



OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

BOARD MEETING AGENDA

Friday July 22, 2022 9:00 A.M.		PERS 11410 SW 68 th Parkway Tigard, OR
ITEM		PRESENTER
A. Administration		
1.	May 27, 2022 Board Meeting Minutes	SHENOY
2.	Director's Report	OLINECK
	a. Forward-Looking Calendar	
	b. OPERF Investment Report	
	c. Budget Execution Report	
3.	CEM Benchmarking Results	REID
B. Administrative Rulemaking		
1.	Notice of IAP Optional Employer Account Contributions Rule	VAUGHN
2.	Adoption of Delegation of Signing Authority Rule	
C. Action and Discussion Items		
1.	SB 1049 Implementation Update	ELLEDGE-RHODES
2.	Equal to or Better Than Testing Recommendations	WINSHIP, RIORDON
3.	2023-2025 Agency Budget Recommendation	HORSFORD, GABRIEL
4.	Presentation of December 31, 2021 System Valuation Results	MILLIMAN

The PERS Board members, meeting presenters and the public have the option to attend this meeting in person or remotely. Visit <https://www.oregon.gov/pers/Pages/Board/PERS-Board-Information.aspx> for options. This meeting will be recorded. An audio recording of the meeting will be available on the PERS website following the meeting.

*Public testimony will be taken on action items at the Chair's discretion.
Please submit written testimony to PERS.Board@state.or.us (three days in advance of the meeting is preferred.)*

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

2022 Meetings: September 30, December 2*
2023 Meetings: February 3, April 3*, June 2, July 28*, September 29, December 1*
 *Audit Committee planned for post-Board meeting

Administration

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2. Director's Report
 - a. Forward-Looking Calendar
 - b. OPERF Investment Report
 - c. Budget Execution Report
3. CEM Benchmarking Results

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM BOARD MEETING MINUTES

May 27, 2022

Board members present:

Vice Chair Lawrence Furnstahl, Jardon Jaramillo, Stephen Buckley, and John Scanlan attended in person in the PERS Boardroom.

Chair Sadhana Shenoy attended virtually.

Staff present:

Alex Gaub, Heather Case, Jake Winship, Jason Stanley, Katie Brogan, Sam Paris, and Yvette Elledge-Rhodes attended in person in the PERS Boardroom.

Abigail Churchill, Ann Gabourel, Anne Marie Vu, Carla Shaw, Chris Geier, Colin Campi, Daniel Rivas, Debby Larsen, Elizabeth Rossman, Janice Richards, Jeffrey Cunningham, Jordan Masanga, Laurie Kosche, Kevin Olineck, Mario Graham-Tutt, MaryMichelle Sosne, Matt Rickard, Karen Chavez, Greg Gabriel, Matthew Graves, Megan Mumey, Melanie Chandler, Michael Duren, Neil Jones, Phuongnam Tran, Richard Horsford, Rosanne Lurie, Sean Laurie, Shawn Harper, Stephanie Vaughn, Steven Cardinale, Susan Moen, Susannah Bodman, Tammy Nguyen, and Tiffani Cairo attended virtually.

Others present:

Matt Larrabee, Scott Preppernau, and Del Stevens attended in person in the PERS Boardroom.

Alberto Lugo, Andrea Bradbury, Aruna Masih, Carol Samuels, David Barry, David Moore, Deborah Tremblay, Erica Hedberg, Eugene Bentley, Gabby Hansen, Gary Smith, Gay Lynn Bath, Jacqueline King, Jeff Gudman, Jen Stahel, Jennifer Jones, Jessica Kuhlman, Joe Ebisa, John Borden, Joseph Seymour, Kali Leinenbach, Kimberly Mandel, Kristi Jenkins, Michelle Lisper, Michelle Taylor, Nancy Brewer, Nate Carter, Noel Cruse, Patrick Weisgerber, Phyllis Kirkwood, Rachel Tillman, Randall Miller, Rex Kim, Richard Ward, Robert Burket, Robin Richardson, Sam Hutchison, Shannon Haas, Shelly Taylor-Mitchell, Sherrie Osborn, Stephanie Messier, Tahni Fagerberg, Tina Dixon, Tom Crawford, and Wenzel Cummings attended virtually.

Chair Shenoy called the meeting to order at 9:01 a.m.

ADMINISTRATION

A.1. MEETING MINUTES OF MARCH 28, 2022

Vice Chair Furnstahl moved to approve the minutes as presented from the March 28, 2022, PERS Board meeting. Board Member Buckley seconded the approval of the minutes. The motion passed unanimously.

A.2. DIRECTOR'S REPORT

Director Kevin Olineck presented the Director's Report and the forward-looking calendar. He noted that the agency has reopened to the public. The forward-looking calendar has 2023 PERS Board meeting dates listed for hybrid meetings.

The Oregon Public Employees Retirement Fund (OPERF) returns, for the period ending April 30, 2022, were -0.37%.

Operating expenditures for March, April, and preliminary expenditures for May are \$4,806,107, \$4,338,370, and \$6,301,974, respectively.

Through May 8, 2022, the agency has expended a total of \$48,505,830 or 38.3% of PERS' legislatively approved operations budget of \$126,596,362. At this time, the agency's projected variance is \$5,010,715.

Olineck reviewed the meeting agenda.

A.3. REVIEW BOARD EDUCATION POLICY, TRAINING, AND BOARD SMART PRESENTATION

Olineck presented the Annual Report of Board Member Training Activities. At the May 2020 board meeting, the board adopted the Board Education Policy. The Policy proposes that each board member be subject to a \$5,000 per annum education limit. The Policy states the director will prepare a yearly report on the training activities of the PERS Board members. This report satisfies the requirement. No board action was required.

Randall Miller and Rachel Tillman of Board Smart presented. Board Smart is an online education tool which can be utilized by PERS Board members to provide consistency in board education. No board action was required.

A.4. BOARD SCORECARD REPORT ON AGENCY PERFORMANCE MEASURES

Matt Rickard 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 2022. Rickard noted that the council is beginning the effort of reviewing and updating measures to reflect updated processes and rule changes. The next Board Scorecard will be presented at the December meeting.

No board action was required.

A.5. OREGON SAVINGS GROWTH PLAN (OSGP) ADVISORY COMMITTEE APPOINTMENTS

Debby Larsen, Deferred Compensation Program Manager, presented. She is requesting the appointment of one new member to the OSGP Advisory Committee to fill an expiring vacancy and reappointment of six existing members.

Board Member Buckley moved to reappoint Colin Benson, Eugene Bentley, and Christine Valentine to their second terms and, Kyle Niemeyer, Jeff Gibbs, and Zechariah Heck to their first full term after completing their partial terms; all with effective dates of July 1, 2022 and term expiration dates of June 30, 2025. Board Member Scanlan seconded. The motion passed unanimously.

ADMINISTRATIVE RULEMAKING

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

B.1. NOTICE OF DELEGATION OF SIGNING AUTHORITY RULE

Vaughn presented notice of Rulemaking for Delegation of Signing Authority Rule: OAR 459-001-0035, Contested Case Hearing.

A rulemaking hearing will be held remotely on June 22, 2022, at 2:00 p.m. The public comment period ends June 28, 2022, at 5:00 p.m. No board action was required.

B.2. ADOPTION OF DEATH AND SURVIVOR BENEFITS RULE

Vaughn presented Adoption of Death and Survivor Benefits Rule: OAR 459-014-0050, Designation of Beneficiary at Retirement and Survivor Benefits.

A rulemaking hearing was held remotely on April 26, 2022, at 2:00 p.m. No members of the public attended. The public comment period ended May 2, 2022, at 5:00 p.m. No public comment was received.

Board Member Jaramillo moved to adopt the Death and Survivor Benefits rule, as presented. Vice Chair Furnstahl seconded. The motion passed unanimously.

B.3. ADOPTION OF EMPLOYER INCENTIVE FUND PROGRAM RULE

Vaughn presented adoption of Employer Incentive Fund Program Rule: OAR 459-009-0092, Employer Incentive Fund Program.

A rulemaking hearing was held remotely on April 26, 2022, at 2:00 p.m. No members of the public attended. The public comment period ended May 2, 2022, at 5:00 p.m. No public comment was received. No board action was required.

Board Member Buckley moved to adopt the Employer Incentive Fund Program rule, as presented. Board Member Jaramillo seconded. The motion passed unanimously.

B.4. ADOPTION OF RULES TO IMPLEMENT SB 112

Vaughn presented adoption of Rules to Implement Senate Bill 112 (2021): OAR 459-005-0020, Determination of Employee or Non-Employee Status, OAR 459-010-0030, Determination of Employee Status (repeal), OAR 459-010-0032, Determination of Independent Contractor Status (repeal).

Board Member Buckley moved to adopt the rules to implement Senate Bill 112, as presented. Vice Chair Furnstahl seconded. The motion passed unanimously.

ACTION AND DISCUSSION ITEMS

C.1. SB 1049 IMPLEMENTATION UPDATE

Yvette Elledge-Rhodes, Deputy Director, presented.

Elledge-Rhodes reviewed the ongoing activities of the individual projects that make up the Senate Bill (SB) 1049 Implementation Program. She highlighted program activities that have been completed, or are in process, since the last board meeting.

Program health will remain in yellow status as Member Redirect is scheduled past the end of the 2021-2023 biennium. Member Redirect is in green status.

No board action was required.

C.2. EQUAL TO OR BETTER (ETOB) THAN TESTING UPDATE

Jake Winship, Actuarial Manager presented.

Winship provided an update on the actions that have been completed since the last board meeting. The second phase of ETOB will require the use of actuarial assumptions, the most impactful of which is the discount rate used to assess plan liabilities. The final report will be provided to the PERS Board at the July 22 meeting.

After the board materials were prepared, it was decided that no board action is required at this time.

C.3. AUDIT AND RISK COMMITTEE OVERSIGHT

Jason Stanley, Chief Compliance, Audit, and Risk Officer presented.

At the March 28, 2022 Audit Committee meeting, members voted to propose expanding the committee to include Risk in addition to Audit. The expanded committee would have oversight over areas of risk, including Information Security, Business Continuity and Disaster Recovery, and once established, Enterprise Risk Management.

Board Member Jaramillo moved to expand the oversight of the PERS Audit Committee to include other areas of risk. The Committee will now be known as the PERS Audit and Risk Committee. Board Member Buckley seconded. The motion passed unanimously.

C.6. 2023-2025 AGENCY BUDGET DEVELOPMENT UPDATE

Item C.6. was taken out of order. Richard Horsford, Chief Financial Officer presented.

Horsford provided an update on the latest activities in 2023-25 State Agency Budget development process. A preliminary budget package was shared with the PERS Board. Final board approval of the 2023-25 Agency Request Budget will occur during the PERS Board meeting on July 22, 2022.

No board action was required.

C.4. PERS HEALTH INSURANCE PLAN ANNUAL UPDATE

Vice Chair Furnstahl recused himself from participating in the remaining agenda items, given his association with Oregon Health & Science University, and left the meeting 10:20 a.m.

Karen Chavez, PERS Health Insurance Program Manager, presented the PERS Health Insurance Program (PHIP) annual update. Chavez reviewed the mission, core operating principles, resources, consultants, membership, and health plans associated with the program.

No board action was required.

C.5. 2023 RETIREE HEALTH INSURANCE PLAN RENEWALS AND RATES

Karen Chavez, PERS Health Insurance Program Manager, presented.

Karen Chavez, PERS Health Insurance Program (PHIP) Manager, presented the 2023 PHIP Plans and Rates. Board members discussed variables in the rate setting process.

Board Member Scanlan moved to approve the proposed PHIP RFP contract renewals, benefits, and rates for the 2023 Plan Year as presented in Item C.5.Attachment 1: PHIP 2023 Proposed Rates. Board Member Jaramillo seconded. The motion passed unanimously.

Chair Shenoy adjourned the board meeting at 10:55 a.m.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Kevin Olineck", is written over a light gray rectangular background.

Kevin Olineck, Director

Administration

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3. CEM Benchmarking Results

Director's Report

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

Kevin Olineck, Director



Overview

This Director's Report tries to encapsulate, at a high level, noteworthy changes that have taken place since the last board meeting, while also recognizing staff accomplishments.

Ongoing efforts

Legislative Concepts Update At the March board meeting, the board approved three legislative concepts for submission. This approval allowed us to make the formal request to the Department of Administrative Services (DAS) and the Governor's Office to move forward with drafting these bills. We were notified in early June that all three of our legislative concepts were approved to move forward to the drafting stage.

Emergency Board Submission for Modernization

Funding As noted in my May Report, PERS submitted a request for an increase in Other Funds limitation of \$4,490,000 to continue the agency's modernization efforts. This limitation was requested to complete the comprehensive planning and design phase for the PERS Modernization Program without a significant gap in time between the initial planning phase just completed and the beginning of the 2023-2025 biennium. PERS had received an initial limitation of \$800,000 in our 2023-2025 Legislatively Approved Budget, under SB 5536. This new request was an increase to that package, which will fund the program for the remainder of the 2021-23 biennium.

This request was reviewed during the June 1 – 3 legislative days by the Emergency Board and PERS was allocated \$3,797,797.

Highlights

Agency initiatives and accomplishments

I want to continue to highlight where PERS staff have not only made great progress with standard operational processes, but also made significant headway on strategic initiatives. The following are accomplishments that deserve to be highlighted, with staff publicly acknowledged for their efforts.



2022 CX Award Fonolo, the leading provider of cloud-based call-back solutions, has announced the winners of its annual 2022 CX Awards. This year, the company recognized Oregon PERS and EECU (Educational Employees Credit Union) for their commitment to creating exceptional customer experiences. Now in its



sixth year, Fonolo's annual CX Awards celebrate contact centers that demonstrate excellence in customer service and customer experience. The winners were selected based on the amount of hold time they saved their customers over the previous year. Call-back solutions are designed to create a better experience for both the contact center and the caller, and the majority of Fonolo's customers report

improvements in their abandonment rate and customer satisfaction (CSAT) scores after launching its call-back solution. This prestigious award recognizes the agency's commitment to our members and specifically highlights the accomplishments of the Member Information

Center in reducing wait times and fostering a better call experience.

National Association of Government Communicators Blue Pencil and Gold Screen Award The

Communications Section took first place in the digital e-newsletter category from the National Association of Government Communicators' Blue Pencil and Gold Screen awards. This award recognizes the Communications Section and Employer Service Center (ESC) collaboration to identify opportunities for improvement and enact changes in how we communicate with our PERS-participating employers. Using survey data, the Communications Section redesigned not only the look and feel of the employer newsletter, but also the content, tailoring it a more diverse audience. This collaboration resulted in a more robust and engaging monthly newsletter for our employer stakeholders, as well as a significant reduction in call volume for the ESC.



Award Season Continues!

Member Information Center wins Fonolo's 2022 CX Excellence Award

Communications wins an NAGC Blue Pencil & Gold Screen Award

OREGON PERS

75 years of serving those who serve Oregon

Excerpted from our May 2022 LinkedIn announcement.

Director's Report

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

Kevin Olineck, Director



Average age at retirement for applicable 2021 retirees: 62 years old

Average years of service at retirement for applicable 2021 retirees: 26 years of service

Average monthly retirement benefit

- For all retirees from 1990 – 2021, the average monthly retirement benefit at time of retirement was \$2,486 per month, or about \$29,827 annually.
- For those retirees in the most recent year (2021), the average monthly retirement benefit was \$3,358 per month, or about \$40,297 annually.

Average public employee salaries at retirement

- For all retirees from 1990 – 2021, the final average salary at retirement was \$57,269 annually.
- For 2021 retirees, the final average salary at retirement was \$90,191 annually.

Average salary replacement ratio

- For all retirees from 1990 – 2021, the average annual retirement benefit equaled 52% of final average salary at the time of retirement.
- For 2021 retirees, the average annual retirement benefit equaled 44% of final average salary.
- For all retirees from 1990 – 2021, there were 5.7% who received annual benefits more than 100% of final average salary. The average of years of service for this group was 31 years.
- For 2021 retirees, 1.0% received annual benefits more than 100% of final average salary. The average of years of service for this group was 38 years.

For members who retired with 30 years of service

- From 1990 – 2021, the average retirement benefit for 30-year members equaled 75% of final average salary and the average monthly benefit was \$3,740 per month.
- The average replacement ratio for 30-year members peaked at 100% of final average salary in 2000 and their average monthly benefit was \$4,200 per month.
- For 2021 only, the average retirement benefit for 30-year members equaled 49% of final average salary and the average monthly benefit was \$4,002 per month.
- 10.2% of retirees from 1990 – 2021 had 30 years of service.
- 9.7% of retirees in 2021 had 30 years of service.

2022 Income Replacement Ratio Study

Annually, our Actuarial Activities Section engages in a Replacement Ratio Study based on the prior year's retirement data. This information will be published in the 2022 *PERS by the Numbers*. A summary is also provided here.



PERS Board Meeting Forward-Looking Calendar

Wednesday, September 7, 2022 (OIC Meeting — recommend board members to attend)

Results of Asset/Liability Study – preliminary results with focus on asset mix

Friday, September 30, 2022

Board Governance Assignments
Board Adoption of Actual 2023- 2025 Contribution Rates
Legislative Update (if needed)
2023-28 Strategic Plan Preview
Member and Employer Survey Results
Review Board Education Policy and Training

Wednesday, October 26, 2022 (OIC Meeting — recommend board members to attend)

Results of Asset/Liability Study – final results, including liabilities

Friday, December 2, 2022*

Presentation of Legislative Concept Drafts before Filing
POBMS Presentation
Secretary of State Actuarial Audit Results
2023-28 Strategic Plan Approval
Employer Incentive Fund Report
Financial Modeling Presentation

2023 Meeting Dates

9:00 a.m. Start Times

- Friday, February 3
- Monday, April 3*
- Friday, June 2
- Friday, July 28*
- Friday, September 29
- Friday, December 1*

**Audit Committee planned for post-board meeting*

OPERF	Regular Account				Historical Performance (Annual Percentage)							
	Policy ¹	Target ¹	\$ Thousands ²	Actual	Year-To-Date ³	1 YEAR	2 YEARS	3 YEARS	4 YEARS	5 YEARS	7 YEARS	10 YEARS
Public Equity	25.0-35.0%	30.0%	\$ 19,719,151	21.1%	(17.25)	(13.36)	11.18	6.69	5.92	7.05	7.11	9.32
Private Equity	15.0-27.5%	20.0%	\$ 26,112,932	28.0%	6.61	24.23	33.81	21.86	20.11	19.64	16.26	15.46
Total Equity	45.0-55.0%	50.0%	\$ 45,832,083	49.1%								
Opportunity Portfolio	0-5%	0%	\$ 2,465,522	2.6%	2.03	10.19	20.39	13.04	10.59	9.92	8.87	9.68
Total Fixed	15-25%	20.0%	\$ 18,488,908	19.8%	(9.23)	(9.05)	(4.03)	(0.25)	1.57	1.33	1.68	2.23
Risk Parity	0.0-3.5%	2.5%	\$ 1,886,411	2.0%	(17.13)	(12.95)	2.85					
Real Estate	7.5-17.5%	12.5%	\$ 12,728,634	13.6%	15.12	29.61	18.42	13.61	11.62	11.02	10.60	11.33
Real Assets	2.5-10.0%	7.5%	\$ 7,338,907	7.9%	13.53	23.15	18.58	9.60	7.12	7.15	6.76	4.43
Diversifying Strategies	2.5-10.0%	7.5%	\$ 4,568,797	4.9%	14.98	17.09	12.38	2.80	0.52	0.68	1.47	2.71
Cash w/Overlay	0-3%	0%	\$ 39,306	0.0%	(0.70)	(0.76)	(0.14)	0.74	1.35	1.37	1.28	1.11
TOTAL OPERF Regular Account		100.0%	\$ 93,348,567	100.0%	(1.38)	6.32	15.53	10.30	9.34	9.36	8.54	9.29
OPERF Policy Benchmark					(5.68)	(0.66)	12.27	8.95	8.51	8.65	8.22	9.25
Value Added					4.30	6.98	3.26	1.34	0.83	0.71	0.32	0.04

Target Date Funds

3,224,486

TOTAL OPERF Variable Account

\$ 303,569

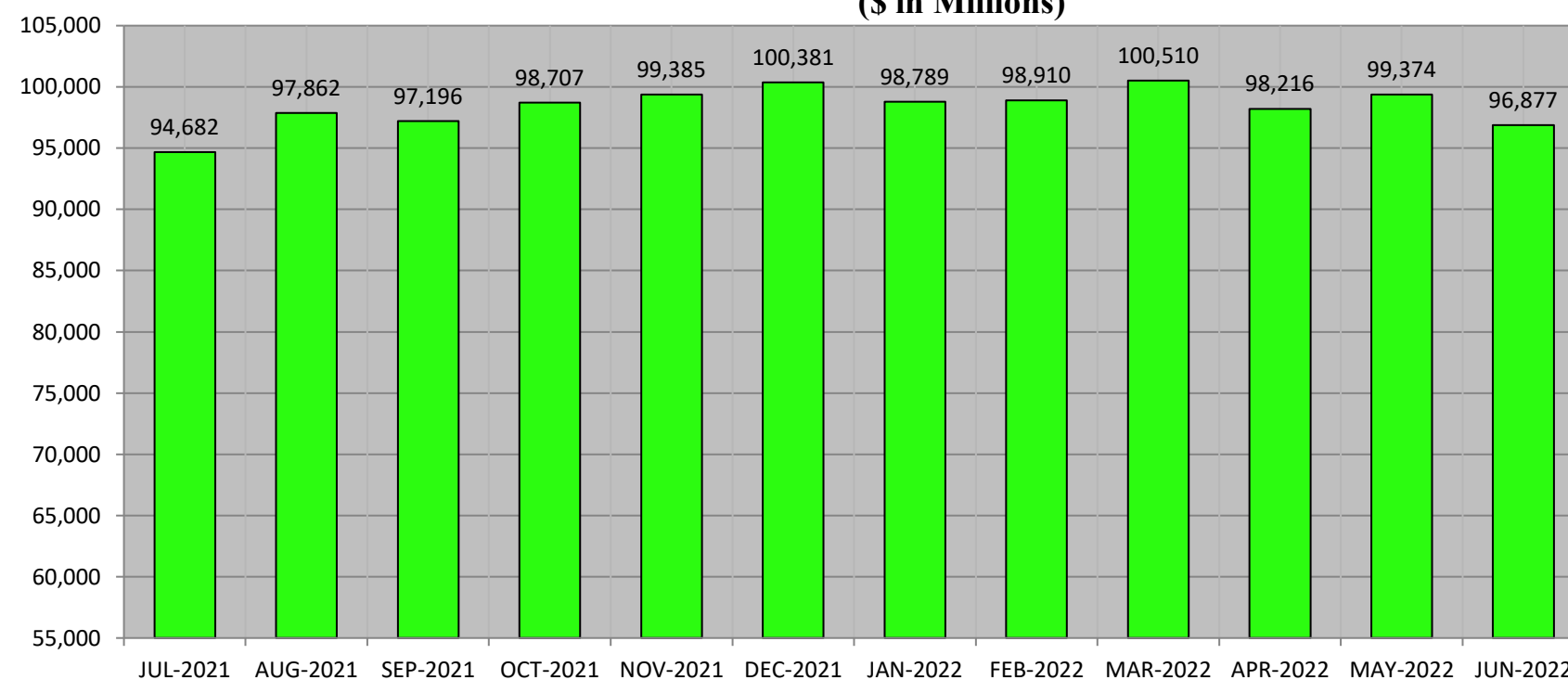
(20.24)	(16.21)	8.81	6.31	5.96	7.05	7.16	9.06
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Asset Class Benchmarks:

MSCI ACWI IMI NET	(20.44)	(16.52)	8.47	5.98	5.62	6.70	6.78	8.71
RUSSELL 3000+300 BPS QTR LAG	5.04	15.25	38.82	21.74	19.23	18.82	16.74	17.68
CPI + 5%	8.88	14.47	12.54	10.20	9.32	9.06	8.28	7.71
OREGON CUSTOM FI BENCHMARK	(10.35)	(10.12)	(4.88)	(0.86)	1.08	0.92	1.23	1.70
S&P Risk Parity - 12% Target Volatility	(12.26)	(6.67)	11.00	7.89	8.88	9.17	7.53	8.17
OREGON CUSTOM REAL ESTATE BENCHMARK	15.34	27.26	13.64	10.30	9.35	8.90	9.05	9.77
CPI +4%	8.36	13.39	11.47	9.16	8.28	8.02	7.26	6.68
HFRI FOF: CONSERVATIVE INDEX	(1.53)	0.13	7.31	4.65	4.00	4.03	3.11	3.82
91 DAY TREASURY BILL	0.14	0.17	0.13	0.63	1.05	1.11	0.89	0.64

Total OPERF NAV
(includes Variable Fund assets)
One year ending JUN-2022

(\$ in Millions)



¹OIC Policy revised June 2021. Beginning October 1, 2021, the Alternatives Portfolio has been split up into two new portfolios: Real Assets and Diversifying Strategies.

²Includes impact of cash overlay management.

³For 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 MAY-2022

Oregon Public Employees Retirement Fund

OPERF	Regular Account				Historical Performance (Annual Percentage)							
	Policy ¹	Target ¹	\$ Thousands ²	Actual	Year-To-Date ³	1 YEAR	2 YEARS	3 YEARS	4 YEARS	5 YEARS	7 YEARS	10 YEARS
Public Equity	25.0-35.0%	30.0%	\$ 20,992,489	21.9%	(9.75)	(5.29)	17.63	12.13	8.00	9.10	8.15	10.79
Private Equity	15.0-27.5%	20.0%	\$ 26,646,338	27.8%	7.74	25.92	34.08	22.57	20.37	20.33	16.98	16.25
Total Equity	45.0-55.0%	50.0%	\$ 47,638,827	49.8%								
Opportunity Portfolio	0-5%	0%	\$ 2,479,174	2.6%	2.81	11.81	21.33	12.89	10.87	10.23	8.99	10.15
Total Fixed	15-25%	20.0%	\$ 19,040,629	19.9%	(7.86)	(6.89)	(2.94)	0.64	1.95	1.61	1.80	2.48
Risk Parity	0.0-3.5%	2.5%	\$ 2,016,211	2.1%	(11.43)	(3.73)	7.75					
Real Estate	7.5-17.5%	12.5%	\$ 12,341,185	12.9%	12.53	26.95	16.92	12.77	11.29	10.59	10.36	11.40
Real Assets	2.5-10.0%	7.5%	\$ 7,315,482	7.6%	12.79	22.13	18.55	9.54	6.90	7.00	6.42	4.43
Diversifying Strategies	2.5-10.0%	7.5%	\$ 4,811,338	5.0%	16.05	16.17	12.06	3.28	0.33	0.89	1.98	2.88
Cash w/Overlay	0-3%	0%	\$ 38,288	0.0%	(0.55)	(0.62)	0.06	0.90	1.43	1.42	1.29	1.13
TOTAL OPERF Regular Account		100.0%	\$ 95,681,134	100.0%	0.78	9.10	17.26	12.04	9.85	9.98	8.84	9.95
OPERF Policy Benchmark					(2.65)	3.82	14.09	11.42	9.34	9.71	8.69	10.13
Value Added					3.44	5.28	3.17	0.63	0.50	0.27	0.16	(0.18)

Target Date Funds

3,353,758

TOTAL OPERF Variable Account

\$ 338,619

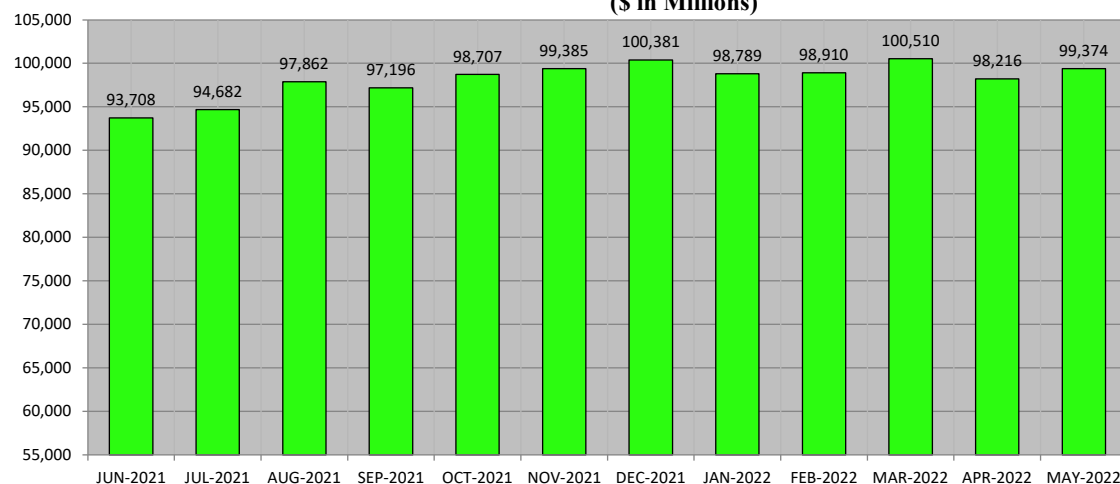
	(12.80)	(7.63)	15.57	11.82	8.20	9.12	8.20	10.55
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Asset Class Benchmarks:

MSCI ACWI IMI NET	(12.93)	(7.54)	15.27	11.51	7.87	8.78	7.82	10.20
RUSSELL 3000+300 BPS QTR LAG	6.69	19.78	34.73	24.27	19.71	20.71	17.43	19.38
CPI + 5%	6.97	13.97	12.08	9.71	9.00	8.78	8.13	7.55
OREGON CUSTOM FI BENCHMARK	(8.92)	(8.09)	(3.88)	0.01	1.48	1.21	1.37	1.95
S&P Risk Parity - 12% Target Volatility	(4.64)	3.20	18.11	13.09	10.77	10.44	8.53	9.43
OREGON CUSTOM REAL ESTATE BENCHMARK	12.72	25.14	12.48	9.61	8.90	8.73	9.24	9.80
CPI +4%	6.55	12.89	11.02	8.67	7.96	7.75	7.10	6.52
HFRI FOF: CONSERVATIVE INDEX	0.05	2.08	9.11	5.46	4.42	4.33	3.25	3.96
91 DAY TREASURY BILL	0.12	0.14	0.13	0.69	1.08	1.12	0.89	0.64

Total OPERF NAV
(includes Variable Fund assets)
One year ending MAY-2022

(\$ in Millions)



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²Includes impact of cash overlay management.

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



Oregon

Kate Brown, Governor

Public Employees Retirement System

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

July 22, 2022

TO: Members of the PERS Board
FROM: Gregory R. Gabriel, Budget Officer
SUBJECT: July 2022 Budget Report

2021-23 OPERATING BUDGET

Operating expenditures for May, June, and preliminary expenditures for July are \$4,619,044, \$5,499,973, and \$4,340,648, respectively. Final expenditures for July will close in the Statewide Financial Management System on August 12 and will be included in the September 2022 report to the PERS Board.

- Through July 1, 2022, the agency has expended a total of \$59,107,279 or 46.7% of PERS' legislatively approved operations budget of \$126,596,362.
- At this time, the agency's projected variance is \$5,498,875.
- Core Retirement Systems Applications (CRSA) expenditures for May, June, and preliminary expenditures for July are \$946,943, \$667,973, and \$975,293, respectively. As of July 1, the agency has expended \$9,991,298 of the legislatively approved budget of \$23,967,212.
- At this time the CRSA projected variance is \$967,886.

2022 LEGISLATIVE EMERGENCY BOARD

The June Emergency Board made the following updates to the PERS budget as outlined in item 72 of the certificate, effective June 3, 2022:

- Increase of \$3,797,797 in Other Funds expenditure limitation for the ORION Modernization Project.

2021-23 NON-LIMITED BUDGET

The adopted budget includes \$12,886,613,593 in total estimated non-limited expenditures. Non-limited expenditures include benefit payments, health insurance premiums, and third-party administration payments for both the PERS Health Insurance Program (PHIP) and the Individual Account Program (IAP).

- Non-Limited expenditures through July 1, 2022, are \$5,878,773,960.

A.2.c. Attachment – 2021-23, CRSA, Agency-wide Budget Execution Summary Analysis

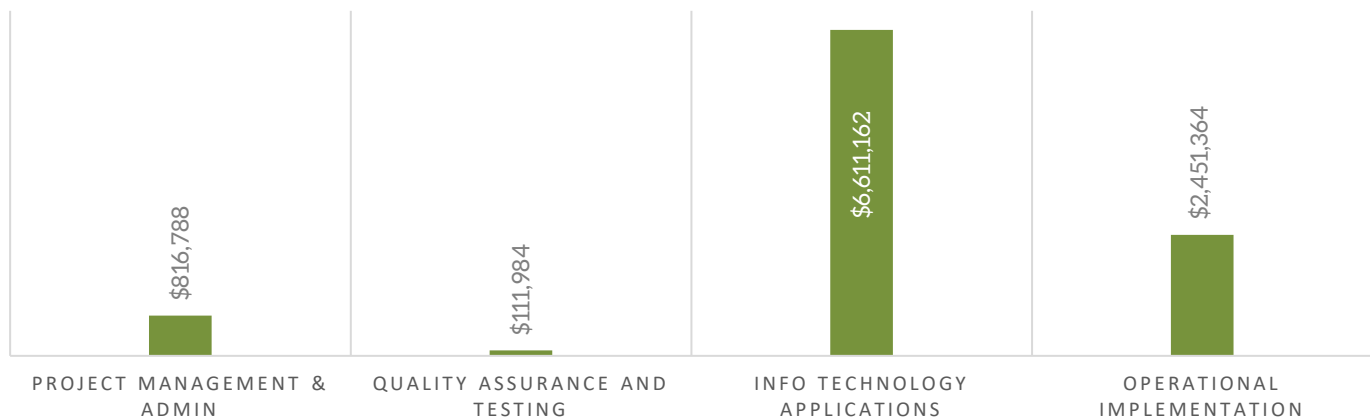
Core Retirement Systems Application

Summary Budget Analysis Preliminary for the Month of July 2022

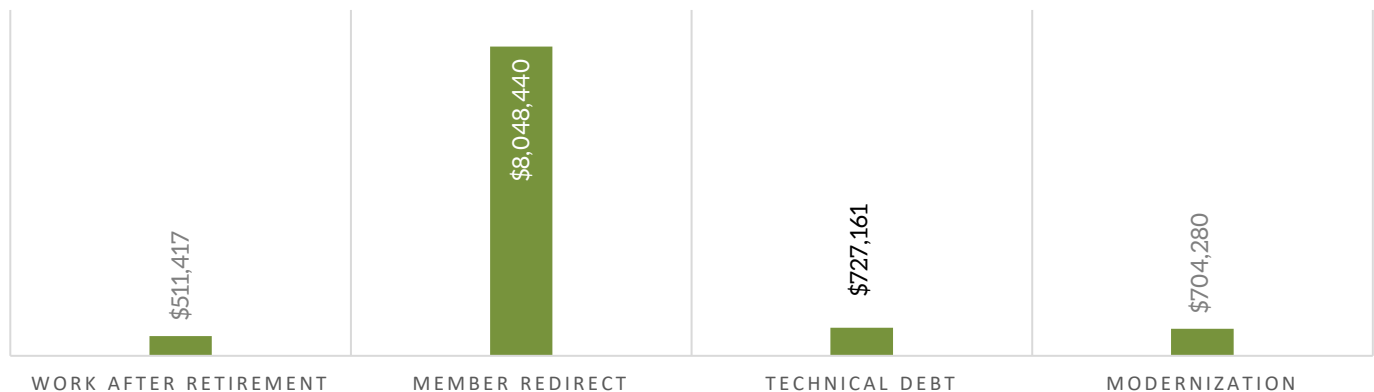
Biennial Summary

Category	Actual Exp. To Date	Projected Expenditures	Total Est. Expend.	2021-23 LAB	Variance
Personal Services	2,455,393	3,882,650	6,338,043	6,356,112	18,069
Services & Supplies	7,535,905	9,125,378	16,661,283	17,556,100	894,817
Capital Outlay				55,000	55,000
Total	9,991,298	13,008,028	22,999,326	23,967,212	967,886

EXPENDITURES BY PACKAGE



EXPENDITURES BY PROJECT



PERS Monthly Budget Report

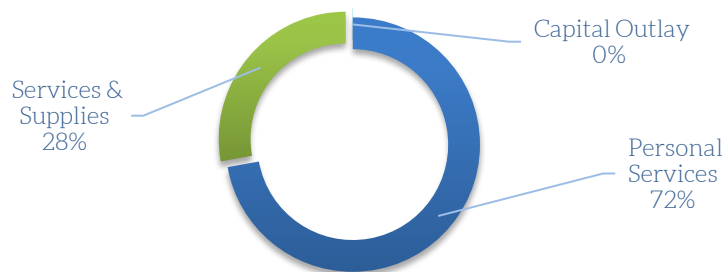
2021-23 Agency-Wide Budget Execution Preliminary Summary for the Month of July 2022

Limited-Operating Budget

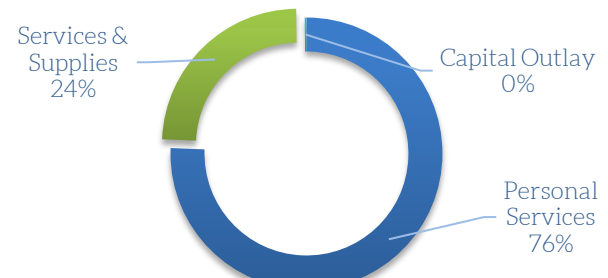
2021-23 Biennial Summary

Category	Actual Exp. To Date	Projected Expenditures	Total Est. Expenditures	2021-23 LAB	Variance
Personal Services	42,653,894	46,888,226	89,542,120	91,033,361	1,491,241
Services & Supplies	16,431,940	14,971,549	31,403,489	34,094,093	2,690,604
Capital Outlay	21,445	130,433	151,878	1,468,908	1,317,030
Unscheduled				0	0
Total	59,107,279	61,990,208	121,097,487	126,596,362	5,498,875

Actual Expenditures



Projected Expenditures



Monthly Summary

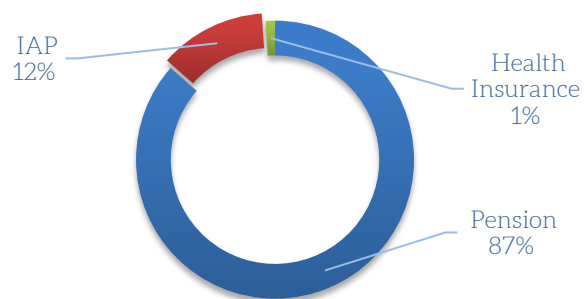
Category	Actual Exp.	Projections	Variance	Avg. Monthly Actual Exp.	Avg. Monthly Projected Exp.
Personal Services	3,655,748	3,788,340	132,592	3,436,491	3,839,667
Services & Supplies	684,899	568,712	(116,188)	1,316,408	1,199,975
Capital Outlay	0	0	0	7,148	103,103
Total	4,340,648	4,357,052	16,404	4,760,047	5,142,746

Non-Limited Budget

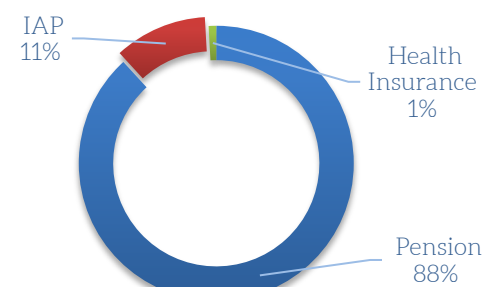
2021-23 Biennial Summary

Programs	Actual Exp To Date	Projected Expenditures	Total Est. Expenditures	Non-Limited LAB	Variance
Pension	5,083,699,967	6,103,646,812	11,187,346,779	11,215,517,678	28,170,899
IAP	729,994,081	655,671,952	1,385,666,034	1,298,603,848	(87,062,186)
Health Insurance	65,079,912	48,129,582	113,209,494	372,492,067	259,282,573
Total	5,878,773,960	6,807,448,347	12,686,222,307	12,886,613,593	200,391,286

Actual Expenditures



Projected Expenditures



Administration

1. May 27, 2022 Board Meeting Minutes
2. Director's Report
 - a. Forward-Looking Calendar
 - b. OPERF Investment Report
 - c. Budget Execution Report
3. CEM Benchmarking Results

Oregon Public Employees Retirement System

Pension Administration Benchmarking Report FY 2021



Key Takeaways:

Cost

- Your total pension administration cost of \$182 per active member and annuitant was \$65 above the peer average of \$117.
- Your higher costs are mainly due to costs associated with the implementation of SB1049.
- Offsetting the project based costs were lower personnel costs than peers, despite more FTE per 10,000 members.

Service

- Your total service score was 59. This was below the peer median of 82.
- Your service score increased from 56 to 59 between 2014 and 2021.

Complexity

- Oregon PERS has the second highest plan design complexity score among CEM's global universe. High complexity negatively impacts service, front office productivity and back office costs.

69 leading global pension systems participate in CEM's benchmarking service

Participants

United States

Arizona SRS
CalPERS
CalSTRS
Colorado PERA
Delaware PERS
Florida RS
Idaho PERS
Illinois MRF
Indiana PRS
Iowa PERS
KPERs
LACERA
Michigan ORS
Minnesota State RS
Nevada PERS
NYC TRS
NYSLRS
Ohio PERS
Oregon PERS
Pennsylvania PSERS
PSRS PEERS of Missouri
South Dakota RS

STRS Ohio
Texas County and District RS
TRS Illinois
TRS of Texas
Utah RS
Virginia RS
Washington State DRS

Canada

Alberta Pension Services
Alberta Teachers
BC Pension Corporation
Canadian Forces PP
Federal Public Service PP
HOOPP
LAPP of Alberta
Municipal Pension Plan of BC
Ontario Pension Board
Ontario Teachers
OPTrust
RCMP
Saskatchewan HEPP

The Netherlands*

ABN Amro PF
ABP
bpfBOUW
Metaal en Techniek
PF PWRI
PF Vervoer
PFZW
Rabobank PF

Denmark

ATP

United Kingdom*

Armed Forces Pension Scheme
BSA NHS Pensions
BT Pension Scheme
Greater Manchester PF
Irish Construction Workers' PS
Local Pensions Partnership
Lothian PF
Merseyside PF
Pension Protection Fund
Principal Civil Service
Railpen Pension Scheme
Rolls Royce Pension Fund
Royal Mail Pensions
Teachers' Pensions
Tyne & Wear PF
Universities Superannuation
West Midlands Metro
West Yorkshire PF

* Systems in the UK and most systems in the Netherlands complete different benchmarking surveys and hence your analysis does not include their results.

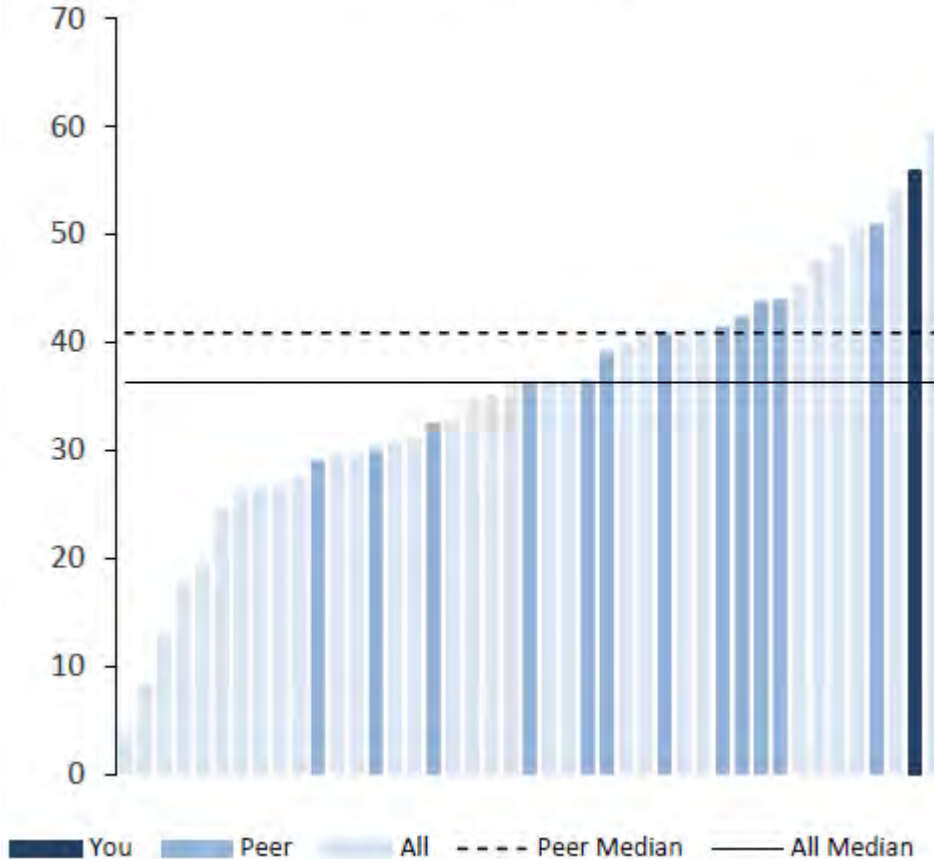
Oregon PERS was compared to the following 13 peers:

Custom Peer Group for Oregon PERS			
Peers (sorted by size)	Membership (in 000's)		
	Active Members	Annuitants	Total
Virginia RS	345	225	570
Washington State DRS	334	209	543
Ohio PERS	289	217	506
Indiana PRS	248	167	414
Arizona SRS	208	163	371
STRS Ohio	203	160	363
Colorado PERA	234	127	361
Oregon PERS	181	159	340
Illinois MRF	171	140	311
Iowa PERS	173	129	302
TRS Illinois	159	128	287
PSRS PEERS of Missouri	129	101	229
LACERA	99	71	170
Peer Median	203	159	361
Peer Average	213	153	367

Inactive members are not considered when selecting peers because they are excluded when determining cost per member. They are excluded because they are less costly to administer than either active members or annuitants.

Back-office costs, service and productivity are impacted by system complexity. Your total complexity score of 56 was above the peer average of 41.

