  - Removing hours limits could increase work after retirement
  - Assessing employer contribution on rehired retirees could decrease it
  - Could be a knock-on effect on growth in (non-retired) system payroll
- Limits on future salary
  - Leads to lower future growth in accrued benefit for small portion of members
  - Tier 2 and OPSRP members were already subject to the (higher) federal limit; Tier 1 member previously were not subject to a limit
  - Our understanding is the limit also restricts payroll subject to contributions

# Economic Assumptions and Actuarial Methods

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# Economic Assumptions and Actuarial Methods

- At the May 31, 2019 meeting, the Board reviewed
  - Non-investment economic assumptions
  - Actuarial methods
  - Investment return assumption
- Our recommendations regarding economic assumptions and actuarial methods are unchanged since the May meeting

# Economic Assumptions

Details of these recommendations are included in our May 2019 presentation

	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.

# 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	<p>Level percent of pay, layered fixed periods:</p> <p>Tier 1/Tier 2: 20 years            OPSRP: 16 years            RHIA/RHIPA: 10 Years</p>	<p>No change to OPSRP and RHIA/RHIPA</p> <p>Current Tier 1/Tier 2 shortfall will be reamortized over 22 years per SB 1049</p>
Rate Collar	<p>Limits change in base contribution rate to larger of 20% of current rate or 3.00% of payroll;</p> <p>Collar widens incrementally when funded status below 70%</p>	No change

# 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 investment earnings, 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:

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

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

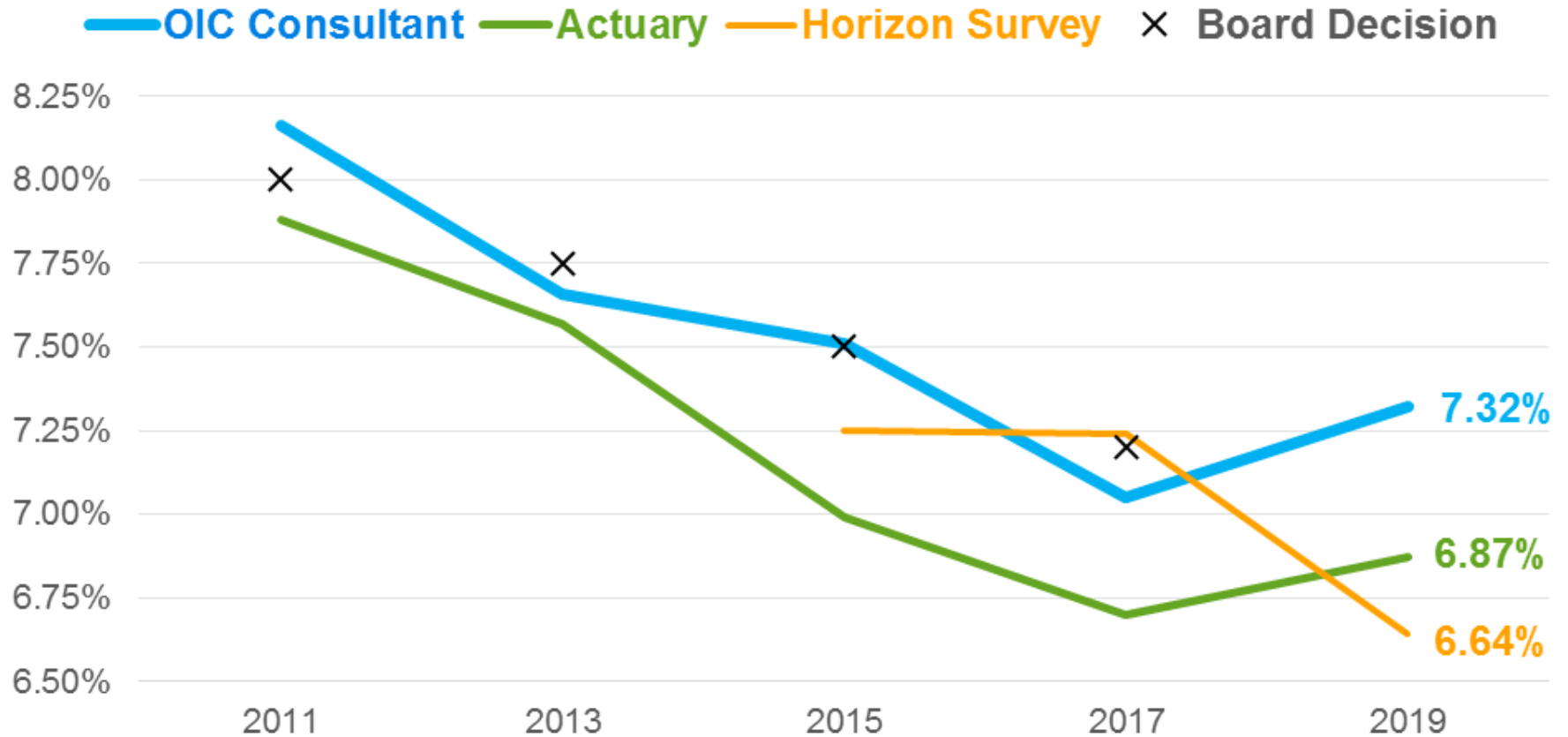
# Investment Return 50<sup>th</sup> Percentile Outlooks

- 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

## Geometric Returns from Outlook Models



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

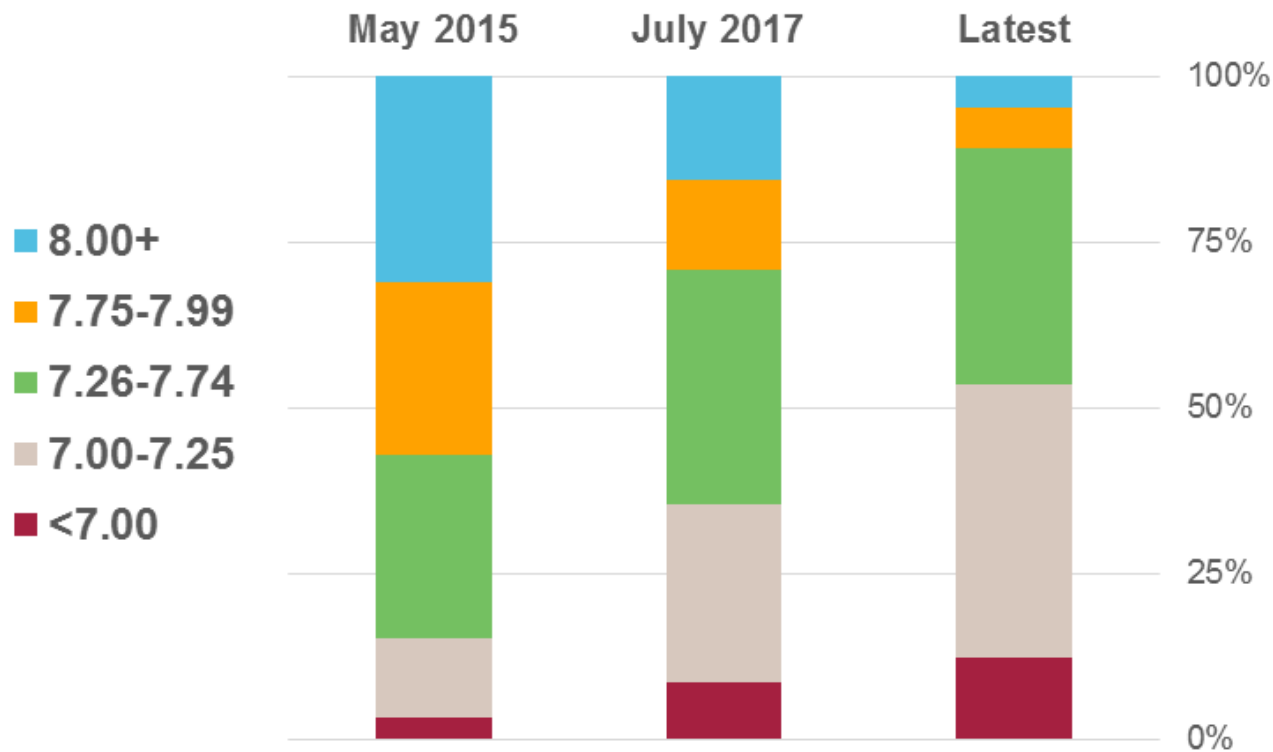
- Estimates are based on OIC's target long-term asset allocation
  - Current actual allocation differs somewhat from the target allocation
- Callan and Horizon estimates are calibrated over a shorter investment timeframe than Milliman's estimates
  - Also reflect lower level of assumed inflation