Total Complexity



Complexity Score by Cause
(0 least - 100 most)

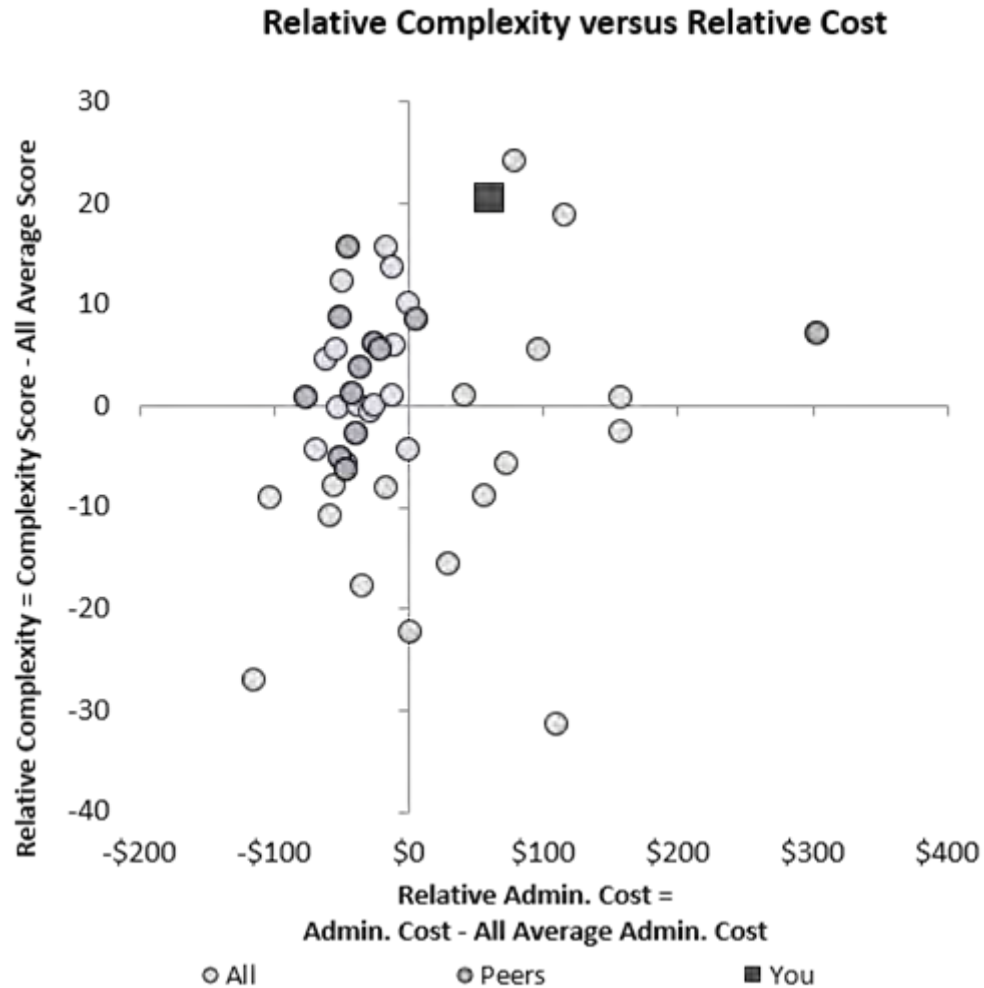
Cause	You	Peer Avg
Pension Payment Options	46	37
Customization Choices	26	15
Multiple Plan Types and Overlap	75	31
Multiple Benefit Formula	70	52
External Reciprocity	0	33
COLA Rules	57	32
Contribution Rates	64	41
Variable Compensation	100	79
Service Credit Rules	48	42
Divorce Rules	100	57
Purchase Rules	70	62
Refund Rules	24	49
Disability Rules	83	66
Total Complexity	56	40

Your plan complexity:

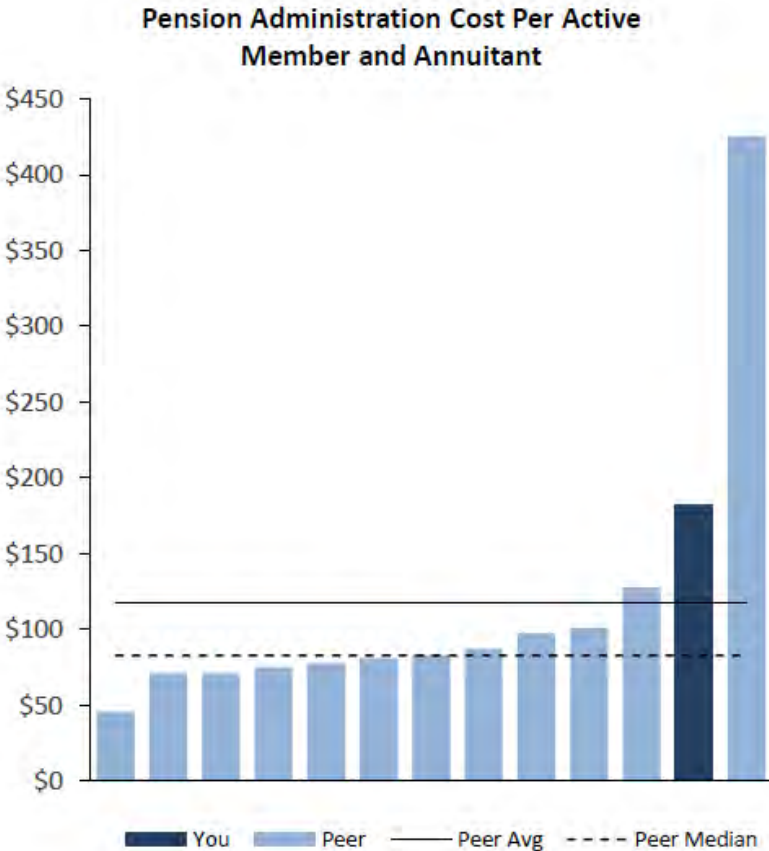
- Negatively impacts service.
- Increases costs, particularly major projects.
- Reduces front office productivity.

Your plan complexity score increased from 54 to 56 as a result of SB 1049.

The relationship between complexity and pension administration cost in the CEM universe:



Your total pension administration cost of \$182 per active member and annuitant was \$65 above the peer average of \$117.



Category	\$000s	\$ per Active Member and Annuitant	
	You	You	Peer Avg
<u>Front office</u>			
Member Transactions	4,988	15	17
Member Communication	7,321	22	21
Collections & Data Maintenance	6,287	19	7
<u>Governance and support</u>			
Governance and Financial Control	2,839	8	8
Major Projects	16,950	50	9
Information Technology	12,784	38	30
Building	2,188	6	8
HR	849	2	3
Actuarial	773	2	2
Audit	1,201	4	4
Other Support Services	3,680	11	4
Total Pension Administration	61,905	182	117

Your total pension administration cost was \$61.9 million. This excludes the fully-attributed cost of administering healthcare, and optional and third-party administered benefits of \$16.6 million.

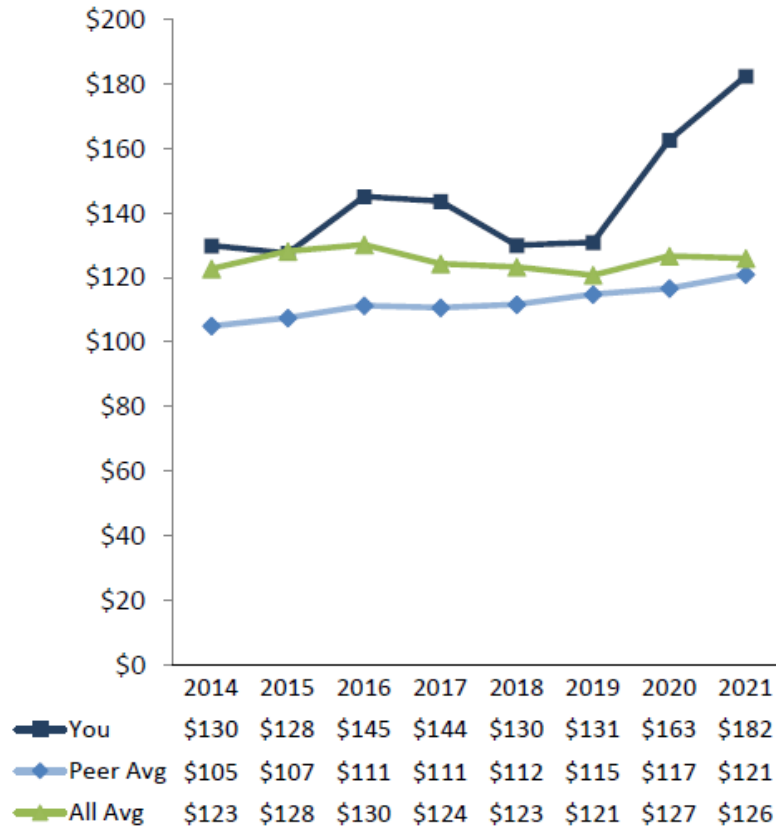
Reasons why your total cost was \$65 above the peer average:

Reason	You	Peer Avg	Impact \$ per active member and
1 More front-office FTE per 10,000 members	5.6 FTE	3.8 FTE	\$21
2 Lower third party costs per member in the front-office	\$3	\$7	-\$4
3 Lower costs per FTE			
Salaries and Benefits	\$101,287	\$116,415	
Building and Utilities	\$6,467	\$12,953	
HR	\$2,509	\$5,245	
IT Desktop, Networks, Telecom	<u>\$14,134</u>	<u>\$22,442</u>	
Total	\$124,398	\$157,055	-\$19
4 Higher support costs per member ¹			
Governance and Financial Control	\$10	\$8	
Major Projects	\$53	\$10	
IT Strategy, Database, Applications	\$27	\$17	
Actuarial, Legal, Audit, Other	<u>\$24</u>	<u>\$13</u>	
Total	\$115	\$48	\$67
Total			\$65

1. To avoid double counting, support costs are adjusted for differences in cost per FTE.

Cost trends:

Trend in Total Pension Administration Costs

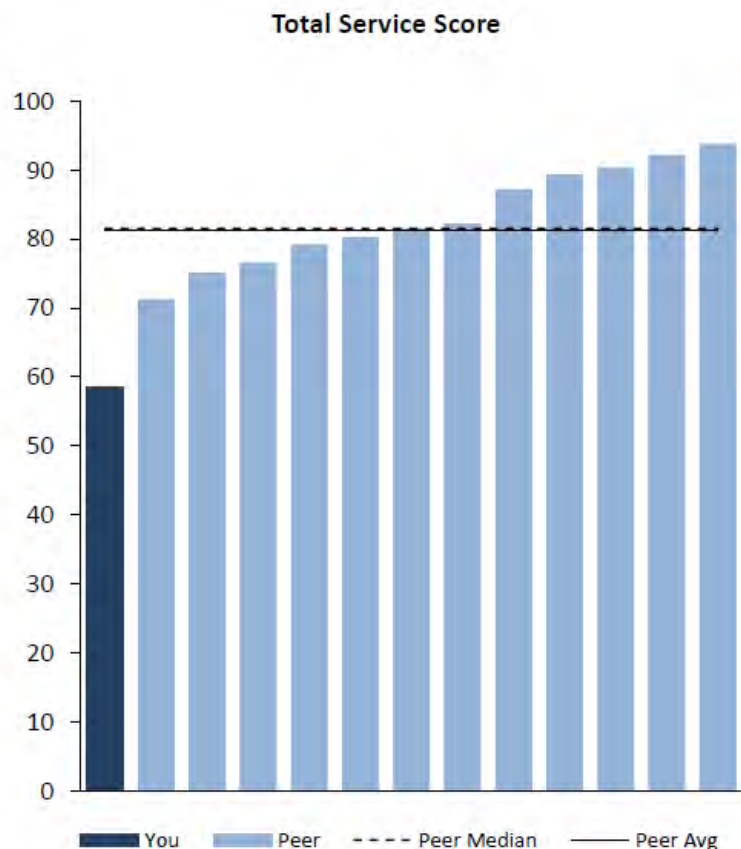


Between 2014 and 2021:

- Your total pension administration cost per active member and annuitant increased by 5.0% per annum. During the same period, the average cost of your peers with 8 consecutive years of data increased 2.0% per annum.
- Your higher costs per member in FYE 2020 and 2021 were primarily due to your multi-year project to implement changes required by SB1049.

Trend analysis is based on systems that have provided 8 consecutive years of data (12 of your 13 peers and 34 of the 45 systems in the universe).

Your total service score of 59 was below the peer median of 82.



Service Scores by Activity

Activity	Weight	Peer	
		You	Median
1. Member Transactions			
Pension Payments	10.0%	100	100
Pension Inceptions	7.4%	9	91
Refunds, Withdrawals, and Transfers-out	1.3%	5	95
Purchases and Transfers-in	3.1%	68	92
Disability	3.8%	64	93
2. Member Communication			
Call Center	21.0%	44	73
1-on-1 Counseling	7.4%	51	77
Member Presentations	6.5%	96	100
Written Pension Estimates	4.7%	44	93
Mass Communication			
Website	21.3%	77	88
News and Targeted Communication	2.8%	68	81
Member Statements	4.7%	57	88
3. Other			
Member Experience Surveying	5.0%	10	38
Disaster Recovery	1.0%	65	100
Weighted Total Service Score	100%	59	82

Service is defined from a member's perspective. Higher service means more channels, faster turnaround times, more availability, more choice, better content and higher quality.

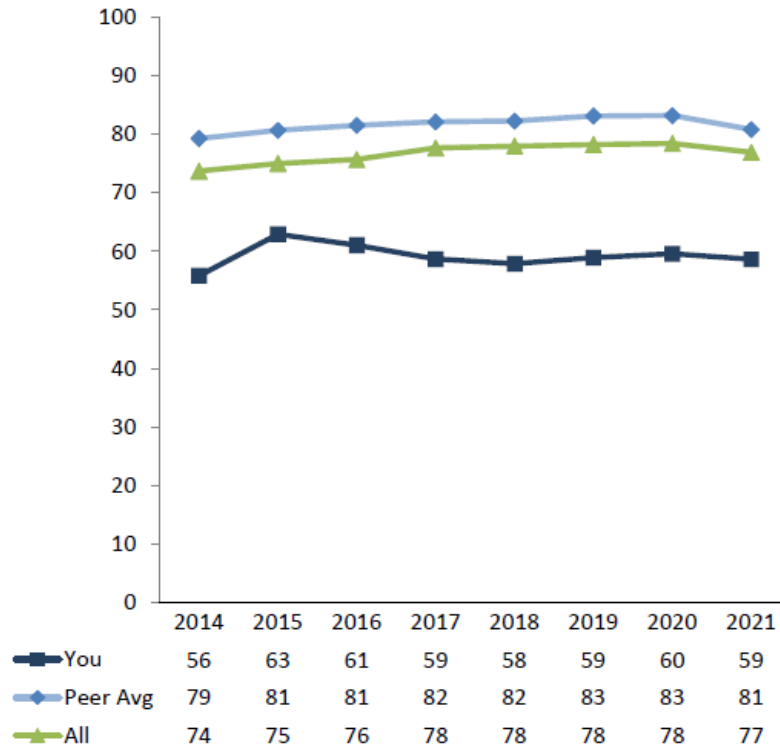
Higher service is not necessarily cost-effective. For example, the ability to answer the telephone 24 hours a day is higher service, but not cost effective.

Examples of key service measures included in your Service Score:

Select Key Service Metrics	You		Peer Avg
	2020	2021	
<u>Member Contacts</u>			
• % of calls resulting in undesired outcomes (busy signals, messages, hang-ups)	11%	11%	15%
• Average total wait time including time negotiating auto attendants, etc.	818 secs	984 secs	266 secs
<u>Website</u>			
• Can members access their own data in a secure environment?	Yes	Yes	100% Yes
• Do you have an online calculator linked to member data?	Yes	Yes	100% Yes
• # of other website tools offered such as changing address information, registering for counseling sessions and/or workshops, viewing or printing tax receipts, etc.	11	11	16
<u>1-on-1 Counseling and Member Presentations</u>			
• % of your active membership that attended a 1-on-1 counseling session	1.9%	1.8%	2.3%
• % of your active membership that attended a presentation	4.7%	2.3%	5.7%
<u>Pension Inceptions</u>			
• What % of annuity pension inceptions are paid without an interruption of cash flow greater than 1 month between the final pay check and the first pension check?	5.8%	5.6%	87.9%
<u>Member Statements</u>			
• How current is an active member's data in the statements that the member receives?	5.0 mos	5.0 mos	2.3 mos
• Do statements provide an estimate of the future pension entitlement?	No	No	69% Yes

Your service score increased from 56 to 59 between 2014 and 2021.

Trends in Total Service Score



Trend analysis is based on systems that have provided 8 consecutive years of data (12 of your 13 peers).

Historic scores have been restated to reflect changes in methodology. Therefore, your historic service scores may differ from previous reports.

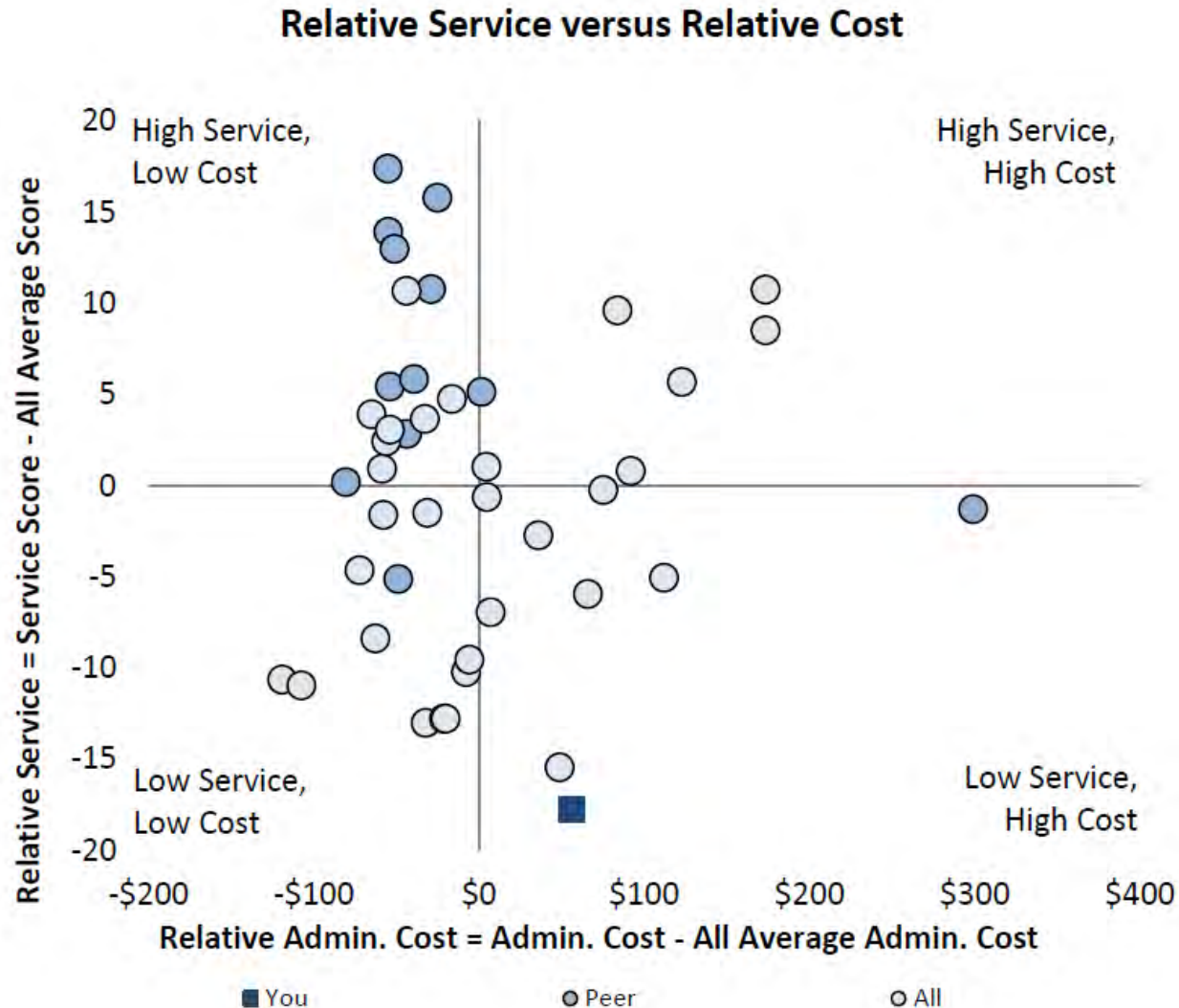
Changes that had a positive impact

- Call Center: Your undesired call outcomes such as abandoned calls in menu, in queue, or hold decreased from 20.9% to 10.6%, and you now notify the caller of the expected wait times.
- Purchases: Your turnaround time for service credit purchase estimates decreased from 37 days to 14 days.
- Pension Estimate: Your turnaround time for pension estimates decreased from 36 days to 13 days.

Changes that had a negative impact

- Call Center: You added two additional menu layers in 2016.
- Face-to-Face Interactions: Due to COVID restrictions you conducted fewer presentations and 1-on-1 counseling sessions. The percentage of members attending these sessions decreased from 6.6% in 2020 to 4.1% in 2021.

The relationship between service and pension administration cost in the CEM universe:





July 22, 2022
PERS Board Meeting Agenda

Administrative Rulemaking

1. Notice of IAP Optional Employer Account Contributions Rule
2. Adoption of Delegation of Signing Authority Rule



Oregon

Kate Brown, Governor

Public Employees Retirement System

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

July 22, 2022

TO: Members of the PERS Board
FROM: Stephanie Vaughn, Manager, Policy Analysis & Compliance Section
SUBJECT: Notice of Rulemaking for IAP Optional Employer Account Contributions Rule:
OAR 459-080-0050, *IAP Employer Account Contributions*

OVERVIEW

- Action: None. This is notice that staff has begun rulemaking.
- Reason: Clarify that rule applies to IAP Optional Employer Account contributions.
- Policy Issue: None identified.

BACKGROUND

ORS 238A.340 allows participating employers to contribute an additional one to six percent of an employee's salary to an employer account within the IAP for some or all of its employees. This optional contribution is provided by employer agreement, which may be by policy or collective bargaining. OAR 459-080-0050 covers specific issues related to the establishment and maintenance of these accounts. In order to distinguish the employer contributions to this optional account from contributions made to the IAP by an employer on behalf of its employees, staff has edited the rule by adding the word "optional" to the rule title and in the rule text, which will clarify that the rule only applies to employer contributions to the optional employer account in the IAP.

PUBLIC COMMENT AND HEARING TESTIMONY

A rulemaking hearing will be held remotely on August 24, 2022, at 2:00 p.m. The public comment period ends August 30, 2022, at 5:00 p.m.

LEGAL REVIEW

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

IMPACT

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

Benefit: Addition of the word "optional" throughout the rule will clarify to which type of employer contributions the rule applies.

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

RULEMAKING TIMELINE

July 22, 2022	Staff began the rulemaking process by filing Notice of Rulemaking with the Secretary of State.
July 22, 2022	PERS Board notified that staff began the rulemaking process.
July 22, 2022	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.
August 24, 2022	Rulemaking hearing to be held remotely at 2:00 p.m.
August 30, 2022	Public comment period ends at 5:00 p.m.
September 30, 2022	Staff will propose adopting the rule modifications, including any changes resulting from public comment or reviews by staff or legal counsel.

NEXT STEPS

A rulemaking hearing will be held remotely on August 24, 2022. The rule is scheduled to be brought before the PERS Board for adoption at the September 30, 2022 board meeting.

B.1. Attachment 1 - 459-080-0050, *IAP Employer Account Contributions*

**OREGON ADMINISTRATIVE RULE
PUBLIC EMPLOYEES RETIREMENT BOARD
CHAPTER 459
DIVISION 080 – OPSRP INDIVIDUAL ACCOUNT PROGRAM**

1 **459-080-0050**

2 **IAP Optional Employer Account Contributions**

3 (1) Employers shall not begin optional employer contributions under ORS
4 238A.340 to the employer account of a member under the OPSRP Individual Account
5 Program (IAP) until the agreement by which those contributions will be made has been
6 provided to PERS. The agreement must, at a minimum, provide the following
7 information:

8 (a) The date those contributions are to commence; and

9 (b) The percentage of salary to be contributed.

10 (2) ORS 238A.340(1) allows participating public employers to agree to provide
11 these optional employer contributions for specific groups of employees. The employer
12 will be solely responsible for reporting which groups of employees are eligible for the
13 optional employer contributions, so long as those employees are eligible for membership
14 under ORS 238A.300 and OAR 459-080-0010. PERS will rely on the employer's records
15 to determine whether an employee was in a group that should have received optional
16 employer contributions.

17 (3) Optional ~~[E]~~ employer contributions made on behalf of a person who fails to
18 meet the standards for IAP employee contributions under OAR 459-080-0150 will be
19 returned pursuant to section (5) of that rule.

20 (4) Optional ~~[E]~~ employer contributions made in error for an employee who is not
21 entitled to those contributions under the employer's agreement will be returned less any
22 fees or losses incurred since the contributions were submitted. Any earnings on these

1 contributions will be credited to the forfeiture account established under OAR 459-080-
2 0150.

3 (5) Whether contributions were erroneous will be based upon the employer's records
4 as reported to PERS.

5 Stat. Auth.: ORS 238A.450

6 Stats. Implemented: ORS 238A.340

July 22, 2022
PERS Board Meeting Agenda

Administrative Rulemaking

1. Notice of IAP Optional Employer Account Contributions Rule
2. Adoption of Delegation of Signing Authority Rule



Oregon

Kate Brown, Governor

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www.oregon.gov/pers

July 22, 2022

TO: Members of the PERS Board
FROM: Stephanie Vaughn, Manager, Policy Analysis & Compliance Section
SUBJECT: Adoption of Delegation of Signing Authority Rule:
OAR 459-001-0035, *Contested Case Hearing*

OVERVIEW

- Action: Adopt the Delegation of Signing Authority incorporated into the Contested Case Hearing rule.
- Reason: Codify in administrative rule the delegation of the PERS Board's signing authority for final orders to the Director and Deputy Director.

BACKGROUND

Oregon Revised Statutes 183.411 allows the PERS Board to delegate the authority to enter a final order. This delegation can be made for a proceeding or class of proceedings, and to an officer or employee, or class of officers or employees. In March 2008, via motion and unanimous vote, the PERS Board delegated to the Executive Director the authority to enter final orders only in cases when the board is adopting the Administrative Law Judge's (ALJ's) proposed order, with technical corrections, as necessary. The PERS Board's delegation also requires that staff send proposed orders and any other pertinent material to the board for its review, prior to the Director taking action to enter a final order, with the board reserving the right to move the case to a future board meeting. However, this delegation of authority was never reflected in our administrative rules.

This amendment to the rule officially incorporates the PERS Board's delegation of this authority. While editing the rule, staff further recognized that no contingency exists for situations when the Director may not be available. To this end, staff recommended in a policy discussion when the rule was noticed that the board further delegate its authority for issuing the final order in the situations noted above to the Deputy Director as well as the Director. The PERS Board did not indicate opposition or provide different direction, so the rule presented for adoption incorporates this additional delegation.

While the rule is open, one other edit has been made. The current rule indicates that the PERS Board "deliberates and decides on final orders during regularly scheduled board meetings," which is not the current practice. Prior to 2008, the ALJs' proposed orders were presented to the PERS Board at public board meetings for consideration. Currently, in accordance with the delegation of entering a final order to the Director, staff sends the draft final order to all board members electronically for review. If the PERS Board wishes to discuss the case, the board notifies staff, and the case is presented at a future board meeting. The edit to the rule supports

current practice and covers both the electronic review of the draft final orders and allows for review and discussion at a public meeting, if requested.

PUBLIC COMMENT AND HEARING TESTIMONY

A rulemaking hearing was held remotely on June 22, 2022, at 2:00 p.m. No members of the public attended. The public comment period ended June 28, 2022, 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 PERS Board need not adopt the rule modifications.

Benefit: Codify in administrative rule the delegation of signing authority for final orders.

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

RULEMAKING TIMELINE

May 27, 2022	Staff began the rulemaking process by filing Notice of Rulemaking with the Secretary of State.
May 27, 2022	PERS Board notified that staff began the rulemaking process.
June 1, 2022	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.
June 22, 2022	Rulemaking hearing held remotely at 2:00 p.m.
June 28, 2022	Public comment period ended at 5:00 p.m.
July 22, 2022	Board may adopt the rule modifications, including any changes resulting from public comment or reviews by staff or legal counsel.

BOARD OPTIONS

The PERS Board may:

1. Pass a motion to “adopt the Delegation of Signing Authority rule, as presented.”
2. Direct staff to make other changes to the rule or explore other options.

STAFF RECOMMENDATION

Staff recommends the PERS Board choose Option #1.

B.2. Attachment 1 - 459-001-0035, *Contested Case Hearing*

**OREGON ADMINISTRATIVE RULE
PUBLIC EMPLOYEES RETIREMENT BOARD
CHAPTER 459
DIVISION 001 – PROCEDURAL RULES**

1 **459-001-0035**

2 **Contested Case Hearing**

3 (1) Request for a contested case hearing. To obtain review of any determination
4 made under OAR 459-001-0030 or 459-001-0032 for which a contested case hearing has
5 not been held, the party must file with the Board a request for a contested case hearing.
6 The request must be filed within 45 days following the date of the Director's
7 determination.

8 (2) Informal conferences. Informal conferences are available as an alternative means
9 that may achieve resolution of any matter under review. A request for an informal
10 conference does not relieve a person of the requirements for timely filing of a request for
11 a contested case hearing.

12 (3) Criteria for request. The request for a contested case hearing must be in writing
13 and set forth:

14 (a) A description of the determination for which review is requested;

15 (b) A short statement of the manner in which the determination is alleged to be in
16 error;

17 (c) A statement of facts that are the basis of the request;

18 (d) Reference to applicable statutes, rules or court decisions upon which the
19 requester relies;

20 (e) A statement of the action the request seeks; and

21 (f) A request for a hearing.

1 (4) The Director, or an administrator appointed by the Director, may direct the staff
2 to schedule a formal contested case hearing or develop a recommendation to deny the
3 member's request to be presented to the Board. The Board may then deny a request for a
4 hearing when it has decided, in consultation with legal counsel, that the Board has no
5 authority to grant the relief requested.

6 (5) The hearing must be conducted in accordance with the Attorney General's Model
7 Rules of Procedure. Parties to the hearing will include the requester, any other person
8 named as a party, and any other person who petitions to participate and is determined to
9 have an interest in the outcome of the proceeding.

10 (6) *[The Board generally deliberates and decides on final orders during regularly*
11 *scheduled board meetings.]* The Board may *[instead]* deliberate and decide on final
12 orders at any *[other]* time and place allowed by law, as determined on a case-by-case
13 basis, such as electronically or via a telephone conference.

14 (7) In contested cases where the agency is upholding the administrative law
15 judge's proposed order, the Director or Deputy Director may issue the final order
16 after the Board has had an opportunity for review.

17 Stat. Auth.: ORS 238.650, 183.464 & 183.600 - 183.690

18 Stats. Implemented: ORS 183.413 - 183.470

July 22, 2022
PERS Board Meeting Agenda

Action and Discussion Items

1. SB 1049 Implementation Update
2. Equal to or Better Than Testing Recommendations
3. 2023-2025 Agency Budget Recommendation
4. Presentation of December 31, 2021 System Valuation Results



Oregon

Kate Brown, Governor

Public Employees Retirement System

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July 22, 2022

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

Senate Bill (SB) 1049 was signed into law by the Governor on June 11, 2019. PERS staff continue to focus on completing work in an efficient and effective manner.

PROGRAM/PROJECT IMPLEMENTATION

The SB 1049 Implementation Program is being managed as one comprehensive program, with the following six individual projects. All projects go through the Enterprise Information Services (EIS) stage-gate process.

Project	Effective Date	Project Health and Status (as of 6/30/22)
SB 1049 Program		Program health: Yellow <ul style="list-style-type: none"> Program health will remain in yellow status as Member Redirect is scheduled past the end of the 2021-23 biennium. Cross Project Effort (CPE) health is now in red status due to delays in Work Package (WP) 6.
Employer Programs Project	Effective 7/1/2019	Project ended 7/16/21.
Salary Limit Project	Effective 1/1/2020	Project ended 5/28/21.
Work After Retirement Project	Effective 1/1/2020	Project ended 2/24/22.
Member Redirect Project	Effective 7/1/2020	Project health: Yellow <ul style="list-style-type: none"> Yellow status is due to uncertainty of Work Package (WP) 8 (EPSA Death) schedule. Change requests in process for schedule changes as well as SB 111A construction and transition. User Acceptance Testing (UAT) has completed for WP6 (EPSA Retirement). On schedule towards the 7/21/22 deployment. Construction in process for WP9 (EPSA and OPSRP Withdrawal). WP11 (Reemployment and Adjustments) elaboration in process.
Member Choice Project	Effective 1/1/2021	Project ended 8/4/21.
Technical Debt		Project health: Green

		<ul style="list-style-type: none">• UAT completed for WP1 (Employer Statements). On schedule towards the 7/21/22 deployment.• WP4 (jClarety Reporting Engine) technical elaboration and development work in process, due 7/8/22.• WP5 (Side Account Reversals) and WP6 (General Ledger Reversals) will both need work order contracts. Planning and scheduling in process.
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Highlighted activities completed or in progress since late March 2022:

- Program and project activities
 - iQMS activities
 - Draft Quarterly QA Status and Improvement report (July 2022) expected 7/21/22
 - Final Periodic Quality Status report (May 2022) received 6/27/22
- Budget reporting
 - Next bi-monthly meeting with the Chief Financial Office, Legislative Fiscal Office, and the Governor’s Office is scheduled for 7/27/22
 - Work order contract approved for Member Redirect work packages through remainder of the biennium

PROGRAM/PROJECT BUDGET

The high-level budget information is contained within page two of the attachment to agenda item A.2.c. The detailed budget can be viewed in the attached Monthly Status Report.

Budget development for the 2023-2025 program is underway. PERS staff will continue to update the board as program implementation continues throughout the year.

C.1. Attachment 1 – *Monthly Project Status Report and Roadmap*

SB 1049 Implementation Program

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

Program information:

Program start: July 1, 2019 | Program end: June 19, 2024

Subprojects:

Project 1: Employer Programs

Project start: July 1, 2019 | Project end: July 16, 2021

Project status: **Complete**

Project 2: Work After Retirement (WAR)

Project start: July 1, 2019 | Project end: February 24, 2022

Project status: **Complete**

Project 3: Salary Limit

Project start: July 1, 2019 | Project end: May 28, 2021

Project status: **Complete**

Program statement:

SB 1049 is comprehensive legislation intended to address the increasing cost of funding Oregon's Public Employees Retirement System (PERS), reduce system Unfunded Actuarial Liability (UAL) obligations, and provide relief to escalating contribution rate increases for public employers. Implementation will occur across six subprojects.

Project 4: Member Redirect

Project start: July 1, 2019 | Project end: April 25, 2024

Project status: **Yellow**

Project 5: Member Choice

Project start: October 23, 2019 | Project end: August 4, 2021

Project status: **Complete**

Project 6: Technical Debt

Project start: June 22, 2021 | Project end: February 1, 2023

Project status: **Green**

For details regarding individual project status, please refer to the respective project section(s) below.

Overall program status: **Yellow**

The program status continues to be yellow. Member Redirect and Technical Debt have activities planned into the 2023-2025 biennium, and that budget has not been approved. In addition, the Cross Project Effort is red due to WP6 IAP Balance Comparison Tool construction delays.

Member Redirect and Technical Debt are on target for a combined production deployment on 7/21/2022. UAT has gone extremely well for both projects, displaying high quality even though this release is substantially larger than all prior SB 1049 releases. Employers have also participated in this UAT effort.

Member Redirect has turned yellow this month due to WP8.1 EPSA Death schedule uncertainty. We may not be able to complete this work package within the current baselined schedule, and the team is developing mitigation plans to address this concern.

PERS has submitted the 2023-2025 SB 1049 Business Case and Budget Request to EIS for review. This request includes 6 months of contingency due to the Member Redirect scheduling concerns described above, and an additional 6-month stabilization period, which would extend the program end date.

SB 1049 Implementation Program

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

Budget health: Yellow

Work is planned for Member Redirect and Technical Debt beyond the 2021-2023 biennium, but that budget has not been approved yet.

29560- SB 1049 Implementation Program by Project					
Other Funds Lmt	21-23 Budget	Actual to Date	Projections	21-23 Total	Variance
Work After Retirement	\$ 1,127,741	\$ 527,076	\$ -	\$ 527,076	\$ -
Variance from WAR	\$ -	\$ -	\$ -	\$ -	\$ 600,665
Member Redirect	\$ 19,248,730	\$ 7,890,158	\$ 11,572,655	\$ 19,462,813	\$ (214,083)
Technical Debt	\$ 2,790,741	\$ 705,348	\$ 562,945	\$ 1,268,293	\$ 1,522,448
				\$ -	\$ -
Total	\$ 23,167,212	\$ 9,122,582	\$ 12,135,601	\$ 21,258,183	\$ 1,909,029

29560- SB 1049 Implementation Program by POP					
Other Funds Lmt	21-23 Budget	Actual to Date	Projections	21-23 Total	Variance
Project Management & Admin	\$ 2,044,800	\$ 748,788	\$ 883,212	\$ 1,632,000	\$ 412,800
Quality Assurance and Testing	\$ 812,500	\$ 111,984	\$ 815,749	\$ 927,733	\$ (115,233)
Info Technology Applications	\$ 13,337,000	\$ 5,824,136	\$ 6,913,810	\$ 12,737,946	\$ 599,054
Operational Implementation	\$ 6,972,912	\$ 2,437,675	\$ 3,522,829	\$ 5,960,504	\$ 1,012,408
Total	\$ 23,167,212	\$ 9,122,582	\$ 12,135,600	\$ 21,258,183	\$ 1,909,029

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

Schedule health: **Red**

The Cross Project Effort is red due to delays in development activities for WP6 IAP Balance Comparison Tool. We chose to not turn the entire program status red because this is a stand-alone work package that has no downstream SB 1049 impacts due to this delay. In addition, this is a new tool, and the business users can continue to employ known workarounds for this functionality.

The schedule health for Member Redirect has turned yellow due to schedule uncertainty for WP8.1 EPSA Death.

The schedule health for Technical Debt remains green, and efforts are underway to add two recently approved work packages into the schedule.

Scope health: **Yellow**

The program and project scope are largely understood and have been incorporated into program-level plans and schedules. However, scope health is yellow because the scope of Member Redirect WP8.1 (EPSA Pre-Retirement Death) appears to be larger than originally anticipated.

Quality Assurance activities:

- iQMS Deliverable 4.1.9 Quarterly QA Status and Improvement Report started 3/10/2022, completed 5/27/2022.
- iQMS Deliverable 3.3.9 Periodic Quality Status Report started 4/26/2022, due 6/22/2022.
- iQMS Deliverable 4.1.10 Quarterly QA Status and Improvement Report started 6/8/2022, due 8/18/2022.

Emerging concerns/needs/impacts:

- As additional non-SB 1049 work efforts continue to ramp up, there is an increased concern that these projects could have a negative impact to SB 1049:
 - Resources, both people and technical, may be negatively impacted. The SB 1049 team continues to monitor resource allocations for SB 1049 resources across all projects (where data is available) and mitigate impacts where issues are found. The SB 1049 Project Managers proactively manage their schedules to ensure major milestones are kept on track.
 - jClarety production deployments (both SB 1049 and non-SB 1049) are stacked very tightly between July 2022 and early 2023. There is little wiggle room to accommodate schedule slippage for any release without impacting subsequent SB 1049 releases.
 - Non-SB 1049 Projects may necessitate requirement changes for SB 1049 work packages, causing re-work and possible schedule delays.

SB 1049 Implementation Program

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

Program Risks and Mitigation

Listed below are the most critical risks for this project.

For the complete Risk Log, please see the Risk Log tab in the most recent weekly status report: [SB 1049 Program Weekly Status Report](#)

#	Risk Description	Mitigation and/or Contingency Plan	Notes
20	Internal Staffing: Resource shifting, competing priorities, or over allocation impact the availability of dedicated project resources	➤ The Project Management Office continues to conduct cross-project bi-weekly meetings to discuss resource allocations across all PERS projects.	Increased Maintenance and Enhancement (M&E) activities have increased concerns for resource availability through Jan 2023.
39	Critical Resources Allocated to non-SB 1049 Work: Critical SB 1049 resources are allocated to non-SB 1049 work, impacting availability for SB 1049 work, and causing schedule delays.	<ul style="list-style-type: none"> ➤ Assess project and resource plans for any new work effort to determine impact to SB 1049 ➤ Proactively manage any identified resource constraints and work with managers to mitigate SB 1049 impact. 	Non-SB 1049 work efforts include, but are not limited to: <ul style="list-style-type: none"> • Maintenance & Enhancements (several separate efforts) • W-4 Tax Form Project • ACH Treasury KeyBank Transition
81	Technology Risk: Complexity and fragility of jClarety system.	➤ Some or all the SB 1049 projects may require attention to fixing technical debt or finding appropriate work arounds.	

Program Issues and Action Plans

Listed below are the most critical issues for this project.

For the complete Issue Log, please see the Issue Log tab in the most recent weekly status report: [SB 1049 Program Weekly Status Report](#)

No	Issue	Resolution / Notes	Estimated Resolution Date
22	Technology Risk: Complex, New or Untried Process: The project solution is complex, new, untried in the market or not aligned with best practices.	PowerApps is planned to be used for CPE WP6 IAP Balance Comparison Tool, but this tool is new to PERS, and the learning curve has been significant. Construction of this tool is delayed.	TBD

SB 1049 Implementation Program

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

Program information: Cross Project Effort

Start: May 28, 2020 | **End:** May 13, 2024
Project Manager: Susan K. Mundell

Cross Project Effort objective:

The Cross Project Effort is focused on technical tools, and extracts that are used across multiple SB 1049 projects. Originally, these efforts were included as Work Packages within the individually impacted projects. The scope of this effort has not changed, but the work has been restructured to ensure it receives an appropriate level of coordination and ensure the success of the necessary inter-project integrations.

Overall status: **Red**

Narrative: Work Package 4.2 (WP4.2) Individual Account Program Adjustment (IAP) Calculator completed User Acceptance Testing (UAT) and deployed to production early with zero outstanding defects. A decision was made by Information Services Division (ISD) to continue to pursue Microsoft PowerApps as the platform for development of WP6: IAP Balance Comparison tool. While ISD continues to work with Microsoft PowerApps engineers to determine development solutions for WP6 IAP Balance Comparison tool, PowerApps is a new platform for PERS, and the learning curve has proven to be steeper than anticipated. Until normal development can progress, and the schedule can be rebaselined, Cross Project Effort will be in a red status.

Schedule Deliverables and Milestones

Milestones Schedule				
Milestone	Percent Complete	Baseline Finish Date	Actual / Forecast Finish Date*	Status/ Notes
WP3: IAP Divorce Tool Deployed	100%	2/22/2022	3/04/2022	
WP5.2: Prior Year Earnings Invoice Tool Deployed	0%	5/20/2022	5/17/2022	
WP4.2: IAP Adjustment Calculator Deployed	0%	6/01/2022	5/26/2022	
WP6: IAP Balance Comparison Tool	0%	10/04/2022	TBD	Development delayed - replanning
WP7.3: Payouts Actuarial Extract	0%	2/22/2024	3/28/2024	Date change approved by Steering Team
Cross Project Effort Closure	0%	5/13/2024	5/13/2024	

*Finish Date Color: Green = on Schedule, Yellow = in Jeopardy, Red = Late

SB 1049 Implementation Program

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen



Senate Bill (SB) 1049 Implementation Road Map 2019-2021 Biennium

	2019						2020						2021											
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Employer Programs	<ul style="list-style-type: none"> 7/1/19 – Effective Date 9/3/19 – Employer Incentive Fund (EIF) Application #1 Opens 11/27/19 – EIF Application #1 Closes 12/2/19 – EIF Application #2 Opens 												<ul style="list-style-type: none"> 8/6/20 – Employer Rate Projection Tool (ERPT) Assessment Complete 12/1/20 – EIF Application #2 Closes 3/30/21 – Work Package (WP) 1 Migrate and Adapt ERPT → 6/30/21 – WP2 ERPT Stakeholder Acceptance and Deployment → 											
Salary Limit							<ul style="list-style-type: none"> 12/24/19 – Work Package (WP) 1 – Short Term 1/1/20 – Effective Date 1/24/20 – WP2 Post 2020 Salary Limit – Long Term 						<ul style="list-style-type: none"> 11/19/20 – WP3 User Screens to Record Annual Salary Limit – Long Term 5/13/21 – WP4 Proration Reports and Workflow – Long Term → 5/28/21 – Project Close → 											
Work After Retirement							<ul style="list-style-type: none"> 12/19/19 – Work Package (WP) 1 Retiree Wages Suspended – Short Term 1/1/20 – Effective Date 						<ul style="list-style-type: none"> 11/19/20 – WP2 New Wage Codes with General Ledger (GL) Integration – Long Term 5/13/21 – WP3 Retro Rate Change – Long Term → 											
Member Redirect	<ul style="list-style-type: none"> 6/18/20 – Work Package (WP) 1 Employee Pension Stability Account Set Up/Batch/General Ledger – Short Term → 7/1/20 – Effective Date → 						<ul style="list-style-type: none"> 1/21/21 – WP5.2 Online Member Services User Interface – Long Term → 1/26/21 – WP2 TIED SSIS – Non-jClarety – Long Term → 6/24/21 – WP4.2 EPSA Display, and WP12 Full EPSA Set up Screen – Long Term → 						<ul style="list-style-type: none"> 9/22/20 – Voluntary Contributions Initial Functionality – Long Term 10/30/20 – WP2.2 IAP Forecaster Tool – non-jClarety – Long Term 11/19/20 – Voluntary Contributions Final Functionality Release – Long Term 3/23/21 – WP3 EPSA Earnings – Long Term 											
Member Choice	<ul style="list-style-type: none"> 10/23/19 – Project Kick Off 5/15/20 – Member Annual Statements (MAS) Flyer Communication → 						<ul style="list-style-type: none"> 8/19/20 – Member Choice Notification → 8/20/20 – Work Package (WP) 1 Online Member Services (OMS) Changes Deployed → 9/1-30/20 – Election Period 3/23/21 – WP2 OMS & jClarety Enhancements – Long Term → 5/1/21 – Member Choice reflected in MAS → 6/24/21 – WP3 Online Member Services (OMS) Election and Bugs → 						<ul style="list-style-type: none"> 1/1/21 – Effective Date 											
PROGRAM INITIATIVE																								
Cross Project Effort	<ul style="list-style-type: none"> 1/26/21 – WP2.1 IAP Payment Recon (short-term) → 3/18/21 – WP1.2 IAP Validator Tool (long-term) → 4/27/21 – WP2.2 IAP Payment Recon (long-term) → 5/13/21 – WP7.2 Employer Information Actuarial Extract → 6/18/21 – WP5.1 PYE Invoicing Tool → 6/24/21 – WP7.1 Non-Retired Census Actuarial Extract → 6/28/21 – WP4.1 IAP Adjustment Calculator → 																							

SB 1049 Implementation Program

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen



Senate Bill (SB) 1049 Implementation Road Map 2021-2023 Biennium

	2021						2022						2023										
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
Employer Programs	● 7/16/21 – Project Close						Jun 17																
Work After Retirement							● 12/16/21 – WP4 Side Account Credit Allocation																
							● 2/24/22 – Project Close																
Member Redirect							● 10/14/21 – WP5 Voluntary Contribution Maintenance – Long Term																
							● 3/24/22 – WP4.3 EPSA Transaction Display – Long Term																
													● 7/21/22 – WP6.1 EPSA Retirement – Long Term										
													● 2/23/23 – WP9.1 EPSA Withdrawal – Long Term → ●										
													● 2/23/23 – WP9.2 Alter OPSRP Withdrawal – Long Term → ●										
Member Choice	● 8/4/21 – Project Close																						
Technical Debt	● 7/1/21 – Project Kickoff																						
							4/30/22 – WP3 General Ledger Reversals, Including Side Accounts – Functional Design Specification Completed																
							● 3/31/22 – WP2 Benefit Account Transition Status – Functional Design Specification Completed																
													● 7/21/22 – WP1 Employer Statements										
													● 9/15/22 – WP4 Hyperion Replacement										
PROGRAM INITIATIVE																							
Cross Project Effort							● 3/4/22 – WP3 IAP Divorce Tool																
													● 5/20/22 – WP5.2 PYE Invoicing Tool										
													● 6/1/22 – WP4.2 IAP Adjustment Calculator										
													TBD – WP6 IAP Balance Comparison Tool										

2023-2025 Biennium

	2023						2024						2025										
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
Member Redirect	● 7/20/23 – WP8.1 EPSA Pre-Retirement Death – Long Term						● 3/28/24 – Migration Finalization																
	● 7/20/23 – WP10 Backlog Implementation – Long Term						● 4/25/24 – Project Close																
							● 12/21/23 – WP11.1 Reemployment – Long Term																
							● 12/21/23 – WP11.2 Excess EPSA – Long Term																
							● 3/28/24 – WP12.2 Final Backlog Implementation – Long Term																
PROGRAM INITIATIVE																							
Cross Project Effort							● 3/28/24 – WP7.3 Tier One/Tier Two/OPSRP Payouts Actuarial Extract																

Project information: Member Redirect

Project start: July 1, 2019, | Project end: April 25, 2024

Project Manager: Chris Yu

Overall project status: **Yellow**

Project Narrative: The overall project health status turned to yellow because of the increased risk of WP8.1 (EPSA Pre-Retirement Death) size and scope, which could delay and extend current project schedule. The Project Manager and Project Team are developing mitigation strategies to address this concern. Work Package 6.1 (EPSA Retirement) User Acceptance Testing is nearly complete, with 99.7% tested and 99.5% passed. The business requirements document for work package 10 (Backlog Implementation) is in development and will be completed by 6/27/2022. The technical review for work package 8.1 (EPSA Pre-Retirement Death) and SB111A (this piece of legislation grants an optional spouse death benefit for Tier 1/Tier 2 pre-retired death accounts and more closely aligns OPSRP spousal death benefits with that option) also continues towards the 6/30/2022 completion date. The construction for work package 9.1 (EPSA Withdrawal) and 9.2 (Alter OPSRP Withdrawal) continues on-track towards the 9/30/2022 completion date.

Work Packages:

Work Package 6.1 EPSA Retirement- Long-Term

- Production Deployment Date: 7/21/2022
- Business Functional Testing was completed on 3/29/2022
- User Acceptance Testing will be completed on 7/5/2022

Work Package 9.2 Alter OPSRP Withdrawal - Long-Term

- Production Deployment Date: 2/23/2023
- Construction will be completed on 9/30/2022
- Business Functional Testing will begin on 10/3/2022

Additional long-term work packages exist. See the Milestones Schedule for a complete list of work packages

Project objective:

Effective July 1, 2020, this section of the bill redirects a portion of member contributions to a new Employee Pension Stability Account (EPSA) when the funded status of the plan is below 90% and the member's monthly salary is more than \$2,500.

Work Package 9.1 EPSA Withdrawal - Long-Term

- Production Deployment Date: 2/23/2023
- Construction will be completed on 9/30/2022
- Business Functional Testing will begin on 10/3/2022

Work Package 8.1 EPSA Pre-Retirement Death - Long-Term

- Production Deployment Date: 7/20/2023
- Construction will be completed on 3/31/2023
- Business Functional Testing will begin on 5/12/2023

SB 1049 Implementation Program

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

Budget health: Green

There will need to be additional funding for 2023-2025, which will be tracked at the program level.

29560 SB1049 - Member Redirect Project					
Expenses	Budget	Actual to Date	Projections	Total	Variance
*Personal Services - PERS	\$ 1,658,226	\$ 501,678	\$ 1,156,548	\$ 1,658,226	\$ -
Personal Services - SB1049	\$ 5,956,112	\$ 2,238,314	\$ 3,717,798	\$ 5,956,112	\$ -
Services and Supplies	\$ 1,927,618	\$ 512,663	\$ 1,174,297	\$ 1,686,960	\$ 240,658
IT Professional Services	\$ 11,860,665	\$ 5,137,140	\$ 6,680,560	\$ 11,817,700	\$ 42,965
IT Expendable Property	\$ 50,000	\$ 2,042	\$ -	\$ 2,042	\$ 47,958
Data Processing Hardware	\$ 55,000		\$ -	\$ -	\$ 55,000
SB1049 Total Expenses	\$ 19,849,395	\$ 7,890,158	\$ 11,572,655	\$ 19,462,813	\$ 386,582
Project Total	\$ 21,507,621	\$ 8,391,836	\$ 12,729,203	\$ 21,121,039	\$ 386,582
Average Monthly Spend (Burn Rate)		\$ 789,015.78	\$ 578,632.77		
*Not included in SB1049 Expenses					

Schedule Health: Yellow

The schedule is at risk to delay and extend current baselined milestones due to the WP8.1 (EPSA Pre-Retirement Death) risk

Scope health: Yellow

WP8.1 (EPSA Pre-Retirement Death) is at risk of not being able to be completed within the current baselined schedule. Final determination will be made after the technical review completes on 6/30/2022

Quality Assurance activities:

- The Monthly Release Management Report will be submitted for Quality Check Point review on 6/30/2022
- The Move to Production Quality Gate for WP6.1 (EPSA Retirement) will be conducted 7/7/2022

Emerging concerns/needs/impacts:

- The size and scope of work package 8.1 (EPSA Pre-Retirement Death) appears to be larger than originally anticipated. The risk is being tracked and the current project health is yellow due to the increased probability that this risk will become an issue. Until the technical review is complete on 6/30/2022, at which time the team will be able to determine the feasibility of our remaining schedule.
- There are several non-SB 1049 projects running concurrent with Member Redirect that could impact resources. This seems to peak in the Winter of 2022

SB 1049 Implementation Program

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

High Level Project Risks and Mitigation

Listed below are the most critical risks for this project.

For the complete Risk Log, please see the Risk Log tab in the most recent weekly status report: [Member Redirect Weekly Status Report](#)

#	Risk Description	Mitigation and/or Contingency Plan	Notes
83	WP8.1 Scope and Size: Based on current progress on the business requirements document, there is a concern that the size and scope of the coding of this work package will not fit within the scheduled timeline	➤ Review requirements and see if any can be deferred to later (backlog). Other options include a change request to extend current baseline duration or remove certain scope to maintain current schedule.	WP8.1. technical review will be complete on 6/30/2022, at which time we will finalize if the scope of work is larger than originally anticipated.
4	Internal Staffing: Resource shifting, competing priorities, or over allocation impact the availability of dedicated project resources, or a key resource leaves PERS or is out for an extended period	➤ Confirm that SB 1049 projects are the current priority with executive leadership. Work with other SB 1049 and non-SB 1049 Project Managers to manage resources and schedule	The Key Bank project and CHG 5270 project (New Governor Letters) deployment dates are to be determined but are expected to overlap with Member Redirect UAT testing.
92	Impact of Non-SB 1049 Projects: There are critical SB 1049 resources (people and technical) that are also allocated to non-SB 1049 projects, which could cause schedule delays, environmental issues, and additional code merges for Member Redirect	➤ Utilize the bi-weekly resource allocation meeting with other non-SB 1049 project managers	The UAT schedule for work packages 9.1 and 9.2 is scheduled to begin on 12/19/2022. This will overlap with non-SB 1049 project testing and deployment activities.

Project Issues and Action Plans

Listed below are the most critical issues for this project.

For the complete Issue Log, please see the Issue Log tab in the most recent weekly status report: [Member Redirect Weekly Status Report](#)

No	Issue	Resolution / Notes	Estimated Resolution Date
	No current issues		

SB 1049 Implementation Program

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

Project Schedule Deliverables and Milestones

Milestones Schedule				
Milestone	Percent Complete	Baseline Finish Date	Actual / Forecast Finish Date*	Status/ Notes
WP2.1 - Tool for IAP Earnings Data	100%	1/26/2021	1/26/2021	
WP3.1 - EPSA Earnings	100%	3/23/2021	3/23/2021	
WP3.2 - Member Annual Statement Extract	100%	3/23/2021	3/23/2021	
WP4.2 - EPSA Transaction Display	100%	6/24/2021	6/24/2021	
WP12 - Full EPSA Set up screen	100%	6/24/2021	6/24/2021	
WP5.1 - Voluntary Contribution maintenance	100%	10/14/2021	10/14/2021	
WP4.3 - EPSA Correct Member Account	100%	3/24/2022	3/24/2022	
WP6.1 - EPSA Retirement	0%	7/21/2022	7/21/2022	
WP9.1 - EPSA Withdrawal	0%	2/23/2023	2/23/2023	
WP9.2 - Alter OPSRP Withdrawal	0%	2/23/2023	2/23/2023	
WP8.1 - EPSA Pre-Retirement Death	0%	7/20/2023	7/20/2023	Risk #83 puts the following deployments at risk as well
WP10 - Backlog Implementation	0%	7/20/2023	7/20/2023	
WP11.1 - Re-Employment	0%	12/21/2023	12/21/2023	
WP11.2 - Excess EPSA	0%	12/21/2023	12/21/2023	
WP12.2 - Final Backlog Implementation	0%	3/28/2024	3/28/2024	
Migration Finalization	0%	3/28/2024	3/28/2024	
Project Complete	0%	4/25/2024	4/25/2024	

*Finish Date Color: Green = on Schedule, Yellow = in Jeopardy, Red = Late

SB 1049 Implementation Program

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

Project information: Technical Debt

Project start: June 22, 2021 | **Project end:** February 1, 2023
Project Manager: Joli Whitney

Project objective:

The SB 1049 Technical Debt Project will address areas of technical debt which have been encountered and identified in the SB 1049 Implementation Program and prioritized for resolution. Resolution of technical debt will be limited to those items that are created by SB 1049, are exacerbated by SB 1049, or inhibit PERS' ability to complete SB 1049 requirements.

Overall project status: **Green**

Project Narrative: Work Package 1 (WP1 Employer Statements) completed UAT on 6/8/2022. This UAT was highly successful, completing early with only one defect identified (and fixed) during the entire UAT period. UAT with Employers is in process and on track to complete by 6/17/2022.

Work Package 4 (WP4 Hyperion Replacement) is in development. The scope of this work package includes building, integrating, and testing the new SSRS reporting framework and converting one report as a proof of concept.

Work Package 5 (WP5 Side Account Reversals) is in schedule development.

Change Request 007- General Ledger Reversals was approved by the SB 1049 Steering Team on 5/24/2022. This has been added to the project as Work Package 6. Schedule development is in process and work order contract amendment will be prepared to obtain resources for WP5 and WP6.

Note that the project closure date will continue to be subject to change as additional items are added into project scope. This is planned and expected. All scope is added via the SB 1049 Change Request Process and approved by the SB 1049 Steering Team.

Work Packages:

Work Package 1: Employer Statements

- Production Deployment Date: 7/21/2022
- UAT completed on 6/8/2022

Work Package 2: Benefit Account Status Transition

- Functional Design Specification Complete 3/31/2022

Work Package 3: General Ledger and Side Account Reversals

- Functional Design Specification Complete 4/30/2022

Work Package 4: Hyperion Replacement

- Production Deployment Date: 9/15/2022
- Development scheduled for completion on 7/8/2022
- BFT scheduled to begin on 7/11/2022
- UAT scheduled to begin on 8/10/2022

Work Package 5: Side Account Reversals

- Milestones TBD

Work Package 6: General Ledger Reversals

- Milestones TBD

SB 1049 Implementation Program

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

CR or WP#	Description	Status	SB 1049 Technical Debt Qualification	Other Considerations/Notes
WP1	Employer Statements	In Process	Exacerbated by SB 1049: New financial components from Member Redirect and WAR projects have made employer statements inaccurate and difficult for employers to understand and reconcile.	The enhancements will make statements easier to read- like a bank statement- and correct the inaccurate information
WP2	Benefit Account Status Transition	Closed	Exacerbated by SB 1049: SB 1049 introduced changes to the way employers report retiree salary and downstream inconsistent activity in recipient and benefit accounts was discovered.	The functional design specification document identified which statuses are correct and information has been updated for developers to utilize in future programming
WP3	General Ledger and Side Account Reversals	Closed	Exacerbated by SB 1049: Two issues impacting General Ledger (GL) were discovered during the WAR project related to transaction reversals. Although these issues existed before SB 1049, the additional functionality added to implement the WAR project have exacerbated these issues.	Through the functional design specification document, it has been determined that although these issues are both related to reversals, the solutions will be different. A decision was made to develop two change requests (CRO06 & CRO07) to explore adding solutions to these issues to the project scope in future work packages.
WP4	Hyperion Replacement	In Process	Inhibit PERS' ability to complete SB 1049: Oracle Hyperion is end of life and a decision was made to discontinue developing new reports in a deprecated product. Member Redirect WP 9.1 has a dependency on the reporting features of Hyperion so the solution must be in place to support this WP. The scope of this WP delivers the solution in SSRS, a Microsoft product, as well as one report to be used as a test case for developers when	There are two other non-SB 1049 work streams to complete the Hyperion replacement: <ul style="list-style-type: none"> • A Maintenance and Enhancement effort to convert approximately 80 reports • A Central Data Management effort to convert BRIO based reports which are utilized by the Financial Services Division. This work must be completed by 6/30/22 to comply with Oracle's mandate.

SB 1049 Implementation Program

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

			addressing other reports used by the agency.	
WP5	Side Account Reversals	CR Approved	Exacerbated by SB 1049: Issues impacting Side Account Reversals were discovered during the WAR project.	Through the As-Is documentation produced in WP3, we have found that Side Account Reversals are a complex issue to address. A change request was approved by the SB 1049 Steering Team on 5/10/22. This is in schedule and work order contract amendment development.
WP6	General Ledger Reversals	CR Approved	Exacerbated by SB 1049: Issues impacting General Ledger (GL) transaction reversals were discovered during the WAR project.	Through the As-Is documentation produced in WP3, we have found that the issues causing incorrect General Ledger is a technical debt item which should be addressed by SB 1049 Technical Debt Project. A change request was approved by SB 1049 Steering Team on 5/24/22. This is in schedule and work order contract amendment development.

***Note:** Change requests will be transitioned to work packages if/when the CR is approved by the SB 1049 Steering Team

SB 1049 Implementation Program

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

Budget health: Green

There will need to be additional funding for 2023-2025, which will be tracked at the program level.

29560 SB1049 - Technical Debt Project					
Expenses	Budget	Actual to Date	Projections	Total	Variance
*Personal Services - PERS	\$ 200,000	\$ 237,545	\$ (37,545)	\$ 200,000	\$ -
Personal Services - SB1049	\$ 200,000	\$ 104,606	\$ 95,394	\$ 200,000	\$ -
Office Expenses	\$ 105,000	\$ 2,668	\$ 6,332	\$ 9,000	\$ 96,000
IT Professional Services	\$ 1,985,000	\$ 433,106	\$ 191,249	\$ 211,500	\$ 1,360,645
Professional Services - QA + PM	\$ 485,741	\$ 164,550	\$ 269,970	\$ 434,520	\$ 51,221
IT Expendable Prop	\$ 15,000	\$ 418	\$ -	\$ 418	\$ 14,582
SB1049 Expenses	\$ 2,790,741	\$ 705,348	\$ 562,945	\$ 1,268,293	\$ 1,522,448
Project Total	\$ 2,990,741	\$ 942,893	\$ 525,400	\$ 1,055,438	\$ 1,522,448
Average Monthly Spend (Burn Rate)		\$ 70,534.81	\$ 51,176.83		
*Not included in SB1049 Expenses					

Schedule Health: Green

WP1, WP2, WP3, and WP4 are all baselined and progressing on-schedule. Schedules for WP5 and WP6 are in development.

Scope health: Green

The current project scope is well understood.

Quality Assurance activities:

- The Move to Production Quality Gate for WP1 Employer Statements will be conducted 7/7/2022
- Quality Check Point for Work Package 5 & 6 Schedule Rebaseline scheduled to begin on 7/13/2022
- Quality Check Point for Work Package 4 Work Package Development document scheduled to start 8/31/2022

Emerging concerns/needs/impacts:

- The schedule is in development for new Work Package 5 Side Account Reversals, but the work is expected to extend into the 2023-2025 biennium. PERS has requested funding for this in the 2023-2025 Budget Request.

SB 1049 Implementation Program

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

High Level Project Risks and Mitigation

Listed below are the most critical risks for this project.

For the complete Risk Log, please see the Risk Log tab in the most recent weekly status report: [Technical Debt Weekly Status Report](#)

#	Risk Description	Mitigation and/or Contingency Plan	Notes
1	Competing SB 1049 Resources	➤ Careful coordinated schedule planning and priorities across the program	We continue to monitor resource allocations at the program and portfolio level.
2	Complexity of Effort: The forecasted amount of work, timing, and complexity is inaccurate, or assumptions made that are off base.	➤ Schedule additional time to analyze complex code.	The project team regularly evaluates and prioritizes the technical debt backlog. Effort is made to research and understand the issues as much as possible before proposing to move forward to a change request.
5	Technology Risk- Complexity and fragility of jClarety system	➤ Iteratively develop more complex code structure; Add necessary technical debt fixes to project scope; Regression Test to ensure technical issue does not negatively affect new code.	The focus of WP5 and WP6 is general ledger and side accounts- two areas where we have known gaps in documentation and system knowledge. The Functional Design Spec developed in WP3 will provide assistance.
6	Associate Product Owner (APO) availability for SB 1049- The Associate Product Owners are limited in bandwidth to complete SB 1049 work due to non-SB 1049 work. When critical issues arise, this severely limits their schedule capacity to complete scheduled SB 1049 tasks.	<ul style="list-style-type: none"> ➤ Product Owners support APO SB 1049 work when an APO is out of the office or must focus on agency critical non-SB production issues. ➤ Hire and train more APOs would be the preferred long-term plan. ➤ Assign backup from non-SB 1049 allocated PERS staff. 	There are multiple UATs in progress currently. We continue to regularly evaluate our resource allocations and see that there is no wiggle room available for these resources.

Project Issues and Action Plans

Listed below are the most critical issues for this project.

For the complete Issue Log, please see the Issue Log tab in the most recent weekly status report: [Technical Debt Weekly Status Report](#)

No	Issue	Resolution / Notes	Estimated Resolution Date
	No current issues		

SB 1049 Implementation Program

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

Project Schedule Deliverables and Milestones

Milestones Schedule				
Milestone	Percent Complete	Baseline Finish Date	Actual / Forecast Finish Date*	Status/ Notes
WP3- Functional Design Specification Document complete	100%	4/29/2022	4/29/2022	
WP4-Draft System Design Specification Document complete	100%	4/29/2022	4/28/2022	
WP1- User acceptance testing (UAT) complete	0%	7/5/2022	7/5/2022	
WP1- Release to production Quality Gate complete	0%	7/20/2022	7/20/2022	
WP1- Production deployment complete	0%	7/20/2022	7/20/2022	
WP4- Business functional testing (BFT) complete	0%	7/22/2022	7/22/2022	
WP1- Lessons Learned	0%	8/4/2022	8/4/2022	
WP4- User acceptance testing (UAT) complete	0%	8/24/2022	8/24/2022	
WP4- Release to production Quality Gate complete	0%	9/8/2022	9/8/2022	
WP4- Production Deployment complete	0%	9/15/2022	9/15/2022	
WP5- Milestones in Development	0%	TBD	TBD	Schedule being developed
WP6- Milestones in Development	0%	TBD	TBD	Schedule being developed
Project Closure Quality Gate	0%	2/1/2023	2/1/2023	Likely to extend due to WP5
Project ends	0%	2/1/2023	2/1/2023	Likely to extend due to WP5

*Finish Date Color: Green = on Schedule, Yellow = in Jeopardy, Red = Late

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

Project information: Salary Limit

Project start: 7/01/ 2019 | Project end: 5/28/2021

Project Manager: Bruce Rosenblatt

Project objective:

The Salary Limit Project is necessary because SB 1049 redefined "salary," which changes the calculation method for Final Average Salary, and contributions for members with subject salary greater than \$195,000. This limit is on salary for plan purposes, and is not a salary cap. The Salary Limit was adjusted for the Consumer Price Index, on 1/04/2021. The redefinition impacts the data and business processes used by diverse teams at PERS, including Benefit Calculations, Member Estimates, Data Verifications, Employer Data Reporting, and Account Data Reviews and Reporting.

Overall project status: Complete

Project Narrative: The Salary Limit Project was successfully closed on 5/28/2021.

Work Packages:

Work Package 1: Short-term Minimum Viable Product (MVP)

- Production Deployment Date: 12/24/2019 (Complete)

Work Package 2: Annual Implementation of New Salary Limit

- Production Deployment Date: 1/23/2020 (Complete)

Work Package 3: Adding self-service screens to jClarety system to record annual changes and effective dates - Long-term

- Production Deployment Date: 11/19/2020 (Complete)

Work Package 4 - Enhances proration work processes when partial year calculations may apply - Long-term

- Production Deployment Date: 5/13/2021 (Complete)

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

Project information: Employer Programs

Project start: July 1, 2019 | **Project end:** July 16, 2021

Project Manager: Joli Whitney

Project objective:

The Employer Programs section of SB 1049 expands the requirements for the Employer Incentive Fund (EIF); and appropriates \$100 million from the General Fund to the Employer Incentive Fund; directs net proceeds from Oregon Lottery Sports betting to the Employer Incentive Fund; allows participating public employers who make larger than \$10 million deposits to side accounts to determine when they wish to have these funds included in their employer rate assessment; and requires all public employers to participate in the Unfunded Actuarial Liability Resolution Program (UALRP).

Overall project status: Complete

Project Narrative: The Employer Programs project was successfully closed on 7/16/2021.

Work Packages:

WP1 Migrate and Adapt ERPT

- Acceptance Quality Gate: 3/23/2021 (this WP was not released to production) (Complete)

WP2 ERPT Stakeholder Acceptance and Deployment to Cloud

- Production Deployment Date: 6/3/2021 (Complete)

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

Project information: Member Choice

Project start: October 23, 2019 | Project end: August 4, 2021

Project Manager: Joli Whitney

Project objective:

The Member Choice sections of SB 1049 give members a say in how their Individual Account Program (IAP) accounts will be invested. Members' regular IAP accounts are currently allocated to Target-Date Funds (TDF) based on their year of birth. Beginning with calendar year 2021, members will be able to elect a TDF other than the default TDF.

Overall project status: Complete

Project Narrative: The Member Choice project was successfully closed on 8/4/2021.

Work Packages:

WP1.1 Online Election

- Production Deployment Date: 8/20/2020 (Complete)

WP1.2 Voya's updates to website and nightly sweep program

- Production Deployment Date: 1/19/2021 (Complete)

WP1.3 PERS paper form election process including workflow

- Production Deployment Date: 8/12/2020 (Complete)

WP1.4 Development of new reports (to Voya and internal)

- Production Deployment Date 9/29/2020 (Complete)

WP2- Refining TDF Processes - Long-term

WP2.1 -Online Member Services and jClarety Enhancements

- Production Deployment Date: 3/23/2021 (Complete)

WP2.2 -Central Data Management Reports

- Production Deployment Date: 6/15/2021 (Complete)

WP3- Online Member Services Election and Bugs

- Production Deployment Date: 6/24/2021 (Complete)

Status Report for June 17, 2022

Executive Sponsor: Kevin Olineck
Program Manager: James Allen

Project information: Work After Retirement (WAR)

Project start: July 1, 2019 | **Project end:** 2/24/2022

Project Manager: Susan K. Mundell

Project objective:

Effective January 1, 2020, the Work After Retirement (WAR) sections of SB 1049 allow most service retirees to work unlimited hours for PERS participating employers in calendar years 2020-2024 while retaining their retirement benefit. It also requires employers to pay employer contributions on retirees' salary during that period.

Overall project status: Complete

Project Narrative: The Work After Retirement Project was successfully closed on 2/24/2022.

Work Packages:

Work Package 1: Suspend DTL2-07 Retiree Wage Codes – Short-term

- Production Deployment Date: 12/19/2019 (Complete)

Work Package 2: New Wage Codes with General Ledger Integration – Long-term

- Production Deployment Date: 11/19/2020 (Complete)

Work Package 3: Retro Rate Change – Long-term

- Production Deployment Date: 5/13/2021 (Complete)

Work Package 4: Side Account Credit Allocation

- Production Deployment Date: 12/16/2021 (Complete)

Senate Bill (SB) 1049 Implementation Road Map

2019-2021 Biennium

	2019						2020						2021											
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Employer Programs	<ul style="list-style-type: none"> 7/1/19 – Effective Date 9/3/19 – Employer Incentive Fund (EIF) Application #1 Opens 						<ul style="list-style-type: none"> 11/27/19 – EIF Application #1 Closes 12/2/19 – EIF Application #2 Opens 						<ul style="list-style-type: none"> 8/6/20 – Employer Rate Projection Tool (ERPT) Assessment Complete 12/1/20 – EIF Application #2 Closes 3/30/21 – Work Package (WP) 1 Migrate and Adapt ERPT →● 6/30/21 – WP2 ERPT Stakeholder Acceptance and Deployment →● 											
Salary Limit							<ul style="list-style-type: none"> 12/24/19 – Work Package (WP) 1 – Short Term 1/1/20 – Effective Date 1/24/20 – WP2 Post 2020 Salary Limit – Long Term 						<ul style="list-style-type: none"> 11/19/20 – WP3 User Screens to Record Annual Salary Limit – Long Term 5/13/21 – WP4 Proration Reports and Workflow – Long Term →● 5/28/21 – Project Close →● 											
Work After Retirement							<ul style="list-style-type: none"> 12/19/19 – Work Package (WP) 1 Retiree Wages Suspended – Short Term 1/1/20 – Effective Date 						<ul style="list-style-type: none"> 11/19/20 – WP2 New Wage Codes with General Ledger (GL) Integration – Long Term 5/13/21 – WP3 Retro Rate Change – Long Term →● 											
Member Redirect							<ul style="list-style-type: none"> 6/18/20 – Work Package (WP) 1 Employee Pension Stability Account Set Up/Batch/General Ledger – Short Term →● 7/1/20 – Effective Date →● 1/21/21 – WP5.2 Online Member Services User Interface – Long Term →● 						<ul style="list-style-type: none"> 9/22/20 – Voluntary Contributions Initial Functionality – Long Term 10/30/20 – WP2.2 IAP Forecaster Tool – non-jClarety – Long Term 11/19/20 – Voluntary Contributions Final Functionality Release – Long Term 3/23/21 – WP3 EPSA Earnings – Long Term 1/26/21 – WP2 TIED SSIS – Non-jClarety – Long Term →● 6/24/21 – WP4.2 EPSA Display, and WP12 Full EPSA Set up Screen – Long Term →● 											
Member Choice	<ul style="list-style-type: none"> 10/23/19 – Project Kick Off 5/15/20 – Member Annual Statements (MAS) Flyer Communication →● 						<ul style="list-style-type: none"> 8/19/20 – Member Choice Notification →● 						<ul style="list-style-type: none"> 8/20/20 – Work Package (WP) 1 Online Member Services (OMS) Changes Deployed 9/1-30/20 – Election Period 3/23/21 – WP2 OMS & jClarety Enhancements – Long Term →● 5/1/21 – Member Choice reflected in MAS →● 6/24/21 – WP3 Online Member Services (OMS) Election and Bugs →● 1/1/21 – Effective Date 											
PROGRAM INITIATIVE																								
Cross Project Effort	<ul style="list-style-type: none"> 1/26/21 – WP2.1 IAP Payment Recon (short-term) →● 3/18/21 – WP1.2 IAP Validator Tool (long-term) →● 9/17/20 – WP1.1 IAP Validator Tool (short-term) →● 4/27/21 – WP2.2 IAP Payment Recon (long-term) →● 5/13/21 – WP7.2 Employer Information Actuarial Extract →● 6/18/21 – WP5.1 PYE Invoicing Tool →● 6/24/21 – WP7.1 Non-Retired Census Actuarial Extract →● 6/28/21 – WP4.1 IAP Adjustment Calculator →● 																							

Senate Bill (SB) 1049 Implementation Road Map

2021-2023 Biennium

	2021						2022						2023											
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Employer Programs	● 7/16/21 – Project Close						Jun 17																	
Work After Retirement							● 12/16/21 – WP4 Side Account Credit Allocation																	
							● 2/24/22 – Project Close																	
Member Redirect							● 10/14/21 – WP5 Voluntary Contribution Maintenance – Long Term						● 7/21/22 – WP6.1 EPSA Retirement – Long Term											
							● 3/24/22 – WP4.3 EPSA Transaction Display – Long Term						2/23/23 – WP9.1 EPSA Withdrawal – Long Term → ●											
													2/23/23 – WP9.2 Alter OPSRP Withdrawal – Long Term → ●											
Member Choice	● 8/4/21 – Project Close																							
Technical Debt	● 7/1/21 – Project Kickoff						4/30/22 – WP3 General Ledger Reversals, Including Side Accounts – Functional Design Specification Completed						● 3/31/22 – WP2 Benefit Account Transition Status – Functional Design Specification Completed											
													● 7/21/22 – WP1 Employer Statements											
													● 9/15/22 – WP4 Hyperion Replacement											
													● 2/1/23 – Project Close											
PROGRAM INITIATIVE																								
Cross Project Effort																								
	● 3/4/22 – WP3 IAP Divorce Tool																							
	● 5/20/22 – WP5.2 PYE Invoicing Tool																							
	● 6/1/22 – WP4.2 IAP Adjustment Calculator																							
	TBD – WP6 IAP Balance Comparison Tool																							

2023-2025 Biennium

	2023						2024						2025											
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN
Member Redirect	● 7/20/23 – WP8.1 EPSA Pre-Retirement Death – Long Term						● 3/28/24 – Migration Finalization																	
	● 7/20/23 – WP10 Backlog Implementation – Long Term						● 4/25/24 – Project Close																	
							● 12/21/23 – WP11.1 Reemployment – Long Term																	
							● 12/21/23 – WP11.2 Excess EPSA – Long Term																	
							● 3/28/24 – WP12.2 Final Backlog Implementation – Long Term																	
PROGRAM INITIATIVE																								
Cross Project Effort																								
	● 3/28/24 – WP7.3 Tier One/Tier Two/OPSRP Payouts Actuarial Extract																							

July 22, 2022
PERS Board Meeting Agenda

Action and Discussion Items

1. SB 1049 Implementation Update
2. Equal to or Better Than Testing Recommendations
3. 2023-2025 Agency Budget Recommendation
4. Presentation of December 31, 2021 System Valuation Results



Oregon

Kate Brown, Governor

Public Employees Retirement System

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July 22, 2022

TO: Members of the PERS Board
FROM: Jake Winship, Actuarial Manager
SUBJECT: Equal to or Better (ETOB) Testing

OVERVIEW

Oregon Administrative Rules 459 Chapter 030 permits public employers to provide retirement benefits to their police officers and firefighters under an exemption from the requirement to participate in the Oregon Public Employees Retirement Plan (PERS). To obtain this exemption, the public employer must petition the PERS Board. The board has engaged the actuarial consulting firm Independent Actuaries, Inc. (IAI) to determine whether the plans seeking exemption provide benefits equal to or better (ETOB) than those available to PERS members similarly situated. This determination must take place within the calendar year 2022.

The scope of the ETOB determination addresses only those benefits provided to the members of each plan. Plan funding, governance, benefit taxation, and investment strategy are explicitly excluded from consideration and have no impact on whether a given plan satisfies the requirements of ETOB determination. ETOB considers the benefit provisions and employer contributions of each plan on a prospective basis, rather than comparing after the fact financial results.

BACKGROUND

Milliman actuaries introduced this topic to the board at its October 1, 2021 meeting. An update was presented on December 3, 2021 at which the PERS Board affirmed the provisions of OAR 459-030 as the basis for equal to or better than testing determination and directed agency staff to solicit a request for quote.

At the January 31 PERS Board meeting, staff presented the results of the request for quote. Based on this, the board awarded the contract for determination of ETOB to Independent Actuaries, Inc.

The PERS Board affirmed a proposed two-step process for ETOB determination at its March 28 meeting. The first step assessed the contribution and benefit formula for each defined benefit plan subject to determination and compared the plan to PERS; the second phase applied to each defined contribution plan and any defined benefit plans which were not unambiguously determined to be ETOB via the first step comparison. The board also approved an updated timeline for completion of required tasks by IAI.

As reported at the May 27 PERS Board meeting, Independent Actuaries, Inc. (IAI) determined that the **City of Forest Grove, City of Portland (FPDR), Morrow County, and Tillamook County**

provide benefits ETOB than those provided by PERS via the step one comparison and no further testing was needed. **The City of Seaside, City of Springfield, City of The Dalles, Union County, and Wheeler County** required second phase testing to determine whether they satisfy the ETOB requirement.

ACTIONS SINCE LAST MEETING

PERS actuarial staff members have continued to meet with consulting actuaries from IAI on a biweekly basis. We have also communicated via email as needed to provide support and additional information.

As part of this ongoing conversation, PERS staff were able to clarify and provide direction on a couple of topics. The first topic concerned whether the ETOB determination ought to account for the implicit subsidy associated with post-retirement medical (PRM) benefits. Actuarial staff advised that this comparison was acceptable but not mandatory. IAI investigation revealed that inclusion or exclusion of these subsidies did not materially impact the resulting determination for any plan. However, because that analysis was completed, it is included in the report for each plan.

The second area concerned the designation of certain benefit plan contributions as “employer pick-up” contributions as defined in Section 414(h)(2) of the Internal Revenue Code (IRC). Actuarial staff, in consultation with members of the PERS policy analysis and compliance team, advised that these should be considered as employer contributions for ETOB determination.

Aeron Riordon of IAI has prepared a final report for each plan subject to ETOB determination. Mr. Riordon is an Enrolled Actuary (EA), an Associate of the Society of Actuaries (ASA), and a member of the American Academy of Actuaries (MAAA). He is available to answer any questions that the board may have concerning the conclusions, procedures, and assumptions used to make the determination presented in these reports.

ACTIONS NEEDED

Staff recommends that the PERS Board take the following actions:

1. Accept the reports provided by Independent Actuaries, Inc. to determine whether each of the subject plans meet or exceed the benefits offered by PERS.
2. Affirm that the retirement plan sponsored by the City of Forest Grove provides benefits *equal to or better* than those available from PERS.
3. Affirm that the retirement plan sponsored by the City of Portland provides benefits *equal to or better* than those available from PERS.
4. Affirm that the retirement plan sponsored by the City of Seaside provides benefits *equal to or better* than those available from PERS.
5. Affirm that the retirement plan sponsored by the City of Springfield provides benefits *equal to or better* than those available from PERS.
6. Affirm that the retirement plan sponsored by the City of the Dalles provides benefits *equal to or better* than those available from PERS.

7. Affirm that the retirement plan sponsored by Morrow County provides benefits *equal to or better* than those available from PERS.
8. Affirm that the retirement plan sponsored by Tillamook County provides benefits *equal to or better* than those available from PERS.
9. Affirm that the retirement plan sponsored by Union County provides benefits *equal to or better* than those available from PERS.
10. Affirm that the retirement plan sponsored by Wheeler County provides benefits *equal to or better* than those available from PERS.

BOARD OPTIONS

The PERS Board may:

1. Pass a motion to accept the ETOB determination reports presented by Independent Actuaries, Inc. and affirm that each plan subject to determination provides benefits equal to or better than PERS.
2. Pass a motion to accept the ETOB determination reports presented by Independent Actuaries, Inc. but reject the conclusion that one or more of the plans subject to determination provides benefits equal to or better than PERS. If this action is selected, the board should specify which, if any, plans are affirmed to provide benefits equal to or better than PERS.
3. Direct Independent Actuaries, Inc. to perform further actions in order to fulfill its contract to determine whether benefits provided are equal to or better than PERS.

STAFF RECOMMENDATION

Staff recommends the PERS Board select the first option presented.

C.2. Attachment 1 - ETOB Determination Reports

CITY OF FOREST GROVE

OREGON REVISED STATUTE 237.620 EQUAL TO OR BETTER THAN (ETOB) DETERMINATION AS OF DECEMBER 31, 2020



**Five Centerpointe Dr., Suite 520
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www.independentactuaries.com**



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**CITY OF FOREST GROVE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

REPORT SUMMARY

This report has been prepared by Independent Actuaries, Inc. for the Oregon Public Employees' Retirement System (PERS) and the City of Forest Grove. This report provides the details of the determination whether the retirement benefits provided by the City qualify for exemption under Oregon Revised Statute (ORS) 237.620(2) from participation in PERS.

Typically, in Oregon, public employers of police officers and firefighters provide retirement benefits under PERS. A public employer may qualify for exemption and provide their own retirement benefits if those benefits are equal to or better (ETOB) than the benefits provided under PERS. An ETOB determination is made every twelve years.

Under the Oregon Administrative Rule (OAR) governing the test, employer retirement benefits are compared at each PERS tier in three categories: total benefits, service retirement with postretirement healthcare, and disability retirement with postretirement healthcare. For an employer to qualify for exemption, the employer total benefits must be greater than 100 percent of benefits that PERS provides at each tier. Additionally, service retirement and disability retirement benefits must each be at least 80 percent of the benefits that PERS provides at each tier.

As approved by the PERS Board, employer retirement benefits may be determined to be ETOB either via a side-by-side comparison of employer plan provisions against PERS plan provisions or by a full actuarial valuation. It is only reasonable to review employer retirement benefits using the side-by-side comparison approach if the benefits are provided via a plan design similar to PERS. Under the side-by-side comparison approach, the employer retirement benefits will only be determined to be ETOB if they are unambiguously equal to or better than PERS. If the employer retirement benefits design is not suitable for side-by-side comparison, or if the benefits are not unambiguously more valuable, a full actuarial valuation determination approach will be used.

Based on the information described in this report, we conclude that retirement benefits provided by the City of Forest Grove meet the standards for receiving an exemption under OAR 459-030-0025 via a side-by-side comparison approach.



DETERMINATION METHODOLOGY

The standards for determining whether an employer provides benefits that are ETOB are stated in OAR 459-030-0025, with additional definitions provided by reference. Other rules for testing are as approved by the PERS Board.

Plan provisions considered in the side-by-side comparison include the level of service retirement and disability retirement benefits, early retirement subsidies, the definition of covered compensation, mandatory employee contributions, the normal form of payment, cost of living adjustments, and the level of explicit and implicit postretirement healthcare benefits.

- We have compared full-career benefits, assuming an employee is covered by either the terms of the public employer's retirement benefit plan(s) or PERS for their entire career starting with their date of hire. Benefit provisions which apply prior to the earliest date of hire of any active employee of the public employer are ignored. Historical plan changes from to the earliest date of hire of any active employee of the public employer to the present are reflected. Current benefit provisions are expected to apply in the future.
- Benefits were compared based on the December 31, 2020 actuarial present value of retirement benefits projected to be accrued to the projected date of retirement or disability, calculated as a percentage of salary.
- We have used hypothetical census data, based on the PERS police officer and firefighter census used in the December 31, 2020 PERS valuation.
- We have used the actuarial assumptions and methods identified in the December 31, 2020 PERS valuation report, but assuming no pre-retirement death or withdrawal. Any additional actuarial assumptions needed to evaluate features of the public employer's retirement plan(s) which are not comparable to PERS have been developed in a manner consistent with PERS assumptions.
- Prior and future benefits which depend on investment returns have been valued using the assumed rate, taking into consideration guaranteed returns stated in plan provisions. The assumed rate is the 6.90% discount rate used in the December 31, 2020 PERS valuation.
- Under the assumptions prescribed for the comparison, the PERS Full Formula method of calculating Tier 1 and Tier 2 retirement benefits results in a more valuable benefit than the Money Match method in almost all cases; therefore, the Full Formula method has been used in the comparison.
- Only employer-funded retirement benefits are included in the comparison. Any contribution described as an employee contribution will be ignored, unless the public employer's plan provisions state that the employer is responsible for making the contribution on the employee's behalf and the responsibility to make the contribution is non-elective.
- We have valued both explicit and implicit postretirement healthcare benefits.
- Our comparison does not value the transfer of investment risk and mortality risk between employee and employer inherent in the plan design differences of defined benefit and defined contribution plans.
- Our comparison does not include increases to retirement benefits under ORS 238.362-368 and ORS 237.635-637.



**CITY OF FOREST GROVE
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

ACTUARIAL CERTIFICATION

Independent Actuaries, Inc. was engaged by the State of Oregon, through its Oregon Public Employees Retirement System (PERS), to review the retirement benefits program of the City of Forest Grove as of December 31, 2020, in order to determine if it is equal to or better than PERS as required by ORS 237.620(2). The conclusions of the review are set forth in this report, which has been prepared exclusively for PERS and the City, and may not be relied upon for any other purpose or by any party other than PERS or the City.

The valuation is based on participant data and plan provision supplied by PERS and the City. All information submitted to us has been reviewed for reasonableness and consistency, but has otherwise been accepted and relied upon without audit. The plan provisions are summarized in the applicable section of this report.

This report was prepared in accordance with applicable law. To the best of our knowledge, the information supplied in this report is complete and accurate. For purposes of determining the actuarial present value of retirement benefits, each prescribed method and assumption was applied in accordance with our understanding of law and regulations under ORS 237.620 and OAR 459. The prescribed and non-prescribed methods and assumptions are disclosed in the Determination Methodology and Actuarial Assumptions sections of this report. In our opinion, each non-prescribed assumption is reasonable and such non-prescribed assumptions, in combination, offer our best estimate of anticipated experience under the plan.


The liabilities were calculated using models developed for the purpose of pension plan valuation, the structure and output of which were evaluated and reasonably achieve their intended purpose.

Future actuarial measurements may differ significantly from the current measurement presented in this report due to such factors as changes in economic or demographic assumptions and changes in plan provisions or applicable law.

The undersigned credentialed actuaries are members of the American Academy of Actuaries and meet the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* of the American Academy of Actuaries to render the actuarial opinion contained herein.



 Aeron Riordon, ASA, EA, MAAA



 Steven L. Diess, EA, MAAA

June 27, 2022 _____
 Date

20-08467 _____
 Enrollment #

June 27, 2022 _____
 Date

20-06055 _____
 Enrollment #

Independent Actuaries, Inc.
 Five Centerpointe Dr., Suite 520, Lake Oswego, OR 97035 503.520.0848



**CITY OF FOREST GROVE
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

TEST RESULTS

The City of Forest Grove provides retirement and disability benefits via a traditional percentage of covered compensation defined benefit type plan design which is comparable to the PERS Full Formula method of calculating Tier 1, Tier 2, and OPSRP retirement and disability benefits. The value of postretirement healthcare benefits provided by the City is also easily compared to those provided under PERS. Therefore, a side-by-side review and comparison of plan provisions has been used as the method for determining whether benefits provided by the City are ETOB than those provided under PERS.

Because the retirement and disability benefits provided to public safety members in PERS Tier 1 and Tier 2 are better than those provided under OPSRP, only a comparison of plan provisions between the City's Retirement Plan and those of PERS Tier 1 and Tier 2 is necessary.

Provided here is a side-by-side listing of key provisions for the City's retirement benefits program compared to PERS.

Plan Provision Under Comparison	City of Forest Grove	PERS Tier 1/Tier 2 (Full Formula)
Benefit Percentage	2.00%	2.00%
Covered Compensation	Salary including overtime, bonus, unused sick leave and vacation time (as applicable)	Salary including overtime, bonus, unused sick leave and vacation time (as applicable)
Years of Service	Uncapped	Uncapped
Normal Retirement Age	Age 58	Age 55
Normal Form of Benefit	60 months certain and life annuity	Cash refund annuity with 25% survivor cash refund allowance
Mandatory Employee Contributions	None	Prior to 2004, 6% of compensation. After 2019, 2.5% of compensation. Tier 1 accounts accrue at a guaranteed rate.
Cost-of-Living Adjustments	Up to 2.00%	2.00% on benefits earned before October 2013. 1.25% or 0.15% (depending on benefit amount) on benefits earned after October 2013.
Unreduced Benefit Eligibility	3 years from normal retirement age or 25 years of service	25 years of service



**CITY OF FOREST GROVE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

Plan Provision Under Comparison	City of Forest Grove	PERS Tier 1/Tier 2 (Full Formula)
Disability Benefits	Normal retirement benefit reflecting years of service as if member had worked to normal retirement age.	Greater of normal retirement benefit reflecting years of service as if member had worked to age 55, or 50% of compensation at disability (for service-related disabilities only).
Retiree Medical Benefits	Value of implicit subsidy due to continued medical coverage for retirees paying COBRA premium rates.	\$60 monthly premium stipend is applied to PERS-sponsored Medicare supplemental insurance costs.

The above comparison shows that the City's retirement benefits are more valuable than those under PERS in nearly every category. Under PERS a portion of the retirement benefit is employee funded. In addition, the City provides a cost of living adjustment and retiree medical benefits which are more valuable than under PERS. The PERS plan provisions which are more valuable are the amount of unused sick leave and vacation time which may be reflected in the calculation of retirement benefits.

To understand the significance of the plan provisions where PERS is better, we developed an adjustment factor for each provision related to the City's retirement benefits. In developing these factors, we considered participant statistics calculated from the hypothetical census data used in our review, including the average and standard deviation of participant age, service, and salary. Our analysis indicates that the employer funded retirement benefits provided by the City are at least 110% the value of those provided by PERS.

Based on our analysis, the City's retirement benefits are ETOB than those provided by PERS.



SUMMARY OF APPLICABLE PLAN PROVISIONS



**CITY OF FOREST GROVE
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

PERS TIER 1/TIER 2 FULL FORMULA BENEFITS

Plan Year	January 1 to December 31.	
Plan Type	Defined Benefit.	
Plan Eligibility	Tier 1: Hired prior to 1996. Tier 2: Hired after 1995 and prior to August 29, 2003.	
Normal Retirement		
Eligibility	The attainment of age 55.	
Benefit	2.00% of average monthly compensation multiplied by years of benefit service.	
Mandatory Employee Contributions		
Eligibility	Prior to January 1, 2004 all Tier 1/Tier 2 participants. Effective July 1, 2020 applicable to participants earning at least \$2,500 monthly in 2020, increased to \$3,333 in 2022 and indexed for inflation in future years.	
Contributions	Prior to January 1, 2004, 6.0% of monthly compensation. After July 1, 2020, 2.50% of monthly compensation.	
Guaranteed Interest Rate (Tier 1 only)	Years	Rate
	1980-1988	7.50%
	1989-2013	8.00%
	2014-2015	7.75%
	2016-2017	7.50%
	2018-2020	7.20%
	2021+	6.90%



**CITY OF FOREST GROVE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS Tier 1/Tier 2 Full Formula Benefits
(Continued)**

Early Retirement

Eligibility	The earlier of age 50 or completion of 30 years of benefit service.
Benefit	Accrued benefit actuarially reduced for each year that early commencement precedes normal retirement age.
Unreduced Benefit Eligibility	25 years of benefit service.

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	Normal Retirement Benefit credited with years of service as if the employee worked to age 55, commencing immediately. In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation. For participants with at least 15 years of credited benefit service, the benefit cannot be lower than \$100 monthly and cannot exceed the greater of the final monthly compensation or \$400 monthly.

Compensation

Limits	\$195,000 in 2020, indexed with inflation.
Covered	Total Compensation including overtime and bonuses.
Average Monthly	The greater of covered compensation averaged over the three consecutive plan years that produce the highest average and covered compensation averaged over the final 36 consecutive months of service.

Accrued Benefit

A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.



**CITY OF FOREST GROVE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS Tier 1/Tier 2 Full Formula Benefits
(Concluded)**

Unit Purchase Employer Match	Up to \$80 monthly for 60 monthly annuity payments which must commence after earliest retirement age and be paid out by age 65.
Waiting-Time Purchase	Members with 10 years of service may purchase credit for the six month period of employment prior to participation. The cost is the amount of employee and employer contributions that would have been made during the waiting period.
Unused Sick Leave	50% of unused sick leave may be used to increase final average earnings in PERS, if the employer participates in that program.
Vacation Cash-Out	Unused vacation may be included in final average earnings for Tier 1 members.
Normal Form of Benefit	Cash refund annuity with 25% survivor continuation.
Optional Forms of Benefit	Partial lump sum: refund of member contributions with interest plus a pension based on the employer-paid portion of the Full Formula Benefit.
Actuarial Equivalent	
Interest	7.2% pre- and post-retirement.
Mortality	Blended mortality based on PUB-2010 tables, with different tables depending on purpose of adjustment
Cost of Living Adjustments	
Benefits Earned Before October, 2013	Annual adjustment to reflect the increase or decrease in CPI (Portland Area – All Items), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.
Benefits Earned After October, 2013	1.25% for benefit amounts up to \$60,000 and 0.15% for benefit amounts above \$60,000.



PERS TIER 1/TIER 2 RETIREE HEALTH INSURANCE ACCOUNT (RHIA)

Retiree Medicare Supplement

Eligibility	Receiving retirement benefits, covered eight years before retirement, enrolled in a PERS-sponsored health plan, and enrolled in Medicare Part A and Part B.
Benefit	\$60 monthly per retiree is applied to PERS-sponsored Medicare supplemental insurance costs.



**CITY OF FOREST GROVE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

PERS OPSRP FULL FORMULA BENEFITS

Plan Year	January 1 to December 31.
Plan Type	Defined Benefit.
Plan Eligibility	Hired after August 28, 2003.
Normal Retirement	
Eligibility	The earlier of age 60, or age 53 with 25 years of benefit service.
Benefit	1.80% of average monthly compensation multiplied by years of benefit service.
Mandatory Employee Contributions	
Eligibility	Effective July 1, 2020, applicable to participants earning at least \$2,500 monthly in 2020, increased to \$3,333 in 2022 and indexed for inflation in future years.
Contributions	After July 1, 2020, 0.75% of monthly compensation.
Early Retirement	
Eligibility	Age 50 with five years of service.
Benefit	Accrued benefit actuarially reduced for each year that early commencement precedes normal retirement age.
Unreduced Benefit Eligibility	None.



**CITY OF FOREST GROVE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS OPSRP Full Formula Benefits
(Continued)**

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	Until Normal Retirement Age, 45% of monthly compensation during the last full month of employment, reduced if the total benefit exceeds 75% of compensation. After Normal Retirement Age, Normal Retirement Benefit credited with benefit years of service as if the employee worked to Normal Retirement Age, with salary increased with cost of living adjustments.

Compensation

Limits	\$195,000 in 2020, indexed with inflation.
Covered	Total Compensation including overtime up to average limit and bonuses.
Average Monthly	The greater of covered compensation averaged over the three consecutive plan years that produce the highest average and covered compensation averaged over the final 36 consecutive months of service.

Accrued Benefit

A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.

Normal Form of Benefit

Single life annuity.

Actuarial Equivalent

Interest	7.2% pre- and post-retirement.
Mortality	Blended mortality based on PUB-2010 tables, with different tables depending on purpose of adjustment.



**CITY OF FOREST GROVE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS OPSRP Full Formula Benefits
(Concluded)**

Cost of Living Adjustments

Benefits Earned Before October, 2013	Annual adjustment to reflect the increase or decrease in CPI (Portland Area – All Items), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.
Benefits Earned After October, 2013	1.25% for benefit amounts up to \$60,000 and 0.15% for benefit amounts above \$60,000.