	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

# 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 1.4% of payroll increase in the uncollared system average base employer contribution rate, while the effect of lowering the assumed return to 7.10% is estimated as a 0.7% of payroll increase
- 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

# Projected Effects of Legislation and Investment Return Assumption

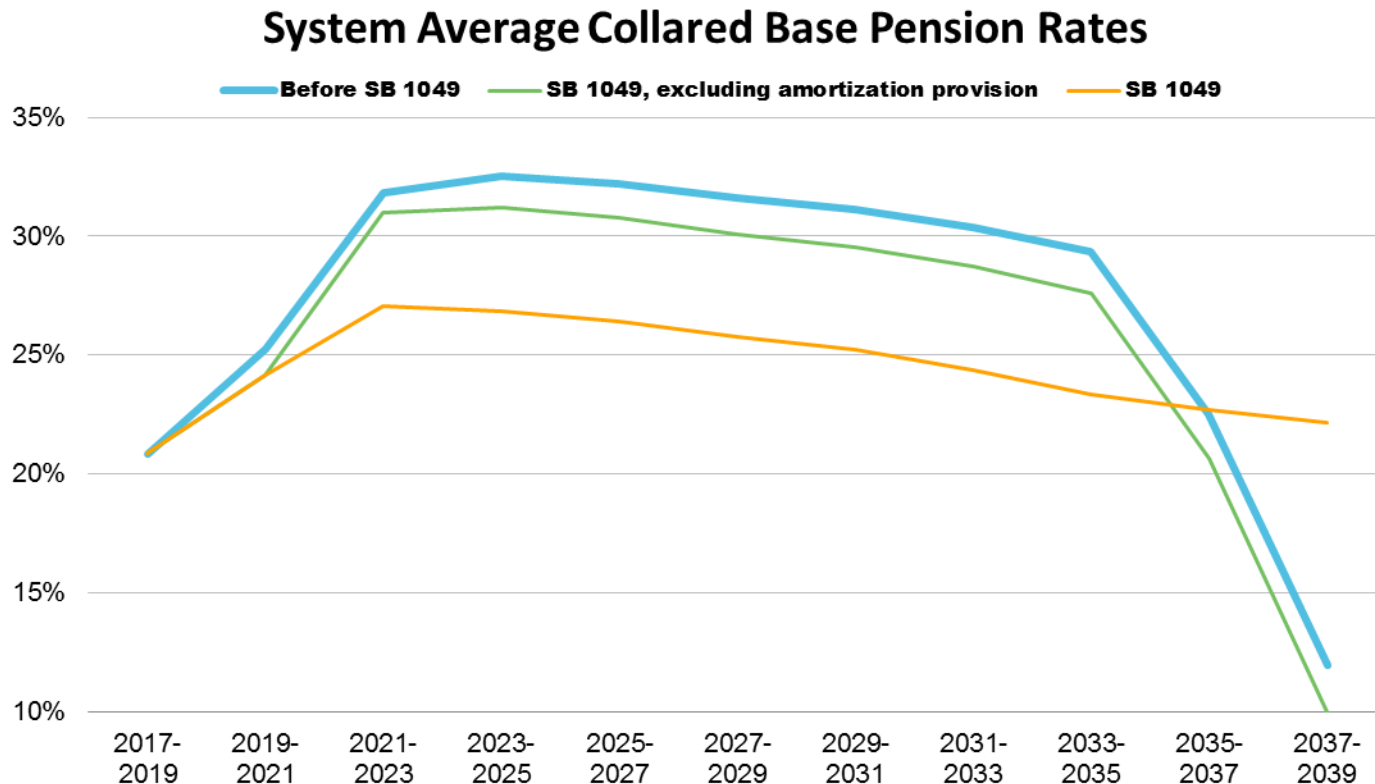
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# Financial Modeling - Effect of SB 1049

- When legislation that became SB 1049 was in process, Milliman prepared financial modeling projections, building on work from the December 2018 Board meeting
- Illustrates effect of:
  - 22 year re-amortization of Tier 1 Tier 2 UAL with December 31, 2019 rate-setting valuation
  - Estimate of work after retirement and redirection provisions
    - Analysis assumes redirected member contributions would serve as an **offset** to employer contribution rates
- While not reflected in the financial modeling, the \$195,000 limit on salary would not materially affect depicted results
- See December 2018 Board materials and follow-up Milliman analyses for discussion of modeling basis and assumptions

# Financial Modeling - Effect of SB 1049

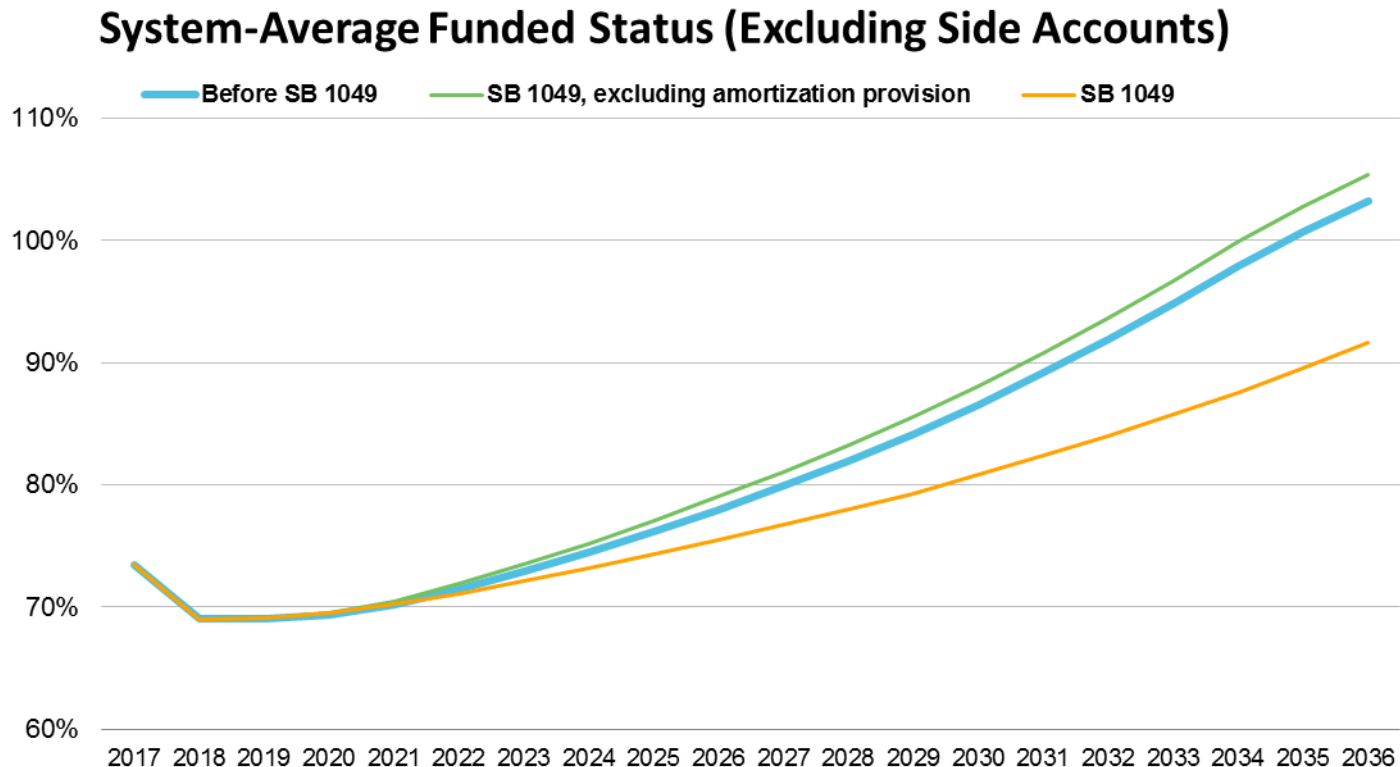
- Assumed rate of 7.2% and actual future returns of +7.20%