**CITY OF FOREST GROVE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

CITY OF FOREST GROVE RETIREMENT PLAN

Effective Date	July 1, 1963.
Plan Year	July 1 to June 30.
Plan Type	Defined Benefit.
Normal Retirement	
Eligibility	Age 58.
Benefit	2.0% of average monthly compensation multiplied by years of benefit service.
Mandatory Employee Contributions	None.
Early Retirement	
Eligibility	Age 50.
Benefit	Normal retirement benefit reduced by 6.67% for each year that early commencement precedes three years prior to normal retirement age.
Unreduced Benefit Eligibility	25 years of benefit service.



**CITY OF FOREST GROVE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**City of Forest Grove Retirement Plan
(Continued)**

Disability Benefit

Eligibility Total and permanent disability with 10 years of service (immediate if service-related).

Benefit Normal Retirement Benefit credited with years of benefit service as if the employee worked to age 58, commencing immediately. Benefit cannot be lower than \$100 monthly.

Compensation

Plan Total Compensation including overtime and bonuses.

Average Monthly Plan compensation averaged over the three consecutive plan years out of the last ten that produce the highest average.

Accrued Benefit

A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.

Unused Sick Leave

Unused sick leave is converted to benefits under the Retirement Plan. Participants who commence a retirement benefit within 63 days after terminating employment are entitled to a percentage of the value of accrued unused sick leave. Participants may also choose to receive this amount as an actuarially equivalent monthly annuity.

Vacation Cash-Out

Unused vacation may be included in final average earnings.

Normal Form of Benefit

60 months certain and life annuity.

Actuarial Equivalent

Interest 8.0% pre- and post-retirement.

Mortality 1984 Unisex Pension.

Cost of Living Adjustments

Annual adjustment to reflect the increase or decrease in the Consumer Price Index (CPI), subject to a maximum increase of 2.00% in any year. Benefits will never decrease below original amount.



CITY OF FOREST GROVE ADDITIONAL BENEFIT PROVISIONS

Retiree Medical

Implicit Eligibility

Continued medical coverage is offered to the City's bargaining group public safety retirees, spouses and dependents until Medicare eligibility, on a self-pay basis.

Implicit Benefit

The retiree premium rate (whether paid by the City or by the retiree) is based on the premium rates available to active employees. Generally, the premium does not represent the full cost of covering retirees (since they are older than the active population, retirees can be expected to generate higher medical claims and therefore higher premiums for the active population). This additional cost is called the "implicit subsidy".



ACTUARIAL ASSUMPTIONS



**CITY OF FOREST GROVE
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

ACTUARIAL ASSUMPTIONS FOR ETOB TESTING

Valuation Date	December 31, 2020.	
Plan Eligibility	All employees eligible to participate under PERS are treated as eligible for ETOB testing.	
Interest Rate for Discounting Future Liabilities	6.90% per year.	
Interest Rate to Project Past and Future Earnings	The greater of 6.90% or the plan’s guaranteed interest rate, if any.	
General Inflation	2.40% per year.	
Payroll Growth	3.40% per year.	
Salary Merit Scale	Duration	Annual Increase
	0	5.13%
	5	2.87%
	10	1.58%
	15	0.98%
	20	0.79%
	25	0.72%
	30 +	0.50%
Unused Sick Leave Program	For employers with a traditional defined benefit retirement plan design, if unused sick leave is converted to benefits under the retirement plan the employer is treated as if electing to participate in the Unused Sick Leave Program.	



**CITY OF FOREST GROVE
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

Mortality Rates

Active employees: None.

Retirees: PUB 2010 Retiree Tables for Safety Employees, sex distinct, projected generationally.

Beneficiaries: PUB 2010 Employee and Retiree Tables for General Employees, sex distinct, projected generationally.

Beneficiary adjustments: Set back 12 months for males, no set back for females.

Disabled Retirees: 50% of PUB 2010 Disabled Retiree Tables for Safety Employees, 50% of PUB 2010 Disabled Retiree Tables for Non-Safety Employees, sex distinct, projected generationally.

Improvement Scale: Unisex Social Security Data Scale (60 year average), with data through 2017.

Turnover Rates

None.

Disability Rates

Based on 1985 Pension Disability Table Class 1 – unisex, as adjusted per 2020 experience study. Rates are applied past retirement eligibility, but not after normal retirement age. Sample rates are as follows:

Age	Service Disability Rate	Ordinary Disability Rate
30	0.0128%	0.0160%
35	0.0196%	0.0245%
40	0.0316%	0.0395%
45	0.0518%	0.0648%
50	0.0896%	0.1120%



**CITY OF FOREST GROVE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

Retirement Rates

Age	Tier 1 / Tier 2			OPSRP		
	Years of Service			Years of Service		
	< 13	13 - 24	25 +	< 13	13 - 24	25 +
50	1.5%	3.0%	32.0%	0.5%	1.5%	5.5%
51	1.5%	3.0%	27.0%	0.5%	1.5%	5.5%
52	1.5%	3.0%	27.0%	0.5%	1.5%	5.5%
53	1.5%	3.0%	27.0%	0.5%	1.5%	27.0%
54	1.5%	3.5%	27.0%	0.5%	1.5%	27.0%
55	3.0%	15.5%	27.0%	2.0%	5.0%	27.0%
56	3.0%	10.0%	27.0%	2.0%	5.0%	27.0%
57	3.0%	10.0%	27.0%	2.0%	5.0%	27.0%
58	6.0%	10.0%	27.0%	5.0%	5.0%	27.0%
59	6.0%	10.0%	27.0%	5.0%	5.0%	27.0%
60	6.0%	12.0%	27.0%	5.0%	15.0%	27.0%
61	6.0%	14.0%	27.0%	5.0%	8.5%	27.0%
62	15.0%	25.0%	38.0%	10.0%	25.0%	38.0%
63	15.0%	15.0%	31.0%	7.0%	15.0%	31.0%
64	15.0%	15.0%	31.0%	7.0%	15.0%	31.0%
65	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
66	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
67	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
68	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
69	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
70	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Postretirement Healthcare Participation 100%

Postretirement Healthcare Lapse None.

Spouse Coverage 100% of future retirees are assumed to cover a spouse as well. Males are assumed to be three years older than their female spouses.



PERS SPECIFIC ACTUARIAL ASSUMPTIONS

Cost of Living Adjustments	Blended based on Moro vs. State of Oregon, with separate assumptions for each tier: Tier 1: 1.798% Tier 2: 1.735% OPSRP: 1.484%
Unused Sick Leave Program	Benefits have been increased by 7.50%
Vacation Cash-Out	Tier 1 benefits have been increased by 4.75%.
Unit Purchase Match	Assume maximum purchase, with a cost to employer of \$4,000 if retiring before age 65.
Waiting-Time Purchases	Assume purchased.
Assumed Form of Payment	
Tier 1/Tier 2	98% of participants elect to receive their benefit as a cash refund annuity with 25% survivor continuation, 2% of participants elect to receive their benefit as a partial lump sum: refund of member contributions with interest plus a pension based on the employer-paid portion of the Full Formula Benefit.
OPSRP	100% of participants elect to receive their benefit as a single life annuity.



**CITY OF FOREST GROVE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

CITY OF FOREST GROVE SPECIFIC ACTUARIAL ASSUMPTIONS

Earliest Applicable Date of Hire Considered	December 21, 1994.
Cost of Living Adjustments	2.00%.
Covered Compensation Adjustments	None.
Unused Sick Leave Program	The City is assumed to participate in the program. Benefits have been increased by 5.50%.
Vacation Cash-Out	Benefits have been increased by 4.00%.
Assumed Form of Payment	Normal form.

CITY OF PORTLAND

OREGON REVISED STATUTE 237.620 EQUAL TO OR BETTER THAN (ETOB) DETERMINATION AS OF DECEMBER 31, 2020



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**CITY OF PORTLAND
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

REPORT SUMMARY

This report has been prepared by Independent Actuaries, Inc. for the Oregon Public Employees' Retirement System (PERS) and the City of Portland. This report provides the details of the determination whether the retirement benefits provided by the City qualify for exemption under Oregon Revised Statute (ORS) 237.620(2) from participation in PERS.

Typically, in Oregon, public employers of police officers and firefighters provide retirement benefits under PERS. A public employer may qualify for exemption and provide their own retirement benefits if those benefits are equal to or better (ETOB) than the benefits provided under PERS. An ETOB determination is made every twelve years.

Under the Oregon Administrative Rule (OAR) governing the test, employer retirement benefits are compared at each PERS tier in three categories: total benefits, service retirement with postretirement healthcare, and disability retirement with postretirement healthcare. For an employer to qualify for exemption, the employer total benefits must be greater than 100 percent of benefits that PERS provides at each tier. Additionally, service retirement and disability retirement benefits must each be at least 80 percent of the benefits that PERS provides at each tier.

As approved by the PERS Board, employer retirement benefits may be determined to be ETOB either via a side-by-side comparison of employer plan provisions against PERS plan provisions or by a full actuarial valuation. It is only reasonable to review employer retirement benefits using the side-by-side comparison approach if the benefits are provided via a plan design similar to PERS. Under the side-by-side comparison approach, the employer retirement benefits will only be determined to be ETOB if they are unambiguously equal to or better than PERS. If the employer retirement benefits design is not suitable for side-by-side comparison, or if the benefits are not unambiguously more valuable, a full actuarial valuation determination approach will be used.

Based on the information described in this report, we conclude that retirement benefits provided by the City of Portland meet the standards for receiving an exemption under OAR 459-030-0025 via a side-by-side comparison approach.



DETERMINATION METHODOLOGY

The standards for determining whether an employer provides benefits that are ETOB are stated in OAR 459-030-0025, with additional definitions provided by reference. Other rules for testing are as approved by the PERS Board.

Plan provisions considered in the side-by-side comparison include the level of service retirement and disability retirement benefits, early retirement subsidies, the definition of covered compensation, mandatory employee contributions, the normal form of payment, cost of living adjustments, and the level of explicit and implicit postretirement healthcare benefits.

- We have compared full-career benefits, assuming an employee is covered by either the terms of the public employer's retirement benefit plan(s) or PERS for their entire career starting with their date of hire. Benefit provisions which apply prior to the earliest date of hire of any active employee of the public employer are ignored. Historical plan changes from to the earliest date of hire of any active employee of the public employer to the present are reflected. Current benefit provisions are expected to apply in the future.
- Benefits were compared based on the December 31, 2020 actuarial present value of retirement benefits projected to be accrued to the projected date of retirement or disability, calculated as a percentage of salary.
- We have used hypothetical census data, based on the PERS police officer and firefighter census used in the December 31, 2020 PERS valuation.
- We have used the actuarial assumptions and methods identified in the December 31, 2020 PERS valuation report, but assuming no pre-retirement death or withdrawal. Any additional actuarial assumptions needed to evaluate features of the public employer's retirement plan(s) which are not comparable to PERS have been developed in a manner consistent with PERS assumptions.
- Prior and future benefits which depend on investment returns have been valued using the assumed rate, taking into consideration guaranteed returns stated in plan provisions. The assumed rate is the 6.90% discount rate used in the December 31, 2020 PERS valuation.
- Under the assumptions prescribed for the comparison, the PERS Full Formula method of calculating Tier 1 and Tier 2 retirement benefits results in a more valuable benefit than the Money Match method in almost all cases; therefore, the Full Formula method has been used in the comparison.
- Only employer-funded retirement benefits are included in the comparison. Any contribution described as an employee contribution will be ignored, unless the public employer's plan provisions state that the employer is responsible for making the contribution on the employee's behalf and the responsibility to make the contribution is non-elective.
- We have valued both explicit and implicit postretirement healthcare benefits.
- Our comparison does not value the transfer of investment risk and mortality risk between employee and employer inherent in the plan design differences of defined benefit and defined contribution plans.
- Our comparison does not include increases to retirement benefits under ORS 238.362-368 and ORS 237.635-637.



**CITY OF PORTLAND
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

ACTUARIAL CERTIFICATION

Independent Actuaries, Inc. was engaged by the State of Oregon, through its Oregon Public Employees Retirement System (PERS), to review the retirement benefits program of the City of Portland as of December 31, 2020, in order to determine if it is equal to or better than PERS as required by ORS 237.620(2). The conclusions of the review are set forth in this report, which has been prepared exclusively for PERS and the City, and may not be relied upon for any other purpose or by any party other than PERS or the City.

The valuation is based on participant data and plan provision supplied by PERS and the City. All information submitted to us has been reviewed for reasonableness and consistency, but has otherwise been accepted and relied upon without audit. The plan provisions are summarized in the applicable section of this report.

This report was prepared in accordance with applicable law. To the best of our knowledge, the information supplied in this report is complete and accurate. For purposes of determining the actuarial present value of retirement benefits, each prescribed method and assumption was applied in accordance with our understanding of law and regulations under ORS 237.620 and OAR 459. The prescribed and non-prescribed methods and assumptions are disclosed in the Determination Methodology and Actuarial Assumptions sections of this report. In our opinion, each non-prescribed assumption is reasonable and such non-prescribed assumptions, in combination, offer our best estimate of anticipated experience under the plan.

The liabilities were calculated using models developed for the purpose of pension plan valuation, the structure and output of which were evaluated and reasonably achieve their intended purpose.

Future actuarial measurements may differ significantly from the current measurement presented in this report due to such factors as changes in economic or demographic assumptions and changes in plan provisions or applicable law.

The undersigned credentialed actuaries are members of the American Academy of Actuaries and meet the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* of the American Academy of Actuaries to render the actuarial opinion contained herein.

Aeron Riordon, ASA, EA, MAAA

Steven L. Diess, EA, MAAA

June 27, 2022 _____
 Date

20-08467 _____
 Enrollment #

June 27, 2022 _____
 Date

20-06055 _____
 Enrollment #

Independent Actuaries, Inc.
 Five Centerpointe Dr., Suite 520, Lake Oswego, OR 97035 503.520.0848



**CITY OF PORTLAND
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

TEST RESULTS

The City of Portland provides retirement and disability benefits via a traditional percentage of covered compensation defined benefit type plan design which is comparable to the PERS Full Formula method of calculating Tier 1, Tier 2, and OPSRP retirement and disability benefits. The value of postretirement healthcare benefits provided by the City is also easily compared to those provided under PERS. Therefore, a side-by-side review and comparison of plan provisions has been used as the method for determining whether benefits provided by the City are ETOB than those provided under PERS.

The City of Portland Retirement Plan provides different levels of benefits that are relevant to the ETOB test. These groups are described in the table below.

Benefit Group	Distinction
FPDR 1	Retired on or before January 1, 1990.
FPDR 2	Not FPDR 1, and hired before January 1, 2007.
FPDR 3	Hired after December 31, 2006.

Only the benefits provided under FPDR 2 are relevant to ETOB since no members of FPDR 1 are active as of the ETOB testing date of December 31, 2020 and members of FPDR 3 are covered by the OPSRP with additional benefits provided by the City of Portland, and by definition are receiving benefits equal to or better than those provided by PERS.

Because the retirement and disability benefits provided to public safety members in PERS Tier 1 and Tier 2 are better than those provided under OPSRP, only a comparison of plan provisions between the City's Retirement Plan and those of PERS Tier 1 and Tier 2 is necessary.

Provided here is a side-by-side listing of key provisions for the City's retirement benefits program compared to PERS.

Plan Provision Under Comparison	City of Portland (FPDR 2)	PERS Tier 1/Tier 2 (Full Formula)
Benefit Percentage	2.20%, 2.40%, 2.60%, or 2.80% for elected joint and survivor form percent of 100%, 75%, 50%, or 25%/0% respectively.	2.00%
Covered Compensation	Salary including bonus, but excluding overtime, unused sick leave and vacation time (as applicable)	Salary including overtime, bonus, unused sick leave and vacation time (as applicable)
Years of Service	Capped at 30 years of service	Uncapped



**CITY OF PORTLAND
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Plan Provision Under Comparison	City of Portland (FPDR 2)	PERS Tier 1/Tier 2 (Full Formula)
Normal Retirement Age	Earlier of age 50 with 25 years of service or age 55	Age 55
Normal Form of Benefit	Joint and survivor annuity with elected percent of 0%, 25%, 50%, 75%, or 100%	Cash refund annuity with 25% survivor cash refund allowance
Mandatory Employee Contributions	Prior to July 1990, 7% of compensation.	Prior to 2004, 6% of compensation. After 2019, 2.5% of compensation. Tier 1 accounts accrue at a guaranteed rate.
Cost-of-Living Adjustments	2.00% on benefits before October 8, 2013. 1.75% on benefits earned after October 8, 2013.	2.00% on benefits earned before October 2013. 1.25% or 0.15% (depending on benefit amount) on benefits earned after October 2013.
Unreduced Benefit Eligibility	None	25 years of service
Disability Benefits	Until disability retirement age, 75% of compensation (for service-related disabilities) or 50% of compensation (for other disabilities). After disability retirement age, normal retirement benefit reflecting additional years of service and pay increases.	Greater of normal retirement benefit reflecting years of service as if member had worked to age 55, or 50% of compensation at disability (for service-related disabilities only).
Retiree Medical Benefits	Value of implicit subsidy due to continued medical coverage for retirees paying COBRA premium rates.	\$60 monthly premium stipend is applied to PERS-sponsored Medicare supplemental insurance costs.

The above comparison shows that the City’s retirement benefits are more valuable than those under PERS in nearly every category. The city provides a benefit percentage and retiree medical benefits which are more valuable than under PERS. The PERS plan provisions which are more valuable are the amount of overtime, unused sick leave, and vacation time that may be reflected in the calculation of retirement benefits.

To understand the significance of the plan provisions where PERS is better, we developed an adjustment factor for each provision related to the City’s retirement benefits. In developing these factors, we considered participant statistics calculated from the hypothetical census data used in our review,



**CITY OF PORTLAND
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

including the average and standard deviation of participant age, service, and salary. Our analysis indicates that the employer funded retirement benefits provided by the City are at least 140% the value of those provided by PERS.

Based on our analysis, the City's retirement benefits are ETOB than those provided by PERS.



SUMMARY OF APPLICABLE PLAN PROVISIONS



**CITY OF PORTLAND
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

PERS TIER 1/TIER 2 FULL FORMULA BENEFITS

Plan Year	January 1 to December 31.	
Plan Type	Defined Benefit.	
Plan Eligibility	Tier 1: Hired prior to 1996. Tier 2: Hired after 1995 and prior to August 29, 2003.	
Normal Retirement		
Eligibility	Age 55.	
Benefit	2.00% of average monthly compensation multiplied by years of benefit service.	
Mandatory Employee Contributions		
Eligibility	Prior to January 1, 2004 all Tier 1/Tier 2 participants. Effective July 1, 2020 applicable to participants earning at least \$2,500 monthly in 2020, increased to \$3,333 in 2022 and indexed for inflation in future years.	
Contributions	Prior to January 1, 2004, 6.0% of monthly compensation. After July 1, 2020, 2.50% of monthly compensation.	
Guaranteed Interest Rate (Tier 1 only)	Years	Rate
	1980-1988	7.50%
	1989-2013	8.00%
	2014-2015	7.75%
	2016-2017	7.50%
	2018-2020	7.20%
	2021+	6.90%



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**PERS Tier 1/Tier 2 Full Formula Benefits
(Continued)**

Early Retirement

Eligibility	The earlier of age 50 or completion of 30 years of benefit service.
Benefit	Accrued benefit actuarially reduced for each year that early commencement precedes normal retirement age.
Unreduced Benefit Eligibility	25 years of benefit service.

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	Normal Retirement Benefit credited with years of service as if the employee worked to age 55, commencing immediately. In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation. For participants with at least 15 years of credited benefit service, the benefit cannot be lower than \$100 monthly and cannot exceed the greater of the final monthly compensation or \$400 monthly.

Compensation

Limits	\$195,000 in 2020, indexed with inflation.
Covered	Total Compensation including overtime and bonuses.
Average Monthly	The greater of covered compensation averaged over the three consecutive plan years that produce the highest average and covered compensation averaged over the final 36 consecutive months of service.

Accrued Benefit

A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.



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**PERS Tier 1/Tier 2 Full Formula Benefits
(Concluded)**

Unit Purchase Employer Match	Up to \$80 monthly for 60 monthly annuity payments which must commence after earliest retirement age and be paid out by age 65.
Waiting-Time Purchase	Members with 10 years of service may purchase credit for the six month period of employment prior to participation. The cost is the amount of employee and employer contributions that would have been made during the waiting period.
Unused Sick Leave	50% of unused sick leave may be used to increase final average earnings in PERS, if the employer participates in that program.
Vacation Cash-Out	Unused vacation may be included in final average earnings for Tier 1 members.
Normal Form of Benefit	Cash refund annuity with 25% survivor continuation.
Optional Forms of Benefit	Partial lump sum: refund of member contributions with interest plus a pension based on the employer-paid portion of the Full Formula Benefit.
Actuarial Equivalent	
Interest	7.2% pre- and post-retirement.
Mortality	Blended mortality based on PUB-2010 tables, with different tables depending on purpose of adjustment
Cost of Living Adjustments	
Benefits Earned Before October, 2013	Annual adjustment to reflect the increase or decrease in CPI (Portland Area – All Items), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.
Benefits Earned After October, 2013	1.25% for benefit amounts up to \$60,000 and 0.15% for benefit amounts above \$60,000.



PERS TIER 1/TIER 2 RETIREE HEALTH INSURANCE ACCOUNT (RHIA)

Retiree Medicare Supplement

Eligibility	Receiving retirement benefits, covered eight years before retirement, enrolled in a PERS-sponsored health plan, and enrolled in Medicare Part A and Part B.
Benefit	\$60 monthly per retiree is applied to PERS-sponsored Medicare supplemental insurance costs.



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ORS 237.620 ETOB DETERMINATION REPORT
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PERS OPSRP FULL FORMULA BENEFITS

Plan Year	January 1 to December 31.
Plan Type	Defined Benefit.
Plan Eligibility	Hired after August 28, 2003.
Normal Retirement	
Eligibility	The the earlier of age 60, or age 53 with 25 years of benefit service.
Benefit	1.80% of average monthly compensation multiplied by years of benefit service.
Mandatory Employee Contributions	
Eligibility	Effective July 1, 2020, applicable to participants earning at least \$2,500 monthly in 2020, increased to \$3,333 in 2022 and indexed for inflation in future years.
Contributions	After July 1, 2020, 0.75% of monthly compensation.
Early Retirement	
Eligibility	Age 50 with five years of service.
Benefit	Accrued benefit actuarially reduced for each year that early commencement precedes normal retirement age.
Unreduced Benefit Eligibility	None.



**CITY OF PORTLAND
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**PERS OPSRP Full Formula Benefits
(Continued)**

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	Until Normal Retirement Age, 45% of monthly compensation during the last full month of employment, reduced if the total benefit exceeds 75% of compensation. After Normal Retirement Age, Normal Retirement Benefit credited with benefit years of service as if the employee worked to Normal Retirement Age, with salary increased with cost of living adjustments.

Compensation

Limits	\$195,000 in 2020, indexed with inflation.
Covered	Total Compensation including overtime up to average limit and bonuses.
Average Monthly	The greater of covered compensation averaged over the three consecutive plan years that produce the highest average and covered compensation averaged over the final 36 consecutive months of service.
Accrued Benefit	A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.
Normal Form of Benefit	Single life annuity.
Actuarial Equivalent	
Interest	7.2% pre- and post-retirement.
Mortality	Blended mortality based on PUB-2010 tables, with different tables depending on purpose of adjustment.



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**PERS OPSRP Full Formula Benefits
(Concluded)**

Cost of Living Adjustments

Benefits Earned Before October, 2013	Annual adjustment to reflect the increase or decrease in CPI (Portland Area – All Items), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.
Benefits Earned After October, 2013	1.25% for benefit amounts up to \$60,000 and 0.15% for benefit amounts above \$60,000.



CITY OF PORTLAND FPDR 2 RETIREMENT PLAN

Eligibility	Closed to new entrants as of January 1, 2007.
Plan Year	January 1 to December 31.
Plan Type	Defined Benefit.
Normal Retirement	
Eligibility	Earlier of age 50 with 25 years of service or age 55.
Benefit	2.20%, 2.40%, 2.60%, or 2.80% of a participant's average monthly compensation depending on the elected percent of the survivor portion of the joint and survivor annuity form of payment (100%, 75%, 50%, or 25%/0% respectively) multiplied by years of benefit service, up to 30 years.
Mandatory Employee Contributions	
Eligibility	Participating in the plan.
Contributions	Prior to July 1, 1990, 7.0% of monthly compensation.
Employer Contributions	None.
Early Retirement	
Eligibility	The earlier of age 50 with 25 years of service or age 55.
Benefit	Accrued benefit.



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**City Of Portland FPDR 2 Retirement Plan
(Continued)**

Disability Benefit

Eligibility Immediate upon total and permanent disability with the exceptions of heart disease and cancer. 5 years of service for service-related heart disease. 5 years of service for service-related cancer for firefighters only. If service-related cancer is prostate cancer, there is an additional requirement to be diagnosed before age 55.

Benefit Until disability retirement age, 75% of compensation excluding bonuses and overtime if disability is service-related, or 50% of compensation excluding bonuses and overtime if not service-related. Benefits may be reduced if outside wages are received (subject to a minimum benefit of 25% of compensation excluding bonuses and overtime).

Disability retirement age is the earlier of Social Security normal retirement age or the age at which the participant has earned 30 years of service. Partial years of service continue to accrue during disability.

After disability retirement age, the benefit is the normal retirement benefit based on base pay increased during disability and additional years of service accrued during disability.

Compensation

Limits \$200,000 as indexed; \$285,000 for plan years beginning in or after 2020.

Plan Total Compensation including bonuses, but excluding overtime.

Average Monthly Highest plan year compensation out of the last ten years.

Accrued Benefit A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.



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**City Of Portland FPDR 2 Retirement Plan
(Concluded)**

Normal Form of Benefit Joint & survivor annuity with elected survivor portion of 0%, 25%, 50%, 75%, or 100%.

Cost of Living Adjustments

Benefits Earned Before October, 2013 Annual adjustment to reflect the increase or decrease in the Consumer Price Index, Portland Area – All Items (CPI), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.

Benefits Earned After October, 2013 1.75%.



CITY OF PORTLAND ADDITIONAL BENEFIT PROVISIONS

Retiree Medical

Implicit Eligibility

Continued medical coverage is offered to the City's public safety retirees, spouses and dependents until Medicare eligibility, on a self-pay basis.

Implicit Benefit

The retiree premium rate (whether paid by the City or by the retiree) is based on the premium rates available to active employees. Generally, the premium does not represent the full cost of covering retirees (since they are older than the active population, retirees can be expected to generate higher medical claims and therefore higher premiums for the active population). This additional cost is called the "implicit subsidy".



ACTUARIAL ASSUMPTIONS



ACTUARIAL ASSUMPTIONS FOR ETOB TESTING

Valuation Date	December 31, 2020.	
Plan Eligibility	All employees eligible to participate under PERS are treated as eligible for ETOB testing.	
Interest Rate for Discounting Future Liabilities	6.90% per year.	
Interest Rate to Project Past and Future Earnings	The greater of 6.90% or the plan’s guaranteed interest rate, if any.	
General Inflation	2.40% per year.	
Payroll Growth	3.40% per year.	
Salary Merit Scale	Duration	Annual Increase
	0	5.13%
	5	2.87%
	10	1.58%
	15	0.98%
	20	0.79%
	25	0.72%
	30 +	0.50%
Unused Sick Leave Program	For employers with a traditional defined benefit retirement plan design, if unused sick leave is converted to benefits under the retirement plan the employer is treated as if electing to participate in the Unused Sick Leave Program.	



**CITY OF PORTLAND
 ORS 237.620 ETOB DETERMINATION REPORT
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Mortality Rates

Active employees: None.

Retirees: PUB 2010 Retiree Tables for Safety Employees, sex distinct, projected generationally.

Beneficiaries: PUB 2010 Employee and Retiree Tables for General Employees, sex distinct, projected generationally.

Beneficiary adjustments: Set back 12 months for males, no set back for females.

Disabled Retirees: 50% of PUB 2010 Disabled Retiree Tables for Safety Employees, 50% of PUB 2010 Disabled Retiree Tables for Non-Safety Employees, sex distinct, projected generationally.

Improvement Scale: Unisex Social Security Data Scale (60 year average), with data through 2017.

Turnover Rates

None.

Disability Rates

Based on 1985 Pension Disability Table Class 1 – unisex, as adjusted per 2020 experience study. Rates are applied past retirement eligibility, but not after normal retirement age. Sample rates are as follows:

Age	Service Disability Rate	Ordinary Disability Rate
30	0.0128%	0.0160%
35	0.0196%	0.0245%
40	0.0316%	0.0395%
45	0.0518%	0.0648%
50	0.0896%	0.1120%



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Retirement Rates

Age	Tier 1 / Tier 2			OPSRP		
	Years of Service			Years of Service		
	< 13	13 - 24	25 +	< 13	13 - 24	25 +
50	1.5%	3.0%	32.0%	0.5%	1.5%	5.5%
51	1.5%	3.0%	27.0%	0.5%	1.5%	5.5%
52	1.5%	3.0%	27.0%	0.5%	1.5%	5.5%
53	1.5%	3.0%	27.0%	0.5%	1.5%	27.0%
54	1.5%	3.5%	27.0%	0.5%	1.5%	27.0%
55	3.0%	15.5%	27.0%	2.0%	5.0%	27.0%
56	3.0%	10.0%	27.0%	2.0%	5.0%	27.0%
57	3.0%	10.0%	27.0%	2.0%	5.0%	27.0%
58	6.0%	10.0%	27.0%	5.0%	5.0%	27.0%
59	6.0%	10.0%	27.0%	5.0%	5.0%	27.0%
60	6.0%	12.0%	27.0%	5.0%	15.0%	27.0%
61	6.0%	14.0%	27.0%	5.0%	8.5%	27.0%
62	15.0%	25.0%	38.0%	10.0%	25.0%	38.0%
63	15.0%	15.0%	31.0%	7.0%	15.0%	31.0%
64	15.0%	15.0%	31.0%	7.0%	15.0%	31.0%
65	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
66	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
67	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
68	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
69	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
70	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Postretirement Healthcare Participation 100%

Postretirement Healthcare Lapse None.

Spouse Coverage 100% of future retirees are assumed to cover a spouse as well. Males are assumed to be three years older than their female spouses.



PERS SPECIFIC ACTUARIAL ASSUMPTIONS

Cost of Living Adjustments	Blended based on Moro vs. State of Oregon, with separate assumptions for each tier: Tier 1: 1.798% Tier 2: 1.735% OPSRP: 1.484%
Vacation Cash-Out	Tier 1 benefits have been increased by 4.75%.
Unit Purchase Match	Assume maximum purchase, with a cost to employer of \$4,000 if retiring before age 65.
Waiting-Time Purchases	Assume purchased.
Assumed Form of Payment	
Tier 1/Tier 2	98% of participants elect to receive their benefit as a cash refund annuity with 25% survivor continuation, 2% of participants elect to receive their benefit as a partial lump sum: refund of member contributions with interest plus a pension based on the employer-paid portion of the Full Formula Benefit.
OPSRP	100% of participants elect to receive their benefit as a single life annuity.



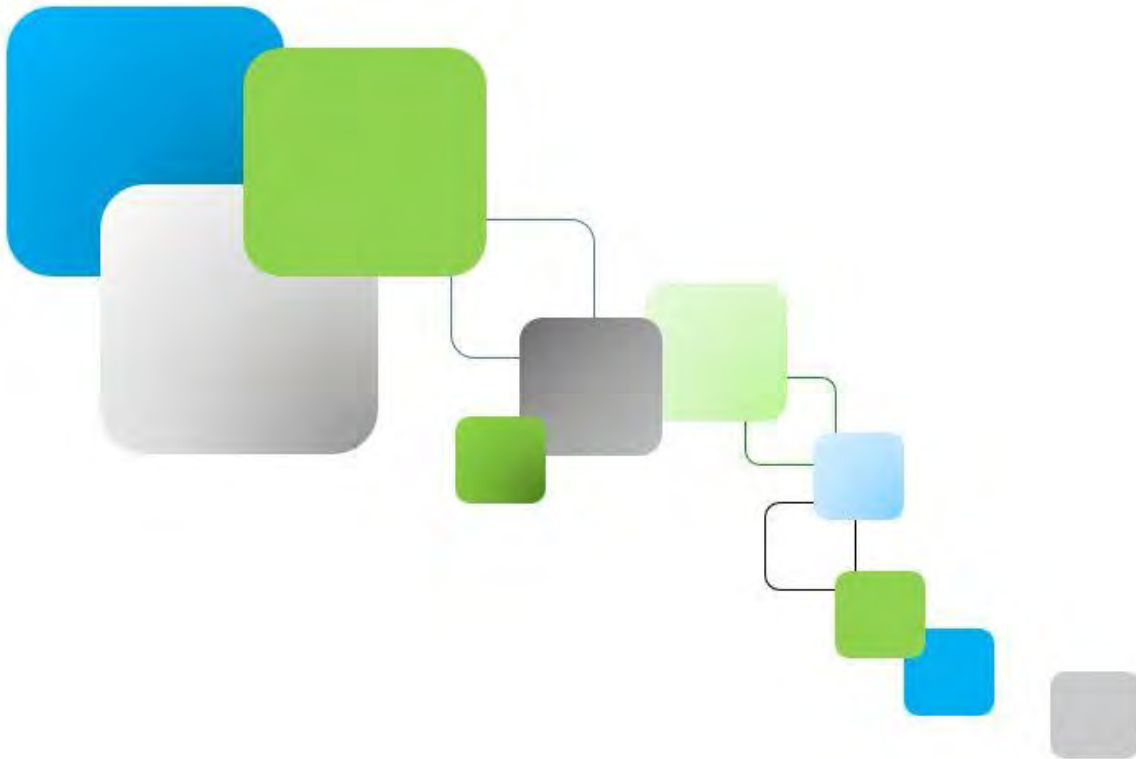
**CITY OF PORTLAND
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CITY OF PORTLAND SPECIFIC ACTUARIAL ASSUMPTIONS

Earliest Applicable Date of Hire Considered	July 1, 1984.
Cost of Living Adjustments	Blended based on service before and after October 2013: 1.89%.
Covered Compensation Adjustments	Because benefits under the Retirement Plan exclude consideration of overtime, benefits have been reduced by 5.50% based on information provided by PERS and the City.
Unused Sick Leave Program	The City of Portland is not assumed to participate in the Unused Sick Leave Program.
Assumed Form of Payment	Joint & survivor annuity with 25% continuation.

CITY OF SEASIDE

OREGON REVISED STATUTE 237.620 EQUAL TO OR BETTER THAN (ETOB) DETERMINATION AS OF DECEMBER 31, 2020



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**CITY OF SEASIDE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

REPORT SUMMARY

This report has been prepared by Independent Actuaries, Inc. for the Oregon Public Employees' Retirement System (PERS) and the City of Seaside. This report provides the details of the determination whether the retirement benefits provided by the City qualify for exemption under Oregon Revised Statute (ORS) 237.620(2) from participation in PERS.

Typically, in Oregon, public employers of police officers and firefighters provide retirement benefits under PERS. A public employer may qualify for exemption and provide their own retirement benefits if those benefits are equal to or better (ETOB) than the benefits provided under PERS. An ETOB determination is made every twelve years.

Under the Oregon Administrative Rule (OAR) governing the test, employer retirement benefits are compared at each PERS tier in three categories: total benefits, service retirement with postretirement healthcare, and disability retirement with postretirement healthcare. For an employer to qualify for exemption, the employer total benefits must be greater than 100 percent of benefits that PERS provides at each tier. Additionally, service retirement and disability retirement benefits must each be at least 80 percent of the benefits that PERS provides at each tier.

As approved by the PERS Board, employer retirement benefits may be determined to be ETOB either via a side-by-side comparison of employer plan provisions against PERS plan provisions or by a full actuarial valuation. It is only reasonable to review employer retirement benefits using the side-by-side comparison approach if the benefits are provided via a plan design similar to PERS. Under the side-by-side comparison approach, the employer retirement benefits will only be determined to be ETOB if they are unambiguously equal to or better than PERS. If the employer retirement benefits design is not suitable for side-by-side comparison, or if the benefits are not unambiguously more valuable, a full actuarial valuation determination approach will be used.

Based on the information described in this report, we conclude that retirement benefits provided by the City of Seaside meet the standards for receiving an exemption OAR 459-030-0025.



DETERMINATION METHODOLOGY

The standards for determining whether an employer provides benefits that are ETOB are stated in OAR 459-030-0025, with additional definitions provided by reference. Other rules for testing are as approved by the PERS Board.

- We have compared full-career benefits, assuming an employee is covered by either the terms of the public employer's retirement benefit plan(s) or PERS for their entire career starting with their date of hire. Benefit provisions which apply prior to the earliest date of hire of any active employee of the public employer are ignored. Historical plan changes from to the earliest date of hire of any active employee of the public employer to the present are reflected. Current benefit provisions are expected to apply in the future.
- Benefits were compared based on the December 31, 2020 actuarial present value of retirement benefits projected to be accrued to the projected date of retirement or disability, calculated as a percentage of salary.
- We have used hypothetical census data, based on the PERS police officer and firefighter census used in the December 31, 2020 PERS valuation.
- We have used the actuarial assumptions and methods identified in the December 31, 2020 PERS valuation report, but assuming no pre-retirement death or withdrawal. Any additional actuarial assumptions needed to evaluate features of the public employer's retirement plan(s) which are not comparable to PERS have been developed in a manner consistent with PERS assumptions.
- Prior and future benefits which depend on investment returns have been valued using the assumed rate, taking into consideration guaranteed returns stated in plan provisions. The assumed rate is the 6.90% discount rate used in the December 31, 2020 PERS valuation.
- Under the assumptions prescribed for the comparison the PERS Full Formula method of calculating Tier 1 and Tier 2 retirement benefits results in a more valuable benefit than the Money Match method in almost all cases; therefore, the Full Formula method has been used in the comparison.
- Only employer-funded retirement benefits are included in the comparison. Any contribution described as an employee contribution will be ignored, unless the public employer's plan provisions state that the employer is responsible for making the contribution on the employee's behalf and the responsibility to make the contribution is non-elective.
- We have valued both explicit and implicit postretirement healthcare benefits.
- Our comparison does not value the transfer of investment risk and mortality risk between employee and employer inherent in the plan design differences of defined benefit and defined contribution plans.
- Our comparison does not include increases to retirement benefits under ORS 238.362-368 and ORS 237.635-637.



**CITY OF SEASIDE
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

ACTUARIAL CERTIFICATION

Independent Actuaries, Inc. was engaged by the State of Oregon, through its Oregon Public Employees Retirement System (PERS), to review the retirement benefits program of the City of Seaside as of December 31, 2020, in order to determine if it is equal to or better than PERS as required by ORS 237.620(2). The conclusions of the review are set forth in this report, which has been prepared exclusively for PERS and the City, and may not be relied upon for any other purpose or by any party other than PERS or the City.

The valuation is based on participant data and plan provision supplied by PERS and the City. All information submitted to us has been reviewed for reasonableness and consistency, but has otherwise been accepted and relied upon without audit. The plan provisions are summarized in the applicable section of this report.

This report was prepared in accordance with applicable law. To the best of our knowledge, the information supplied in this report is complete and accurate. For purposes of determining the actuarial present value of retirement benefits, each prescribed method and assumption was applied in accordance with our understanding of law and regulations under ORS 237.620 and OAR 459. The prescribed and non-prescribed methods and assumptions are disclosed in the Determination Methodology and Actuarial Assumptions sections of this report. In our opinion, each non-prescribed assumption is reasonable and such non-prescribed assumptions, in combination, offer our best estimate of anticipated experience under the plan.

The liabilities were calculated using models developed for the purpose of pension plan valuation, the structure and output of which were evaluated and reasonably achieve their intended purpose.

Future actuarial measurements may differ significantly from the current measurement presented in this report due to such factors as changes in economic or demographic assumptions and changes in plan provisions or applicable law.

The undersigned credentialed actuaries are members of the American Academy of Actuaries and meet the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* of the American Academy of Actuaries to render the actuarial opinion contained herein.

Aeron Riordon, ASA, EA, MAAA

Steven L. Diess, EA, MAAA

June 27, 2022
 Date

20-08467
 Enrollment #

June 27, 2022
 Date

20-06055
 Enrollment #

Independent Actuaries, Inc.
 Five Centerpointe Dr., Suite 520, Lake Oswego, OR 97035 503.520.0848



**CITY OF SEASIDE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

TEST RESULTS

A side-by-side comparison of the plan provisions alone does not unambiguously show that the City of Seaside Retirement Plan provides benefits that are ETOB PERS. Therefore, a full actuarial valuation was conducted in order to determine whether the City qualifies for exemption from participation in PERS.

For the City to qualify for exemption, the employer total benefits must be greater than 100 percent of benefits that PERS provides at each tier. Additionally, service retirement with postretirement healthcare and disability retirement with postretirement healthcare must each be at least 80 percent of benefits that PERS provides at each tier. As shown below, the retirement benefits provided by the City meet this standard.

PERS Benefit Tier Type	Present Value of Estimated Employer-Funded Full-Career Retirement Benefits as of December 31, 2020 for Hypothetical Census Data Groups as a Percentage of PERS Subject Salary		City of Seaside Benefits as a Percentage of PERS
	City of Seaside ¹	PERS	
Retirement – Tier 1	870%	705 %	123%
Disability – Tier 1	7%	3%	228 %
Total – Tier 1	877%	708%	124%
Retirement – Tier 2	723%	597%	121 %
Disability – Tier 2	12%	7%	171%
Total – Tier 2	735%	604%	122%
Retirement – OPSRP	566 %	377%	150%
Disability – OPSRP	19%	14%	134%
Total – OPSRP	585%	391%	149%

¹ Please note that not all benefits potentially includable for ETOB determination purposes were valued in this comparison, because the employer demonstrated compliance with the ETOB requirement without including such benefits.



**CITY OF SEASIDE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

PARTICIPANT DATA

Hypothetical census data has been used for review of benefits, per the rules governing ETOB determination. The hypothetical data was based on the police officer and firefighter census used in the December 31, 2020 PERS valuation.

	Tier 1	Tier 2	OPSRP	Total
Count	1,151	3,708	10,518	15,377
Average Attained Age	53.65	49.63	39.35	42.90
Average Total Years of Service	26.80	20.47	8.02	12.42
Average 2020 PERS Subject Salary	\$114,024	\$107,508	\$82,406	\$90,826



SUMMARY OF APPLICABLE PLAN PROVISIONS



**CITY OF SEASIDE
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

PERS TIER 1/TIER 2 FULL FORMULA BENEFITS

Plan Year	January 1 to December 31.	
Plan Type	Defined Benefit.	
Plan Eligibility	Tier 1: Hired prior to 1996. Tier 2: Hired after 1995 and prior to August 29, 2003.	
Normal Retirement		
Eligibility	Age 55.	
Benefit	2.00% of average monthly compensation multiplied by years of benefit service.	
Mandatory Employee Contributions		
Eligibility	Prior to January 1, 2004 all Tier 1/Tier 2 participants. Effective July 1, 2020 applicable to participants earning at least \$2,500 monthly in 2020, increased to \$3,333 in 2022 and indexed for inflation in future years.	
Contributions	Prior to January 1, 2004, 6.0% of monthly compensation. After July 1, 2020, 2.50% of monthly compensation.	
Guaranteed Interest Rate (Tier 1 only)	Years	Rate
	1980-1988	7.50%
	1989-2013	8.00%
	2014-2015	7.75%
	2016-2017	7.50%
	2018-2020	7.20%
	2021+	6.90%



**CITY OF SEASIDE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS Tier 1/Tier 2 Full Formula Benefits
(Continued)**

Early Retirement

Eligibility	The earlier of age 50 or completion of 30 years of benefit service.
Benefit	Accrued benefit actuarially reduced for each year that early commencement precedes normal retirement age.
Unreduced Benefit Eligibility	25 years of benefit service.

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	Normal Retirement Benefit credited with years of service as if the employee worked to age 55, commencing immediately. In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation. For participants with at least 15 years of credited benefit service, the benefit cannot be lower than \$100 monthly and cannot exceed the greater of the final monthly compensation or \$400 monthly.

Compensation

Limits	\$195,000 in 2020, indexed with inflation.
Covered	Total Compensation including overtime and bonuses.
Average Monthly	The greater of covered compensation averaged over the three consecutive plan years that produce the highest average and covered compensation averaged over the final 36 consecutive months of service.

Accrued Benefit

A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.



**CITY OF SEASIDE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS Tier 1/Tier 2 Full Formula Benefits
(Concluded)**

Unit Purchase Employer Match	Up to \$80 monthly for 60 monthly annuity payments which must commence after earliest retirement age and be paid out by age 65.
Waiting-Time Purchase	Members with 10 years of service may purchase credit for the six month period of employment prior to participation. The cost is the amount of employee and employer contributions that would have been made during the waiting period.
Unused Sick Leave	50% of unused sick leave may be used to increase final average earnings in PERS, if the employer participates in that program.
Vacation Cash-Out	Unused vacation may be included in final average earnings for Tier 1 members.
Normal Form of Benefit	Cash refund annuity with 25% survivor continuation.
Optional Forms of Benefit	Partial lump sum: refund of member contributions with interest plus a pension based on the employer-paid portion of the Full Formula Benefit.
Actuarial Equivalent	
Interest	7.2% pre- and post-retirement.
Mortality	Blended mortality based on PUB-2010 tables, with different tables depending on purpose of adjustment
Cost of Living Adjustments	
Benefits Earned Before October, 2013	Annual adjustment to reflect the increase or decrease in CPI (Portland Area – All Items), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.
Benefits Earned After October, 2013	1.25% for benefit amounts up to \$60,000 and 0.15% for benefit amounts above \$60,000.



PERS TIER 1/TIER 2 RETIREE HEALTH INSURANCE ACCOUNT (RHIA)

Retiree Medicare Supplement

Eligibility	Receiving retirement benefits, covered eight years before retirement, enrolled in a PERS-sponsored health plan, and enrolled in Medicare Part A and Part B.
Benefit	\$60 monthly per retiree is applied to PERS-sponsored Medicare supplemental insurance costs.



**CITY OF SEASIDE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

PERS OPSRP FULL FORMULA BENEFITS

Plan Year	January 1 to December 31.
Plan Type	Defined Benefit.
Plan Eligibility	Hired after August 28, 2003.
Normal Retirement	
Eligibility	The attainment of the earlier of age 60, or age 53 with 25 years of benefit service.
Benefit	1.80% of average monthly compensation multiplied by years of benefit service.
Mandatory Employee Contributions	
Eligibility	Effective July 1, 2020, applicable to participants earning at least \$2,500 monthly in 2020, increased to \$3,333 in 2022 and indexed for inflation in future years.
Contributions	After July 1, 2020, 0.75% of monthly compensation.
Early Retirement	
Eligibility	The attainment of age 50 with five years of service.
Benefit	Accrued benefit actuarially reduced for each year that early commencement precedes normal retirement age.
Unreduced Benefit Eligibility	None.



**CITY OF SEASIDE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS OPSRP Full Formula Benefits
(Continued)**

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	Until Normal Retirement Age, 45% of monthly compensation during the last full month of employment, reduced if the total benefit exceeds 75% of compensation. After Normal Retirement Age, Normal Retirement Benefit credited with benefit years of service as if the employee worked to Normal Retirement Age, with salary increased with cost of living adjustments.

Compensation

Limits	\$195,000 in 2020, indexed with inflation.
Covered	Total Compensation including overtime up to average limit and bonuses.
Average Monthly	The greater of covered compensation averaged over the three consecutive plan years that produce the highest average and covered compensation averaged over the final 36 consecutive months of service.

Accrued Benefit

A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.

Normal Form of Benefit

Single life annuity.

Actuarial Equivalent

Interest	7.2% pre- and post-retirement.
Mortality	Blended mortality based on PUB-2010 tables, with different tables depending on purpose of adjustment.



**CITY OF SEASIDE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS OPSRP Full Formula Benefits
(Concluded)**

Cost of Living Adjustments

Benefits Earned Before October, 2013	Annual adjustment to reflect the increase or decrease in CPI (Portland Area – All Items), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.
Benefits Earned After October, 2013	1.25% for benefit amounts up to \$60,000 and 0.15% for benefit amounts above \$60,000.



**CITY OF SEASIDE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

CITY OF SEASIDE RETIREMENT PLAN

Effective Date	March 1, 1973.
Plan Year	July 1 to June 30.
Plan Type	Defined Benefit.
Normal Retirement	
Eligibility	Age 60.
Benefit	1.55% of average monthly compensation multiplied by years of benefit service as a participant, plus the normal form actuarial equivalent of accumulated employer contributions.
Mandatory Employee Contributions	None.
Employer Contributions	
Eligibility	Participating in the plan.
Contributions	7.00% of monthly compensation without overtime or bonuses.
Early Retirement	
Eligibility	Age 50.
Benefit	Normal retirement benefit reduced by 0.6% for each month that early commencement precedes age 55.
Unreduced Benefit Eligibility	Age 55 with 25 years of benefit service, or any age with 30 years of benefit service.



**CITY OF SEASIDE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**City of Seaside Retirement Plan
(Continued)**

Late Retirement

Eligibility	Defer commencement of benefit beyond normal retirement date.
Benefit	Greater of the benefit accrued at Normal Retirement Date increased by 7.2% for each of the first 5 years following normal retirement age plus 3.6% for each additional year thereafter, and the benefit calculated under the normal retirement formula using additional years of compensation and benefit service.

Disability Benefit

Eligibility	Total and permanent disability with 10 years of service (immediate if disability is service related).
Benefit	The accrued benefit earned to date of disability, plus 64% of the additional normal retirement benefit credited with benefit years of service as if the employee worked to age 55, commencing immediately. In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation.

Compensation

Limits	\$285,000 in 2020, indexed with inflation.
Plan	Total Compensation including overtime and bonuses.
Average Monthly	Plan compensation averaged over the final three consecutive plan years out of the last ten that produce the highest average.



**CITY OF SEASIDE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**City of Seaside Retirement Plan
(Concluded)**

Accrued Benefit	A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.
Unit Purchase Match	Up to \$80 monthly for 60 monthly annuity payments paid between normal retirement age and age 65.
Unused Sick Leave	50% of unused sick leave may be used to increase final average earnings.
Vacation Cash-Out	Unused vacation may be included in final average earnings.
Normal Form of Benefit	Single life annuity with a modified cash refund.
Optional Forms of Benefit	Single life annuity, certain and life annuity, joint & survivor annuity.
Actuarial Equivalent	
Interest	30-yr Treasury rate for third month preceding the July 1 start of the plan year; as of April, 2020 this rate is 1.27%.
Mortality	1994 Group Annuity Reserving, projected to 2002, blended 50% Male / 50% Female.
Cost of Living Adjustments	Annual adjustment to reflect the increase or decrease in the Consumer Price Index (CPI), subject to a maximum increase of 2.00% in any year.



CITY OF SEASIDE ADDITIONAL BENEFIT PROVISIONS

Retiree Medical

Implicit Eligibility	Continued medical coverage is offered to the City's public safety retirees, spouses and dependents until Medicare eligibility, as provided in the current contract.
Implicit Benefit	The retiree premium rate (whether paid by the City or by the retiree) is based on the premium rates available to active employees. Generally, the premium does not represent the full cost of covering retirees (since they are older than the active population, retirees can be expected to generate higher medical claims and therefore higher premiums for the active population). This additional cost is called the "implicit subsidy".
Explicit Eligibility	The completion of 15 years of service.
Explicit Benefit	<p>The City pays 100% of the premium for medical insurance, including dental and vision coverage for the retiree and spouse until Medicare eligibility or 10 years have elapsed, if sooner.</p> <p>The monthly premium is \$768.49 for a retiree, and \$1,607.02 for a retiree and their spouse.</p>



ACTUARIAL ASSUMPTIONS



**CITY OF SEASIDE
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

ACTUARIAL ASSUMPTIONS FOR ETOB TESTING

Valuation Date	December 31, 2020.	
Plan Eligibility	All employees eligible to participate under PERS are treated as eligible for ETOB testing.	
Interest Rate for Discounting Future Liabilities	6.90% per year.	
Interest Rate to Project Past and Future Earnings	The greater of 6.90% or the plan’s guaranteed interest rate, if any.	
General Inflation	2.40% per year.	
Payroll Growth	3.40% per year.	
Salary Merit Scale	Duration	Annual Increase
	0	5.13%
	5	2.87%
	10	1.58%
	15	0.98%
	20	0.79%
	25	0.72%
	30 +	0.50%
Unused Sick Leave Program	For employers with a traditional defined benefit retirement plan design, if unused sick leave is converted to benefits under the retirement plan the employer is treated as if electing to participate in the Unused Sick Leave Program.	
Unit Purchase Match	Assume maximum purchase, with a cost to employer of \$4,000 if retiring before age 65.	



**CITY OF SEASIDE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

Mortality Rates

Active employees: None.

Retirees: PUB 2010 Retiree Tables for Safety Employees, sex distinct, projected generationally.

Beneficiaries: PUB 2010 Employee and Retiree Tables for General Employees, sex distinct, projected generationally.

Beneficiary adjustments: Set back 12 months for males, no set back for females.

Disabled Retirees: 50% of PUB 2010 Disabled Retiree Tables for Safety Employees, 50% of PUB 2010 Disabled Retiree Tables for Non-Safety Employees, sex distinct, projected generationally.

Improvement Scale: Unisex Social Security Data Scale (60 year average), with data through 2017.

Turnover Rates

None.

Disability Rates

Based on 1985 Pension Disability Table Class 1 – unisex, as adjusted per 2020 experience study. Rates are applied past retirement eligibility, but not after normal retirement age. Sample rates are as follows:

Age	Service Disability Rate	Ordinary Disability Rate
30	0.0128%	0.0160%
35	0.0196%	0.0245%
40	0.0316%	0.0395%
45	0.0518%	0.0648%
50	0.0896%	0.1120%



**CITY OF SEASIDE
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

Retirement Rates

Age	Tier 1 / Tier 2			OPSRP		
	Years of Service			Years of Service		
	< 13	13 - 24	25 +	< 13	13 - 24	25 +
50	1.5%	3.0%	32.0%	0.5%	1.5%	5.5%
51	1.5%	3.0%	27.0%	0.5%	1.5%	5.5%
52	1.5%	3.0%	27.0%	0.5%	1.5%	5.5%
53	1.5%	3.0%	27.0%	0.5%	1.5%	27.0%
54	1.5%	3.5%	27.0%	0.5%	1.5%	27.0%
55	3.0%	15.5%	27.0%	2.0%	5.0%	27.0%
56	3.0%	10.0%	27.0%	2.0%	5.0%	27.0%
57	3.0%	10.0%	27.0%	2.0%	5.0%	27.0%
58	6.0%	10.0%	27.0%	5.0%	5.0%	27.0%
59	6.0%	10.0%	27.0%	5.0%	5.0%	27.0%
60	6.0%	12.0%	27.0%	5.0%	15.0%	27.0%
61	6.0%	14.0%	27.0%	5.0%	8.5%	27.0%
62	15.0%	25.0%	38.0%	10.0%	25.0%	38.0%
63	15.0%	15.0%	31.0%	7.0%	15.0%	31.0%
64	15.0%	15.0%	31.0%	7.0%	15.0%	31.0%
65	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
66	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
67	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
68	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
69	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
70	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Postretirement Healthcare Participation 100%

Postretirement Healthcare Lapse None.

Spouse Coverage 100% of future retirees are assumed to cover a spouse as well. Males are assumed to be three years older than their female spouses.



PERS SPECIFIC ACTUARIAL ASSUMPTIONS

Cost of Living Adjustments	Blended based on Moro vs. State of Oregon, with separate assumptions for each tier: Tier 1: 1.798% Tier 2: 1.735% OPSRP: 1.484%
Unused Sick Leave Program	Benefits have been increased by 7.50%
Vacation Cash-Out	Tier 1 benefits have been increased by 4.75%.
Waiting-Time Purchases	Assume purchased.
Assumed Form of Payment	
Tier 1/Tier 2	98% of participants elect to receive their benefit as a cash refund annuity with 25% survivor continuation, 2% of participants elect to receive their benefit as a partial lump sum: refund of member contributions with interest plus a pension based on the employer-paid portion of the Full Formula Benefit.
OPSRP	100% of participants elect to receive their benefit as a single life annuity.



**CITY OF SEASIDE
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

CITY OF SEASIDE SPECIFIC ACTUARIAL ASSUMPTIONS

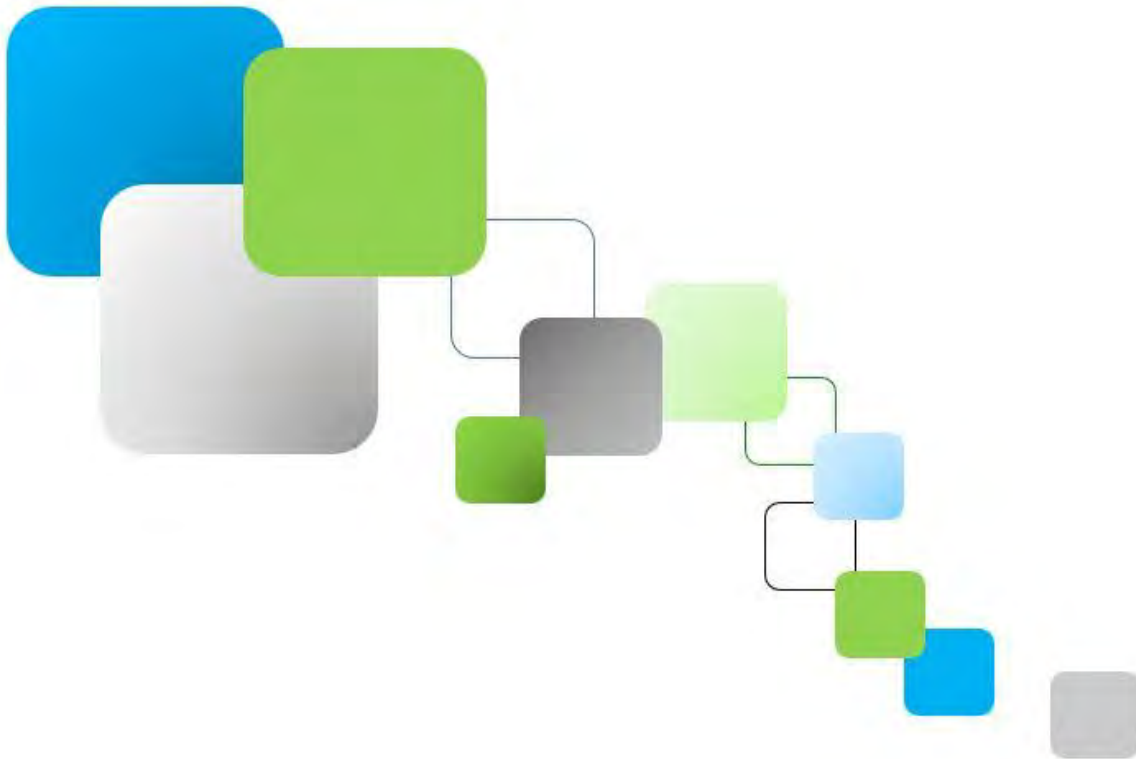
Earliest Applicable Date of Hire Considered	October 16, 1995.
Cost of Living Adjustments	2.00%.
Covered Compensation Adjustments	For the purpose of calculating employer contributions, covered compensation has been reduced by 8.00% based on information provided by PERS and the City.
Unused Sick Leave Program	The City is assumed to participate in the Unused Sick Leave Program. Benefits have been increased by 7.50%
Vacation Cash-Out	Benefits have been increased by 4.75%.
Assumed Form of Payment	Normal form.
Annual Premium Increase Rates	The assumed increases for medical plans are:

<u>Year</u>	<u>Rate</u>	<u>Year</u>	<u>Rate</u>
2021	5.90%	2052-2060	4.70%
2022	5.50%	2061-2064	4.60%
2023	5.10%	2065-2066	4.50%
2024	5.00%	2067	4.40%
2025-2026	4.90%	2068	4.30%
2027	4.80%	2069-2070	4.20%
2028-2036	4.70%	2071	4.10%
2037-2045	4.80%	2072-2073	4.00%
2046-2049	4.90%	2074+	3.90%
2050-2051	4.80%		

Health Care Claims Costs	2021 claims costs for an age 64 retiree or spouse are assumed to be \$19,698.
Coverage of Eligible Children	We have assumed no impact of dependent children on the implicit subsidy.
Dental and Vision Costs	We have assumed no implicit subsidy due to dental or vision costs.

CITY OF SPRINGFIELD

OREGON REVISED STATUTE 237.620 EQUAL TO OR BETTER THAN (ETOB) DETERMINATION AS OF DECEMBER 31, 2020



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**CITY OF SPRINGFIELD
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

REPORT SUMMARY

This report has been prepared by Independent Actuaries, Inc. for the Oregon Public Employees' Retirement System (PERS) and the City of Springfield. This report provides the details of the determination whether the retirement benefits provided by the City qualify for exemption under Oregon Revised Statute (ORS) 237.620(2) from participation in PERS.

Typically, in Oregon, public employers of police officers and firefighters provide retirement benefits under PERS. A public employer may qualify for exemption and provide their own retirement benefits if those benefits are equal to or better (ETOB) than the benefits provided under PERS. An ETOB determination is made every twelve years.

Under the Oregon Administrative Rule (OAR) governing the test, employer retirement benefits are compared at each PERS tier in three categories: total benefits, service retirement with postretirement healthcare, and disability retirement with postretirement healthcare. For an employer to qualify for exemption, the employer total benefits must be greater than 100 percent of benefits that PERS provides at each tier. Additionally, service retirement and disability retirement benefits must each be at least 80 percent of the benefits that PERS provides at each tier.

As approved by the PERS Board, employer retirement benefits may be determined to be ETOB either via a side-by-side comparison of employer plan provisions against PERS plan provisions or by a full actuarial valuation. It is only reasonable to review employer retirement benefits using the side-by-side comparison approach if the benefits are provided via a plan design similar to PERS. Under the side-by-side comparison approach, the employer retirement benefits will only be determined to be ETOB if they are unambiguously equal to or better than PERS. If the employer retirement benefits design is not suitable for side-by-side comparison, or if the benefits are not unambiguously more valuable, a full actuarial valuation determination approach will be used.

Based on the information described in this report, we conclude that retirement benefits provided by the City of Springfield meet the standards for receiving an exemption OAR 459-030-0025.



DETERMINATION METHODOLOGY

The standards for determining whether an employer provides benefits that are ETOB are stated in OAR 459-030-0025, with additional definitions provided by reference. Other rules for testing are as approved by the PERS Board.

- We have compared full-career benefits, assuming an employee is covered by either the terms of the public employer's retirement benefit plan(s) or PERS for their entire career starting with their date of hire. Benefit provisions which apply prior to the earliest date of hire of any active employee of the public employer are ignored. Historical plan changes from to the earliest date of hire of any active employee of the public employer to the present are reflected. Current benefit provisions are expected to apply in the future.
- Benefits were compared based on the December 31, 2020 actuarial present value of retirement benefits projected to be accrued to the projected date of retirement or disability, calculated as a percentage of salary.
- We have used hypothetical census data, based on the PERS police officer and firefighter census used in the December 31, 2020 PERS valuation.
- We have used the actuarial assumptions and methods identified in the December 31, 2020 PERS valuation report, but assuming no pre-retirement death or withdrawal. Any additional actuarial assumptions needed to evaluate features of the public employer's retirement plan(s) which are not comparable to PERS have been developed in a manner consistent with PERS assumptions.
- Prior and future benefits which depend on investment returns have been valued using the assumed rate, taking into consideration guaranteed returns stated in plan provisions. The assumed rate is the 6.90% discount rate used in the December 31, 2020 PERS valuation.
- Under the assumptions prescribed for the comparison the PERS Full Formula method of calculating Tier 1 and Tier 2 retirement benefits results in a more valuable benefit than the Money Match method in almost all cases; therefore, the Full Formula method has been used in the comparison.
- Only employer-funded retirement benefits are included in the comparison. Any contribution described as an employee contribution will be ignored, unless the public employer's plan provisions state that the employer is responsible for making the contribution on the employee's behalf and the responsibility to make the contribution is non-elective.
- We have valued both explicit and implicit postretirement healthcare benefits.
- Our comparison does not value the transfer of investment risk and mortality risk between employee and employer inherent in the plan design differences of defined benefit and defined contribution plans.
- Our comparison does not include increases to retirement benefits under ORS 238.362-368 and ORS 237.635-637.



**CITY OF SPRINGFIELD
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

ACTUARIAL CERTIFICATION

Independent Actuaries, Inc. was engaged by the State of Oregon, through its Oregon Public Employees Retirement System (PERS), to review the retirement benefits program of the City of Springfield as of December 31, 2020, in order to determine if it is equal to or better than PERS as required by ORS 237.620(2). The conclusions of the review are set forth in this report, which has been prepared exclusively for PERS and the City, and may not be relied upon for any other purpose or by any party other than PERS or the City.

The valuation is based on participant data and plan provision supplied by PERS and the City. All information submitted to us has been reviewed for reasonableness and consistency, but has otherwise been accepted and relied upon without audit. The plan provisions are summarized in the applicable section of this report.

This report was prepared in accordance with applicable law. To the best of our knowledge, the information supplied in this report is complete and accurate. For purposes of determining the actuarial present value of retirement benefits, each prescribed method and assumption was applied in accordance with our understanding of law and regulations under ORS 237.620 and OAR 459. The prescribed and non-prescribed methods and assumptions are disclosed in the Determination Methodology and Actuarial Assumptions sections of this report. In our opinion, each non-prescribed assumption is reasonable and such non-prescribed assumptions, in combination, offer our best estimate of anticipated experience under the plan.


The liabilities were calculated using models developed for the purpose of pension plan valuation, the structure and output of which were evaluated and reasonably achieve their intended purpose.

Future actuarial measurements may differ significantly from the current measurement presented in this report due to such factors as changes in economic or demographic assumptions and changes in plan provisions or applicable law.

The undersigned credentialed actuaries are members of the American Academy of Actuaries and meet the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* of the American Academy of Actuaries to render the actuarial opinion contained herein.



 Aeron Riordon, ASA, EA, MAAA



 Steven L. Diess, EA, MAAA

June 27, 2022 _____
 Date

20-08467 _____
 Enrollment #

June 27, 2022 _____
 Date

20-06055 _____
 Enrollment #

Independent Actuaries, Inc.
 Five Centerpointe Dr., Suite 520, Lake Oswego, OR 97035 503.520.0848



**CITY OF SPRINGFIELD
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

TEST RESULTS

The City of Springfield Retirement Plan provides benefits via a cash balance type plan design which is not comparable to PERS using the Full Formula method of calculating Tier 1, Tier 2, and OPSRP retirement benefits. Therefore, a full actuarial valuation was conducted in order to determine whether the City qualifies for exemption from participation in PERS.

For the City to qualify for exemption, the employer total benefits must be greater than 100 percent of benefits that PERS provides at each tier. Additionally, service retirement with postretirement healthcare and disability retirement with postretirement healthcare must each be at least 80 percent of benefits that PERS provides at each tier. As shown below, the retirement benefits provided by the City meet this standard.

PERS Benefit Tier Type	Present Value of Estimated Employer- Funded Full-Career Retirement Benefits as of December 31, 2020 for Hypothetical Census Data Groups as a Percentage of PERS Subject Salary		City of Springfield Benefits as a Percentage of PERS
	City of Springfield ¹	PERS	
Retirement – Tier 1	1,102%	705%	156%
Disability – Tier 1	7%	3%	205%
Total – Tier 1	1,108%	708%	156%
Retirement – Tier 2	838%	597%	140%
Disability – Tier 2	9%	7%	134%
Total – Tier 2	847%	604%	140%
Retirement – OPSRP	626%	377%	166%
Disability – OPSRP	11%	14%	81%
Total – OPSRP	637%	391%	163%

¹ Please note that not all benefits potentially includable for ETOB determination purposes were valued in this comparison, because the employer demonstrated compliance with the ETOB requirement without including such benefits.



**CITY OF SPRINGFIELD
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

PARTICIPANT DATA

Hypothetical census data has been used for review of benefits, per the rules governing ETOB determination. The hypothetical data was based on the police officer and firefighter census used in the December 31, 2020 PERS valuation.

	Tier 1	Tier 2	OPSRP	Total
Count	1,151	3,708	10,518	15,377
Average Attained Age	53.65	49.63	39.35	42.90
Average Total Years of Service	26.80	20.47	8.02	12.42
Average 2020 PERS Subject Salary	\$114,024	\$107,508	\$82,406	\$90,826



SUMMARY OF APPLICABLE PLAN PROVISIONS



**CITY OF SPRINGFIELD
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

PERS TIER 1/TIER 2 FULL FORMULA BENEFITS

Plan Year	January 1 to December 31.	
Plan Type	Defined Benefit.	
Plan Eligibility	Tier 1: Hired prior to 1996. Tier 2: Hired after 1995 and prior to August 29, 2003.	
Normal Retirement		
Eligibility	Age 55.	
Benefit	2.00% of average monthly compensation multiplied by years of benefit service.	
Mandatory Employee Contributions		
Eligibility	Prior to January 1, 2004 all Tier 1/Tier 2 participants. Effective July 1, 2020 applicable to participants earning at least \$2,500 monthly in 2020, increased to \$3,333 in 2022 and indexed for inflation in future years.	
Contributions	Prior to January 1, 2004, 6.0% of monthly compensation. After July 1, 2020, 2.50% of monthly compensation.	
Guaranteed Interest Rate (Tier 1 only)	Years	Rate
	1980-1988	7.50%
	1989-2013	8.00%
	2014-2015	7.75%
	2016-2017	7.50%
	2018-2020	7.20%
	2021+	6.90%



**CITY OF SPRINGFIELD
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS Tier 1/Tier 2 Full Formula Benefits
(Continued)**

Early Retirement

Eligibility	The earlier of age 50 or completion of 30 years of benefit service.
Benefit	Accrued benefit actuarially reduced for each year that early commencement precedes normal retirement age.
Unreduced Benefit Eligibility	25 years of benefit service.

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	Normal Retirement Benefit credited with years of service as if the employee worked to age 55, commencing immediately. In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation. For participants with at least 15 years of credited benefit service, the benefit cannot be lower than \$100 monthly and cannot exceed the greater of the final monthly compensation or \$400 monthly.

Compensation

Limits	\$195,000 in 2020, indexed with inflation.
Covered	Total Compensation including overtime and bonuses.
Average Monthly	The greater of covered compensation averaged over the three consecutive plan years that produce the highest average and covered compensation averaged over the final 36 consecutive months of service.

Accrued Benefit

A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.



**CITY OF SPRINGFIELD
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS Tier 1/Tier 2 Full Formula Benefits
(Concluded)**

Unit Purchase Employer Match	Up to \$80 monthly for 60 monthly annuity payments which must commence after earliest retirement age and be paid out by age 65.
Waiting-Time Purchase	Members with 10 years of service may purchase credit for the six month period of employment prior to participation. The cost is the amount of employee and employer contributions that would have been made during the waiting period.
Unused Sick Leave	50% of unused sick leave may be used to increase final average earnings in PERS, if the employer participates in that program.
Vacation Cash-Out	Unused vacation may be included in final average earnings for Tier 1 members.
Normal Form of Benefit	Cash refund annuity with 25% survivor continuation.
Optional Forms of Benefit	Partial lump sum: refund of member contributions with interest plus a pension based on the employer-paid portion of the Full Formula Benefit.
Actuarial Equivalent	
Interest	7.2% pre- and post-retirement.
Mortality	Blended mortality based on PUB-2010 tables, with different tables depending on purpose of adjustment
Cost of Living Adjustments	
Benefits Earned Before October, 2013	Annual adjustment to reflect the increase or decrease in CPI (Portland Area – All Items), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.
Benefits Earned After October, 2013	1.25% for benefit amounts up to \$60,000 and 0.15% for benefit amounts above \$60,000.



PERS TIER 1/TIER 2 RETIREE HEALTH INSURANCE ACCOUNT (RHIA)

Retiree Medicare Supplement

Eligibility	Receiving retirement benefits, covered eight years before retirement, enrolled in a PERS-sponsored health plan, and enrolled in Medicare Part A and Part B.
Benefit	\$60 monthly per retiree is applied to PERS-sponsored Medicare supplemental insurance costs.



**CITY OF SPRINGFIELD
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

PERS OPSRP FULL FORMULA BENEFITS

Plan Year	January 1 to December 31.
Plan Type	Defined Benefit.
Plan Eligibility	Hired after August 28, 2003.
Normal Retirement	
Eligibility	The attainment of the earlier of age 60, or age 53 with 25 years of benefit service.
Benefit	1.80% of average monthly compensation multiplied by years of benefit service.
Mandatory Employee Contributions	
Eligibility	Effective July 1, 2020, applicable to participants earning at least \$2,500 monthly in 2020, increased to \$3,333 in 2022 and indexed for inflation in future years.
Contributions	After July 1, 2020, 0.75% of monthly compensation.
Early Retirement	
Eligibility	The attainment of age 50 with five years of service.
Benefit	Accrued benefit actuarially reduced for each year that early commencement precedes normal retirement age.
Unreduced Benefit Eligibility	None.



**CITY OF SPRINGFIELD
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS OPSRP Full Formula Benefits
(Continued)**

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	Until Normal Retirement Age, 45% of monthly compensation during the last full month of employment, reduced if the total benefit exceeds 75% of compensation. After Normal Retirement Age, Normal Retirement Benefit credited with benefit years of service as if the employee worked to Normal Retirement Age, with salary increased with cost of living adjustments.

Compensation

Limits	\$195,000 in 2020, indexed with inflation.
Covered	Total Compensation including overtime up to average limit and bonuses.
Average Monthly	The greater of covered compensation averaged over the three consecutive plan years that produce the highest average and covered compensation averaged over the final 36 consecutive months of service.

Accrued Benefit	A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.
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Normal Form of Benefit	Single life annuity.
------------------------	----------------------

Actuarial Equivalent

Interest	7.2% pre- and post-retirement.
Mortality	Blended mortality based on PUB-2010 tables, with different tables depending on purpose of adjustment.



**CITY OF SPRINGFIELD
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS OPSRP Full Formula Benefits
(Concluded)**

Cost of Living Adjustments

Benefits Earned Before October, 2013	Annual adjustment to reflect the increase or decrease in CPI (Portland Area – All Items), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.
Benefits Earned After October, 2013	1.25% for benefit amounts up to \$60,000 and 0.15% for benefit amounts above \$60,000.



**CITY OF SPRINGFIELD
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

CITY OF SPRINGFIELD RETIREMENT PLAN

Effective Date	May 1, 1963.
Plan Year	January 1 to December 31.
Plan Type	Cash Balance (Defined Benefit).
Normal Retirement	
Eligibility	Age 55.
Benefit	Hypothetical Account Balance resulting from annual pay credits and interest credits.
Mandatory Employee Contributions	None.
Employer Contributions	None.
Early Retirement	
Eligibility	Age 50 with 25 years of service.
Benefit	Normal retirement benefit.
Disability Benefit	
Eligibility	Immediately upon total and permanent disability.
Benefit	Credits for service earned until the earlier of age 60, date of death, or the date the employee is no longer disabled. The balance is distributed at the earlier of age 65 or date of death.
Compensation	
Limits	\$200,000 as indexed; \$285,000 for plan years beginning in or after 2020.
Plan	Total Compensation including bonuses and overtime.



**CITY OF SPRINGFIELD
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**City of Springfield Retirement Plan
(Concluded)**

Pay (or Principal) Credits

Period	Employer Contribution Account	Employer Additional Contribution or Pick-up Account
After July 31, 2005	12.8%	6.0%
January 1, 1998 – July 31, 2005	12.6%	7.0%
July 1, 1990 – December 31, 1997	12.6%	7% if monthly earnings ≥ \$1,500 6% if monthly earnings < \$1,500
July 1, 1989 – June 30, 1990	10.0%	7% if monthly earnings ≥ \$1,500 6% if monthly earnings < \$1,500
July 1, 1979 – June 30, 1989	10.0%	7% if monthly earnings ≥ \$1,500 6% if monthly earnings ≥ \$1,000 5% if monthly earnings ≥ \$500 4% if monthly earnings < \$500

Employer Additional Contribution Accounts are credited for union employees, and Employee Pick-up Accounts are credited for non-union employees.

Interest Credits	9.00%, credited annually.
Accrued Benefit	Lump Sum of Hypothetical Account Balance.
Normal Form of Benefit	Lump Sum.



CITY OF SPRINGFIELD ADDITIONAL BENEFIT PROVISIONS

Disability Insurance

Insurance Benefit 60% of monthly compensation prior to disability up to \$10,000 per year.

Benefit Period Until the greater Social Security Normal Retirement Age or four years after the date of disability.

Retiree Medical

Implicit Eligibility Continued medical coverage is offered to the City's public safety retirees, spouses and dependents until Medicare eligibility, on a self-pay basis.

Implicit Benefit The active premium rate (whether paid by the City or by the retiree) still applies. Generally, the premium does not represent the full cost of covering retirees (since they are older than the active population, retirees can be expected to generate higher medical claims and therefore higher premiums for the active population). This additional cost is called the "implicit subsidy".

The monthly premium charged is \$595.38 for a retiree, and \$1,308.98 for a retiree and their spouse.

Explicit Eligibility Retiring with two years of service and with age plus years of service total at least 70 years, or disabled under the disability insurance plan.

Explicit Benefit The City contributes \$115.05 per month towards the premium for medical insurance for the retiree only until Medicare eligibility.



ACTUARIAL ASSUMPTIONS



**CITY OF SPRINGFIELD
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

ACTUARIAL ASSUMPTIONS FOR ETOB TESTING

Valuation Date	December 31, 2020.	
Plan Eligibility	All employees eligible to participate under PERS are treated as eligible for ETOB testing.	
Interest Rate for Discounting Future Liabilities	6.90% per year.	
Interest Rate to Project Past and Future Earnings	The greater of 6.90% or the plan’s guaranteed interest rate, if any.	
General Inflation	2.40% per year.	
Payroll Growth	3.40% per year.	
Salary Merit Scale	Duration	Annual Increase
	0	5.13%
	5	2.87%
	10	1.58%
	15	0.98%
	20	0.79%
	25	0.72%
	30 +	0.50%
Unused Sick Leave Program	For employers with a traditional defined benefit retirement plan design, if unused sick leave is converted to benefits under the retirement plan the employer is treated as if electing to participate in the Unused Sick Leave Program.	



**CITY OF SPRINGFIELD
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

Mortality Rates

Active employees: None.

Retirees: PUB 2010 Retiree Tables for Safety Employees, sex distinct, projected generationally.

Beneficiaries: PUB 2010 Employee and Retiree Tables for General Employees, sex distinct, projected generationally.

Beneficiary adjustments: Set back 12 months for males, no set back for females.

Disabled Retirees: 50% of PUB 2010 Disabled Retiree Tables for Safety Employees, 50% of PUB 2010 Disabled Retiree Tables for Non-Safety Employees, sex distinct, projected generationally.

Improvement Scale: Unisex Social Security Data Scale (60 year average), with data through 2017.

Turnover Rates

None.

Disability Rates

Based on 1985 Pension Disability Table Class 1 – unisex, as adjusted per 2020 experience study. Rates are applied past retirement eligibility, but not after normal retirement age. Sample rates are as follows:

Age	Service Disability Rate	Ordinary Disability Rate
30	0.0128%	0.0160%
35	0.0196%	0.0245%
40	0.0316%	0.0395%
45	0.0518%	0.0648%
50	0.0896%	0.1120%



**CITY OF SPRINGFIELD
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

Retirement Rates

Age	Tier 1 / Tier 2			OPSRP		
	Years of Service			Years of Service		
	< 13	13 - 24	25 +	< 13	13 - 24	25 +
50	1.5%	3.0%	32.0%	0.5%	1.5%	5.5%
51	1.5%	3.0%	27.0%	0.5%	1.5%	5.5%
52	1.5%	3.0%	27.0%	0.5%	1.5%	5.5%
53	1.5%	3.0%	27.0%	0.5%	1.5%	27.0%
54	1.5%	3.5%	27.0%	0.5%	1.5%	27.0%
55	3.0%	15.5%	27.0%	2.0%	5.0%	27.0%
56	3.0%	10.0%	27.0%	2.0%	5.0%	27.0%
57	3.0%	10.0%	27.0%	2.0%	5.0%	27.0%
58	6.0%	10.0%	27.0%	5.0%	5.0%	27.0%
59	6.0%	10.0%	27.0%	5.0%	5.0%	27.0%
60	6.0%	12.0%	27.0%	5.0%	15.0%	27.0%
61	6.0%	14.0%	27.0%	5.0%	8.5%	27.0%
62	15.0%	25.0%	38.0%	10.0%	25.0%	38.0%
63	15.0%	15.0%	31.0%	7.0%	15.0%	31.0%
64	15.0%	15.0%	31.0%	7.0%	15.0%	31.0%
65	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
66	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
67	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
68	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
69	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
70	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Postretirement Healthcare Participation 100%

Postretirement Healthcare Lapse None.

Spouse Coverage 100% of future retirees are assumed to cover a spouse as well. Males are assumed to be three years older than their female spouses.



PERS SPECIFIC ACTUARIAL ASSUMPTIONS

Cost of Living Adjustments	Blended based on Moro vs. State of Oregon, with separate assumptions for each tier: Tier 1: 1.798% Tier 2: 1.735% OPSRP: 1.484%
Vacation Cash-Out	Tier 1 benefits have been increased by 4.75%.
Unit Purchase Match	Assume maximum purchase, with a cost to employer of \$4,000 if retiring before age 65.
Waiting-Time Purchases	Assume purchased.
Assumed Form of Payment	
Tier 1/Tier 2	98% of participants elect to receive their benefit as a cash refund annuity with 25% survivor continuation, 2% of participants elect to receive their benefit as a partial lump sum: refund of member contributions with interest plus a pension based on the employer-paid portion of the Full Formula Benefit.
OPSRP	100% of participants elect to receive their benefit as a single life annuity.



**CITY OF SPRINGFIELD
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

CITY OF SPRINGFIELD SPECIFIC ACTUARIAL ASSUMPTIONS

Earliest Applicable Date of Hire Considered Union employees: December 6, 1983.
Non-union employees: April 16, 1999.

Covered Compensation Adjustments None.

Unused Sick Leave Program The City of Springfield is not assumed to participate in the Unused Sick Leave Program.

Assumed Form of Payment Normal form.

Disability Insurance Payments Offset by Social Security disability payments, City of Springfield Retirement Plan disability benefits in excess of service retirement benefits, and worker's compensation, as applicable.

Annual Premium Increase Rates The assumed increases for medical plans are:

<u>Year</u>	<u>Rate</u>	<u>Year</u>	<u>Rate</u>
2021	5.90%	2052-2060	4.70%
2022	5.50%	2061-2064	4.60%
2023	5.10%	2065-2066	4.50%
2024	5.00%	2067	4.40%
2025-2026	4.90%	2068	4.30%
2027	4.80%	2069-2070	4.20%
2028-2036	4.70%	2071	4.10%
2037-2045	4.80%	2072-2073	4.00%
2046-2049	4.90%	2074+	3.90%
2050-2051	4.80%		

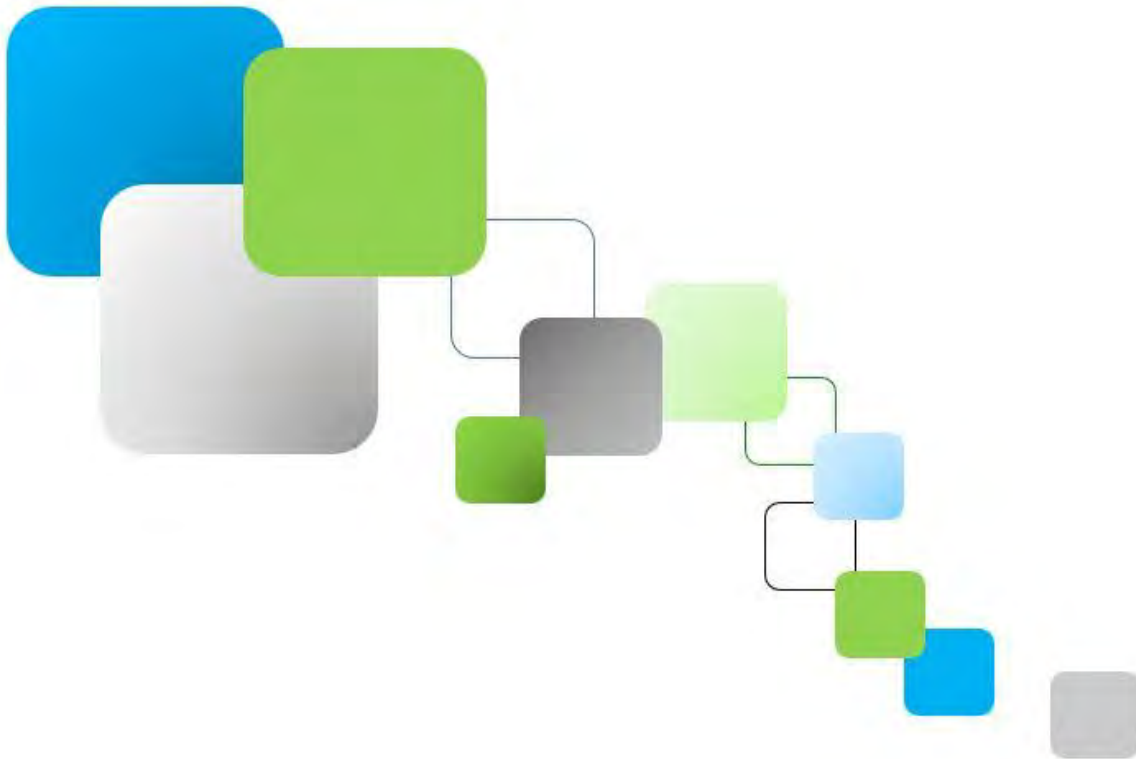
Health Care Claims Costs 2021 claims costs for an age 64 retiree or spouse are assumed to be \$15,261.

Coverage of Eligible Children We have assumed no impact of dependent children on the implicit subsidy.

Dental and Vision Costs We have assumed no implicit subsidy due to dental or vision costs.

CITY OF THE DALLES

OREGON REVISED STATUTE 237.620 EQUAL TO OR BETTER THAN (ETOB) DETERMINATION AS OF DECEMBER 31, 2020



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**CITY OF THE DALLES
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

REPORT SUMMARY

This report has been prepared by Independent Actuaries, Inc. for the Oregon Public Employees' Retirement System (PERS) and the City of The Dalles. This report provides the details of the determination whether the retirement benefits provided by the City qualify for exemption under Oregon Revised Statute (ORS) 237.620(2) from participation in PERS.

Typically, in Oregon, public employers of police officers and firefighters provide retirement benefits under PERS. A public employer may qualify for exemption and provide their own retirement benefits if those benefits are equal to or better (ETOB) than the benefits provided under PERS. An ETOB determination is made every twelve years.

Under the Oregon Administrative Rule (OAR) governing the test, employer retirement benefits are compared at each PERS tier in three categories: total benefits, service retirement with postretirement healthcare, and disability retirement with postretirement healthcare. For an employer to qualify for exemption, the employer total benefits must be greater than 100 percent of benefits that PERS provides at each tier. Additionally, service retirement and disability retirement benefits must each be at least 80 percent of the benefits that PERS provides at each tier.

As approved by the PERS Board, employer retirement benefits may be determined to be ETOB either via a side-by-side comparison of employer plan provisions against PERS plan provisions or by a full actuarial valuation. It is only reasonable to review employer retirement benefits using the side-by-side comparison approach if the benefits are provided via a plan design similar to PERS. Under the side-by-side comparison approach, the employer retirement benefits will only be determined to be ETOB if they are unambiguously equal to or better than PERS. If the employer retirement benefits design is not suitable for side-by-side comparison, or if the benefits are not unambiguously more valuable, a full actuarial valuation determination approach will be used.

Based on the information described in this report, we conclude that retirement benefits provided by the City of The Dalles meet the standards for receiving an exemption OAR 459-030-0025.



DETERMINATION METHODOLOGY

The standards for determining whether an employer provides benefits that are ETOB are stated in OAR 459-030-0025, with additional definitions provided by reference. Other rules for testing are as approved by the PERS Board.

- We have compared full-career benefits, assuming an employee is covered by either the terms of the public employer's retirement benefit plan(s) or PERS for their entire career starting with their date of hire. Benefit provisions which apply prior to the earliest date of hire of any active employee of the public employer are ignored. Historical plan changes from to the earliest date of hire of any active employee of the public employer to the present are reflected. Current benefit provisions are expected to apply in the future.
- Benefits were compared based on the December 31, 2020 actuarial present value of retirement benefits projected to be accrued to the projected date of retirement or disability, calculated as a percentage of salary.
- We have used hypothetical census data, based on the PERS police officer and firefighter census used in the December 31, 2020 PERS valuation.
- We have used the actuarial assumptions and methods identified in the December 31, 2020 PERS valuation report, but assuming no pre-retirement death or withdrawal. Any additional actuarial assumptions needed to evaluate features of the public employer's retirement plan(s) which are not comparable to PERS have been developed in a manner consistent with PERS assumptions.
- Prior and future benefits which depend on investment returns have been valued using the assumed rate, taking into consideration guaranteed returns stated in plan provisions. The assumed rate is the 6.90% discount rate used in the December 31, 2020 PERS valuation.
- Under the assumptions prescribed for the comparison the PERS Full Formula method of calculating Tier 1 and Tier 2 retirement benefits results in a more valuable benefit than the Money Match method in almost all cases; therefore, the Full Formula method has been used in the comparison.
- Only employer-funded retirement benefits are included in the comparison. Any contribution described as an employee contribution will be ignored, unless the public employer's plan provisions state that the employer is responsible for making the contribution on the employee's behalf and the responsibility to make the contribution is non-elective.
- We have valued both explicit and implicit postretirement healthcare benefits.
- Our comparison does not value the transfer of investment risk and mortality risk between employee and employer inherent in the plan design differences of defined benefit and defined contribution plans.
- Our comparison does not include increases to retirement benefits under ORS 238.362-368 and ORS 237.635-637.



**CITY OF THE DALLES
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

ACTUARIAL CERTIFICATION

Independent Actuaries, Inc. was engaged by the State of Oregon, through its Oregon Public Employees Retirement System (PERS), to review the retirement benefits program of the City of The Dalles as of December 31, 2020, in order to determine if it is equal to or better than PERS as required by ORS 237.620(2). The conclusions of the review are set forth in this report, which has been prepared exclusively for PERS and the City, and may not be relied upon for any other purpose or by any party other than PERS or the City.

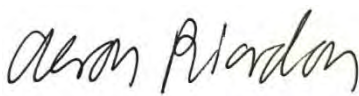
The valuation is based on participant data and plan provision supplied by PERS and the City. All information submitted to us has been reviewed for reasonableness and consistency, but has otherwise been accepted and relied upon without audit. The plan provisions are summarized in the applicable section of this report.

This report was prepared in accordance with applicable law. To the best of our knowledge, the information supplied in this report is complete and accurate. For purposes of determining the actuarial present value of retirement benefits, each prescribed method and assumption was applied in accordance with our understanding of law and regulations under ORS 237.620 and OAR 459. The prescribed and non-prescribed methods and assumptions are disclosed in the Determination Methodology and Actuarial Assumptions sections of this report. In our opinion, each non-prescribed assumption is reasonable and such non-prescribed assumptions, in combination, offer our best estimate of anticipated experience under the plan.


The liabilities were calculated using models developed for the purpose of pension plan valuation, the structure and output of which were evaluated and reasonably achieve their intended purpose.

Future actuarial measurements may differ significantly from the current measurement presented in this report due to such factors as changes in economic or demographic assumptions and changes in plan provisions or applicable law.

The undersigned credentialed actuaries are members of the American Academy of Actuaries and meet the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* of the American Academy of Actuaries to render the actuarial opinion contained herein.



 Aeron Riordon, ASA, EA, MAAA



 Steven L. Diess, EA, MAAA

June 28, 2022 _____
 Date

20-08467 _____
 Enrollment #

June 28, 2022 _____
 Date

20-06055 _____
 Enrollment #

Independent Actuaries, Inc.
 Five Centerpointe Dr., Suite 520, Lake Oswego, OR 97035 503.520.0848



**CITY OF THE DALLES
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

TEST RESULTS

The City of The Dalles Retirement Plan provides benefits via a defined contribution type plan design which is not comparable to PERS using the Full Formula method of calculating Tier 1, Tier 2, and OPSRP retirement benefits. Therefore, a full actuarial valuation was conducted in order to determine whether the City qualifies for exemption from participation in PERS.

For the City to qualify for exemption, the employer total benefits must be greater than 100 percent of benefits that PERS provides at each tier. Additionally, service retirement with postretirement healthcare and disability retirement with postretirement healthcare must each be at least 80 percent of benefits that PERS provides at each tier. As shown below, the retirement benefits provided by the City meet this standard.

PERS Benefit Tier Type	Present Value of Estimated Employer- Funded Full-Career Retirement Benefits as of December 31, 2020 for Hypothetical Census Data Groups as a Percentage of PERS Subject Salary		City of The Dalles Benefits as a Percentage of PERS
	City of The Dalles ¹	PERS	
Retirement – Tier 1	824%	705%	117%
Disability – Tier 1	10%	3%	317%
Total – Tier 1	835%	708%	118%
Retirement – Tier 2	657%	597%	110%
Disability – Tier 2	15%	7%	212%
Total – Tier 2	671%	604%	111%
Retirement – OPSRP	513%	377%	136%
Disability – OPSRP	19%	14%	136%
Total – OPSRP	531%	391%	136%

¹ Please note that not all benefits potentially includable for ETOB determination purposes were valued in this comparison, because the employer demonstrated compliance with the ETOB requirement without including such benefits.



**CITY OF THE DALLES
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

PARTICIPANT DATA

Hypothetical census data has been used for review of benefits, per the rules governing ETOB determination. The hypothetical data was based on the police officer and firefighter census used in the December 31, 2020 PERS valuation.

	Tier 1	Tier 2	OPSRP	Total
Count	1,151	3,708	10,518	15,377
Average Attained Age	53.65	49.63	39.35	42.90
Average Total Years of Service	26.80	20.47	8.02	12.42
Average 2020 PERS Subject Salary	\$114,024	\$107,508	\$82,406	\$90,826



SUMMARY OF APPLICABLE PLAN PROVISIONS



**CITY OF THE DALLES
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

PERS TIER 1/TIER 2 FULL FORMULA BENEFITS

Plan Year	January 1 to December 31.	
Plan Type	Defined Benefit.	
Plan Eligibility	Tier 1: Hired prior to 1996. Tier 2: Hired after 1995 and prior to August 29, 2003.	
Normal Retirement		
Eligibility	Age 55.	
Benefit	2.00% of average monthly compensation multiplied by years of benefit service.	
Mandatory Employee Contributions		
Eligibility	Prior to January 1, 2004 all Tier 1/Tier 2 participants. Effective July 1, 2020 applicable to participants earning at least \$2,500 monthly in 2020, increased to \$3,333 in 2022 and indexed for inflation in future years.	
Contributions	Prior to January 1, 2004, 6.0% of monthly compensation. After July 1, 2020, 2.50% of monthly compensation.	
Guaranteed Interest Rate (Tier 1 only)	Years	Rate
	1980-1988	7.50%
	1989-2013	8.00%
	2014-2015	7.75%
	2016-2017	7.50%
	2018-2020	7.20%
	2021+	6.90%



**CITY OF THE DALLES
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS Tier 1/Tier 2 Full Formula Benefits
(Continued)**

Early Retirement

Eligibility	The earlier of age 50 or completion of 30 years of benefit service.
Benefit	Accrued benefit actuarially reduced for each year that early commencement precedes normal retirement age.
Unreduced Benefit Eligibility	25 years of benefit service.

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	Normal Retirement Benefit credited with years of service as if the employee worked to age 55, commencing immediately. In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation. For participants with at least 15 years of credited benefit service, the benefit cannot be lower than \$100 monthly and cannot exceed the greater of the final monthly compensation or \$400 monthly.

Compensation

Limits	\$195,000 in 2020, indexed with inflation.
Covered	Total Compensation including overtime and bonuses.
Average Monthly	The greater of covered compensation averaged over the three consecutive plan years that produce the highest average and covered compensation averaged over the final 36 consecutive months of service.

Accrued Benefit

A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.