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# Financial Modeling - Effect of SB 1049

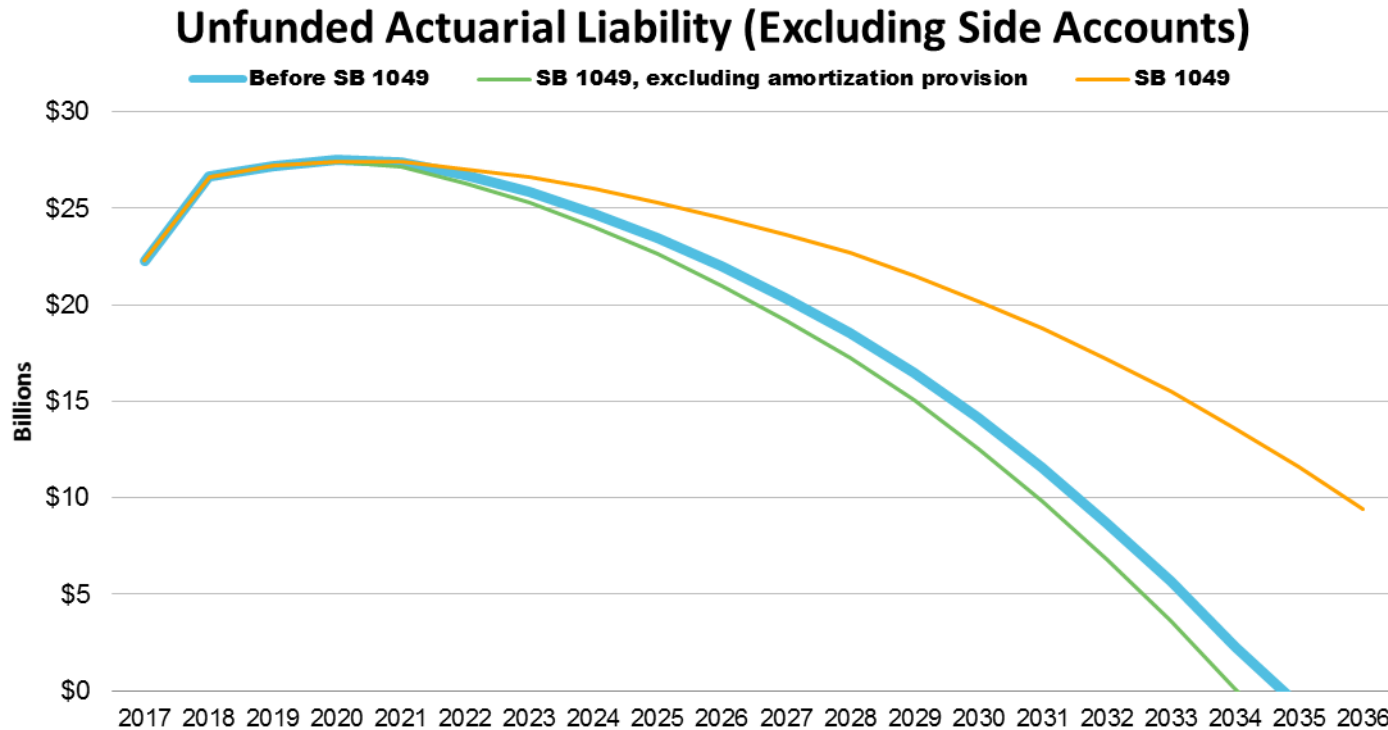
- Assumed rate of 7.2% and actual future returns of +7.20%



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# Financial Modeling - Effect of SB 1049

- Assumed rate of 7.2% and actual future returns of +7.20%

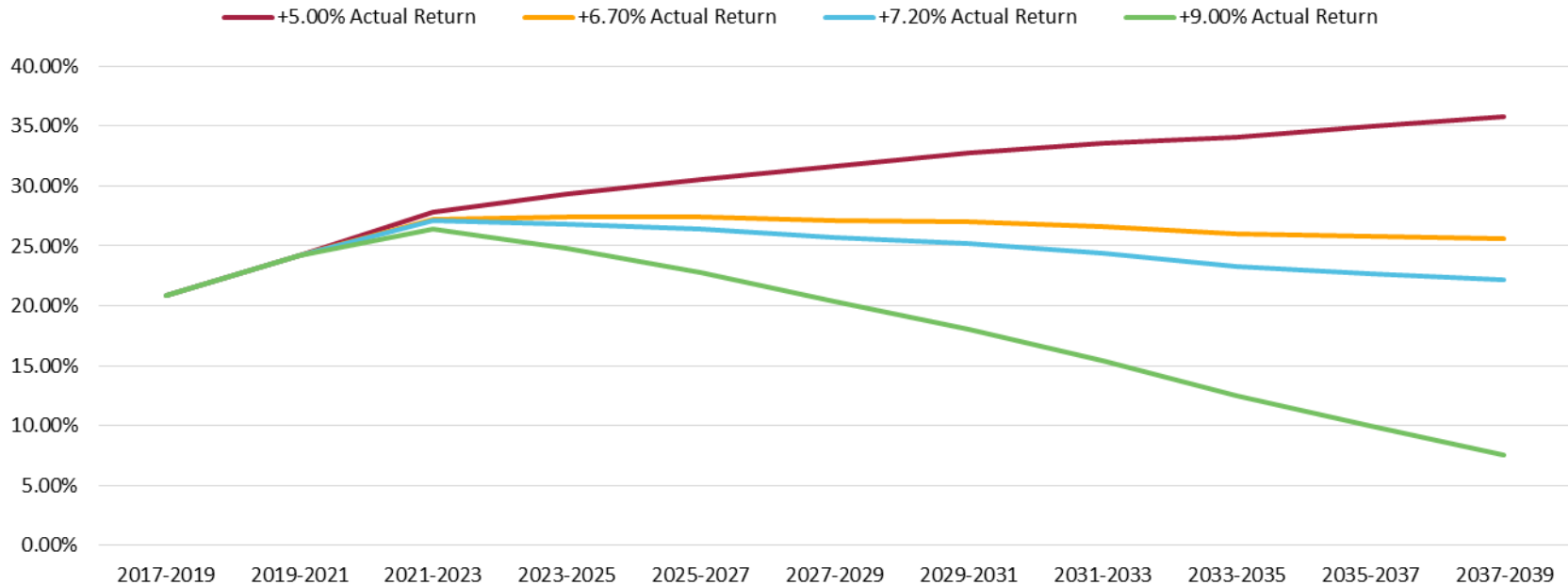


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# Financial Modeling - Effect of SB 1049

- Assumed rate of 7.2% and varying actual steady future returns

**System Average Collared Base Pension Rates**  
Reflecting SB 1049



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# Overview of Demographic Assumptions

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# Demographic Assumptions

- We have statistically analyzed member census data provided by PERS
  - Four years of data analyzed for most demographic assumptions
  - Eight years of data analyzed for individual member salary increase assumptions
- Recommended assumptions were developed based on the statistical analysis
- Full details of the analysis are in our formal experience study report

# Summary of Demographic Assumptions

- Update mortality assumptions: use newly issued base tables specific to public plans
  - Also incorporate most recent data in assumption for projected future mortality improvement
- Adjust likelihood of retirement assumption at some ages where recent experience differed from current assumption
- Increase merit portion of individual member salary assumption for two of three groups
- Adjust pre-retirement termination assumptions for two groups
- Adjust disability incidence assumptions
- Updates to assumed final average salary adjustments for factors such as unused vacation and sick leave for most groups for members eligible under those provisions
- Updates to assumed lump sum and service purchase election rates
- Adjustments to post-retirement medical program assumptions
  - Participation levels (RHIA & RHIPA)
  - Healthcare inflation assumption for RHIPA program

# Mortality Assumption

- For each group, the mortality assumption consists of two parts:
  - 1) A **base table** – for a given age, lists a probability of death at that age
  - 2) A **projection scale** – modifies base table entries to reflect anticipated continued mortality improvement over time
    - Reflects common-sense understanding that a new retiree today has a longer life expectancy than a new retiree 25 years ago...and that a new retiree 25 years from now is reasonably anticipated to have a longer life expectancy than a new retiree today
- We are recommending base table and projection scale updates:
  - Combined effect was decrease in liability of less than \$150 million
- New recommended “Pub-2010” base tables reflect the Society of Actuaries (SOA) Public Plans Mortality Study published in January 2019

# Mortality Assumption

- ORS 238.607: adopted actuarial equivalency factors *must use the best actuarial information on mortality available at the time*
  - We separately reviewed police and fire mortality per ORS 238.608
- We matched PERS experience to the SOA's Public Plans ("Pub-2010") base tables
  - PERS was one of the systems that contributed data to the study; in general new tables fit experience well
  - Calibrated to PERS experience as needed with "set-backs" or other adjustments to standard table
- For mortality improvement projection scale, maintained approach adopted in prior experience study of using a projection scale based on 60-year average annual improvement from Social Security mortality experience
  - Updated to reflect most recent information available at the time (through 2015)
- Recommended assumptions produce results similar to prior assumptions

Technical details on our recommendation and more information on the mortality assumption are in our formal Experience Study report

# Mortality Assumption

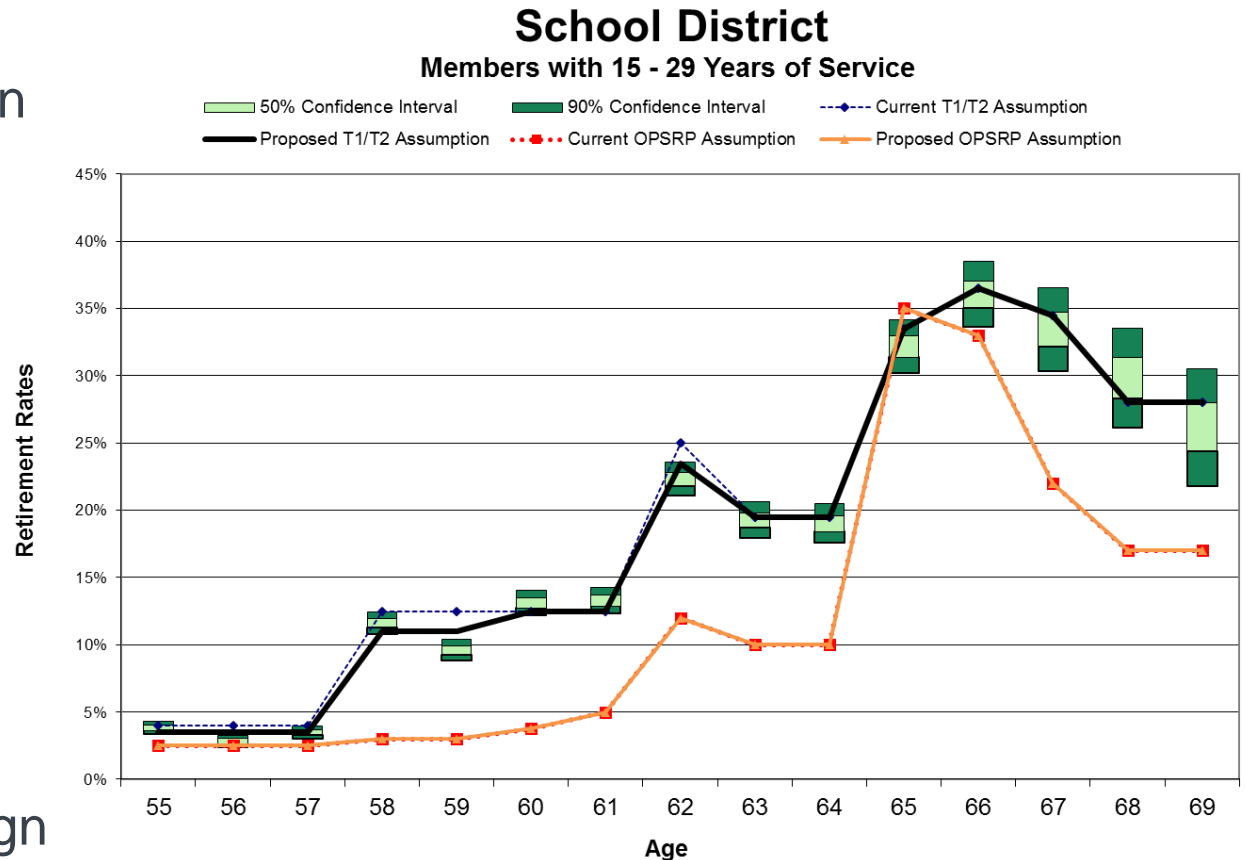
- Illustrative effect of assumption changes for non-disabled retiree:

Future Life Expectancy (in years)	Retires at Age 60 in 2019			Retires at Age 60 in 2039		
	Current	New	Change	Current	New	Change
School District Male	28.3	27.8	-0.5	29.6	29.0	-0.5
General Service Male	26.9	26.9	0.0	28.4	28.4	0.0
Police & Fire Male	26.9	25.7	-1.2	28.4	27.1	-1.3
School District Female	29.9	29.9	0.0	31.2	31.1	-0.1
General Service Female	28.1	28.6	0.5	29.5	29.9	0.4
Police & Fire Female	28.1	28.6	0.5	29.5	29.9	0.4

- The table above has three assumed preconditions, all of which serve to increase the life expectancy:
  - The individual is assumed to have already survived to age 60
  - The individual is assumed to have served in PERS-covered employment
  - The individual is assumed to not be disabled as of age 60

# Rate of Retirement Assumption

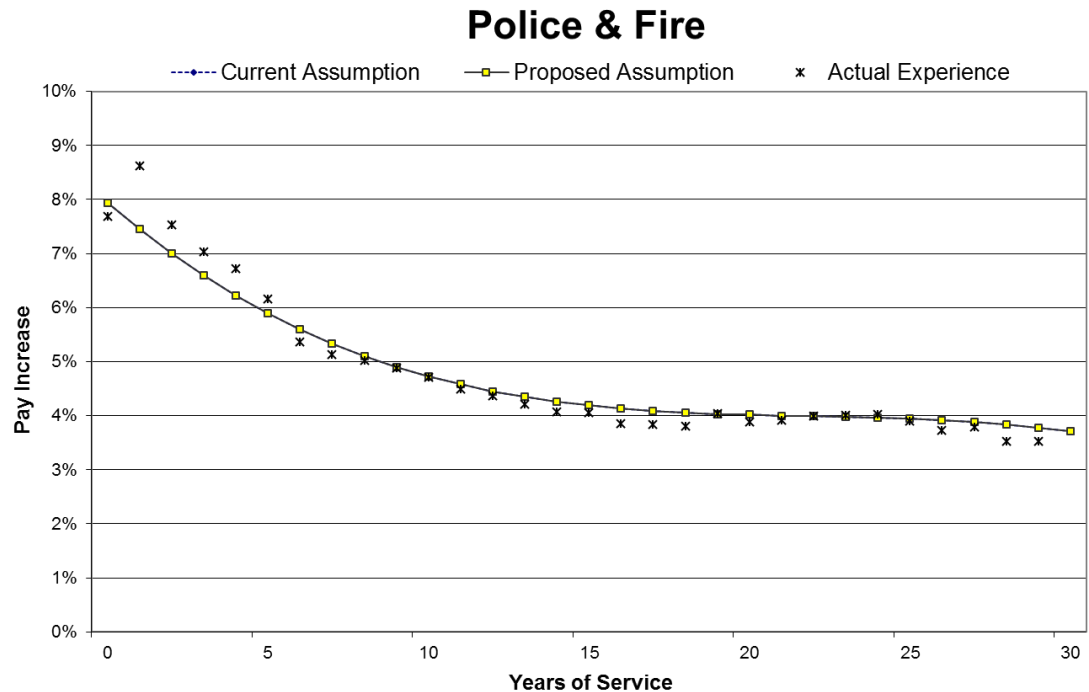
- The likelihood that an eligible member retires in a given year
- Structure:
  - School District
  - Other General Service
  - Police & Fire
  - Divided into 3 service bands
  - Tier 1/Tier 2 vs. OPSRP
- Modifications made to assumptions at certain ages to more closely align with recent experience
  - Typically, lowering assumptions at some earlier retirement ages



Example shown above. Recommendations for other groups shown in detailed Experience Study report.