CITY OF THE DALLES
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020

PERS Tier 1/Tier 2 Full Formula Benefits
(Concluded)

Unit Purchase Employer Match	Up to \$80 monthly for 60 monthly annuity payments which must commence after earliest retirement age and be paid out by age 65.
Waiting-Time Purchase	Members with 10 years of service may purchase credit for the six month period of employment prior to participation. The cost is the amount of employee and employer contributions that would have been made during the waiting period.
Unused Sick Leave	50% of unused sick leave may be used to increase final average earnings in PERS, if the employer participates in that program.
Vacation Cash-Out	Unused vacation may be included in final average earnings for Tier 1 members.
Normal Form of Benefit	Cash refund annuity with 25% survivor continuation.
Optional Forms of Benefit	Partial lump sum: refund of member contributions with interest plus a pension based on the employer-paid portion of the Full Formula Benefit.
Actuarial Equivalent	
Interest	7.2% pre- and post-retirement.
Mortality	Blended mortality based on PUB-2010 tables, with different tables depending on purpose of adjustment
Cost of Living Adjustments	
Benefits Earned Before October, 2013	Annual adjustment to reflect the increase or decrease in CPI (Portland Area – All Items), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.
Benefits Earned After October, 2013	1.25% for benefit amounts up to \$60,000 and 0.15% for benefit amounts above \$60,000.



PERS TIER 1/TIER 2 RETIREE HEALTH INSURANCE ACCOUNT (RHIA)

Retiree Medicare Supplement

Eligibility	Receiving retirement benefits, covered eight years before retirement, enrolled in a PERS-sponsored health plan, and enrolled in Medicare Part A and Part B.
Benefit	\$60 monthly per retiree is applied to PERS-sponsored Medicare supplemental insurance costs.



**CITY OF THE DALLES
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

PERS OPSRP FULL FORMULA BENEFITS

Plan Year	January 1 to December 31.
Plan Type	Defined Benefit.
Plan Eligibility	Hired after August 28, 2003.
Normal Retirement	
Eligibility	The earlier of age 60, or age 53 with 25 years of benefit service.
Benefit	1.80% of average monthly compensation multiplied by years of benefit service.
Mandatory Employee Contributions	
Eligibility	Effective July 1, 2020, applicable to participants earning at least \$2,500 monthly in 2020, increased to \$3,333 in 2022 and indexed for inflation in future years.
Contributions	After July 1, 2020, 0.75% of monthly compensation.
Early Retirement	
Eligibility	Age 50 with five years of service.
Benefit	Accrued benefit actuarially reduced for each year that early commencement precedes normal retirement age.
Unreduced Benefit Eligibility	None.



CITY OF THE DALLES
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020

PERS OPSRP Full Formula Benefits
(Continued)

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	Until Normal Retirement Age, 45% of monthly compensation during the last full month of employment, reduced if the total benefit exceeds 75% of compensation. After Normal Retirement Age, Normal Retirement Benefit credited with benefit years of service as if the employee worked to Normal Retirement Age, with salary increased with cost of living adjustments.

Compensation

Limits	\$195,000 in 2020, indexed with inflation.
Covered	Total Compensation including overtime up to average limit and bonuses.
Average Monthly	The greater of covered compensation averaged over the three consecutive plan years that produce the highest average and covered compensation averaged over the final 36 consecutive months of service.
Accrued Benefit	A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.
Normal Form of Benefit	Single life annuity.
Actuarial Equivalent	
Interest	7.2% pre- and post-retirement.
Mortality	Blended mortality based on PUB-2010 tables, with different tables depending on purpose of adjustment.



**CITY OF THE DALLES
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS OPSRP Full Formula Benefits
(Concluded)**

Cost of Living Adjustments

Benefits Earned Before October, 2013	Annual adjustment to reflect the increase or decrease in CPI (Portland Area – All Items), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.
Benefits Earned After October, 2013	1.25% for benefit amounts up to \$60,000 and 0.15% for benefit amounts above \$60,000.



**CITY OF THE DALLES
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

CITY OF THE DALLES RETIREMENT PLAN

Effective Date	January 1, 1968.
Plan Year	January 1 to December 31.
Plan Type	Defined Contribution.
Normal Retirement	
Eligibility	Age 60.
Benefit	Account balance.
Mandatory Employee Contributions	
Eligibility	Participating in the plan.
Contributions	6.0% of monthly compensation, picked up by the employer.
Employer Contributions	
Eligibility	Participating in the plan.
Contributions	16.6% of monthly compensation.
Early Retirement	
Eligibility	Age 50 with 10 years of service.
Benefit	Normal retirement benefit.
Disability Benefit	
Eligibility	Eligible for social security or long term disability benefits.
Benefit	Immediate vesting of the account balance.



**CITY OF THE DALLES
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**City of The Dalles Retirement Plan
(Concluded)**

Compensation

Limits	\$200,000 as indexed; \$285,000 for plan years beginning in or after 2020.
Plan	Total Compensation excluding bonuses and overtime.
Normal Form of Benefit	Lump sum.
Optional Forms of Benefit	Single life annuity, joint & survivor annuity, installments.



CITY OF THE DALLES ADDITIONAL BENEFIT PROVISIONS

Disability Insurance

Insurance Benefit 66 2/3% of compensation prior to disability up to \$4,500 per month.

Benefit Period Until Social Security Normal Retirement Age.

Retiree Medical

Implicit Eligibility Continued medical coverage is offered to the City's public safety retirees, spouses and dependents until Medicare eligibility, on a self-pay basis.

Implicit Benefit The retiree premium rate (whether paid by the City or by the retiree) is based on the premium rates available to active employees. Generally, the premium does not represent the full cost of covering retirees (since they are older than the active population, retirees can be expected to generate higher medical claims and therefore higher premiums for the active population). This additional cost is called the "implicit subsidy".

The monthly premium for the Cigna Base Plan is \$750.94 for a retiree, and \$1,613.82 for a retiree and their spouse.



ACTUARIAL ASSUMPTIONS



**CITY OF THE DALLES
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

ACTUARIAL ASSUMPTIONS FOR ETOB TESTING

Valuation Date	December 31, 2020.	
Plan Eligibility	All employees eligible to participate under PERS are treated as eligible for ETOB testing.	
Interest Rate for Discounting Future Liabilities	6.90% per year.	
Interest Rate to Project Past and Future Earnings	The greater of 6.90% or the plan’s guaranteed interest rate, if any.	
General Inflation	2.40% per year.	
Payroll Growth	3.40% per year.	
Salary Merit Scale	<u>Duration</u>	<u>Annual Increase</u>
	0	5.13%
	5	2.87%
	10	1.58%
	15	0.98%
	20	0.79%
	25	0.72%
	30 +	0.50%
Unused Sick Leave Program	For employers with a traditional defined benefit retirement plan design, if unused sick leave is converted to benefits under the retirement plan the employer is treated as if electing to participate in the Unused Sick Leave Program.	



**CITY OF THE DALLES
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

Mortality Rates

Active employees: None.

Retirees: PUB 2010 Retiree Tables for Safety Employees, sex distinct, projected generationally.

Beneficiaries: PUB 2010 Employee and Retiree Tables for General Employees, sex distinct, projected generationally.

Beneficiary adjustments: Set back 12 months for males, no set back for females.

Disabled Retirees: 50% of PUB 2010 Disabled Retiree Tables for Safety Employees, 50% of PUB 2010 Disabled Retiree Tables for Non-Safety Employees, sex distinct, projected generationally.

Improvement Scale: Unisex Social Security Data Scale (60 year average), with data through 2017.

Turnover Rates

None.

Disability Rates

Based on 1985 Pension Disability Table Class 1 – unisex, as adjusted per 2020 experience study. Rates are applied past retirement eligibility, but not after normal retirement age

<u>Age</u>	<u>Service Disability Rate</u>	<u>Ordinary Disability Rate</u>
30	0.0128%	0.0160%
35	0.0196%	0.0245%
40	0.0316%	0.0395%
45	0.0518%	0.0648%
50	0.0896%	0.1120%



**CITY OF THE DALLES
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

Retirement Rates

Age	Tier 1 / Tier 2			OPSRP		
	Years of Service			Years of Service		
	< 13	13 - 24	25 +	< 13	13 - 24	25 +
50	1.5%	3.0%	32.0%	0.5%	1.5%	5.5%
51	1.5%	3.0%	27.0%	0.5%	1.5%	5.5%
52	1.5%	3.0%	27.0%	0.5%	1.5%	5.5%
53	1.5%	3.0%	27.0%	0.5%	1.5%	27.0%
54	1.5%	3.5%	27.0%	0.5%	1.5%	27.0%
55	3.0%	15.5%	27.0%	2.0%	5.0%	27.0%
56	3.0%	10.0%	27.0%	2.0%	5.0%	27.0%
57	3.0%	10.0%	27.0%	2.0%	5.0%	27.0%
58	6.0%	10.0%	27.0%	5.0%	5.0%	27.0%
59	6.0%	10.0%	27.0%	5.0%	5.0%	27.0%
60	6.0%	12.0%	27.0%	5.0%	15.0%	27.0%
61	6.0%	14.0%	27.0%	5.0%	8.5%	27.0%
62	15.0%	25.0%	38.0%	10.0%	25.0%	38.0%
63	15.0%	15.0%	31.0%	7.0%	15.0%	31.0%
64	15.0%	15.0%	31.0%	7.0%	15.0%	31.0%
65	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
66	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
67	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
68	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
69	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
70	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Postretirement Healthcare Participation 100%

Postretirement Healthcare Lapse None.

Spouse Coverage 100% of future retirees are assumed to cover a spouse as well. Males are assumed to be three years older than their female spouses.



PERS SPECIFIC ACTUARIAL ASSUMPTIONS

Cost of Living Adjustments	Blended based on Moro vs. State of Oregon, with separate assumptions for each tier: Tier 1: 1.798% Tier 2: 1.735% OPSRP: 1.484%
Vacation Cash-Out	Tier 1 benefits have been increased by 4.75%.
Unit Purchase Match	Assume maximum purchase, with a cost to employer of \$4,000 if retiring before age 65.
Waiting-Time Purchases	Assume purchased.
Assumed Form of Payment	
Tier 1/Tier 2	98% of participants elect to receive their benefit as a cash refund annuity with 25% survivor continuation, 2% of participants elect to receive their benefit as a partial lump sum: refund of member contributions with interest plus a pension based on the employer-paid portion of the Full Formula Benefit.
OPSRP	100% of participants elect to receive their benefit as a single life annuity.



**CITY OF THE DALLES
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

CITY OF THE DALLES SPECIFIC ACTUARIAL ASSUMPTIONS

Earliest Applicable Date of Hire Considered	January 1, 1986.
Covered Compensation Adjustments	Because benefits under the Retirement Plan exclude consideration of overtime and bonus, covered compensation has been reduced by 8.90% based on information provided by PERS and the City.
Unused Sick Leave Program	The City of The Dalles is not assumed to participate in the Unused Sick Leave Program.
Assumed Form of Payment	Normal form.
Disability Insurance Payments	Offset by Social Security disability payments, City of The Dalles Retirement Plan disability benefits in excess of service retirement benefits, and worker’s compensation, as applicable.
Worker’s Compensation	For service related disability, worker’s compensation is assumed to pay 66 2/3% of covered compensation, limited to the Oregon Average Weekly Wage of \$1,093.41, increased annually by 3.40%, and offset by Social Security disability payments.
Annual Premium Increase Rates	The assumed increases for medical plans are:

<u>Year</u>	<u>Rate</u>	<u>Year</u>	<u>Rate</u>
2021	5.90%	2052-2060	4.70%
2022	5.50%	2061-2064	4.60%
2023	5.10%	2065-2066	4.50%
2024	5.00%	2067	4.40%
2025-2026	4.90%	2068	4.30%
2027	4.80%	2069-2070	4.20%
2028-2036	4.70%	2071	4.10%
2037-2045	4.80%	2072-2073	4.00%
2046-2049	4.90%	2074+	3.90%
2050-2051	4.80%		



**CITY OF THE DALLES
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**City of The Dalles Specific Actuarial Assumptions
(Concluded)**

Health Care Claims Costs	2021 claims costs for an age 64 retiree or spouse are assumed to be \$19,248.
Coverage of Eligible Children	We have assumed no impact of dependent children on the implicit subsidy.
Dental and Vision Costs	We have assumed no implicit subsidy due to dental or vision costs.

MORROW COUNTY

**OREGON REVISED STATUTE 237.620
EQUAL TO OR BETTER THAN (ETOB) DETERMINATION
AS OF DECEMBER 31, 2020**



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**MORROW COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

REPORT SUMMARY

This report has been prepared by Independent Actuaries, Inc. for the Oregon Public Employees' Retirement System (PERS) and Morrow County. This report provides the details of the determination whether the retirement benefits provided by the County qualify for exemption under Oregon Revised Statute (ORS) 237.620(2) from participation in PERS.

Typically, in Oregon, public employers of police officers and firefighters provide retirement benefits under PERS. A public employer may qualify for exemption and provide their own retirement benefits if those benefits are equal to or better (ETOB) than the benefits provided under PERS. An ETOB determination is made every twelve years.

Under the Oregon Administrative Rule (OAR) governing the test, employer retirement benefits are compared at each PERS tier in three categories: total benefits, service retirement with postretirement healthcare, and disability retirement with postretirement healthcare. For an employer to qualify for exemption, the employer total benefits must be greater than 100 percent of benefits that PERS provides at each tier. Additionally, service retirement and disability retirement benefits must each be at least 80 percent of the benefits that PERS provides at each tier.

As approved by the PERS Board, employer retirement benefits may be determined to be ETOB either via a side-by-side comparison of employer plan provisions against PERS plan provisions or by a full actuarial valuation. It is only reasonable to review employer retirement benefits using the side-by-side comparison approach if the benefits are provided via a plan design similar to PERS. Under the side-by-side comparison approach, the employer retirement benefits will only be determined to be ETOB if they are unambiguously equal to or better than PERS. If the employer retirement benefits design is not suitable for side-by-side comparison, or if the benefits are not unambiguously more valuable, a full actuarial valuation determination approach will be used.

Based on the information described in this report, we conclude that retirement benefits provided by Morrow County meet the standards for receiving an exemption under OAR 459-030-0025 via a side-by-side comparison approach.



DETERMINATION METHODOLOGY

The standards for determining whether an employer provides benefits that are ETOB are stated in OAR 459-030-0025, with additional definitions provided by reference. Other rules for testing are as approved by the PERS Board.

Plan provisions considered in the side-by-side comparison include the level of service retirement and disability retirement benefits, early retirement subsidies, the definition of covered compensation, mandatory employee contributions, the normal form of payment, cost of living adjustments, and the level of explicit and implicit postretirement healthcare benefits.

- We have compared full-career benefits, assuming an employee is covered by either the terms of the public employer's retirement benefit plan(s) or PERS for their entire career starting with their date of hire. Benefit provisions which apply prior to the earliest date of hire of any active employee of the public employer are ignored. Historical plan changes from to the earliest date of hire of any active employee of the public employer to the present are reflected. Current benefit provisions are expected to apply in the future.
- Benefits were compared based on the December 31, 2020 actuarial present value of retirement benefits projected to be accrued to the projected date of retirement or disability, calculated as a percentage of salary.
- We have used hypothetical census data, based on the PERS police officer and firefighter census used in the December 31, 2020 PERS valuation.
- We have used the actuarial assumptions and methods identified in the December 31, 2020 PERS valuation report, but assuming no pre-retirement death or withdrawal. Any additional actuarial assumptions needed to evaluate features of the public employer's retirement plan(s) which are not comparable to PERS have been developed in a manner consistent with PERS assumptions.
- Prior and future benefits which depend on investment returns have been valued using the assumed rate, taking into consideration guaranteed returns stated in plan provisions. The assumed rate is the 6.90% discount rate used in the December 31, 2020 PERS valuation.
- Under the assumptions prescribed for the comparison, the PERS Full Formula method of calculating Tier 1 and Tier 2 retirement benefits results in a more valuable benefit than the Money Match method in almost all cases; therefore, the Full Formula method has been used in the comparison.
- Only employer-funded retirement benefits are included in the comparison. Any contribution described as an employee contribution will be ignored, unless the public employer's plan provisions state that the employer is responsible for making the contribution on the employee's behalf and the responsibility to make the contribution is non-elective.
- We have valued both explicit and implicit postretirement healthcare benefits.
- Our comparison does not value the transfer of investment risk and mortality risk between employee and employer inherent in the plan design differences of defined benefit and defined contribution plans.
- Our comparison does not include increases to retirement benefits under ORS 238.362-368 and ORS 237.635-637.



**MORROW COUNTY
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

ACTUARIAL CERTIFICATION

Independent Actuaries, Inc. was engaged by the State of Oregon, through its Oregon Public Employees Retirement System (PERS), to review the retirement benefits program of Morrow County as of December 31, 2020, in order to determine if it is equal to or better than PERS as required by ORS 237.620(2). The conclusions of the review are set forth in this report, which has been prepared exclusively for PERS and the County, and may not be relied upon for any other purpose or by any party other than PERS or the County.

The valuation is based on participant data and plan provision supplied by PERS and the County. All information submitted to us has been reviewed for reasonableness and consistency, but has otherwise been accepted and relied upon without audit. The plan provisions are summarized in the applicable section of this report.

This report was prepared in accordance with applicable law. To the best of our knowledge, the information supplied in this report is complete and accurate. For purposes of determining the actuarial present value of retirement benefits, each prescribed method and assumption was applied in accordance with our understanding of law and regulations under ORS 237.620 and OAR 459. The prescribed and non-prescribed methods and assumptions are disclosed in the Determination Methodology and Actuarial Assumptions sections of this report. In our opinion, each non-prescribed assumption is reasonable and such non-prescribed assumptions, in combination, offer our best estimate of anticipated experience under the plan.

The liabilities were calculated using models developed for the purpose of pension plan valuation, the structure and output of which were evaluated and reasonably achieve their intended purpose.

Future actuarial measurements may differ significantly from the current measurement presented in this report due to such factors as changes in economic or demographic assumptions and changes in plan provisions or applicable law.

The undersigned credentialed actuaries are members of the American Academy of Actuaries and meet the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* of the American Academy of Actuaries to render the actuarial opinion contained herein.

Aeron Riordon, ASA, EA, MAAA

Steven L. Diess, EA, MAAA

June 27, 2022 _____
 Date

20-08467 _____
 Enrollment #

June 27, 2022 _____
 Date

20-06055 _____
 Enrollment #

Independent Actuaries, Inc.
 Five Centerpointe Dr., Suite 520, Lake Oswego, OR 97035 503.520.0848



**MORROW COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
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TEST RESULTS

Morrow County provides retirement and disability benefits via a traditional percentage of covered compensation defined benefit type plan design which is comparable to the PERS Full Formula method of calculating Tier 1, Tier 2, and OPSRP retirement and disability benefits. The value of postretirement healthcare benefits provided by the County is also easily compared to those provided under PERS. Therefore, a side-by-side review and comparison of plan provisions has been used as the method for determining whether benefits provided by the County are ETOB than those provided under PERS.

The Morrow County Retirement Plan provides different levels of benefits that are relevant to the ETOB test. These groups are described in the table below.

Benefit Group	Distinction
Bargaining Employees	Benefit percentage is 3.0%.
Non-Bargaining Employees hired on or before 12/31/2004	Benefit percentage is 3.0%.
Non-Bargaining Employees hired after 12/31/2004	Benefit percentage is 2.4%.

The County's retirement and disability benefits provided to the non-bargaining employees hired after December 31, 2004 are less valuable than those provided to other employee groups, and the benefits provided to PERS Tier 1 and Tier 2 members are more valuable than those provided to OPSRP members. Therefore, only a comparison between the County retirement plan provisions applicable to non-bargaining employees hired after December 31, 2004 and PERS provisions applicable to Tier 1 and Tier 2 is necessary.

Provided here is a side-by-side listing of key provisions for the County's retirement benefits program compared to PERS.

Plan Provision Under Comparison	Morrow County (Non-Bargaining Employees hired after 12/31/2004)	PERS Tier 1/Tier 2 (Full Formula)
Benefit Percentage	2.40%	2.00%
Covered Compensation	Salary including unused sick leave, but excluding overtime, bonus, and vacation time	Salary including overtime, bonus, unused sick leave and vacation time (as applicable)
Years of Service	Uncapped	Uncapped
Normal Retirement Age	Age 70	Age 55



**MORROW COUNTY
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Plan Provision Under Comparison	Morrow County (Non-Bargaining Employees hired after 12/31/2004)	PERS Tier 1/Tier 2 (Full Formula)
Normal Form of Benefit	Cash refund annuity	Cash refund annuity with 25% survivor cash refund allowance
Mandatory Employee Contributions	None	Prior to 2004, 6% of compensation. After 2019, 2.5% of compensation. Tier 1 accounts accrue at a guaranteed rate.
Cost-of-Living Adjustments	Up to 2.00%	2.00% on benefits earned before October 2013. 1.25% or 0.15% (depending on benefit amount) on benefits earned after October 2013.
Unreduced Benefit Eligibility	Age 55 or 25 years of service	25 years of service
Disability Benefits	Normal retirement benefit reflecting years of service as if member had worked to age 55 (service not to be projected beyond 25 years)	Greater of normal retirement benefit reflecting years of service as if member had worked to age 55, or 50% of compensation at disability (for service-related disabilities only).
Retiree Medical Benefits	Value of implicit subsidy due to continued medical coverage for retirees paying COBRA premium rates.	\$60 monthly premium stipend is applied to PERS-sponsored Medicare supplemental insurance costs.

The above comparison shows that the County’s retirement benefits are more valuable than those under PERS in nearly every category. Under PERS, a portion of the retirement benefit is employee funded. In addition, the County provides a benefit percentage and retiree medical benefits which are more valuable than under PERS. The PERS plan provisions which are more valuable are the covered compensation and amount of unused sick leave which may be reflected in the calculation of retirement benefits.

To understand the significance of the plan provisions where PERS is better, we developed an adjustment factor for each provision related to the County’s retirement benefits. In developing these factors, we considered participant statistics calculated from the hypothetical census data used in our review, including the average and standard deviation of participant age, service, and salary. Our analysis indicates that the employer funded retirement benefits provided by the County are at least 110% the value of those provided by PERS.

Based on our analysis, the County’s retirement benefits are ETOB than those provided by PERS.



SUMMARY OF APPLICABLE PLAN PROVISIONS



**MORROW COUNTY
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

PERS TIER 1/TIER 2 FULL FORMULA BENEFITS

Plan Year	January 1 to December 31.	
Plan Type	Defined Benefit.	
Plan Eligibility	Tier 1: Hired prior to 1996. Tier 2: Hired after 1995 and prior to August 29, 2003.	
Normal Retirement		
Eligibility	The attainment of age 55.	
Benefit	2.00% of average monthly compensation multiplied by years of benefit service.	
Mandatory Employee Contributions		
Eligibility	Prior to January 1, 2004 all Tier 1/Tier 2 participants. Effective July 1, 2020 applicable to participants earning at least \$2,500 monthly in 2020, increased to \$3,333 in 2022 and indexed for inflation in future years.	
Contributions	Prior to January 1, 2004, 6.0% of monthly compensation. After July 1, 2020, 2.50% of monthly compensation.	
Guaranteed Interest Rate (Tier 1 only)	Years	Rate
	1980-1988	7.50%
	1989-2013	8.00%
	2014-2015	7.75%
	2016-2017	7.50%
	2018-2020	7.20%
	2021+	6.90%



**MORROW COUNTY
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**PERS Tier 1/Tier 2 Full Formula Benefits
(Continued)**

Early Retirement

Eligibility	The earlier of age 50 or completion of 30 years of benefit service.
Benefit	Accrued benefit actuarially reduced for each year that early commencement precedes normal retirement age.
Unreduced Benefit Eligibility	25 years of benefit service.

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	Normal Retirement Benefit credited with years of service as if the employee worked to age 55, commencing immediately. In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation. For participants with at least 15 years of credited benefit service, the benefit cannot be lower than \$100 monthly and cannot exceed the greater of the final monthly compensation or \$400 monthly.

Compensation

Limits	\$195,000 in 2020, indexed with inflation.
Covered	Total Compensation including overtime and bonuses.
Average Monthly	The greater of covered compensation averaged over the three consecutive plan years that produce the highest average and covered compensation averaged over the final 36 consecutive months of service.

Accrued Benefit

A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.



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**PERS Tier 1/Tier 2 Full Formula Benefits
(Concluded)**

Unit Purchase Employer Match	Up to \$80 monthly for 60 monthly annuity payments which must commence after earliest retirement age and be paid out by age 65.
Waiting-Time Purchase	Members with 10 years of service may purchase credit for the six month period of employment prior to participation. The cost is the amount of employee and employer contributions that would have been made during the waiting period.
Unused Sick Leave	50% of unused sick leave may be used to increase final average earnings in PERS, if the employer participates in that program.
Vacation Cash-Out	Unused vacation may be included in final average earnings for Tier 1 members.
Normal Form of Benefit	Cash refund annuity with 25% survivor continuation.
Optional Forms of Benefit	Partial lump sum: refund of member contributions with interest plus a pension based on the employer-paid portion of the Full Formula Benefit.
Actuarial Equivalent	
Interest	7.2% pre- and post-retirement.
Mortality	Blended mortality based on PUB-2010 tables, with different tables depending on purpose of adjustment
Cost of Living Adjustments	
Benefits Earned Before October, 2013	Annual adjustment to reflect the increase or decrease in CPI (Portland Area – All Items), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.
Benefits Earned After October, 2013	1.25% for benefit amounts up to \$60,000 and 0.15% for benefit amounts above \$60,000.



**MORROW COUNTY
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PERS TIER 1/TIER 2 RETIREE HEALTH INSURANCE ACCOUNT (RHIA)

Retiree Medicare Supplement

Eligibility	Receiving retirement benefits, covered eight years before retirement, enrolled in a PERS-sponsored health plan, and enrolled in Medicare Part A and Part B.
Benefit	\$60 monthly per retiree is applied to PERS-sponsored Medicare supplemental insurance costs.



**MORROW COUNTY
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PERS OPSRP FULL FORMULA BENEFITS

Plan Year	January 1 to December 31.
Plan Type	Defined Benefit.
Plan Eligibility	Hired after August 28, 2003.
Normal Retirement	
Eligibility	The earlier of age 60, or age 53 with 25 years of benefit service.
Benefit	1.80% of average monthly compensation multiplied by years of benefit service.
Mandatory Employee Contributions	
Eligibility	Effective July 1, 2020, applicable to participants earning at least \$2,500 monthly in 2020, increased to \$3,333 in 2022 and indexed for inflation in future years.
Contributions	After July 1, 2020, 0.75% of monthly compensation.
Early Retirement	
Eligibility	Age 50 with five years of service.
Benefit	Accrued benefit actuarially reduced for each year that early commencement precedes normal retirement age.
Unreduced Benefit Eligibility	None.



**MORROW COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
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**PERS OPSRP Full Formula Benefits
(Continued)**

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	Until Normal Retirement Age, 45% of monthly compensation during the last full month of employment, reduced if the total benefit exceeds 75% of compensation. After Normal Retirement Age, Normal Retirement Benefit credited with benefit years of service as if the employee worked to Normal Retirement Age, with salary increased with cost of living adjustments.

Compensation

Limits	\$195,000 in 2020, indexed with inflation.
Covered	Total Compensation including overtime up to average limit and bonuses.
Average Monthly	The greater of covered compensation averaged over the three consecutive plan years that produce the highest average and covered compensation averaged over the final 36 consecutive months of service.
Accrued Benefit	A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.
Normal Form of Benefit	Single life annuity.
Actuarial Equivalent	
Interest	7.2% pre- and post-retirement.
Mortality	Blended mortality based on PUB-2010 tables, with different tables depending on purpose of adjustment.



**MORROW COUNTY
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**PERS OPSRP Full Formula Benefits
(Concluded)**

Cost of Living Adjustments

Benefits Earned Before October, 2013	Annual adjustment to reflect the increase or decrease in CPI (Portland Area – All Items), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.
Benefits Earned After October, 2013	1.25% for benefit amounts up to \$60,000 and 0.15% for benefit amounts above \$60,000.



**MORROW COUNTY
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MORROW COUNTY RETIREMENT PLAN

Effective Date	July 1, 1966. Closed to new entrants as of June 30, 2020.
Plan Year	July 1 to June 30.
Plan Type	Defined Benefit.
Normal Retirement	
Eligibility	Age 70.
Benefit	3.0% (2.4% if employee is a non-bargaining employee hired after December 31, 2004) of average monthly compensation multiplied by years of benefit service.
Mandatory Employee Contributions	None.
Early Retirement	
Eligibility	Age 50.
Benefit	Accrued benefit reduced by 7.2% for each year that early commencement precedes age 55.
Unreduced Benefit Eligibility	25 years of benefit service.
Disability Benefit	
Eligibility	Total and permanent disability with 5 years of service (immediate if disability is service related).
Benefit	Normal retirement benefit credited with years of benefit service as if the employee worked to age 55 (not to exceed the greater of 25 years or years of service at disability), commencing immediately.



**MORROW COUNTY
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**Morrow County Retirement Plan
(Concluded)**

Compensation

Limits \$200,000 as indexed; \$285,000 for plan years beginning in or after 2020.

Plan Total Compensation excluding overtime and bonuses.

Average Monthly Plan compensation averaged over the three consecutive plan years out of the last ten years that produce the highest average.

Accrued Benefit A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.

Unused Sick Leave 50% of unused sick leave is paid as a lump sum.

Normal Form of Benefit Cash refund annuity.

Optional Forms of Benefit Single life annuity, certain & life annuity (5, 10, 15, or 20 years certain), joint & survivor annuity (50%, 66 2/3%, 75%, or 100% continuation), lump sum, full cash refund annuity, lump sum and annuity.

Actuarial Equivalent

Interest 7.0% pre- and post-retirement.

Mortality Retirement Plan 2000 Mortality Table, blend of 50% Male Combined Healthy and 50% Female Combined Healthy.

Cost of Living Adjustments Annual adjustment to reflect the increase or decrease in the Consumer Price Index (CPI), subject to a maximum increase or decrease of 2.00% in any year. Benefits will never decrease below original amount. Increases and decreases in CPI in any year in excess of 2.00% are accumulated and applied in future years.



MORROW COUNTY ADDITIONAL BENEFIT PROVISIONS

Retiree Medical

Implicit Eligibility

Continued medical coverage is offered to the County's public safety retirees, spouses and dependents until Medicare eligibility, on a self-pay basis.

Implicit Benefit

The retiree premium rate (whether paid by the County or by the retiree) is based on the premium rates available to active employees. Generally, the premium does not represent the full cost of covering retirees (since they are older than the active population, retirees can be expected to generate higher medical claims and therefore higher premiums for the active population). This additional cost is called the "implicit subsidy".



ACTUARIAL ASSUMPTIONS



**MORROW COUNTY
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ACTUARIAL ASSUMPTIONS FOR ETOB TESTING

Valuation Date	December 31, 2020.	
Plan Eligibility	All employees eligible to participate under PERS are treated as eligible for ETOB testing.	
Interest Rate for Discounting Future Liabilities	6.90% per year.	
Interest Rate to Project Past and Future Earnings	The greater of 6.90% or the plan’s guaranteed interest rate, if any.	
General Inflation	2.40% per year.	
Payroll Growth	3.40% per year.	
Salary Merit Scale	Duration	Annual Increase
	0	5.13%
	5	2.87%
	10	1.58%
	15	0.98%
	20	0.79%
	25	0.72%
	30 +	0.50%
Unused Sick Leave Program	For employers with a traditional defined benefit retirement plan design, if unused sick leave is converted to benefits under the retirement plan the employer is treated as if electing to participate in the Unused Sick Leave Program.	



**MORROW COUNTY
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Mortality Rates

Active employees: None.

Retirees: PUB 2010 Retiree Tables for Safety Employees, sex distinct, projected generationally.

Beneficiaries: PUB 2010 Employee and Retiree Tables for General Employees, sex distinct, projected generationally.

Beneficiary adjustments: Set back 12 months for males, no set back for females.

Disabled Retirees: 50% of PUB 2010 Disabled Retiree Tables for Safety Employees, 50% of PUB 2010 Disabled Retiree Tables for Non-Safety Employees, sex distinct, projected generationally.

Improvement Scale: Unisex Social Security Data Scale (60 year average), with data through 2017.

Turnover Rates

None.

Disability Rates

Based on 1985 Pension Disability Table Class 1 – unisex, as adjusted per 2020 experience study. Rates are applied past retirement eligibility, but not after normal retirement age. Sample rates are as follows:

Age	Service Disability Rate	Ordinary Disability Rate
30	0.0128%	0.0160%
35	0.0196%	0.0245%
40	0.0316%	0.0395%
45	0.0518%	0.0648%
50	0.0896%	0.1120%



**MORROW COUNTY
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Retirement Rates

Age	Tier 1 / Tier 2			OPSRP		
	Years of Service			Years of Service		
	< 13	13 - 24	25 +	< 13	13 - 24	25 +
50	1.5%	3.0%	32.0%	0.5%	1.5%	5.5%
51	1.5%	3.0%	27.0%	0.5%	1.5%	5.5%
52	1.5%	3.0%	27.0%	0.5%	1.5%	5.5%
53	1.5%	3.0%	27.0%	0.5%	1.5%	27.0%
54	1.5%	3.5%	27.0%	0.5%	1.5%	27.0%
55	3.0%	15.5%	27.0%	2.0%	5.0%	27.0%
56	3.0%	10.0%	27.0%	2.0%	5.0%	27.0%
57	3.0%	10.0%	27.0%	2.0%	5.0%	27.0%
58	6.0%	10.0%	27.0%	5.0%	5.0%	27.0%
59	6.0%	10.0%	27.0%	5.0%	5.0%	27.0%
60	6.0%	12.0%	27.0%	5.0%	15.0%	27.0%
61	6.0%	14.0%	27.0%	5.0%	8.5%	27.0%
62	15.0%	25.0%	38.0%	10.0%	25.0%	38.0%
63	15.0%	15.0%	31.0%	7.0%	15.0%	31.0%
64	15.0%	15.0%	31.0%	7.0%	15.0%	31.0%
65	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
66	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
67	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
68	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
69	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
70	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Postretirement Healthcare Participation 100%

Postretirement Healthcare Lapse None.

Spouse Coverage 100% of future retirees are assumed to cover a spouse as well. Males are assumed to be three years older than their female spouses.



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PERS SPECIFIC ACTUARIAL ASSUMPTIONS

Cost of Living Adjustments	Blended based on Moro vs. State of Oregon, with separate assumptions for each tier: Tier 1: 1.798% Tier 2: 1.735% OPSRP: 1.484%
Unused Sick Leave Program	Benefits have been increased by 7.50%.
Vacation Cash-Out	Tier 1 benefits have been increased by 4.75%.
Unit Purchase Match	Assume maximum purchase, with a cost to employer of \$4,000 if retiring before age 65.
Waiting-Time Purchases	Assume purchased.
Assumed Form of Payment	
Tier 1/Tier 2	98% of participants elect to receive their benefit as a cash refund annuity with 25% survivor continuation, 2% of participants elect to receive their benefit as a partial lump sum: refund of member contributions with interest plus a pension based on the employer-paid portion of the Full Formula Benefit.
OPSRP	100% of participants elect to receive their benefit as a single life annuity.



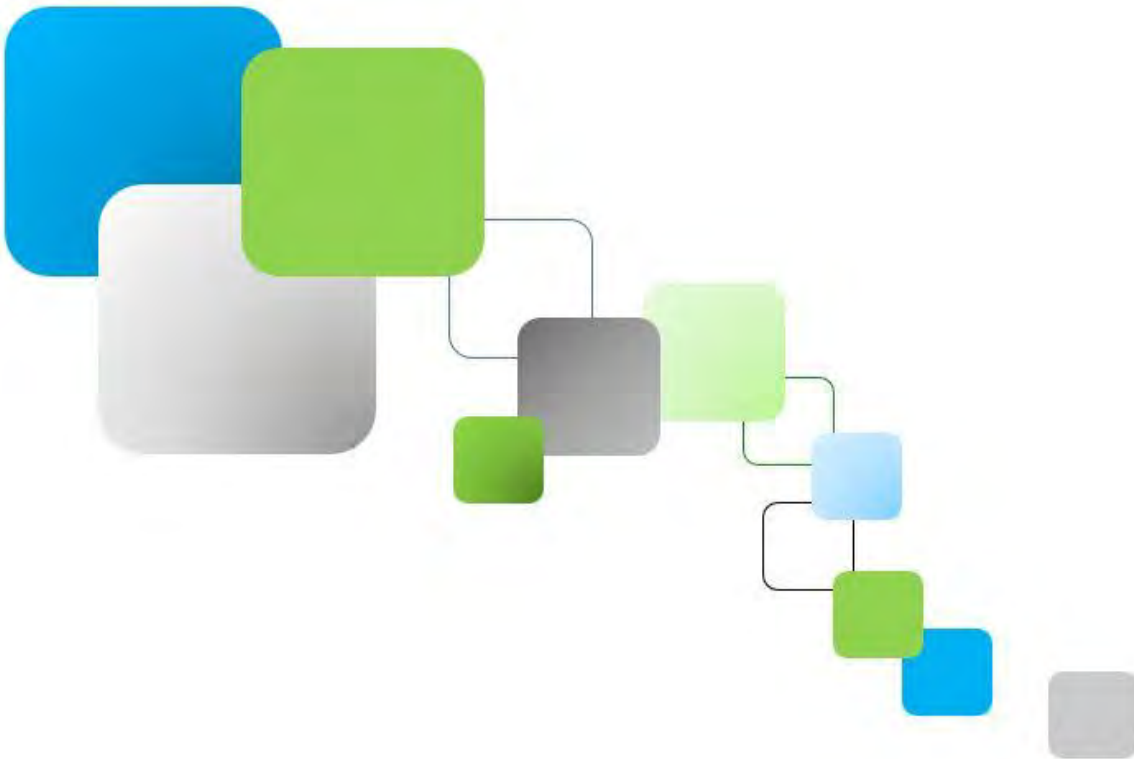
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MORROW COUNTY SPECIFIC ACTUARIAL ASSUMPTIONS

Earliest Applicable Date of Hire Considered	May 8, 1989.
Cost of Living Adjustments	2.00%.
Covered Compensation Adjustments	Because benefits under the Retirement Plan exclude consideration of overtime and bonus, covered compensation has been reduced by 7.50% based on information provided by PERS and the County.
Unused Sick Leave Program	Morrow County is assumed to participate in the Unused Sick Leave Program.
Assumed Form of Payment	Normal Form.

TILLAMOOK COUNTY

OREGON REVISED STATUTE 237.620 EQUAL TO OR BETTER THAN (ETOB) DETERMINATION AS OF DECEMBER 31, 2020



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**TILLAMOOK COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

REPORT SUMMARY

This report has been prepared by Independent Actuaries, Inc. for the Oregon Public Employees' Retirement System (PERS) and Tillamook County. This report provides the details of the determination whether the retirement benefits provided by the County qualify for exemption under Oregon Revised Statute (ORS) 237.620(2) from participation in PERS.

Typically, in Oregon, public employers of police officers and firefighters provide retirement benefits under PERS. A public employer may qualify for exemption and provide their own retirement benefits if those benefits are equal to or better (ETOB) than the benefits provided under PERS. An ETOB determination is made every twelve years.

Under the Oregon Administrative Rule (OAR) governing the test, employer retirement benefits are compared at each PERS tier in three categories: total benefits, service retirement with postretirement healthcare, and disability retirement with postretirement healthcare. For an employer to qualify for exemption, the employer total benefits must be greater than 100 percent of benefits that PERS provides at each tier. Additionally, service retirement and disability retirement benefits must each be at least 80 percent of the benefits that PERS provides at each tier.

As approved by the PERS Board, employer retirement benefits may be determined to be ETOB either via a side-by-side comparison of employer plan provisions against PERS plan provisions or by a full actuarial valuation. It is only reasonable to review employer retirement benefits using the side-by-side comparison approach if the benefits are provided via a plan design similar to PERS. Under the side-by-side comparison approach, the employer retirement benefits will only be determined to be ETOB if they are unambiguously equal to or better than PERS. If the employer retirement benefits design is not suitable for side-by-side comparison, or if the benefits are not unambiguously more valuable, a full actuarial valuation determination approach will be used.

Based on the information described in this report, we conclude that retirement benefits provided by Tillamook County meet the standards for receiving an exemption under OAR 459-030-0025 via a side-by-side comparison approach.



DETERMINATION METHODOLOGY

The standards for determining whether an employer provides benefits that are ETOB are stated in OAR 459-030-0025, with additional definitions provided by reference. Other rules for testing are as approved by the PERS Board.

Plan provisions considered in the side-by-side comparison include the level of service retirement and disability retirement benefits, early retirement subsidies, the definition of covered compensation, mandatory employee contributions, the normal form of payment, cost of living adjustments, and the level of explicit and implicit postretirement healthcare benefits.

- We have compared full-career benefits, assuming an employee is covered by either the terms of the public employer's retirement benefit plan(s) or PERS for their entire career starting with their date of hire. Benefit provisions which apply prior to the earliest date of hire of any active employee of the public employer are ignored. Historical plan changes from to the earliest date of hire of any active employee of the public employer to the present are reflected. Current benefit provisions are expected to apply in the future.
- Benefits were compared based on the December 31, 2020 actuarial present value of retirement benefits projected to be accrued to the projected date of retirement or disability, calculated as a percentage of salary.
- We have used hypothetical census data, based on the PERS police officer and firefighter census used in the December 31, 2020 PERS valuation.
- We have used the actuarial assumptions and methods identified in the December 31, 2020 PERS valuation report, but assuming no pre-retirement death or withdrawal. Any additional actuarial assumptions needed to evaluate features of the public employer's retirement plan(s) which are not comparable to PERS have been developed in a manner consistent with PERS assumptions.
- Prior and future benefits which depend on investment returns have been valued using the assumed rate, taking into consideration guaranteed returns stated in plan provisions. The assumed rate is the 6.90% discount rate used in the December 31, 2020 PERS valuation.
- Under the assumptions prescribed for the comparison, the PERS Full Formula method of calculating Tier 1 and Tier 2 retirement benefits results in a more valuable benefit than the Money Match method in almost all cases; therefore, the Full Formula method has been used in the comparison.
- Only employer-funded retirement benefits are included in the comparison. Any contribution described as an employee contribution will be ignored, unless the public employer's plan provisions state that the employer is responsible for making the contribution on the employee's behalf and the responsibility to make the contribution is non-elective.
- We have valued both explicit and implicit postretirement healthcare benefits.
- Our comparison does not value the transfer of investment risk and mortality risk between employee and employer inherent in the plan design differences of defined benefit and defined contribution plans.
- Our comparison does not include increases to retirement benefits under ORS 238.362-368 and ORS 237.635-637.



**TILLAMOOK COUNTY
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ACTUARIAL CERTIFICATION

Independent Actuaries, Inc. was engaged by the State of Oregon, through its Oregon Public Employees Retirement System (PERS), to review the retirement benefits program of Tillamook County as of December 31, 2020, in order to determine if it is equal to or better than PERS as required by ORS 237.620(2). The conclusions of the review are set forth in this report, which has been prepared exclusively for PERS and the County, and may not be relied upon for any other purpose or by any party other than PERS or the County.

The valuation is based on participant data and plan provision supplied by PERS and the County. All information submitted to us has been reviewed for reasonableness and consistency, but has otherwise been accepted and relied upon without audit. The plan provisions are summarized in the applicable section of this report.

This report was prepared in accordance with applicable law. To the best of our knowledge, the information supplied in this report is complete and accurate. For purposes of determining the actuarial present value of retirement benefits, each prescribed method and assumption was applied in accordance with our understanding of law and regulations under ORS 237.620 and OAR 459. The prescribed and non-prescribed methods and assumptions are disclosed in the Determination Methodology and Actuarial Assumptions sections of this report. In our opinion, each non-prescribed assumption is reasonable and such non-prescribed assumptions, in combination, offer our best estimate of anticipated experience under the plan.

The liabilities were calculated using models developed for the purpose of pension plan valuation, the structure and output of which were evaluated and reasonably achieve their intended purpose.

Future actuarial measurements may differ significantly from the current measurement presented in this report due to such factors as changes in economic or demographic assumptions and changes in plan provisions or applicable law.

The undersigned credentialed actuaries are members of the American Academy of Actuaries and meet the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* of the American Academy of Actuaries to render the actuarial opinion contained herein.

Aeron Riordon, ASA, EA, MAAA

Steven L. Diess, EA, MAAA

June 27, 2022 _____
 Date

20-08467 _____
 Enrollment #

June 27, 2022 _____
 Date

20-06055 _____
 Enrollment #

Independent Actuaries, Inc.
 Five Centerpointe Dr., Suite 520, Lake Oswego, OR 97035 503.520.0848



**TILLAMOOK COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

TEST RESULTS

Tillamook County provides retirement and disability benefits via a traditional percentage of covered compensation defined benefit type plan design which is comparable to the PERS Full Formula method of calculating Tier 1, Tier 2, and OPSRP retirement and disability benefits. The value of postretirement healthcare benefits provided by the County is also easily compared to those provided under PERS. Therefore, a side-by-side review and comparison of plan provisions has been used as the method for determining whether benefits provided by the County are ETOB than those provided under PERS.

As of December 31, 2020, safety employees of the County would only fall under Tier 2 and OPSRP of PERS. Because the retirement and disability benefits provided to public safety members in PERS Tier 2 are better than those provided under OPSRP, only a comparison of plan provisions between the County's Retirement Plan and those of PERS Tier 2 is necessary.

Provided here is a side-by-side listing of key provisions for the County's retirement benefits program compared to PERS.

Plan Provision Under Comparison	Tillamook County	PERS Tier 2 (Full Formula)
Benefit Percentage	2.40%	2.00%
Covered Compensation	Salary excluding overtime, bonus, unused sick leave and vacation time (as applicable)	Salary including overtime, bonus, and unused sick leave (as applicable)
Years of Service	Uncapped	Uncapped
Normal Retirement Age	Age 60 with 5 years of service	Age 55
Normal Form of Benefit	Partial cash refund life annuity	Cash refund annuity with 25% survivor cash refund allowance
Mandatory Employee Contributions	None	Prior to 2004, 6% of compensation. After 2019, 2.5% of compensation.
Cost-of-Living Adjustments	Up to 1.50%	2.00% on benefits earned before October 2013. 1.25% or 0.15% (depending on benefit amount) on benefits earned after October 2013.



**TILLAMOOK COUNTY
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

Plan Provision Under Comparison	Tillamook County	PERS Tier 2 (Full Formula)
Unreduced Benefit Eligibility	Age 55 or 25 years of service	25 years of service
Disability Benefits	Normal retirement benefit credited with benefit years of service as if the employee worked to earliest retirement age, commencing immediately.	Greater of normal retirement benefit reflecting years of service as if member had worked to age 55, or 50% of compensation at disability (for service-related disabilities only).
Retiree Medical Benefits	Value of implicit subsidy due to continued medical coverage for retirees paying COBRA premium rates.	\$60 monthly premium stipend is applied to PERS-sponsored Medicare supplemental insurance costs.

The above comparison shows that the County’s retirement benefits are more valuable than those under PERS in nearly every category. Under PERS, a portion of the retirement benefit is employee funded. In addition, the County provides a benefit percentage and retiree medical benefits which are more valuable than under PERS. The PERS plan provisions which are more valuable are the cost of living adjustments and the amount of bonuses, and overtime which may be reflected in the calculation of retirement benefits.

To understand the significance of the plan provisions where PERS is better, we developed an adjustment factor for each provision related to the County’s retirement benefits. In developing these factors, we considered participant statistics calculated from the hypothetical census data used in our review, including the average and standard deviation of participant age, service, and salary. Our analysis indicates that the employer funded retirement benefits provided by the County are at least 120% the value of those provided by PERS.

Based on our analysis, the County’s retirement benefits are ETOB than those provided by PERS.



SUMMARY OF APPLICABLE PLAN PROVISIONS



**TILLAMOOK COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

PERS TIER 2 FULL FORMULA BENEFITS

Plan Year	January 1 to December 31.
Plan Type	Defined Benefit.
Plan Eligibility	Hired after 1995 and prior to August 29, 2003.
Normal Retirement	
Eligibility	Age 55.
Benefit	2.00% of average monthly compensation multiplied by years of benefit service.
Mandatory Employee Contributions	
Eligibility	Prior to January 1, 2004 all Tier 2 participants. Effective July 1, 2020 applicable to participants earning at least \$2,500 monthly in 2020, increased to \$3,333 in 2022 and indexed for inflation in future years.
Contributions	Prior to January 1, 2004, 6.0% of monthly compensation. After July 1, 2020, 2.50% of monthly compensation.
Early Retirement	
Eligibility	The earlier of age 50 or completion of 30 years of benefit service.
Benefit	Accrued benefit actuarially reduced for each year that early commencement precedes normal retirement age.
Unreduced Benefit Eligibility	25 years of benefit service.



TILLAMOOK COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020

PERS Tier 2 Full Formula Benefits
(Continued)

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	Normal Retirement Benefit credited with years of service as if the employee worked to age 55, commencing immediately. In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation. For participants with at least 15 years of credited benefit service, the benefit cannot be lower than \$100 monthly and cannot exceed the greater of the final monthly compensation or \$400 monthly.

Compensation

Limits	\$195,000 in 2020, indexed with inflation.
Covered	Total Compensation including overtime and bonuses.
Average Monthly	The greater of covered compensation averaged over the three consecutive plan years that produce the highest average and covered compensation averaged over the final 36 consecutive months of service.
Accrued Benefit	A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.
Unit Purchase Employer Match	Up to \$80 monthly for 60 monthly annuity payments which must commence after earliest retirement age and be paid out by age 65.
Waiting-Time Purchase	Members with 10 years of service may purchase credit for the six month period of employment prior to participation. The cost is the amount of employee and employer contributions that would have been made during the waiting period.



**TILLAMOOK COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS Tier 1/Tier 2 Full Formula Benefits
(Concluded)**

Unused Sick Leave	50% of unused sick leave may be used to increase final average earnings in PERS, if the employer participates in that program.
Normal Form of Benefit	Cash refund annuity with 25% survivor continuation.
Optional Forms of Benefit	Partial lump sum: refund of member contributions with interest plus a pension based on the employer-paid portion of the Full Formula Benefit.
Actuarial Equivalent	
Interest	7.2% pre- and post-retirement.
Mortality	Blended mortality based on PUB-2010 tables, with different tables depending on purpose of adjustment
Cost of Living Adjustments	
Benefits Earned Before October, 2013	Annual adjustment to reflect the increase or decrease in CPI (Portland Area – All Items), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.
Benefits Earned After October, 2013	1.25% for benefit amounts up to \$60,000 and 0.15% for benefit amounts above \$60,000.



PERS TIER 2 RETIREE HEALTH INSURANCE ACCOUNT (RHIA)

Retiree Medicare Supplement

Eligibility	Receiving retirement benefits, covered eight years before retirement, enrolled in a PERS-sponsored health plan, and enrolled in Medicare Part A and Part B.
Benefit	\$60 monthly per retiree is applied to PERS-sponsored Medicare supplemental insurance costs.



**TILLAMOOK COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

PERS OPSRP FULL FORMULA BENEFITS

Plan Year	January 1 to December 31.
Plan Type	Defined Benefit.
Plan Eligibility	Hired after August 28, 2003.
Normal Retirement	
Eligibility	The earlier of age 60, or age 53 with 25 years of benefit service.
Benefit	1.80% of average monthly compensation multiplied by years of benefit service.
Mandatory Employee Contributions	
Eligibility	Effective July 1, 2020, applicable to participants earning at least \$2,500 monthly in 2020, increased to \$3,333 in 2022 and indexed for inflation in future years.
Contributions	After July 1, 2020, 0.75% of monthly compensation.
Early Retirement	
Eligibility	Age 50 with five years of service.
Benefit	Accrued benefit actuarially reduced for each year that early commencement precedes normal retirement age.
Unreduced Benefit Eligibility	None.



**TILLAMOOK COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS OPSRP Full Formula Benefits
(Continued)**

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	Until Normal Retirement Age, 45% of monthly compensation during the last full month of employment, reduced if the total benefit exceeds 75% of compensation. After Normal Retirement Age, Normal Retirement Benefit credited with benefit years of service as if the employee worked to Normal Retirement Age, with salary increased with cost of living adjustments.

Compensation

Limits	\$195,000 in 2020, indexed with inflation.
Covered	Total Compensation including overtime up to average limit and bonuses.
Average Monthly	The greater of covered compensation averaged over the three consecutive plan years that produce the highest average and covered compensation averaged over the final 36 consecutive months of service.
Accrued Benefit	A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.
Normal Form of Benefit	Single life annuity.
Actuarial Equivalent	
Interest	7.2% pre- and post-retirement.
Mortality	Blended mortality based on PUB-2010 tables, with different tables depending on purpose of adjustment.



**TILLAMOOK COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS OPSRP Full Formula Benefits
(Concluded)**

Cost of Living Adjustments

Benefits Earned Before October, 2013	Annual adjustment to reflect the increase or decrease in CPI (Portland Area – All Items), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.
Benefits Earned After October, 2013	1.25% for benefit amounts up to \$60,000 and 0.15% for benefit amounts above \$60,000.



**TILLAMOOK COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

TILLAMOOK COUNTY RETIREMENT PLAN

Effective Date	July 1, 1967.
Plan Year	July 1 to June 30.
Plan Type	Defined Benefit.
Normal Retirement	
Eligibility	Age 60 with 5 years of service.
Benefit	2.40% of average monthly compensation multiplied by years of benefit service.
Mandatory Employee Contributions	None.
Employer Contributions	
Eligibility	Participating in the plan.
Contributions	7.0% of monthly compensation to participants earning at least \$1,500 monthly. 6.0% of monthly compensation to participants earning less than \$1,500 monthly.
Early Retirement	
Eligibility	Age 50 with 5 years of service.
Benefit	Accrued benefit reduced by 8.0% for each year that early commencement precedes age 55.
Unreduced Benefit Eligibility	25 years of service.



**TILLAMOOK COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**Tillamook County Retirement Plan
(Continued)**

Late Retirement

Eligibility	Defer commencement of benefit beyond normal retirement date.
Benefit	Greater of the benefit accrued at Normal Retirement Date increased by 7.2% for each of the first 5 years following normal retirement age plus 3.6% for each additional year thereafter, and the benefit calculated under the normal retirement formula using additional years of compensation and benefit service.

Disability Benefit

Eligibility	Total and permanent disability with 10 years of service (immediate if disability is service related).
Benefit	Normal retirement benefit credited with benefit years of service as if the employee worked to earliest retirement age, commencing immediately. Benefit cannot be lower than \$100 monthly.

Compensation

Limits	\$200,000 as indexed; \$285,000 for plan years beginning in or after 2020.
Plan	Total Compensation excluding bonuses and overtime.
Average Monthly	Plan compensation averaged over the three consecutive plan years out of the last ten years that produce the highest average.

Accrued Benefit

A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.



**TILLAMOOK COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**Tillamook County Retirement Plan
(Concluded)**

Unit Purchase Match	Monthly benefit of \$10 times the number of contribution units elected (up to 8). Benefit may be adjusted for retirement other than at age 60.
Normal Form of Benefit	Partial cash refund annuity.
Optional Forms of Benefit	Life annuity, certain and life annuity (10-yr), joint & survivor annuity (50%, 75%, 100%).
Actuarial Equivalent	
Interest	8.0% pre- and post-retirement.
Mortality	1983 Group Annuity Mortality.
Cost of Living Adjustments	Annual adjustment to reflect the increase or decrease in the Consumer Price Index (CPI), subject to a maximum increase of 1.50% in any year. Benefits will never decrease. Increases in CPI in any year in excess of 1.50% and any decreases are accumulated and applied in future years.



**TILLAMOOK COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

TILLAMOOK COUNTY ADDITIONAL BENEFIT PROVISIONS

Retiree Medical

Implicit Eligibility Continued medical coverage is offered to the County’s public safety retirees, spouses and dependents until Medicare eligibility, as provided in the current collective bargaining agreement, or on a self-pay basis.

Implicit Benefit The retiree premium rate (whether paid by the County or by the retiree) is based on the premium rates available to active employees. Generally, the premium does not represent the full cost of covering retirees (since they are older than the active population, retirees can be expected to generate higher medical claims and therefore higher premiums for the active population). This additional cost is called the “implicit subsidy”.

Explicit Eligibility Sergeants, lieutenants, undersheriffs, and sheriffs hired before July 1, 2003. Deputies hired before July 1, 2004.

Explicit Benefit The County pays \$733 of the premium for medical insurance for the retiree until Medicare eligibility.

The County contributes \$115 per month for sergeants, lieutenants, undersheriffs, and sheriffs (\$75 per month for deputies) while employed to a notional account which the employee may use to pay medical expenses during and after employment. The county pays \$207 per month for Medicare Plan F for sergeants, lieutenants, undersheriffs, and sheriffs.



ACTUARIAL ASSUMPTIONS



**TILLAMOOK COUNTY
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

ACTUARIAL ASSUMPTIONS FOR ETOB TESTING

Valuation Date	December 31, 2020.	
Plan Eligibility	All employees eligible to participate under PERS are treated as eligible for ETOB testing.	
Interest Rate for Discounting Future Liabilities	6.90% per year.	
Interest Rate to Project Past and Future Earnings	The greater of 6.90% or the plan’s guaranteed interest rate, if any.	
General Inflation	2.40% per year.	
Payroll Growth	3.40% per year.	
Salary Merit Scale	Duration	Annual Increase
	0	5.13%
	5	2.87%
	10	1.58%
	15	0.98%
	20	0.79%
	25	0.72%
	30 +	0.50%
Unused Sick Leave Program	For employers with a traditional defined benefit retirement plan design, if unused sick leave is converted to benefits under the retirement plan the employer is treated as if electing to participate in the Unused Sick Leave Program.	



**TILLAMOOK COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

Mortality Rates

Active employees: None.

Retirees: PUB 2010 Retiree Tables for Safety Employees, sex distinct, projected generationally.

Beneficiaries: PUB 2010 Employee and Retiree Tables for General Employees, sex distinct, projected generationally.

Beneficiary adjustments: Set back 12 months for males, no set back for females.

Disabled Retirees: 50% of PUB 2010 Disabled Retiree Tables for Safety Employees, 50% of PUB 2010 Disabled Retiree Tables for Non-Safety Employees, sex distinct, projected generationally.

Improvement Scale: Unisex Social Security Data Scale (60 year average), with data through 2017.

Turnover Rates

None.

Disability Rates

Based on 1985 Pension Disability Table Class 1 – unisex, as adjusted per 2020 experience study. Rates are applied past retirement eligibility, but not after normal retirement age. Sample rates are as follows:

Age	Service Disability Rate	Ordinary Disability Rate
30	0.0128%	0.0160%
35	0.0196%	0.0245%
40	0.0316%	0.0395%
45	0.0518%	0.0648%
50	0.0896%	0.1120%



**TILLAMOOK COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

Retirement Rates

Age	Tier 1 / Tier 2			OPSRP		
	Years of Service			Years of Service		
	< 13	13 - 24	25 +	< 13	13 - 24	25 +
50	1.5%	3.0%	32.0%	0.5%	1.5%	5.5%
51	1.5%	3.0%	27.0%	0.5%	1.5%	5.5%
52	1.5%	3.0%	27.0%	0.5%	1.5%	5.5%
53	1.5%	3.0%	27.0%	0.5%	1.5%	27.0%
54	1.5%	3.5%	27.0%	0.5%	1.5%	27.0%
55	3.0%	15.5%	27.0%	2.0%	5.0%	27.0%
56	3.0%	10.0%	27.0%	2.0%	5.0%	27.0%
57	3.0%	10.0%	27.0%	2.0%	5.0%	27.0%
58	6.0%	10.0%	27.0%	5.0%	5.0%	27.0%
59	6.0%	10.0%	27.0%	5.0%	5.0%	27.0%
60	6.0%	12.0%	27.0%	5.0%	15.0%	27.0%
61	6.0%	14.0%	27.0%	5.0%	8.5%	27.0%
62	15.0%	25.0%	38.0%	10.0%	25.0%	38.0%
63	15.0%	15.0%	31.0%	7.0%	15.0%	31.0%
64	15.0%	15.0%	31.0%	7.0%	15.0%	31.0%
65	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
66	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
67	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
68	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
69	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
70	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Postretirement Healthcare Participation 100%

Postretirement Healthcare Lapse None.

Spouse Coverage 100% of future retirees are assumed to cover a spouse as well. Males are assumed to be three years older than their female spouses.



PERS SPECIFIC ACTUARIAL ASSUMPTIONS

Cost of Living Adjustments	Blended based on Moro vs. State of Oregon, with separate assumptions for each tier: Tier 1: 1.798% Tier 2: 1.735% OPSRP: 1.484%
Unit Purchase Match	Assume maximum purchase, with a cost to employer of \$4,000 if retiring before age 65.
Waiting-Time Purchases	Assume purchased.
Assumed Form of Payment	
Tier 2	98% of participants elect to receive their benefit as a cash refund annuity with 25% survivor continuation, 2% of participants elect to receive their benefit as a partial lump sum: refund of member contributions with interest plus a pension based on the employer-paid portion of the Full Formula Benefit.
OPSRP	100% of participants elect to receive their benefit as a single life annuity.



**TILLAMOOK COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

TILLAMOOK COUNTY SPECIFIC ACTUARIAL ASSUMPTIONS

Earliest Applicable Date of Hire Considered	August 9, 1996.
Cost of Living Adjustments	1.50%
Covered Compensation Adjustments	Because benefits under the Retirement Plan exclude consideration of overtime and bonus, covered compensation has been reduced by 7.00% based on information provided by PERS and the County.
Unused Sick Leave Program	The Tillamook County is not assumed to participate in the Unused Sick Leave Program.
Unit Purchase Match	Assume maximum purchase, with a cost to employer of \$4,000 if retiring before age 65.
Assumed Form of Payment	Normal Form.

UNION COUNTY

**OREGON REVISED STATUTE 237.620
EQUAL TO OR BETTER THAN (ETOB) DETERMINATION
AS OF DECEMBER 31, 2020**



**Five Centerpointe Dr., Suite 520
Lake Oswego, Oregon 97035
Main: 503.520.0848
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**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

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**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

REPORT SUMMARY

This report has been prepared by Independent Actuaries, Inc. for the Oregon Public Employees' Retirement System (PERS) and Union County. This report provides the details of the determination whether the retirement benefits provided by the County qualify for exemption under Oregon Revised Statute (ORS) 237.620(2) from participation in PERS.

Typically, in Oregon, public employers of police officers and firefighters provide retirement benefits under PERS. A public employer may qualify for exemption and provide their own retirement benefits if those benefits are equal to or better (ETOB) than the benefits provided under PERS. An ETOB determination is made every twelve years.

Under the Oregon Administrative Rule (OAR) governing the test, employer retirement benefits are compared at each PERS tier in three categories: total benefits, service retirement with postretirement healthcare, and disability retirement with postretirement healthcare. For an employer to qualify for exemption, the employer total benefits must be greater than 100 percent of benefits that PERS provides at each tier. Additionally, service retirement and disability retirement benefits must each be at least 80 percent of the benefits that PERS provides at each tier.

As approved by the PERS Board, employer retirement benefits may be determined to be ETOB either via a side-by-side comparison of employer plan provisions against PERS plan provisions or by a full actuarial valuation. It is only reasonable to review employer retirement benefits using the side-by-side comparison approach if the benefits are provided via a plan design similar to PERS. Under the side-by-side comparison approach, the employer retirement benefits will only be determined to be ETOB if they are unambiguously equal to or better than PERS. If the employer retirement benefits design is not suitable for side-by-side comparison, or if the benefits are not unambiguously more valuable, a full actuarial valuation determination approach will be used.

Based on the information described in this report, we conclude that retirement benefits provided by Union County meet the standards for receiving an exemption OAR 459-030-0025.



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

DETERMINATION METHODOLOGY

The standards for determining whether an employer provides benefits that are ETOB are stated in OAR 459-030-0025, with additional definitions provided by reference. Other rules for testing are as approved by the PERS Board.

- We have compared full-career benefits, assuming an employee is covered by either the terms of the public employer's retirement benefit plan(s) or PERS for their entire career starting with their date of hire. Benefit provisions which apply prior to the earliest date of hire of any active employee of the public employer are ignored. Historical plan changes from to the earliest date of hire of any active employee of the public employer to the present are reflected. Current benefit provisions are expected to apply in the future.
- Benefits were compared based on the December 31, 2020 actuarial present value of retirement benefits projected to be accrued to the projected date of retirement or disability, calculated as a percentage of salary.
- We have used hypothetical census data, based on the PERS police officer and firefighter census used in the December 31, 2020 PERS valuation.
- We have used the actuarial assumptions and methods identified in the December 31, 2020 PERS valuation report, but assuming no pre-retirement death or withdrawal. Any additional actuarial assumptions needed to evaluate features of the public employer's retirement plan(s) which are not comparable to PERS have been developed in a manner consistent with PERS assumptions.
- Prior and future benefits which depend on investment returns have been valued using the assumed rate, taking into consideration guaranteed returns stated in plan provisions. The assumed rate is the 6.90% discount rate used in the December 31, 2020 PERS valuation.
- Under the assumptions prescribed for the comparison the PERS Full Formula method of calculating Tier 1 and Tier 2 retirement benefits results in a more valuable benefit than the Money Match method in almost all cases; therefore, the Full Formula method has been used in the comparison.
- Only employer-funded retirement benefits are included in the comparison. Any contribution described as an employee contribution will be ignored, unless the public employer's plan provisions state that the employer is responsible for making the contribution on the employee's behalf and the responsibility to make the contribution is non-elective.
- We have valued both explicit and implicit postretirement healthcare benefits.
- Our comparison does not value the transfer of investment risk and mortality risk between employee and employer inherent in the plan design differences of defined benefit and defined contribution plans.
- Our comparison does not include increases to retirement benefits under ORS 238.362-368 and ORS 237.635-637.



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

ACTUARIAL CERTIFICATION

Independent Actuaries, Inc. was engaged by the State of Oregon, through its Oregon Public Employees Retirement System (PERS), to review the retirement benefits program of Union County as of December 31, 2020, in order to determine if it is equal to or better than PERS as required by ORS 237.620(2). The conclusions of the review are set forth in this report, which has been prepared exclusively for PERS and the County, and may not be relied upon for any other purpose or by any party other than PERS or the County.

The valuation is based on participant data and plan provision supplied by PERS and the County. All information submitted to us has been reviewed for reasonableness and consistency, but has otherwise been accepted and relied upon without audit. The plan provisions are summarized in the applicable section of this report.

This report was prepared in accordance with applicable law. To the best of our knowledge, the information supplied in this report is complete and accurate. For purposes of determining the actuarial present value of retirement benefits, each prescribed method and assumption was applied in accordance with our understanding of law and regulations under ORS 237.620 and OAR 459. The prescribed and non-prescribed methods and assumptions are disclosed in the Determination Methodology and Actuarial Assumptions sections of this report. In our opinion, each non-prescribed assumption is reasonable and such non-prescribed assumptions, in combination, offer our best estimate of anticipated experience under the plan.

The liabilities were calculated using models developed for the purpose of pension plan valuation, the structure and output of which were evaluated and reasonably achieve their intended purpose.

Future actuarial measurements may differ significantly from the current measurement presented in this report due to such factors as changes in economic or demographic assumptions and changes in plan provisions or applicable law.

The undersigned credentialed actuaries are members of the American Academy of Actuaries and meet the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* of the American Academy of Actuaries to render the actuarial opinion contained herein.

Aeron Riordon, ASA, EA, MAAA

Steven L. Diess, EA, MAAA

June 28, 2022 _____
Date

20-08467 _____
Enrollment #

June 28, 2022 _____
Date

20-06055 _____
Enrollment #

Independent Actuaries, Inc.
Five Centerpointe Dr., Suite 520, Lake Oswego, OR 97035 503.520.0848



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

TEST RESULTS

The Union County Retirement Plan provides benefits via a defined contribution type plan design which is not comparable to PERS using the Full Formula method of calculating Tier 1, Tier 2, and OPSRP retirement benefits. Therefore, a full actuarial valuation was conducted in order to determine whether the County qualifies for exemption from participation in PERS.

For the County to qualify for exemption, the employer total benefits must be greater than 100 percent of benefits that PERS provides at each tier. Additionally, service retirement with postretirement healthcare and disability retirement with postretirement healthcare must each be at least 80 percent of benefits that PERS provides at each tier. Union County provides different contribution rates dependent on the employee’s certification status. Due to this, these benefits were valued separately for the full actuarial valuation. As of December 31, 2020, non-certified employees of Union County would only fall under the OPSRP tier provided by PERS, and thus, non-certified only need to satisfy testing conditions for the OPSRP tier. As shown below, the retirement benefits provided by the County meet this standard.

PERS Benefit Tier Type	Present Value of Estimated Employer-Funded Full-Career Retirement Benefits as of December 31, 2020 for Hypothetical Census Data Groups as a Percentage of PERS Subject Salary		Union County (Certified Employees) Benefits as a Percentage of PERS
	Union County (Certified Employees)¹	PERS	
Retirement – Tier 1	847%	705%	120%
Disability – Tier 1	10%	3%	311%
Total – Tier 1	858%	708%	121%
Retirement – Tier 2	700%	597%	117%
Disability – Tier 2	13%	7%	188%
Total – Tier 2	713%	604%	118%
Retirement – OPSRP	550%	377%	146%
Disability – OPSRP	16%	14%	112%
Total – OPSRP	565%	391%	144%

¹ Please note that not all benefits potentially includable for ETOB determination purposes were valued in this comparison, because the employer demonstrated compliance with the ETOB requirement without including such benefits.



UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020

PERS Benefit Tier Type	Present Value of Estimated Employer- Funded Full-Career Retirement Benefits as of December 31, 2020 for Hypothetical Census Data Groups as a Percentage of PERS Subject Salary		Union County (Non- Certified Employees) Benefits as a Percentage of PERS
	Union County (Non- Certified Employees) ¹	PERS	
Retirement – OPSRP	451%	377%	119%
Disability – OPSRP	14%	14%	103%
Total – OPSRP	465%	391%	119%

¹ Please note that not all benefits potentially includable for ETOB determination purposes were valued in this comparison, because the employer demonstrated compliance with the ETOB requirement without including such benefits.



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

PARTICIPANT DATA

Hypothetical census data has been used for review of benefits, per the rules governing ETOB determination. The hypothetical data was based on the police officer and firefighter census used in the December 31, 2020 PERS valuation.

	Tier 1	Tier 2	OPSRP	Total
Count	1,151	3,708	10,518	15,377
Average Attained Age	53.65	49.63	39.35	42.90
Average Total Years of Service	26.80	20.47	8.02	12.42
Average 2020 PERS Subject Salary	\$114,024	\$107,508	\$82,406	\$90,826



SUMMARY OF APPLICABLE PLAN PROVISIONS



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

PERS TIER 1/TIER 2 FULL FORMULA BENEFITS

Plan Year	January 1 to December 31.	
Plan Type	Defined Benefit.	
Plan Eligibility	Tier 1: Hired prior to 1996. Tier 2: Hired after 1995 and prior to August 29, 2003.	
Normal Retirement		
Eligibility	Age 55.	
Benefit	2.00% of average monthly compensation multiplied by years of benefit service.	
Mandatory Employee Contributions		
Eligibility	Prior to January 1, 2004 all Tier 1/Tier 2 participants. Effective July 1, 2020 applicable to participants earning at least \$2,500 monthly in 2020, increased to \$3,333 in 2022 and indexed for inflation in future years.	
Contributions	Prior to January 1, 2004, 6.0% of monthly compensation. After July 1, 2020, 2.50% of monthly compensation.	
Guaranteed Interest Rate (Tier 1 only)	Years	Rate
	1980-1988	7.50%
	1989-2013	8.00%
	2014-2015	7.75%
	2016-2017	7.50%
	2018-2020	7.20%
	2021+	6.90%



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS Tier 1/Tier 2 Full Formula Benefits
(Continued)**

Early Retirement

Eligibility	The earlier of age 50 or completion of 30 years of benefit service.
Benefit	Accrued benefit actuarially reduced for each year that early commencement precedes normal retirement age.
Unreduced Benefit Eligibility	25 years of benefit service.

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	Normal Retirement Benefit credited with years of service as if the employee worked to age 55, commencing immediately. In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation. For participants with at least 15 years of credited benefit service, the benefit cannot be lower than \$100 monthly and cannot exceed the greater of the final monthly compensation or \$400 monthly.

Compensation

Limits	\$195,000 in 2020, indexed with inflation.
Covered	Total Compensation including overtime and bonuses.
Average Monthly	The greater of covered compensation averaged over the three consecutive plan years that produce the highest average and covered compensation averaged over the final 36 consecutive months of service.

Accrued Benefit

A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS Tier 1/Tier 2 Full Formula Benefits
(Concluded)**

Unit Purchase Employer Match	Up to \$80 monthly for 60 monthly annuity payments which must commence after earliest retirement age and be paid out by age 65.
Waiting-Time Purchase	Members with 10 years of service may purchase credit for the six month period of employment prior to participation. The cost is the amount of employee and employer contributions that would have been made during the waiting period.
Unused Sick Leave	50% of unused sick leave may be used to increase final average earnings in PERS, if the employer participates in that program.
Vacation Cash-Out	Unused vacation may be included in final average earnings for Tier 1 members.
Normal Form of Benefit	Cash refund annuity with 25% survivor continuation.
Optional Forms of Benefit	Partial lump sum: refund of member contributions with interest plus a pension based on the employer-paid portion of the Full Formula Benefit.
Actuarial Equivalent	
Interest	7.2% pre- and post-retirement.
Mortality	Blended mortality based on PUB-2010 tables, with different tables depending on purpose of adjustment
Cost of Living Adjustments	
Benefits Earned Before October, 2013	Annual adjustment to reflect the increase or decrease in CPI (Portland Area – All Items), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.
Benefits Earned After October, 2013	1.25% for benefit amounts up to \$60,000 and 0.15% for benefit amounts above \$60,000.



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

PERS TIER 1/TIER 2 RETIREE HEALTH INSURANCE ACCOUNT (RHIA)

Retiree Medicare Supplement

Eligibility	Receiving retirement benefits, covered eight years before retirement, enrolled in a PERS-sponsored health plan, and enrolled in Medicare Part A and Part B.
Benefit	\$60 monthly per retiree is applied to PERS-sponsored Medicare supplemental insurance costs.



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

PERS OPSRP FULL FORMULA BENEFITS

Plan Year	January 1 to December 31.
Plan Type	Defined Benefit.
Plan Eligibility	Hired after August 28, 2003.
Normal Retirement	
Eligibility	The earlier of age 60, or age 53 with 25 years of benefit service.
Benefit	1.80% of average monthly compensation multiplied by years of benefit service.
Mandatory Employee Contributions	
Eligibility	Effective July 1, 2020, applicable to participants earning at least \$2,500 monthly in 2020, increased to \$3,333 in 2022 and indexed for inflation in future years.
Contributions	After July 1, 2020, 0.75% of monthly compensation.
Early Retirement	
Eligibility	Age 50 with five years of service.
Benefit	Accrued benefit actuarially reduced for each year that early commencement precedes normal retirement age.
Unreduced Benefit Eligibility	None.



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS OPSRP Full Formula Benefits
(Continued)**

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	Until Normal Retirement Age, 45% of monthly compensation during the last full month of employment, reduced if the total benefit exceeds 75% of compensation. After Normal Retirement Age, Normal Retirement Benefit credited with benefit years of service as if the employee worked to Normal Retirement Age, with salary increased with cost of living adjustments.

Compensation

Limits	\$195,000 in 2020, indexed with inflation.
Covered	Total Compensation including overtime up to average limit and bonuses.
Average Monthly	The greater of covered compensation averaged over the three consecutive plan years that produce the highest average and covered compensation averaged over the final 36 consecutive months of service.

Accrued Benefit	A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.
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Normal Form of Benefit	Single life annuity.
------------------------	----------------------

Actuarial Equivalent

Interest	7.2% pre- and post-retirement.
Mortality	Blended mortality based on PUB-2010 tables, with different tables depending on purpose of adjustment.



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS OPSRP Full Formula Benefits
(Concluded)**

Cost of Living Adjustments

Benefits Earned Before October, 2013	Annual adjustment to reflect the increase or decrease in CPI (Portland Area – All Items), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.
Benefits Earned After October, 2013	1.25% for benefit amounts up to \$60,000 and 0.15% for benefit amounts above \$60,000.



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

UNION COUNTY RETIREMENT PLAN

Effective Date October 1, 1969.

Plan Year October 1 to September 30.

Plan Type Defined Contribution.

Normal Retirement

 Eligibility Age 60.

 Benefit Account balance.

Mandatory Employee
Contributions

 Eligibility Certified employees.

Contributions

Period	Contribution rate
After June 30, 2004	0.20%
Before July 1, 2004	2.75% if monthly earnings \geq \$1,500
	1.75% if monthly earnings \geq \$1,000
	0.75% if monthly earnings \geq \$500
	0% if monthly earnings $<$ \$500



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**Union County Retirement Plan
(Continued)**

Employer Contributions

Eligibility Participating in the plan.

Contributions An employer contribution rate multiplied by compensation based on certification status, plus another contribution rate multiplied by compensation and picked up by the employer.

Period	Employer Contribution Rate	Employer Pick-up Contribution Rate
After June 30, 2004	Non-Certified: 10.80% Certified: 15.10%	Non-Certified: 6.00% Certified: 6.00%
January 1, 1995 – June 30, 2004	Non-Certified: 8.25% Certified: 12.55%	Non-Certified: 6.00% Certified: 6.00%
January 1, 1988 – December 31, 1994	Non-Certified: 14.25% Certified: 18.55%	Non-Certified: 0.00% Certified: 0.00%

Early Retirement

Eligibility Age 55.

Benefit Normal retirement benefit.

Disability Benefit

Eligibility Immediate upon total and permanent disability if disability is service related.

Benefit 50% of average monthly compensation at date of disability, payable for life. No payments are made while the participant is receiving any benefit from disability insurance.



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**Union County Retirement Plan
(Concluded)**

Compensation

Limits	\$200,000 as indexed; \$285,000 for plan years beginning in or after 2020.
Plan	Total Compensation including bonuses and overtime.
Normal Form of Benefit	Lump sum.
Optional Forms of Benefit	Single life annuity, installments, certain and life annuity (5-yr, 10-yr, 15-yr), joint & survivor annuity (50%, 66 ² / ₃ %, 75%, 100%).



UNION COUNTY ADDITIONAL BENEFIT PROVISIONS

Disability Insurance

Insurance Benefit 60% of compensation prior to disability up to \$3,000 per month.

Benefit Period Until Social Security Normal Retirement Age.

Retiree Medical

Implicit Eligibility Continued medical coverage is offered to the County's public safety retirees, spouses and dependents until Medicare eligibility, on a self-pay basis.

Implicit Benefit The retiree premium rate (whether paid by the County or by the retiree) is based on the premium rates available to active employees. Generally, the premium does not represent the full cost of covering retirees (since they are older than the active population, retirees can be expected to generate higher medical claims and therefore higher premiums for the active population). This additional cost is called the "implicit subsidy".

The monthly premium charged is \$785.43 for a retiree, and \$1,666.97 for a retiree and spouse.



ACTUARIAL ASSUMPTIONS



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

ACTUARIAL ASSUMPTIONS FOR ETOB TESTING

Valuation Date	December 31, 2020.	
Plan Eligibility	All employees eligible to participate under PERS are treated as eligible for ETOB testing.	
Interest Rate for Discounting Future Liabilities	6.90% per year.	
Interest Rate to Project Past and Future Earnings	The greater of 6.90% or the plan's guaranteed interest rate, if any.	
General Inflation	2.40% per year.	
Payroll Growth	3.40% per year.	
Salary Merit Scale	Duration	Annual Increase
	0	5.13%
	5	2.87%
	10	1.58%
	15	0.98%
	20	0.79%
	25	0.72%
	30 +	0.50%
Unused Sick Leave Program	For employers with a traditional defined benefit retirement plan design, if unused sick leave is converted to benefits under the retirement plan the employer is treated as if electing to participate in the Unused Sick Leave Program.	



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

Mortality Rates

Active employees: None.

Retirees: PUB 2010 Retiree Tables for Safety Employees, sex distinct, projected generationally.

Beneficiaries: PUB 2010 Employee and Retiree Tables for General Employees, sex distinct, projected generationally.

Beneficiary adjustments: Set back 12 months for males, no set back for females.

Disabled Retirees: 50% of PUB 2010 Disabled Retiree Tables for Safety Employees, 50% of PUB 2010 Disabled Retiree Tables for Non-Safety Employees, sex distinct, projected generationally.

Improvement Scale: Unisex Social Security Data Scale (60 year average), with data through 2017.

Turnover Rates

None.

Disability Rates

Based on 1985 Pension Disability Table Class 1 – unisex, as adjusted per 2020 experience study. Rates are applied past retirement eligibility, but not after normal retirement age. Sample rates are as follows:

Age	Service Disability Rate	Ordinary Disability Rate
30	0.0128%	0.0160%
35	0.0196%	0.0245%
40	0.0316%	0.0395%
45	0.0518%	0.0648%
50	0.0896%	0.1120%



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

Retirement Rates

Age	Tier 1 / Tier 2			OPSRP		
	Years of Service			Years of Service		
	< 13	13 - 24	25 +	< 13	13 - 24	25 +
50	1.5%	3.0%	32.0%	0.5%	1.5%	5.5%
51	1.5%	3.0%	27.0%	0.5%	1.5%	5.5%
52	1.5%	3.0%	27.0%	0.5%	1.5%	5.5%
53	1.5%	3.0%	27.0%	0.5%	1.5%	27.0%
54	1.5%	3.5%	27.0%	0.5%	1.5%	27.0%
55	3.0%	15.5%	27.0%	2.0%	5.0%	27.0%
56	3.0%	10.0%	27.0%	2.0%	5.0%	27.0%
57	3.0%	10.0%	27.0%	2.0%	5.0%	27.0%
58	6.0%	10.0%	27.0%	5.0%	5.0%	27.0%
59	6.0%	10.0%	27.0%	5.0%	5.0%	27.0%
60	6.0%	12.0%	27.0%	5.0%	15.0%	27.0%
61	6.0%	14.0%	27.0%	5.0%	8.5%	27.0%
62	15.0%	25.0%	38.0%	10.0%	25.0%	38.0%
63	15.0%	15.0%	31.0%	7.0%	15.0%	31.0%
64	15.0%	15.0%	31.0%	7.0%	15.0%	31.0%
65	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
66	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
67	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
68	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
69	40.0%	40.0%	50.0%	7.0%	35.0%	40.0%
70	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Postretirement Healthcare Participation 100%

Postretirement Healthcare Lapse None.

Spouse Coverage 100% of future retirees are assumed to cover a spouse as well. Males are assumed to be three years older than their female spouses.



PERS SPECIFIC ACTUARIAL ASSUMPTIONS

Cost of Living Adjustments	Blended based on Moro vs. State of Oregon, with separate assumptions for each tier: Tier 1: 1.798% Tier 2: 1.735% OPSRP: 1.484%
Vacation Cash-Out	Tier 1 benefits have been increased by 4.75%.
Unit Purchase Match	Assume maximum purchase, with a cost to employer of \$4,000 if retiring before age 65.
Waiting-Time Purchases	Assume purchased.
Assumed Form of Payment	
Tier 1/Tier 2	98% of participants elect to receive their benefit as a cash refund annuity with 25% survivor continuation, 2% of participants elect to receive their benefit as a partial lump sum: refund of member contributions with interest plus a pension based on the employer-paid portion of the Full Formula Benefit.
OPSRP	100% of participants elect to receive their benefit as a single life annuity.



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

UNION COUNTY SPECIFIC ACTUARIAL ASSUMPTIONS

Earliest Applicable Date of Hire Considered	January 12, 1990.
Covered Compensation Adjustments	None.
Unused Sick Leave Program	The Union County is not assumed to participate in the Unused Sick Leave Program.
Assumed Form of Payment	Normal form.
Disability Insurance Payments	Offset by Social Security disability payments, Union County Retirement Plan disability benefits in excess of service retirement benefits, and worker’s compensation, as applicable.
Worker’s Compensation	For service related disability, worker’s compensation is assumed to pay 66 2/3% of covered compensation, limited to the Oregon Average Weekly Wage of \$1,093.41, increased annually by 3.40%, and offset by Social Security disability payments.
Annual Premium Increase Rates	The assumed increases for medical plans are:

<u>Year</u>	<u>Rate</u>	<u>Year</u>	<u>Rate</u>
2021	5.90%	2052-2060	4.70%
2022	5.50%	2061-2064	4.60%
2023	5.10%	2065-2066	4.50%
2024	5.00%	2067	4.40%
2025-2026	4.90%	2068	4.30%
2027	4.80%	2069-2070	4.20%
2028-2036	4.70%	2071	4.10%
2037-2045	4.80%	2072-2073	4.00%
2046-2049	4.90%	2074+	3.90%
2050-2051	4.80%		



**UNION COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**Union County Specific Actuarial Assumptions
(Concluded)**

Health Care Claims Costs	2021 claims costs for an age 64 retiree or spouse are assumed to be \$20,132.
Coverage of Eligible Children	We have assumed no impact of dependent children on the implicit subsidy.
Dental and Vision Costs	We have assumed no implicit subsidy due to dental or vision costs.

WHEELER COUNTY

**OREGON REVISED STATUTE 237.620
EQUAL TO OR BETTER THAN (ETOB) DETERMINATION
AS OF DECEMBER 31, 2020**



**Five Centerpointe Dr., Suite 520
Lake Oswego, Oregon 97035
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**WHEELER COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

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**WHEELER COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

REPORT SUMMARY

This report has been prepared by Independent Actuaries, Inc. for the Oregon Public Employees' Retirement System (PERS) and Wheeler County. This report provides the details of the determination whether the retirement benefits provided by the County qualify for exemption under Oregon Revised Statute (ORS) 237.620(2) from participation in PERS.

Typically, in Oregon, public employers of police officers and firefighters provide retirement benefits under PERS. A public employer may qualify for exemption and provide their own retirement benefits if those benefits are equal to or better (ETOB) than the benefits provided under PERS. An ETOB determination is made every twelve years.

Under the Oregon Administrative Rule (OAR) governing the test, employer retirement benefits are compared at each PERS tier in three categories: total benefits, service retirement with postretirement healthcare, and disability retirement with postretirement healthcare. For an employer to qualify for exemption, the employer total benefits must be greater than 100 percent of benefits that PERS provides at each tier. Additionally, service retirement and disability retirement benefits must each be at least 80 percent of the benefits that PERS provides at each tier.

As approved by the PERS Board, employer retirement benefits may be determined to be ETOB either via a side-by-side comparison of employer plan provisions against PERS plan provisions or by a full actuarial valuation. It is only reasonable to review employer retirement benefits using the side-by-side comparison approach if the benefits are provided via a plan design similar to PERS. Under the side-by-side comparison approach, the employer retirement benefits will only be determined to be ETOB if they are unambiguously equal to or better than PERS. If the employer retirement benefits design is not suitable for side-by-side comparison, or if the benefits are not unambiguously more valuable, a full actuarial valuation determination approach will be used.

Based on the information described in this report, we conclude that retirement benefits provided by Wheeler County meet the standards for receiving an exemption OAR 459-030-0025.



DETERMINATION METHODOLOGY

The standards for determining whether an employer provides benefits that are ETOB are stated in OAR 459-030-0025, with additional definitions provided by reference. Other rules for testing are as approved by the PERS Board.

- We have compared full-career benefits, assuming an employee is covered by either the terms of the public employer's retirement benefit plan(s) or PERS for their entire career starting with their date of hire. Benefit provisions which apply prior to the earliest date of hire of any active employee of the public employer are ignored. Historical plan changes from to the earliest date of hire of any active employee of the public employer to the present are reflected. Current benefit provisions are expected to apply in the future.
- Benefits were compared based on the December 31, 2020 actuarial present value of retirement benefits projected to be accrued to the projected date of retirement or disability, calculated as a percentage of salary.
- We have used hypothetical census data, based on the PERS police officer and firefighter census used in the December 31, 2020 PERS valuation.
- We have used the actuarial assumptions and methods identified in the December 31, 2020 PERS valuation report, but assuming no pre-retirement death or withdrawal. Any additional actuarial assumptions needed to evaluate features of the public employer's retirement plan(s) which are not comparable to PERS have been developed in a manner consistent with PERS assumptions.
- Prior and future benefits which depend on investment returns have been valued using the assumed rate, taking into consideration guaranteed returns stated in plan provisions. The assumed rate is the 6.90% discount rate used in the December 31, 2020 PERS valuation.
- Under the assumptions prescribed for the comparison the PERS Full Formula method of calculating Tier 1 and Tier 2 retirement benefits results in a more valuable benefit than the Money Match method in almost all cases; therefore, the Full Formula method has been used in the comparison.
- Only employer-funded retirement benefits are included in the comparison. Any contribution described as an employee contribution will be ignored, unless the public employer's plan provisions state that the employer is responsible for making the contribution on the employee's behalf and the responsibility to make the contribution is non-elective.
- We have valued both explicit and implicit postretirement healthcare benefits.
- Our comparison does not value the transfer of investment risk and mortality risk between employee and employer inherent in the plan design differences of defined benefit and defined contribution plans.
- Our comparison does not include increases to retirement benefits under ORS 238.362-368 and ORS 237.635-637.



**WHEELER COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

ACTUARIAL CERTIFICATION

Independent Actuaries, Inc. was engaged by the State of Oregon, through its Oregon Public Employees Retirement System (PERS), to review the retirement benefits program of Wheeler County as of December 31, 2020, in order to determine if it is equal to or better than PERS as required by ORS 237.620(2). The conclusions of the review are set forth in this report, which has been prepared exclusively for PERS and the County, and may not be relied upon for any other purpose or by any party other than PERS or the County.

The valuation is based on participant data and plan provision supplied by PERS and the County. All information submitted to us has been reviewed for reasonableness and consistency, but has otherwise been accepted and relied upon without audit. The plan provisions are summarized in the applicable section of this report.

This report was prepared in accordance with applicable law. To the best of our knowledge, the information supplied in this report is complete and accurate. For purposes of determining the actuarial present value of retirement benefits, each prescribed method and assumption was applied in accordance with our understanding of law and regulations under ORS 237.620 and OAR 459. The prescribed and non-prescribed methods and assumptions are disclosed in the Determination Methodology and Actuarial Assumptions sections of this report. In our opinion, each non-prescribed assumption is reasonable and such non-prescribed assumptions, in combination, offer our best estimate of anticipated experience under the plan.

The liabilities were calculated using models developed for the purpose of pension plan valuation, the structure and output of which were evaluated and reasonably achieve their intended purpose.

Future actuarial measurements may differ significantly from the current measurement presented in this report due to such factors as changes in economic or demographic assumptions and changes in plan provisions or applicable law.

The undersigned credentialed actuaries are members of the American Academy of Actuaries and meet the *Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States* of the American Academy of Actuaries to render the actuarial opinion contained herein.

Aeron Riordon, ASA, EA, MAAA

Steven L. Diess, EA, MAAA

June 27, 2022 _____
Date

20-08467 _____
Enrollment #

June 27, 2022 _____
Date

20-06055 _____
Enrollment #

Independent Actuaries, Inc.
Five Centerpointe Dr., Suite 520, Lake Oswego, OR 97035 503.520.0848



**WHEELER COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

TEST RESULTS

The Wheeler County Retirement Plan provides benefits via a defined contribution type plan design which is not comparable to PERS using the Full Formula method of calculating Tier 1, Tier 2, and OPSRP retirement benefits. Therefore, a full actuarial valuation was conducted in order to determine whether the County qualifies for exemption from participation in PERS.

For the County to qualify for exemption, the employer total benefits must be greater than 100 percent of benefits that PERS provides at each tier. Additionally, service retirement with postretirement healthcare and disability retirement with postretirement healthcare must each be at least 80 percent of benefits that PERS provides at each tier. As of December 31, 2020, safety employees of the County would only fall under the OPSRP tier provided by PERS, and thus, the County only needs to satisfy testing conditions for the OPSRP tier. As shown below, the retirement benefits provided by the County meet this standard.

PERS Benefit Tier Type	Present Value of Estimated Employer- Funded Full-Career Retirement Benefits as of December 31, 2020 for Hypothetical Census Data Groups as a Percentage of PERS Subject Salary		Wheeler County Benefits as a Percentage of PERS
	Wheeler County¹	PERS	
Retirement – OPSRP	478%	377%	126%
Disability – OPSRP	17%	14%	126%
Total – OPSRP	493%	391%	126%

¹ Please note that not all benefits potentially includable for ETOB determination purposes were valued in this comparison, because the employer demonstrated compliance with the ETOB requirement without including such benefits.



**WHEELER COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

PARTICIPANT DATA

Hypothetical census data has been used for review of benefits, per the rules governing ETOB determination. The hypothetical data was based on the police officer and firefighter census used in the December 31, 2020 PERS valuation.

	OPSRP
Count	10,518
Average Attained Age	39.35
Average Total Years of Service	8.02
Average 2020 PERS Subject Salary	\$82,406



SUMMARY OF APPLICABLE PLAN PROVISIONS



**WHEELER COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

PERS OPSRP FULL FORMULA BENEFITS

Plan Year	January 1 to December 31.
Plan Type	Defined Benefit.
Plan Eligibility	Hired after August 28, 2003.
Normal Retirement	
Eligibility	The earlier of age 60, or age 53 with 25 years of benefit service.
Benefit	1.80% of average monthly compensation multiplied by years of benefit service.
Mandatory Employee Contributions	
Eligibility	Effective July 1, 2020, applicable to participants earning at least \$2,500 monthly in 2020, increased to \$3,333 in 2022 and indexed for inflation in future years.
Contributions	After July 1, 2020, 0.75% of monthly compensation.
Early Retirement	
Eligibility	Age 50 with five years of service.
Benefit	Accrued benefit actuarially reduced for each year that early commencement precedes normal retirement age.
Unreduced Benefit Eligibility	None.



**WHEELER COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS OPSRP Full Formula Benefits
(Continued)**

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	Until Normal Retirement Age, 45% of monthly compensation during the last full month of employment, reduced if the total benefit exceeds 75% of compensation. After Normal Retirement Age, Normal Retirement Benefit credited with benefit years of service as if the employee worked to Normal Retirement Age, with salary increased with cost of living adjustments.

Compensation

Limits	\$195,000 in 2020, indexed with inflation.
Covered	Total Compensation including overtime up to average limit and bonuses.
Average Monthly	The greater of covered compensation averaged over the three consecutive plan years that produce the highest average and covered compensation averaged over the final 36 consecutive months of service.

Accrued Benefit	A participant's normal retirement benefit calculated using years of benefit service and average monthly compensation as of the date of calculation.
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Normal Form of Benefit	Single life annuity.
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Actuarial Equivalent

Interest	7.2% pre- and post-retirement.
Mortality	Blended mortality based on PUB-2010 tables, with different tables depending on purpose of adjustment.



**WHEELER COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**PERS OPSRP Full Formula Benefits
(Concluded)**

Cost of Living Adjustments

Benefits Earned Before October, 2013	Annual adjustment to reflect the increase or decrease in CPI (Portland Area – All Items), subject to a maximum increase of 2.00% in any year. CPI changes in excess of the 2.00% limit are accumulated for future benefit adjustments otherwise less than 2.00%. Benefits will never decrease below original amount.
Benefits Earned After October, 2013	1.25% for benefit amounts up to \$60,000 and 0.15% for benefit amounts above \$60,000.



**WHEELER COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

WHEELER COUNTY RETIREMENT PLAN

Effective Date	July 1, 1970.
Plan Year	July 1 to June 30.
Plan Type	Defined Contribution.
Normal Retirement	
Eligibility	Earlier of age 65 or age 55 with two years of service.
Benefit	Account balance.
Mandatory Employee Contributions	None.
Employer Contributions	
Eligibility	Participating in the plan.
Contributions	20.0% of compensation.
Early Retirement	Not provided.
Disability Benefit	
Eligibility	Total and permanent disability.
Benefit	Continued employer contribution until normal retirement date based on compensation prior to disability.



**WHEELER COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**Wheeler County Retirement Plan
(Concluded)**

Compensation

Limits	\$200,000 as indexed; \$285,000 for plan years beginning in or after 2020.
Plan	Total Compensation excluding bonuses and overtime.
Normal Form of Benefit	Lump sum.
Optional Forms of Benefit	Any annuity as determined by the participant and agree to by the plan administer, installments.



**WHEELER COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

WHEELER COUNTY ADDITIONAL BENEFIT PROVISIONS

Disability Insurance

Insurance Benefit 60% of compensation prior to disability up to \$6,000 per month.

Benefit Period Until Social Security Normal Retirement Age.

Retiree Medical

Implicit Eligibility Continued medical and dental coverage is offered to the County's public safety retirees, spouses and dependents until Medicare eligibility, on a self-pay basis.