# Individual Member Salary Increase Assumption

- Reflects combined effects of merit/longevity, general wage growth and inflation assumptions
  - Analyzed eight years of individual pay increases, then back out assumed inflation and general wage growth to isolate the merit/longevity component
- Structure:
  - School District
  - Other General Service
  - Police & Fire
- Police & Fire matched current assumption well

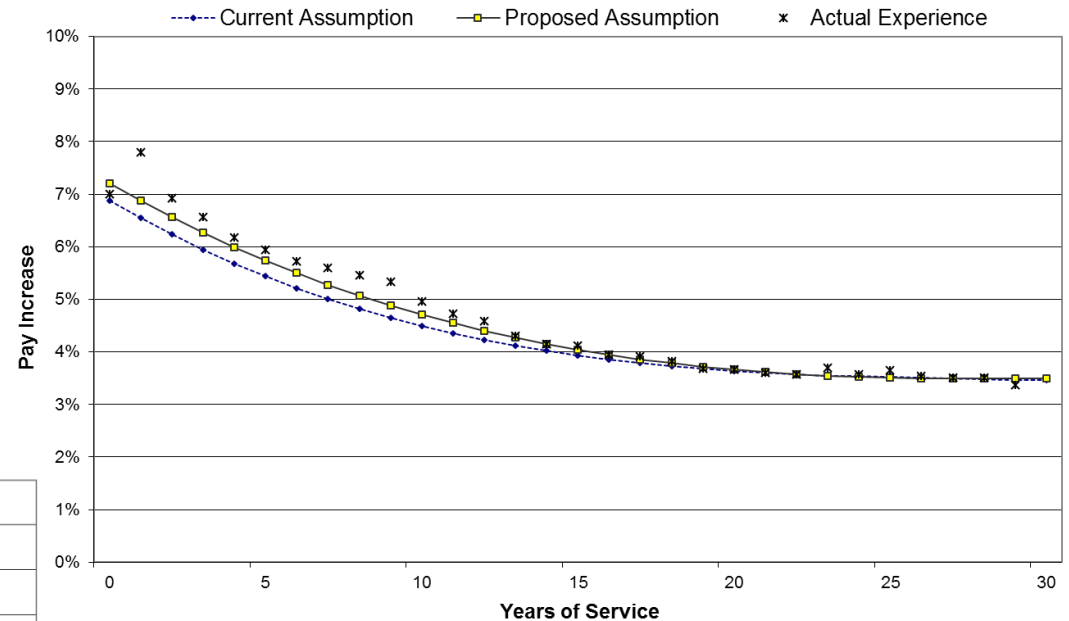


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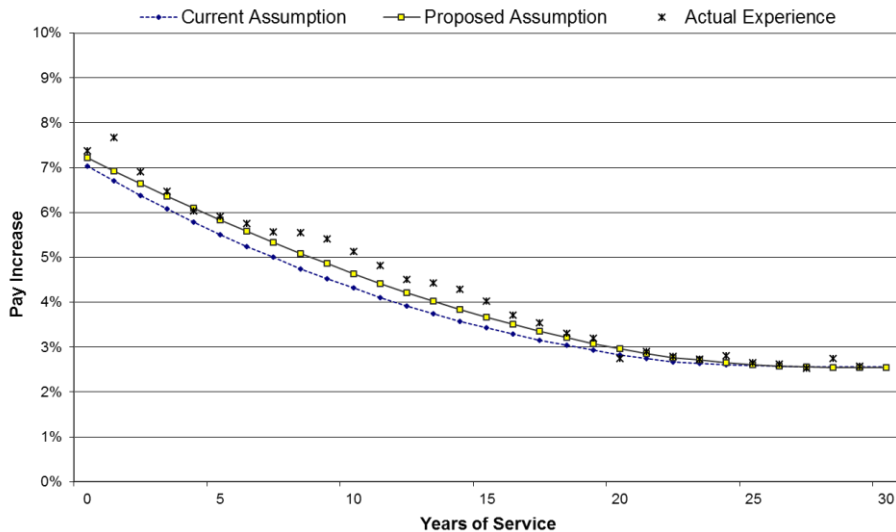
# Individual Member Salary Increase Assumption

## Other General Service

- School District and Other General Service had higher increases than assumed



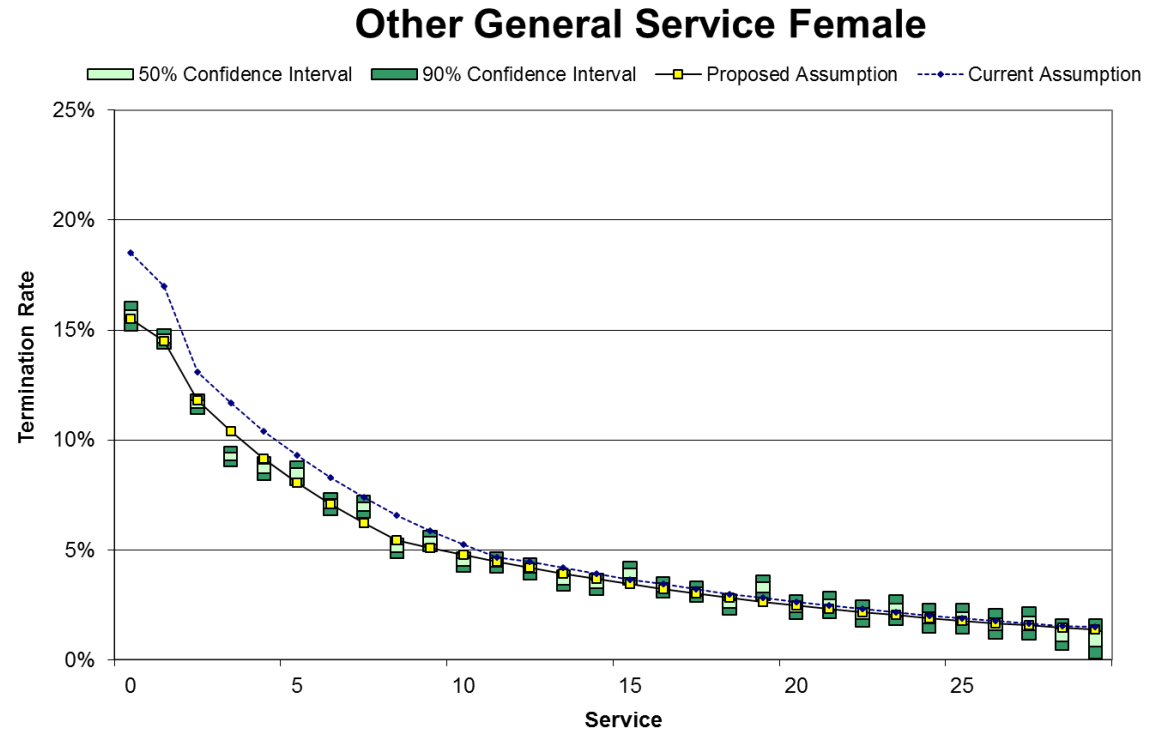
## School Districts



- Assumptions updated reflecting a blend of current assumption and recent observed experience

# Pre-Retirement Employment Termination Assumption

- The likelihood that a member leaves employment in a given year prior to retirement eligibility for reasons other than death or disability
- We recommend adjustments to the assumption for two of five groups for relatively minor, but statistically significant, differences between the current assumption and observed experience



Example shown above. Recommendations for other groups shown in detailed Experience Study report.

# Final Average Salary Adjustments

- In the valuation, we apply assumptions regarding the increase in final average salary for Tier 1/Tier 2 members attributable to:
  - Unused sick leave
  - Lump sum distribution of vacation pay (only affects Tier 1)
- Only relevant when benefits are calculated using Full Formula or Formula Plus Annuity
- We recommend some adjustments to more closely track recent experience:

Unused Sick Leave	Current Assumption	Proposed Assumption	Tier 1 Vacation Cash Out	Current Assumption	Proposed Assumption
State GS Male	6.25%	<b>7.00%</b>	State GS	2.00%	<b>2.25%</b>
State GS Female	3.75%	3.75%	School District	0.25%	0.25%
School District Male	7.50%	<b>7.75%</b>	Local GS	2.75%	<b>3.25%</b>
School District Female	5.75%	5.75%	State Police & Fire	2.50%	<b>2.75%</b>
Local GS Male	4.75%	<b>5.25%</b>	Local Police & Fire	3.75%	<b>4.25%</b>
Local GS Female	3.25%	<b>3.50%</b>			
State Police & Fire	4.75%	<b>4.00%</b>			
Local Police & Fire	7.25%	7.25%			
Inactive Members	3.25%	3.25%			

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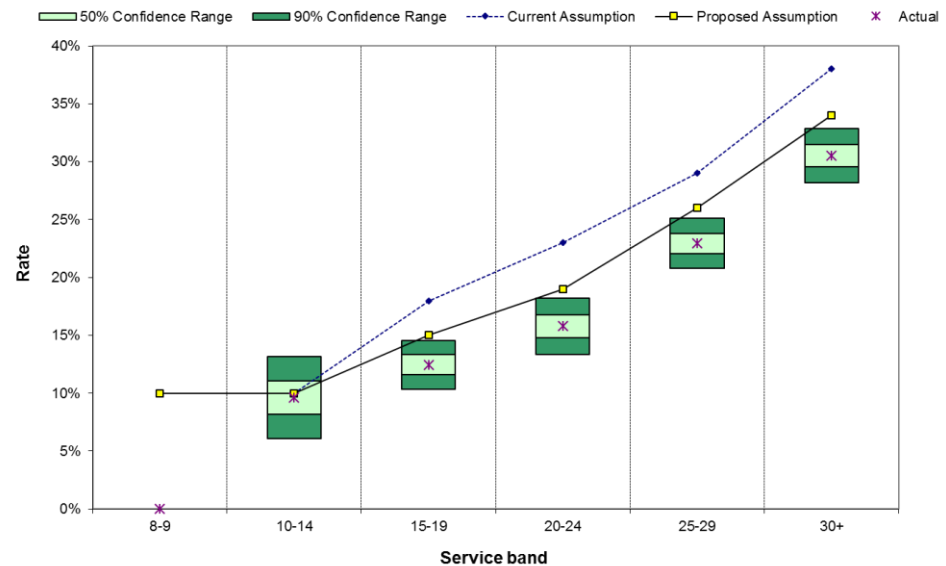
# RHIA and RHIPA Assumptions

- Updates to retiree healthcare participation:
  - Healthy RHIA: Lower participation rates
  - Disabled RHIA: No change
  - RHIPA: Lower rates in most categories
- Health care cost trend assumption applied to RHIPA full subsidy amount was also updated
  - Based on analysis by Milliman health actuaries

**RHIA  
Participation Rates**



**RHIPA  
Participation Rates**



# Estimated Effect of Assumption Changes

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## Preliminary Effect of Changes – Liability

- Estimated effect on combined Tier 1, Tier 2, and OPSRP liabilities based on preliminary valuation work
  - Illustrated for three different investment return assumptions

12/31/2018 Accrued Liability	Assumed Return 7.2%	Assumed Return 7.1%	Assumed Return 7.0%
Current assumptions*	\$86.6 B		
Mortality	(\$0.1 B)		
Merit	\$0.0 B		
Other demographic assumptions	<u>\$0.1 B</u>		
Revised assumptions (before assumed return)	\$86.6 B	\$86.6 B	\$86.6 B
Assumed return	<u>\$0.0 B</u>	<u>\$0.9 B</u>	<u>\$1.8 B</u>
Revised assumptions	\$86.6 B	\$87.5 B	\$88.4 B

\*Includes reduction of less than \$0.1 billion for SB 1049

# Preliminary Effect of Changes – Uncollared Rates

- Estimated impact on uncollared system-average advisory pension rates for 2021-2023 based on preliminary valuation work

	Assumed Return 7.2%		Assumed Return 7.1%		Assumed Return 7.0%	
	UAL	Normal Cost	UAL	Normal Cost	UAL	Normal Cost
Mortality	(0.1%)	0.0%	(0.1%)	0.0%	(0.1%)	0.0%
Merit	0.0%	0.2%	0.0%	0.2%	0.0%	0.2%
Other demographic assumptions	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Assumed return	<u>0.0%</u>	<u>0.0%</u>	<u>0.4%</u>	<u>0.3%</u>	<u>0.8%</u>	<u>0.6%</u>
<b>Total</b>	<b>0.0%</b>	<b>0.3%</b>	<b>0.4%</b>	<b>0.6%</b>	<b>0.8%</b>	<b>0.9%</b>
<b>Combined Total</b>	<b>0.3%</b>		<b>1.0%</b>		<b>1.7%</b>	

Changes shown are stated as a percent of payroll and exclude changes for the RHIA & RHIPA retiree healthcare programs

# Agenda Items – Remaining 2019 Meetings

- Needed action before completion of actuarial valuations:
  - Adoption of assumptions and methods for use in the following valuations:
    - December 31, 2018 “advisory” valuation that estimates 2021-2023 rates
    - December 31, 2019 valuation that calculates recommended 2021-2023 rates
- October meeting:
  - Presentation of system-level December 31, 2018 actuarial valuation results
  - Adoption of actuarial equivalency factors effective January 1, 2020
- December meeting:
  - Acceptance of the December 31, 2018 actuarial valuation report and employer-specific advisory 2021-2023 contribution rates
  - Financial modeling over the next twenty years under a variety of possible future scenarios for actual investment return



# 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 April 2019 and May 2019 presentations to the PERS Board, and the full Experience Study report should be referenced for additional detail on the assumptions, methods, and plan provisions underlying this presentation.

This presentation also summarizes a limited number of high-level preliminary results based on information provided for the December 31, 2018 actuarial valuation. These results are preliminary in nature, are shown here only for illustrating the effect of assumption changes, and should not be relied upon for other purposes. Final results will be published in the December 31, 2018 Actuarial Valuation Report to be published later this year, which will also document the member census data underlying the results.

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.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan’s funded status); and changes in plan provisions or applicable law. While we have illustrated scenarios with differing future investment future returns to illustrate the System’s sensitivity to investment risk, due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. Our annual financially modeling presentation to the PERS Board should be referenced for additional analysis of the potential variation in future measurements. Our forthcoming December 31, 2018 Actuarial Valuation Report will provide additional discussion of the System’s risks. The PERS Board has the final decision regarding the appropriateness of the assumptions.

# Certification

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

## Data

Except where noted, our analysis of demographic assumptions was based on data for the experience period from January 1, 2015 to December 31, 2018 as provided by the Oregon Public Employees Retirement System (PERS). PERS is solely responsible for the validity, accuracy and comprehensiveness of this information; the results of our analysis can be expected to differ and may need to be revised if the underlying data supplied is incomplete or inaccurate.

Member data was summarized according to the actual and potential member decrements during each year. Actual and potential decrements were grouped according to category of employment, sex, age, and/or service depending on the demographic assumption.

Where possible, we attempted to identify decrements that were spread across two calendar years (for example, if a member retired in one year, but didn't commence benefits until January 1 of the following year) so that we could reflect these decrements as individual events.

In order to capture experience across a broader range of budget, collective bargaining, and economic cycles, our analysis of salary increases covered observed salary experience from 2010 through 2018 as provided by PERS.

Our analysis focused on observed salary levels during consecutive calendar years for members who remained in active employment across both years, so that the observed change in salary would not be influenced by the reduced number of months worked during a year in which the member decrements. Similarly, we focused on experience above the 5<sup>th</sup> percentile and below the 95<sup>th</sup> percentile of observed salary increases in order to avoid the potential distorting effect of including extreme salary changes that likely resulted from unusual events.

# 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.

	Annual Arithmetic Mean	20-Year Annualized Geometric Mean	Annual Standard Deviation	Policy Allocation
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.

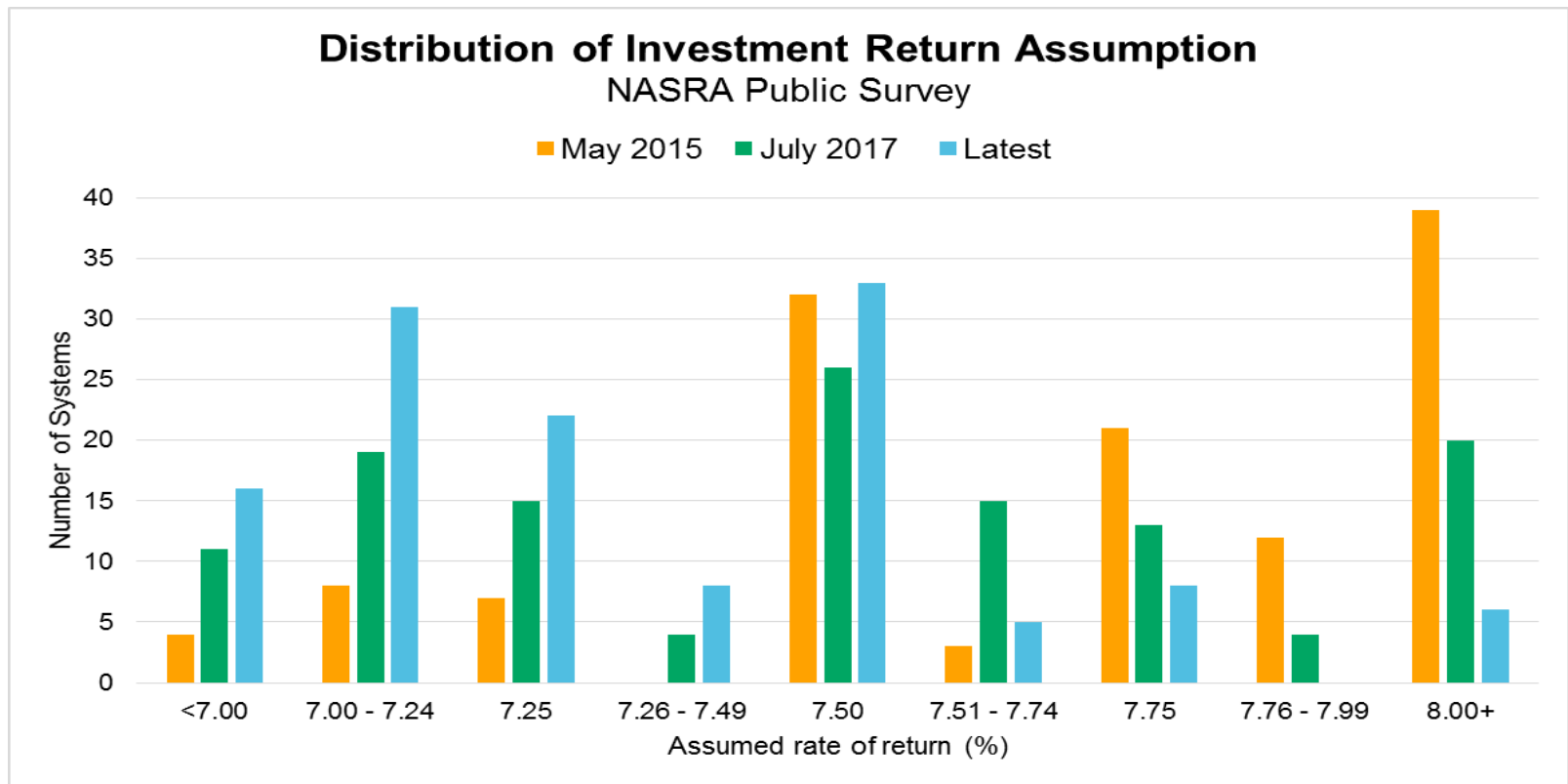
	<b>10-Year Annualized Geometric Mean</b>	<b>Annual Standard Deviation</b>	<b>Policy Allocation</b>
US Equity – Large Cap	6.07%	16.39%	<b>16.17%</b>
US Equity – Small/Mid Cap	6.57%	20.20%	<b>5.20%</b>
Non-US Equity – Developed	6.71%	18.67%	<b>15.40%</b>
Non-US Equity – Emerging	7.64%	24.89%	<b>4.24%</b>
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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# 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



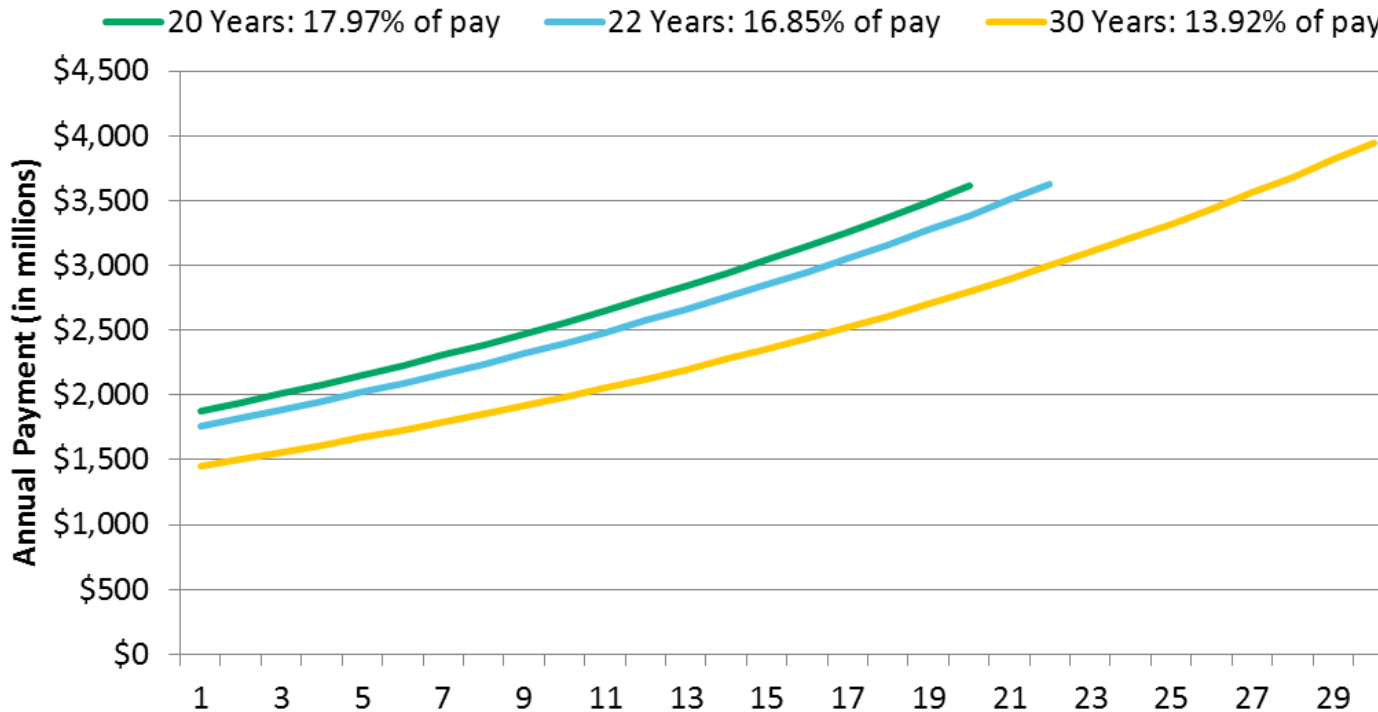
Source: **NASRA (April, 2019)**

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# Illustration of UAL Amortization Periods

## Annual UAL Payments by Selected Amortization Period

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



### Current policy

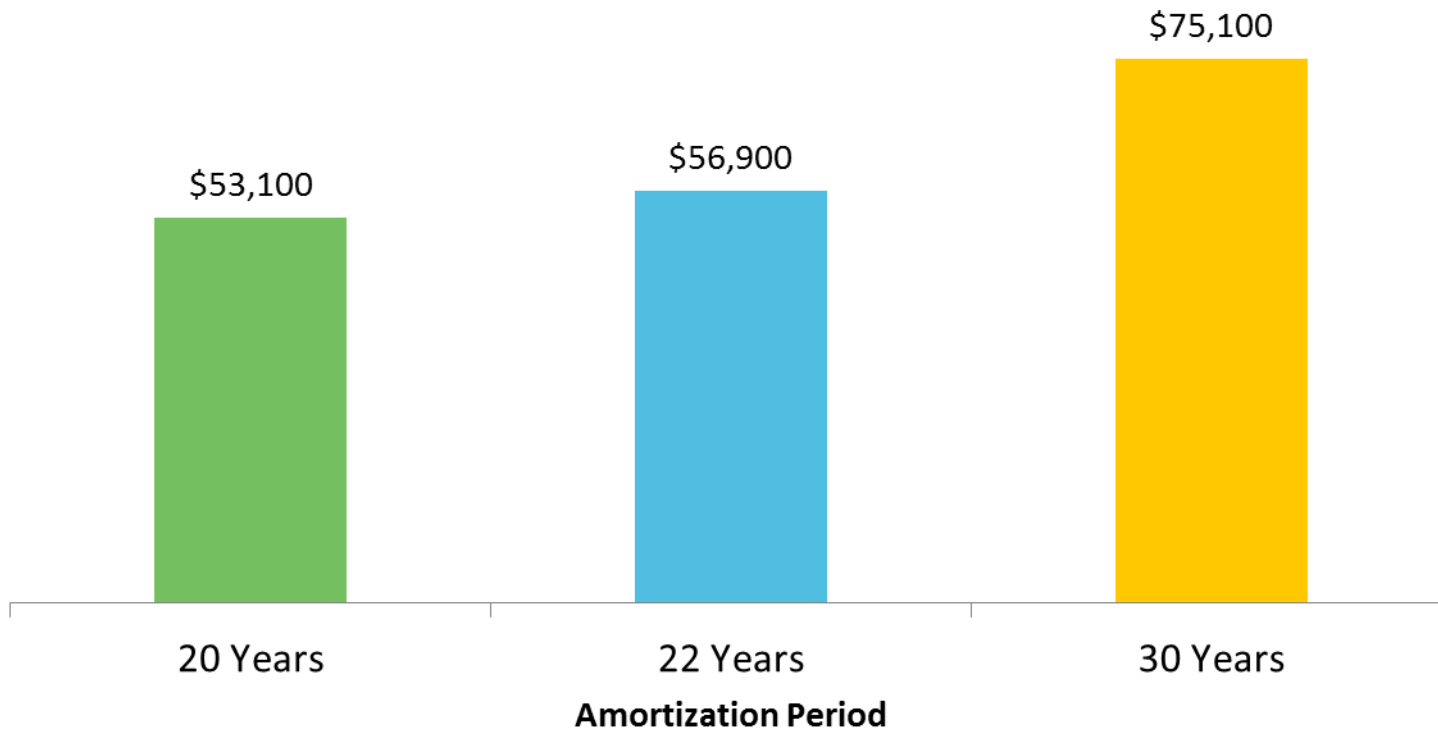
- Tier 1 / Tier 2:  
**20 years**
- OPSRP:  
**16 years**

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# Illustration of UAL Amortization Periods

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

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



## Current policy

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

# Effects of Lowering the Assumed Return

- Lowering the assumption to 7.10% or 7.00% would affect the Money Match calculation for a member age 59½ with a \$135,000 member account balance as of 6/30/2019 as shown:

Benefit Commencement	Starting Benefit Under Assumed Rate*		
	7.20%	7.10%	7.00%
7/1/2019	\$1,909		
12/1/2019	\$1,973		
1/1/2020		\$1,971	\$1,951
2/1/2020		\$1,985	\$1,965
3/1/2020		\$1,999	\$1,979

\* Illustration uses 2018 actuarial equivalency mortality in calculation of all benefits

- At a 7.00% assumption, it would take about three months without retirement for the December 2019 initial benefit level to be reached
  - At a 7.10% assumed return, it would take about one month
  - Illustration ignores Full Formula “floor”, which may mitigate any benefit decrease

# Mortality Assumption

	Current Assumption	Proposed Changes
<b>Healthy Retired</b>	RP 2014 Generational, with unisex Social Security scale (1953-2013 experience) Healthy Annuitant, Sex distinct	Pub-2010 Generational, with unisex Social Security scale (1955-2015 experience) Healthy Retiree, Sex distinct
<ul style="list-style-type: none"> <li>School district male</li> <li>Other GS male</li> <li>P&amp;F male</li> </ul>	White collar, set back 1 year 50% blue/50% white collar, set back 1 year 50% blue/50% white collar, set back 1 year	Teachers, no set back General Employees, set back 1 year Public Safety, no set back
<ul style="list-style-type: none"> <li>School district female</li> <li>Other GS female</li> <li>P&amp;F female</li> </ul>	White collar, set back 1 year 50% blue/50% white collar, no set back 50% blue/50% white collar, no set back	Teachers, no set back General Employees, no set back Public Safety, set back 1 year
<b>Disabled Retired</b>	RP 2014 Disabled, Generational with unisex Social Security scale (1953-2013) Sex distinct	Pub-2010 Disabled, Generational with unisex Social Security scale (1955-2015) Sex distinct
<ul style="list-style-type: none"> <li>P&amp;F male</li> <li>Other male</li> <li>P&amp;F female</li> <li>Other female</li> </ul>	Disabled Retiree, no set back Disabled Retiree, no set back Disabled Retiree, no set back Disabled Retiree, no set back	50% Public Safety/50% Non-Safety, no set back Non-Safety, set forward 2 years 50% Public Safety/50% Non-Safety, no set back Non-Safety, set forward 1 year
<b>Non-Retired Mortality</b>	RP 2014 Generational, with unisex Social Security scale (1953-2013) Employee (Non-Annuitant), Sex distinct	Pub-2010 Generational, with unisex Social Security scale (1955-2015) Employee (Non-Annuitant), Sex distinct
<ul style="list-style-type: none"> <li>School district male</li> <li>Other GS male</li> <li>P&amp;F male</li> </ul>	White collar, set back 1 year 50% blue/50% white collar, set back 1 year 50% blue/50% white collar, set back 1 year	Teachers, no set back, scaled 120% General Employees, set back 1 year, scaled 115% Public Safety, no set back, not scaled
<ul style="list-style-type: none"> <li>School district female</li> <li>Other female</li> </ul>	White collar, set back 1 year 50% blue/50% white collar, no set back 50% blue/50% white collar, no set back	Teachers, no set back, not scaled General Employees, no set back, scaled 125% Public Safety, set back 1 year, not scaled



# Oregon

Kate Brown, Governor

## Public Employees Retirement System

Headquarters:  
11410 S.W. 68<sup>th</sup> Parkway, Tigard, OR  
Mailing Address:  
P.O. Box 23700  
Tigard, OR 97281-3700  
888-320-7377  
TTY (503) 603-7766  
[www.oregon.gov/pers](http://www.oregon.gov/pers)

July 26, 2019

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

### OVERVIEW

- Action: Adopt modifications to the Assumed Rate rule.
- Reason: Specify the effective date to implement an assumed rate change for PERS transactions.
- Policy Issue: None identified.

### 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; therefore, staff is presenting the administrative rule change for approval after the board decides upon the rate. These rule modifications include a blank space to show the assumed rate, and the exact percentage will be added upon adoption by the board.

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.

Under Section 57 of Senate Bill 1049 (2019), the board must submit a report to the Joint Committee on Ways and Means or the Joint Interim Committee on Ways and Means detailing the proposed changes to PERS' actuarial methods and assumptions and the associated, actuarially determined impact to the total liability of the system, the accrued liability of the system, and employer contribution rates. Note that an adopted rule is not effective until it is filed with the Secretary of State. While staff is seeking adoption of the rule with the new assumed rate today, staff will not file the adopted rule until 30 days after the report required by SB 1049 (2019) is submitted to the legislature.

### PUBLIC COMMENT AND HEARING TESTIMONY

A rulemaking hearing was held June 25, 2019, at 2:00 p.m. at PERS headquarters in Tigard. No members of the public attended. The public comment period ended July 2, 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:** 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 held at 2:00 p.m. at PERS in Tigard.
July 2, 2019	Public comment period ended at 5:00 p.m.
July 26, 2019	Board may adopt the rule modifications.

### BOARD OPTIONS

The board may:

1. Pass a motion to “adopt modifications to the Assumed Rate rule, including the assumed rate percentage approved at today’s board meeting.”
2. Direct staff to make other changes to the rule or explore other options.

### STAFF RECOMMENDATION

Staff recommends the board choose Option #1.

- Reason: Reflect the change in the assumed rate as adopted by the board and specify the effective date for implementation of the rate for PERS transactions.

Adoption – Assumed Rate Rule

07/26/19

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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.

C.3. 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