Implicit Benefit The retiree premium rate (whether paid by the County or by the retiree) is based on the premium rates available to active employees. Generally, the premium does not represent the full cost of covering retirees (since they are older than the active population, retirees can be expected to generate higher medical claims and therefore higher premiums for the active population). This additional cost is called the "implicit subsidy".

The monthly premium adjusted to be applicable at the valuation date is \$653.24 for a retiree, and \$1,391.82 for a retiree and their spouse.



ACTUARIAL ASSUMPTIONS



**WHEELER COUNTY
 ORS 237.620 ETOB DETERMINATION REPORT
 DECEMBER 31, 2020**

ACTUARIAL ASSUMPTIONS FOR ETOB TESTING

Valuation Date	December 31, 2020.	
Plan Eligibility	All employees eligible to participate under PERS are treated as eligible for ETOB testing.	
Interest Rate for Discounting Future Liabilities	6.90% per year.	
Interest Rate to Project Past and Future Earnings	The greater of 6.90% or the plan’s guaranteed interest rate, if any.	
General Inflation	2.40% per year.	
Payroll Growth	3.40% per year.	
Salary Merit Scale	Duration	Annual Increase
	0	5.13%
	5	2.87%
	10	1.58%
	15	0.98%
	20	0.79%
	25	0.72%
	30 +	0.50%
Unused Sick Leave Program	For employers with a traditional defined benefit retirement plan design, if unused sick leave is converted to benefits under the retirement plan the employer is treated as if electing to participate in the Unused Sick Leave Program.	



**WHEELER COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

Mortality Rates

Active employees: None.

Retirees: PUB 2010 Retiree Tables for Safety Employees, sex distinct, projected generationally.

Beneficiaries: PUB 2010 Employee and Retiree Tables for General Employees, sex distinct, projected generationally.

Beneficiary adjustments: Set back 12 months for males, no set back for females.

Disabled Retirees: 50% of PUB 2010 Disabled Retiree Tables for Safety Employees, 50% of PUB 2010 Disabled Retiree Tables for Non-Safety Employees, sex distinct, projected generationally.

Improvement Scale: Unisex Social Security Data Scale (60 year average), with data through 2017.

Turnover Rates

None.

Disability Rates

Based on 1985 Pension Disability Table Class 1 – unisex, as adjusted per 2020 experience study. Rates are applied past retirement eligibility, but not after normal retirement age. Sample rates are as follows:

Age	Service Disability Rate	Ordinary Disability Rate
30	0.0128%	0.0160%
35	0.0196%	0.0245%
40	0.0316%	0.0395%
45	0.0518%	0.0648%
50	0.0896%	0.1120%



**WHEELER COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

Retirement Rates

Age	OPSRP		
	Years of Service		
	<u>< 13</u>	<u>13 - 24</u>	<u>25 +</u>
50	0.5%	1.5%	5.5%
51	0.5%	1.5%	5.5%
52	0.5%	1.5%	5.5%
53	0.5%	1.5%	27.0%
54	0.5%	1.5%	27.0%
55	2.0%	5.0%	27.0%
56	2.0%	5.0%	27.0%
57	2.0%	5.0%	27.0%
58	5.0%	5.0%	27.0%
59	5.0%	5.0%	27.0%
60	5.0%	15.0%	27.0%
61	5.0%	8.5%	27.0%
62	10.0%	25.0%	38.0%
63	7.0%	15.0%	31.0%
64	7.0%	15.0%	31.0%
65	7.0%	35.0%	40.0%
66	7.0%	35.0%	40.0%
67	7.0%	35.0%	40.0%
68	7.0%	35.0%	40.0%
69	7.0%	35.0%	40.0%
70	100.0%	100.0%	100.0%

Postretirement Healthcare Participation 100%

Postretirement Healthcare Lapse None.

Spouse Coverage 100% of future retirees are assumed to cover a spouse as well. Males are assumed to be three years older than their female spouses.



PERS SPECIFIC ACTUARIAL ASSUMPTIONS

Cost of Living Adjustments

Blended based on Moro vs. State of Oregon:

OPSRP: 1.484%

Assumed Form of Payment

100% of participants elect to receive their benefit as a single life annuity.



**WHEELER COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

WHEELER COUNTY SPECIFIC ACTUARIAL ASSUMPTIONS

Earliest Applicable Date of Hire Considered	July 24, 2018.
Covered Compensation Adjustments	Because benefits under the Retirement Plan exclude consideration of overtime and bonus, covered compensation has been reduced by 7.70% based on information provided by PERS and the County.
Unused Sick Leave Program	The Wheeler County is not assumed to participate in the Unused Sick Leave Program.
Assumed Form of Payment	Normal form.
Disability Insurance Payments	Offset by Social Security disability payments, Wheeler County Retirement Plan disability benefits in excess of service retirement benefits, and worker’s compensation, as applicable.
Worker’s Compensation	For service related disability, worker’s compensation is assumed to pay 66 2/3% of covered compensation, limited to the Oregon Average Weekly Wage of \$1,093.41, increased annually by 3.40%, offset by Social Security disability payments.
Annual Premium Increase Rates	The assumed increases for medical plans are:

<u>Year</u>	<u>Rate</u>	<u>Year</u>	<u>Rate</u>
2021	5.90%	2052-2060	4.70%
2022	5.50%	2061-2064	4.60%
2023	5.10%	2065-2066	4.50%
2024	5.00%	2067	4.40%
2025-2026	4.90%	2068	4.30%
2027	4.80%	2069-2070	4.20%
2028-2036	4.70%	2071	4.10%
2037-2045	4.80%	2072-2073	4.00%
2046-2049	4.90%	2074+	3.90%
2050-2051	4.80%		



**WHEELER COUNTY
ORS 237.620 ETOB DETERMINATION REPORT
DECEMBER 31, 2020**

**Wheeler County Specific Actuarial Assumptions
(Concluded)**

Health Care Claims Costs	2021 claims costs for an age 64 retiree or spouse are assumed to be \$16,744.
Coverage of Eligible Children	We have assumed no impact of dependent children on the implicit subsidy.
Dental and Vision Costs	We have assumed no implicit subsidy due to dental or vision costs.

From: [Kevin Machiz](#)
To: [PERS BOARD * PERS](#)
Subject: ETOB Testing for Portland FPDR
Date: Thursday, June 16, 2022 10:34:10 PM

Members of the PERS Board,

I am writing to you as a resident of Portland, Oregon.

You have undertaken a process to determine whether several local public pension plans, including the City of Portland Fire & Police Disability & Retirement plan, satisfy the requirements of ETOB. A cost effective approach to ETOB testing is to compare benefit plan provisions side-by-side with PERS provisions to quickly identify that all employer provisions are equal to or better than all provisions of PERS. While this approach is valid under the assumption of unquestioned benefit security, this assumption is deeply flawed in the case of Portland FPDR one and two, which consists of members first sworn before 2007. Portland FPDR is one of only two public pension plans in the United States that operates on a pay-as-you-go funding policy today. In other words, it has a funded ratio of 0% relative to its total liability of \$4.4 billion, according to Milliman's 2020 actuarial valuation report. The only other public pension plan in the United States operating on a pay-as-you-go basis is Puerto Rico Employees Retirement System.

As you've engaged an actuarial firm to assist you with ETOB testing, you do not need to take my word for it. Ask the actuarial firm you've engaged whether or not they can provide an unqualified opinion that the benefit security of Portland FPDR cannot be questioned given that the plan maintains a funded ratio of 0%. I implore you not to let this question go unanswered.

I'm happy to provide further written or verbal comment at the discretion of the Chair.

Kevin Machiz, CFA, FRM

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Kevin Machiz
(610) 724-5179
kevin.machiz@gmail.com

From: [Kevin Machiz](#)
To: [PERS BOARD * PERS](#)
Subject: Re: ETOB Testing for Portland FPDR
Date: Monday, July 18, 2022 6:04:07 PM

I request that the below public comment be made available to the Board ahead of the July 22 meeting.

Members of the PERS Board,

On June 16, I submitted public comment imploring you to ask the consulting actuarial firm that you've engaged for ETOB testing, Independent Actuaries, Inc. (IAI), whether they could provide an unqualified opinion that the benefit security of Portland FPDR couldn't be questioned given that the plan maintains a funded ratio of 0%.

On July 11, a packet of materials for the July 22 Board meeting was published containing a memo from staff on ETOB Testing and an ETOB Determination report from IAI regarding the City of Portland. The memo states that plan funding is explicitly excluded from consideration and has no impact on whether a given plan satisfies the requirements of ETOB determination. I interpret "plan funding" in this context to mean that staff and IAI explicitly acknowledge that they have not vouched for the benefit security of Portland FPDR.

The remainder of this public comment is split into two sections. The first section addresses the responsibility of the Board created by ORS Chapter 237. The second section addresses why Portland FPDR does not meet the determination standard defined in ORS Chapter 237.

Section 1: Responsibility of the Board created by ORS Chapter 237

ORS 237.620 makes it the responsibility of the Public Employees Retirement Board to determine whether Portland FPDR provides retirement benefits equal to or better than the retirement benefits that would be provided under PERS. Evaluations of whether participants are entitled to a benefit are necessary for this task, but not sufficient in the case of Portland FPDR. Because benefit security is not in question for nearly all public pension plans in the United States, an evaluation of benefit security could be easily misinterpreted as a mere formality or even unnecessary.

If the Board decides to ignore the question of benefit security for Portland FPDR, this would risk unintentionally creating a *de jure* policy in which any local police and firefighter pension plan in Oregon could promise ever higher benefits and simultaneously cut funding until trust assets were depleted. Under this hypothetical policy, the Public Employees Retirement Board could be placed in the embarrassing position of determining a local pension plan provides retirement benefits equal to or better than the retirement benefits that would be provided under PERS immediately before the plan began defaulting on benefit payments to retirees. I believe this contradicts both the plain meaning of the statute and the spirit of the law. Such an outcome would ultimately undermine the trust of Oregonians in the Board and in PERS.

Indeed, the Public Employees Retirement Board argued to the Oregon Supreme Court in favor of the view that the goal of statute in defining ETOB determination was adequacy of retirement benefits, as opposed to solely or partially focusing on the generosity of the benefit policy. "Respondents argue that the sole legislative objective was to assure police officers and

firefighters of adequate retirement benefits” *Salem Firefighters Local 314 v. Public Employees Retirement Board*, 717 P.2d 126, 129 (Or. 1986)

The Board has attempted to address this issue through the rulemaking process several times. An older version of OAR 459-030-0025 prior to December 1989 stated specifically that "the Board will not evaluate the adequacy of funding and will assume that all employer-paid benefits will be funded.” *Salem Firefighters Local 314 v. Public Employees Retirement Board*, 717 P.2d 126, 126 (Or. 1986). Then the rule was changed, according to the published justification by the Board in the Oregon Bulletin, to "raise the level of compliance that a local government's plan must meet to be deemed 'equal to or better than' PERS." Through February 2009, OAR 459-030-0025 stated just the opposite of the old rule, that "the Board will consider whether the benefits to be provided by the employer are funded, and the adequacy of funding." After February 2009, this section was simply deleted without any justification that can be found in the public record. The version in place to this day makes no mention of adequacy of funding one way or the other.

The Oregon Attorney General has also opined on actuarial soundness:

ORS chapter 237 does not establish a fixed percentage or monetary amount necessary to be maintained to achieve actuarial soundness. What is created is an implied standard where actuarial calculations determine and maintain the actuarial soundness of the fund...

A review of ORS Chapter 237 discloses that the Legislative Assembly has not set an express standard by way of a fixed amount, percentage or formula to maintain actuarial soundness or solvency of the fund. Instead of a fixed rigid formula, the legislature has recognized the use of an "actuarial standard" to determine actuarial solvency....

In the absence of fixed or definitely ascertainable standards to determine what constitutes "actuarial soundness," the [Public Employees Retirement] board is required to exercise its best judgement in making this determination. It is a matter for its discretion. Its discretion, however, is not without boundaries. The actuarial calculations, assumptions and methods utilized must at least be reasonable and should consider all known or reasonably anticipated risks and liabilities. (1977) Vol 38, p 880

Because an evaluation of benefit security is consistent with the Oregon Attorney General's opinion, the plain meaning of the statute, and the spirit of the law, the Board is required to evaluate benefit security. Past rulemaking processes that attempted to address this issue have been arbitrary and capricious. If the Board believes today that it should not evaluate benefit security, then it is necessary to initiate the rulemaking process, to seek a new opinion from the Oregon Attorney General, and to allow time for public comment on the proposal.

Additionally, ignoring the question of benefit security would create an inconsistency between the Board's decisions to perform one type of analysis and not another. On page 2 of the City of Portland's ETOB Determination report, the Determination Methodology disclosure states "only employer-funded retirement benefits are included in this comparison. Any contribution described as an employee contribution will be ignored..." If funding source will be considered for the purpose of evaluating the generosity of the benefit policy, why wouldn't funding source be considered for the purpose of evaluating benefit security?

Section 2: Portland FPDR does not meet the determination standard defined in ORS Chapter

Portland's pay-as-you-go funding policy makes benefit security uniquely questionable within Oregon. As you know, Oregon PERS has a \$22.9 billion unfunded liability. Portland taxpayers are additionally on the hook for the \$4.4 billion unfunded liability of Portland FPDR One and Two, which consists of the 2,821 members who were first sworn before 2007. At \$1.6 million per member, this is by far the highest unfunded liability per member among US public pension plans tracked by Public Plans Data. For comparison purposes, the unfunded liability per member for PERS is about \$60 thousand.

As you are also aware, the Board has adopted a comprehensive actuarial funding policy for Oregon PERS, which is true of nearly every US public pension plan. This means that it is the policy of the Board to amortize any unfunded liability each year. For years with actuarial valuation reports since 2012, Portland FPDR has experienced negative amortization of \$53 million to \$78 million per year. Negative amortization occurs when contributions are lower than the sum of normal cost and interest on the unfunded liability.

While Portland took action to reform the plan in 2006 by closing the old tier and initiating new hires into PERS, the cost savings of that move are realized slowly. Milliman published a projection that employer contributions across all tiers of police and firefighters in Portland would rise from 103% of payroll in 2021 to 137% of payroll by 2033 in an expected case. Portland FPDR appears to be the most costly public pension plan in the United States regardless of whether you analyze projected cash contributions by employers or actuarial costs that are accruing annually under Milliman's assumptions.

Portland's economic, legal, and political abilities to secure benefits stem from the underlying abilities to either raise taxes or cut spending. The City Charter, which can only be changed by a majority vote of Portlanders, permits a dedicated property tax levy to increase up to a legal limit of \$2.80 per \$1,000 of Real Market Value. However, a feature of Oregon state law called compression resulted in budget cuts long before reaching that legal limit. In particular, the Portland Children's Levy was subject to severe budget cuts around 2012 due to compression. Accordingly, Portland FPDR's own financial statements routinely disclose:

Although the City Charter provides FPDR with dedicated property tax levy authority of up to \$2.80 per \$1,000 of real market value, the Oregon state constitution caps each property's general government taxes at \$10 per \$1,000 of RMV. After reaching this point all levies, including the FPDR levy, are subject to compression to fit under the \$10 limit. For this reason, it is unlikely that FPDR could collect the full \$2.80 per \$1,000 of real market value on each property.

In considering how the City of Portland might react to an increasing risk of breaching a property tax levy cap of \$2.80 per \$1,000 of real market value, how the City reacted to this increasing risk in 2010 may be relevant. Mercer presented projections on January 25, 2011 indicating that the needs of the levy had approximately a 10% probability of exceeding the cap in 2039. FPDR staff requested a presentation of supplemental information. Mercer presented supplemental information on December 19, 2011 containing two alternative funding policies where alternative funding sources for the plan would hypothetically need to be identified. Both alternatives meaningfully lowered the projected probability of reaching the cap. The City of Portland ultimately did not implement an alternative funding policy or seek new funding sources.

I'm happy to engage further at the discretion of the Chair.

Kevin Machiz, CFA, FRM

On Thu, Jun 16, 2022 at 10:33 PM Kevin Machiz <kevin.machiz@gmail.com> wrote:

Members of the PERS Board,

I am writing to you as a resident of Portland, Oregon.

You have undertaken a process to determine whether several local public pension plans, including the City of Portland Fire & Police Disability & Retirement plan, satisfy the requirements of ETOB. A cost effective approach to ETOB testing is to compare benefit plan provisions side-by-side with PERS provisions to quickly identify that all employer provisions are equal to or better than all provisions of PERS. While this approach is valid under the assumption of unquestioned benefit security, this assumption is deeply flawed in the case of Portland FPDR one and two, which consists of members first sworn before 2007. Portland FPDR is one of only two public pension plans in the United States that operates on a pay-as-you-go funding policy today. In other words, it has a funded ratio of 0% relative to its total liability of \$4.4 billion, according to Milliman's 2020 actuarial valuation report. The only other public pension plan in the United States operating on a pay-as-you-go basis is Puerto Rico Employees Retirement System.

As you've engaged an actuarial firm to assist you with ETOB testing, you do not need to take my word for it. Ask the actuarial firm you've engaged whether or not they can provide an unqualified opinion that the benefit security of Portland FPDR cannot be questioned given that the plan maintains a funded ratio of 0%. I implore you not to let this question go unanswered.

I'm happy to provide further written or verbal comment at the discretion of the Chair.

Kevin Machiz, CFA, FRM

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July 22, 2022
PERS Board Meeting Agenda

Action and Discussion Items

1. SB 1049 Implementation Update
2. Equal to or Better Than Testing Recommendations
3. 2023-2025 Agency Budget Recommendation
4. Presentation of December 31, 2021 System Valuation Results



Oregon

Kate Brown, Governor

Public Employees Retirement System

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

July 22, 2022

TO: Members of the PERS Board
FROM: Richard Horsford, Chief Financial Officer
Greg Gabriel, Budget Officer
SUBJECT: 2023-25 Agency Request Budget (ARB) Policy Packages

OVERVIEW

- Action: Approve PERS' 2023-25 Policy Package Requests
- Reason: Review and approval needed by the Department of Administrative Services/Chief Financial Office and the Legislative Fiscal Office.

The 2023-25 State Agency Budget development continues to progress with uncertain times ahead. The state revenue forecasts will certainly provide more direction on 2023-25 budgets, as will the political climate as the state prepares for new gubernatorial leadership. Agencies continue to receive updated guidance regarding budget preparation and PERS will continue to update our budgets accordingly.

As PERS emerges from its 75th year as an agency, we recognize that we must re-imagine how we evolve and deploy our business capabilities via our people, processes, and technologies. This evolution is necessary to meet our member and employer needs into the future. This re-imagining of our service delivery model will be accomplished, in alignment with the PERS Strategic Plan, via an overarching modernization program that, ultimately, ensures that we are meeting those future stakeholder needs by the most effective and efficient means.

BUDGET DEVELOPMENT ACTIVITIES

The Agency Request Budget (ARB), one of three phases of budget development for the 2023-25 biennium, will be in process until July 31. During this first phase, the agency carefully evaluates its operations and puts forth policy package requests in an effort to improve efficiency and increase value to its members. The agency is submitting the following policy packages for the 23-25 budget cycle:

Division	Staff	Limited Staff	Position Re/class	Personnel Costs	Supplies /Capital	Total
Central Administration	4			717,107	31,063	748,170
Financial Services	0				(500,000)	(500,000)
Information Services	11			2,336,738	1,248,438	3,585,176
Operations	2	3	4	873,527	904,648	1,778,175
Compliance, Audit, and Risk	1			218,933	792,562	1,011,495
Core Retirement / SB1049	0	20		3,638,372	16,200,400	19,838,772
Core Retirement / Modernization	15	1		3,228,103	6,344,970	9,573,073
Agency Request Total	33	24	4	10,986,203	18,677,111	\$29,663,314

Summary information on each policy package is below:

POP 101 SB 1049 Implementation: 20 Positions | \$19,838,772

This request continues the agency's efforts to implement SB 1049. The request includes 20 limited duration positions to assist with implementation and workload increases as the implementation efforts finish over the course of this biennia. Additional costs for contract services are estimated at \$16.0M at this time.

POP 102 SB 1049 Permanent Workload: 9 Positions | \$1,887,761

This request continues the agency's efforts to implement SB 1049. The request includes nine positions for various operational duties, which will become permanent staff of the agency.

POP 103 Modernization: 16 Positions | \$ 9,573,073

This business case is a proposal to achieve program funding for Phase 1 of the ORION Modernization Program. This first phase will encompass projects such as part one of Customer Relationship Management program implementation, telephony upgrades, redesigning member correspondence, and preparing for the pension administration enhancements in Phase 2.

POP 104 Enterprise Risk Management Program: 1 Position | \$1,011,495

This proposal is intended to enhance the capabilities of the agency by implementing an Enterprise Risk Management program, which ties together strategy and business plans using risk management methodologies as one of the key decision-making criteria.

POP 105 IT Hardware and Subscriptions: 0 Position | \$2,156,500

This request addresses the upcoming need to complete the seven-year cyclical refresh that is required of the agency's ORION hardware. Currently, most of the hardware is reaching end of life and end of support at the beginning of the 23-25 biennium.

POP 106 PERS Health Insurance Plan Administration: 0 Positions | \$367,960

A request for proposal (RFP) for the PHIP third-party administrator (TPA) contract is overdue with the current contract being over 20 years old. The current PHIP TPA performs the operational processes for the program. The agency will be requesting a transfer of \$500K from the Financial Services Division budget to the Operations Division budget in order to offset the costs of the requested policy package.

POP 107 Maintain Service Level: 5 Positions | \$90,585

Information Services positions have remained static while complexity of the pension system and technology requirements have increased. Operational service requests and incidents have also increased over the last few biennia and the number of supporting staff is insufficient to meet agency service level requirements. This request would add five new positions to meet the growing demand and complexity within Information Services. The agency will be requesting a reduction of \$1M of its current service-level IT Professional Services budget in order to offset the costs of the requested policy package.

POP 108 Retirement Workload: 1 Position | \$161,205

The purpose of this request is to increase the capability of the Member Information Center by adding one Retirement Counselor 2 position to address escalations and increased call volumes.

POP 109 Qualifying/Non-Qualifying Project: 3 Positions | \$523,653

This request would extend two limited duration Retirement Counselor 2 positions and one Retirement Counselor 1 position for the Qualifying/Non-Qualifying (Q/NQ) project.

POP 110 Position Reclassification: 4 Positions | \$58,744

This request reclassifies four positions in the Operations Division. This request reclassifies 3 Retirement Counselor 1 positions to Retirement Counselor 2 roles and one Retirement Counselor 2 position to an Operations and Policy Analyst 1 role.

POP 111 Increase Agency Support Services: 2 Positions | \$365,613

This request is to better prepare and align our human capital management plans to PERS’ mission and strategic goals. This will enable the executive team to leverage the workforce to achieve results. The agency is requesting to hire a Human Resource Analyst 3 and convert one limited duration Office Specialist 2 to permanent status.

2023-25 AGENCY REQUEST BUDGET (ARB)

	2023-25 Current Service Level	POP 101 SB1049 Imp	POP 102 SB 1049 Perm	POP 103 Modernization	POP 104 Enterprise Risk Management	POP 105 IT Hardware/ Subscriptions
Personal Services	94,655,729	3,638,372	1,829,261	3,228,103	218,933	0
Serv/Supplies	36,655,029	16,200,400	58,500	6,344,970	792,562	1,260,000
Capital Outlay	697,003	0	0	0	0	896,000
Total	132,007,761	19,838,772	1,887,761	9,573,073	1,011,495	2,156,000
Positions	384	20	9	16	1	
FTE	384.00	20.00	9.00	14.41	.88	

	POP 106 PHIP	POP 107 Maintain Service	POP 108 Retirement Workload	POP 109 Q/NQ	POP 110 Reclass	POP 111 Support Services	2023-25 Agency Request Budget
Personal Services	0	1,037,147	150,517	504,153	58,744	347,550	105,641,932
Serv/Supplies	367,960	(946,562)	10,688	19,500	0	18,063	54,436,140
Capital Outlay	0	0	0	0	0	0	1,593,003
Total	367,960	90,585	161,205	523,653	58,744	365,613	161,671,075
Positions	0	5	1	3	0	2	441
FTE	0.00	4.40	.88	3.00	0	1.88	438.35

PERS BUDGET METRICS AND COMPARISONS

One way to view the “cost” of PERS administration is to compare the agency’s annual operating budget to the net asset value of the PERS Fund. The following table shows the biennial budget as an annualized percentage of the Fund’s value at the end of each biennium. Note that our annual operating budget has generally ranged from 6 to 9 basis points using that industry standard measurement approach.

Biennium	Legislatively Approved Limited Budget	Fiscal Year Ended June 30th	Limited Budget	PERF Balance		% Operating
2015-2017	\$108,240,199	2016	54,120,100	71,331,639,411		0.0759%
		2017	54,120,100	77,044,798,841		0.0702%
2017-2019	\$101,657,012	2018	50,828,506	81,098,072,149		0.0627%
		2019	50,828,506	81,451,520,000		0.0624%
2019-2021	\$163,256,648	2020	81,628,324	77,257,271,000		0.1056%
		2021	81,628,324	93,708,071,000		0.0871%
2021-2023	\$138,079,911	2022	69,039,955	100,510,110,000	E	0.0687%
		2023	69,039,955	100,510,110,000	E	0.0687%
	ARB					
2023-2025	\$161,671,075	2024	80,835,538	103,525,413,000	E	0.0780%
		2025	80,835,538	103,525,413,000	E	0.0780%

BOARD OPTIONS

PERS is required to submit the 2023-25 Agency Request Budget to the Department of Administrative Services/ Chief Financial Office. This submission will form the basis for the Governor’s Recommended Budget to be developed prior to the 2023 Legislative Session.

The Board may:

1. Pass a motion to “approve the 2023-25 Agency Request Budget as presented for submission to the Department of Administrative Services/ Chief Financial Office.”
2. Direct staff to further refine the budget request in specific areas before submission to DAS.

STAFF RECOMMENDATION

Staff recommends the Board choose Option #1.

Action and Discussion Items

1. SB 1049 Implementation Update
2. Equal to or Better Than Testing Recommendations
3. 2023-2025 Agency Budget Recommendation
4. Presentation of December 31, 2021 System Valuation Results



Year-End 2021 Actuarial Valuation Results

OREGON PUBLIC EMPLOYEES RETIREMENT SYSTEM

Presented by:

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

July 22, 2022

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Executive Summary

- Average collared base employer contribution rates **will increase 1.07% of pay starting July 2023**
 - Collared base employer rates are paid by new employer contributions and/or side account transfers
- Average collared net employer contribution rates **will increase 0.68% of pay starting July 2023**
 - Collared net rates are paid by new employer contributions
- Factors affecting this valuation's July 2023 – June 2025 contribution rate calculations:
 - Decrease in the investment return assumption to 6.9% since last biennium **increased normal cost rates**
 - Actual 2021 investment returns of +20% decreased uncollared UAL rates that amortize unfunded liability
 - **Updated rate collaring policy** adopted mid-2021 led to **no decrease in average collared base UAL rates**
 - **Larger 2023-2025 side account offsets** from strong 2021 returns lessened the net contribution rate increase
- **Year-end 2021** funded status is **80% excluding side accounts**, up from 71% at year-end 2020
- **Year-end 2021** funded status is **86% including side accounts**, up from 76% at year-end 2020
 - Funded status increase primarily due to strong 2021 investment returns

System-Average Weighted Total* Pension-Only Rates

2009-2011
rates set prior
to economic
downturn

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

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

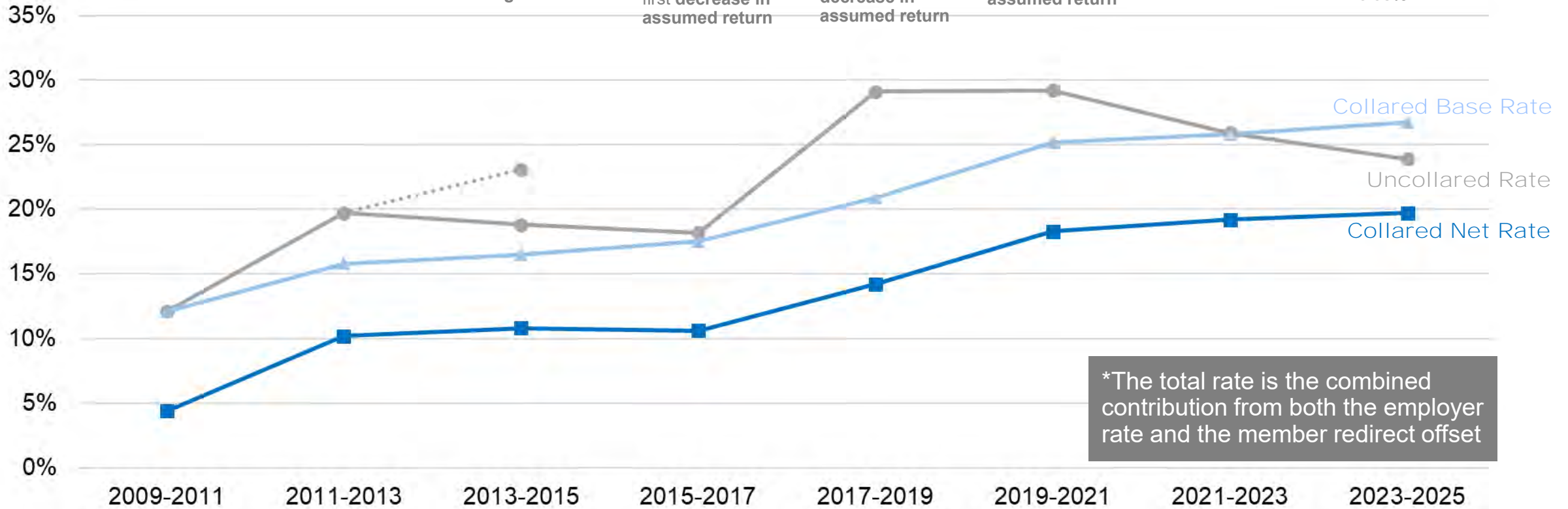
2015-2017 set
pre-Moro
reflecting 2012
(+14.3%) & 2013
(+15.6%) returns,
first decrease in
assumed return

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

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

2021-2023 reflects
+0.48% return in
2018 and **+13.6%**
return in 2019

2023-2025 rates
reflect decrease in
assumed return to
6.90% and 2021
actual return of
+20.05%



*The total rate is the combined contribution from both the employer rate and the member redirect offset

Assumed Return: 8.00%

8.00%

8.00%

7.75%

7.50%

7.20%

7.20%

6.90%

Funded Status & Unfunded Actuarial Liability (UAL)

System-Total Pension Funded Status (\$ billions)			
Valuation date:	12/31/2019	12/31/2020	12/31/2021
Assumed return:	7.20%	6.90%	6.90%
Actuarial liability	\$ 89.4	\$ 95.3	\$ 98.4
Assets (excluding side accounts)	<u>64.8</u>	<u>67.3</u>	<u>78.4</u>
UAL (excluding side accounts)	\$ 24.6	\$ 28.0	\$ 20.0
Funded status (excluding side accounts)	72%	71%	80%
Side account assets	<u>\$ 5.5</u>	<u>\$ 5.1</u>	<u>\$ 6.6</u>
UAL (including side accounts)	\$ 19.1	\$ 22.9	\$ 13.4
Funded status (including side accounts)	79%	76%	86%

Overview

- Today we will review summary valuation results as of December 31, 2021 for:
 - Tier One/Tier Two & OPSRP retirement programs
 - Retiree Health Insurance Account (RHIA), and
 - Retiree Health Insurance Premium Account (RHIPA)
- Formal, detailed results will be presented in our forthcoming December 31, 2021 System-Wide Actuarial Valuation Report
 - All work is based on asset levels and member demographics at year-end 2021
- This valuation will be the basis for 2023-2025 employer contribution rates presented for adoption at the September 30, 2022 Board meeting:
 - Employers' individual rates will be in the September meeting materials
- PERS will deliver employer-specific reports after the rates are adopted

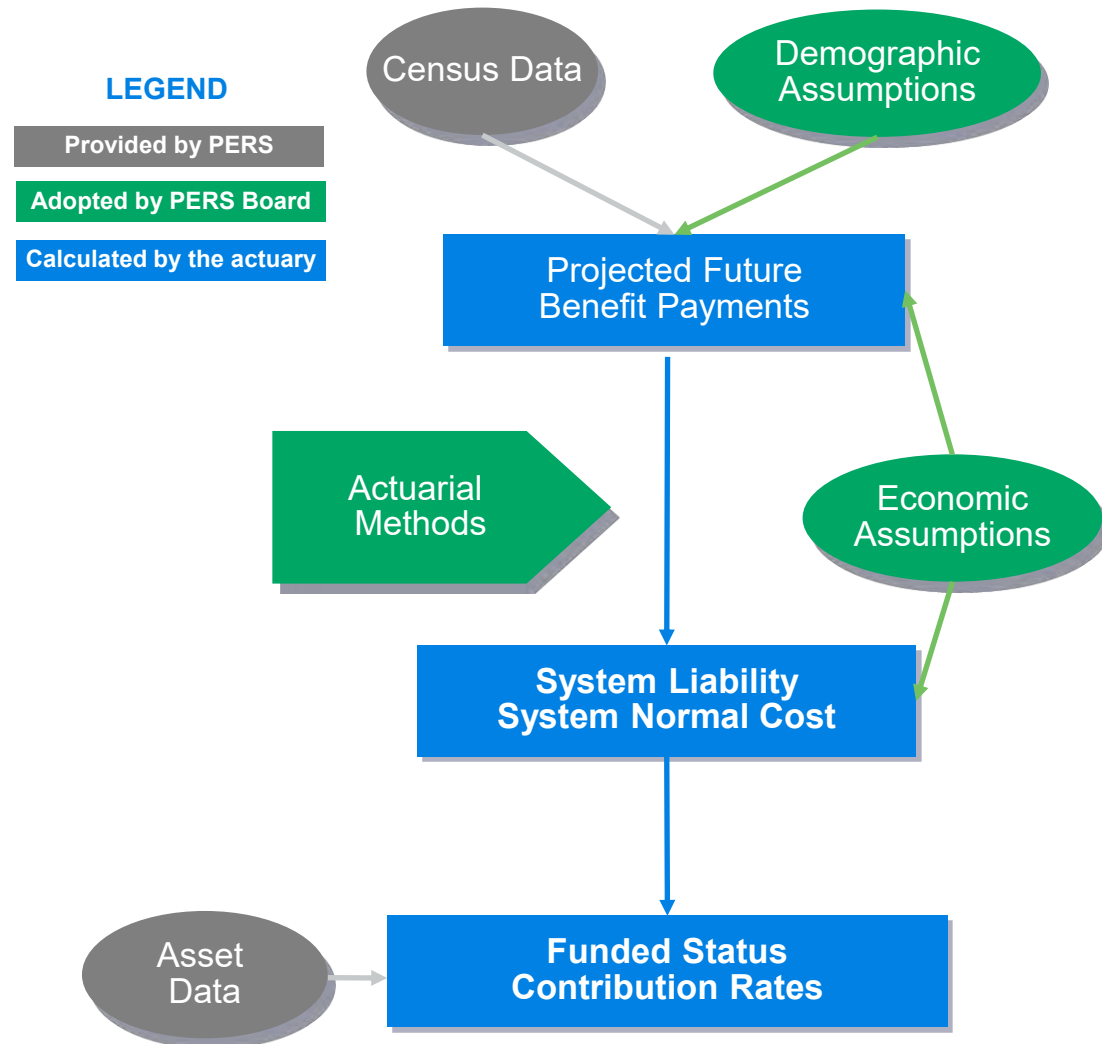
Valuation Process and Timeline

- Actuarial valuations are conducted annually
 - Alternate between “rate-setting” and “advisory” valuations
 - This valuation as of 12/31/2021 is rate-setting
- Board adopts contribution rates developed in rate-setting valuations, and those rates go into effect 18 months after the valuation date

Rate-Setting Valuation Date	Employer Contribution Rates
12/31/2019 →	July 2021 – June 2023
12/31/2021 →	July 2023 – June 2025
12/31/2023 →	July 2025 – June 2027

Two-Year Rate-Setting Cycle

- July 2021: Assumptions & methods adopted by Board in consultation with the actuary
- October 2021: System-wide advisory 12/31/20 actuarial valuation results
- December 2021: Advisory 2023-2025 employer-specific contribution rates
- July 2022: System-wide 12/31/21 rate-setting actuarial valuation results**
- September 2022: **Presentation and adoption of employer-specific 2023-2025 contribution rates**



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Guiding 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.

Changes Since the Last Rate-Setting Valuation

- The 12/31/2019 rate-setting actuarial valuation developed 2021-2023 employer contribution rates, which were adopted by the Board in 2020
- Since the 12/31/2019 rate-setting valuation:
 - The PERS Board adopted new assumptions and methods from the 2020 Experience Study, including reducing the investment return assumption from 7.2% to 6.9%
 - 2021 asset returns exceeded assumed level, with an actual single-year return of +20.05%
 - Actual returns during 2022 will be reflected in next year's advisory valuation
 - Cumulative system payroll increase of nearly 10% over the two-year period between rate-setting valuations

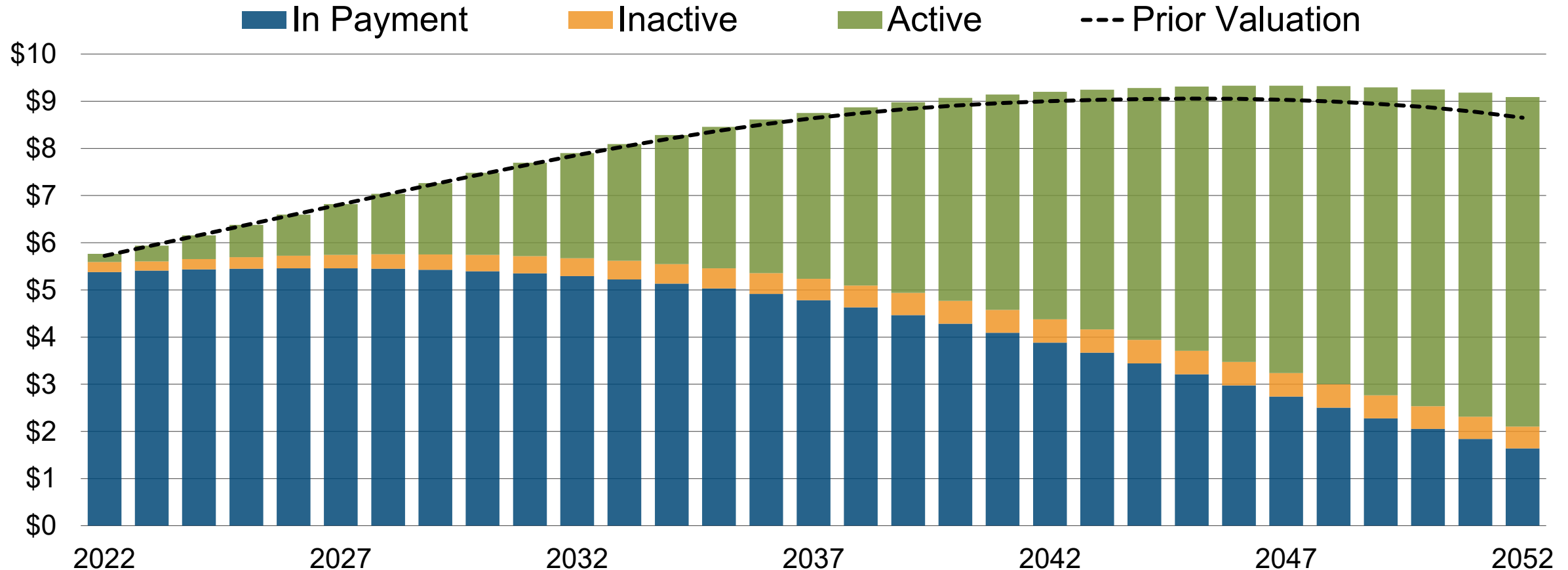
Changes Since the Last Advisory Valuation

- The 12/31/2021 rate-setting valuation will develop final 2023-2025 rates and reflects the following changes since the 12/31/2020 advisory valuation:
 - 2021 OPERF regular account return of +20.05%, which produced a single-year actuarial investment gain of \$8.6 billion
 - System payroll increase of 5.3% from 12/31/2020 to 12/31/2021
- The 12/31/2020 advisory actuarial valuation already reflected:
 - Updated assumptions and methods from the 2020 Experience Study
 - Investment experience during 2020, which at +7.18% was very close to the assumed rate of 7.20% for that year

Projected Benefit Payments for Members as of 12/31/2021

Does Not Include Projected Benefit Payments for Anyone Joining OPSRP After 12/31/2021

Tier One/Tier Two & OPSRP Expected Benefit Payments by Status as of 12/31/2021 (in \$ billions)



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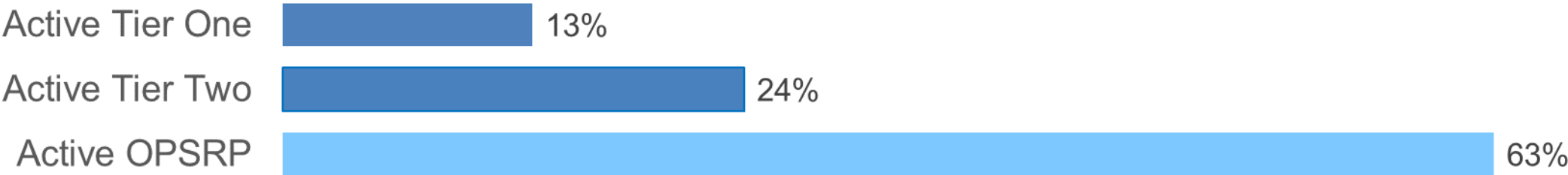
Actuarial Accrued Liability and Normal Cost by Category

12/31/2021 Tier One/Tier Two and OPSRP Actuarial Accrued Liability and Normal Cost

Actuarial Accrued Liability by Member Tier and Status on December 31, 2021



Normal Cost by Member Category on December 31, 2021



Accrued Actuarial Liability is the value of benefits allocated to service prior to 2022

Normal Cost is the value of benefits allocated to projected service during 2022

Sources of 2021 UAL (Excluding Side Accounts) Change

(\$ billions)	UAL Increase
Expected UAL increase/(decrease) during 2021	\$ 0.0
2021 actual investment performance	(8.6)
Actual demographic experience different than assumed	<u>0.6</u>
Actual UAL increase/(decrease) during 2021	(\$ 8.0)

- The **expected UAL increase/(decrease)** is the UAL change, based on 12/31/2020 valuation results, projected to occur during 2021 if actual 2021 experience followed that valuation's assumptions; for several years prior to 2020 there was an expected increase, but there was essentially no expected change in 2021
- The 2021 investment gain (i.e., actual versus assumed return) reflects actual 2021 OPERF returns of +20.05% compared to the assumed 6.90% return
- The increase from actual demographic experience different than assumed was primarily due to individual member salary increase experience during 2021 higher than the long-term assumption; this was partially offset by higher mortality experience than assumed during the year

Tier One/Tier Two Rate Pool Funded Status and UAL

Amounts Shown as of December 31, 2021

(\$ billions) <i>Totals may not add due to rounding</i>	SLGRP	School Districts
Tier One/Tier Two actuarial liability	\$ 47.2	\$ 31.9
Tier One/Tier Two assets (excluding side accounts)	<u>36.3</u>	<u>26.2</u>
Tier One/Tier Two UAL (excluding side accounts)	\$ 10.8	\$ 5.7
Tier One/Tier Two funded status (excluding side accounts)	77%	82%
Projected 2022 Tier One/Tier Two + OPSRP payroll	\$ 7.4	\$ 4.1
Assets to payroll ratio (excluding side accounts)	4.9x	6.3x
UAL to payroll ratio (excluding side accounts)	1.5x	1.4x
Side account assets	\$ 2.8	\$ 3.7
Tier One/Tier Two UAL (including side accounts)	\$ 8.0	\$ 2.0
Tier One/Tier Two funded status (including side accounts)	83%	94%

Comments on 2023 – 2025 Rates

- No single employer pays the system-wide average rate
 - Individual employer rates reflect either rate pool or independent employer-specific results, not the system-wide average
 - Relative proportion of Tier One/Tier Two vs. OPSRP payroll also varies by employer
- Employers in a rate pool do not pay the pool average rate
 - Actual rates reflect employer-specific side account rate offsets and/or any remaining SLGRP charges/offsets
 - SLGRP normal cost rates are specific to an employer's workforce mix of member tier and job classification
- Rates shown on the next several slides do not include the effects of:
 - Individual Account Plan (IAP) contributions
 - Rates for the RHIA & RHIPA retiree healthcare programs
 - Debt service payments on pension obligation bonds

School District Weighted Total* Pension-Only Rates

2009-2011
rates set prior
to economic
downturn

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

2013-2015
shown before
(dotted line)
and after (solid
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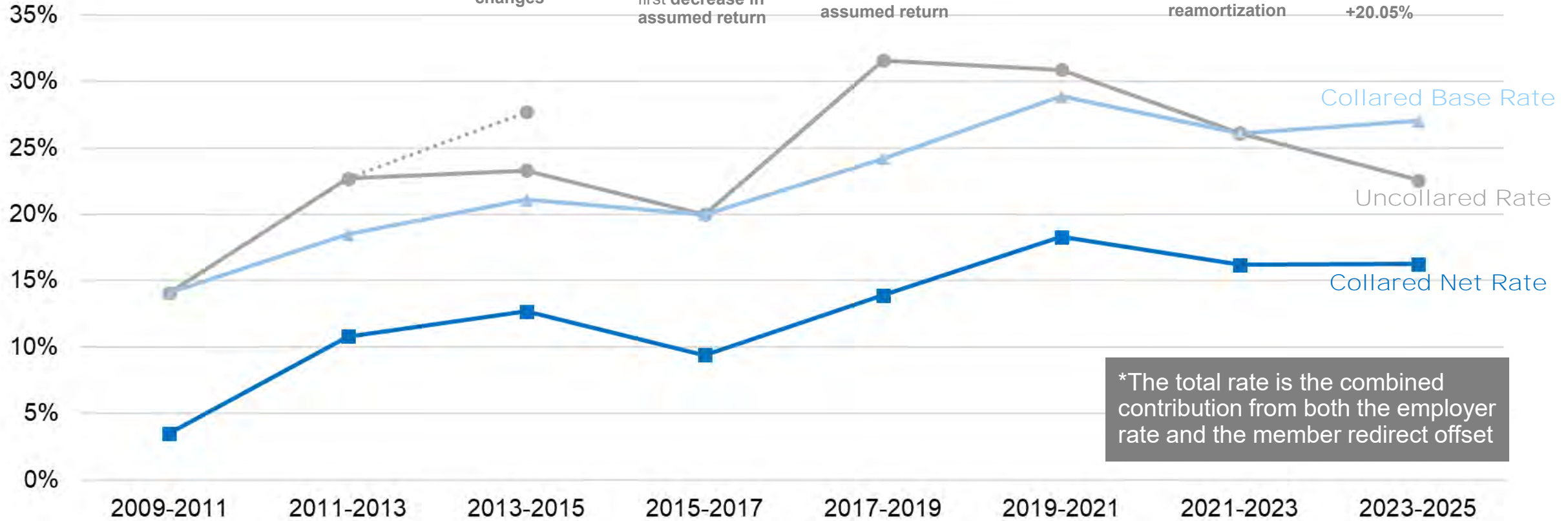
2015-2017
set **pre-Moro**
reflecting 2012
(+14.3%) & 2013
(+15.6%) returns,
first decrease in
assumed return

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

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

2021-2023
reflects
legislatively-
mandated Tier
One/Tier Two
UAL
reamortization

2023-2025 rates
reflect fourth
decrease in
assumed return, to
6.90% and 2021
actual return of
+20.05%



*The total rate is the combined contribution from both the employer rate and the member redirect offset

Assumed Return: 8.00%

8.00%

8.00%

7.75%

7.50%

7.20%

7.20%

6.90%

Uncollared Total Pension Rates – School Districts

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

	12/31/2019 Valuation 2021 – 2023 Final Rates			12/31/2021 Valuation 2023 – 2025 Final Rates		
	Payroll		Weighted Average ¹	Payroll		Weighted Average ¹
	Tier One / Tier Two	OPSRP		Tier One / Tier Two	OPSRP	
Total Normal Cost	13.45%	8.64%	10.35%	14.48%	9.89%	11.24%
Tier One/Tier Two UAL	14.09%	14.09%	14.09%	9.63%	9.63%	9.63%
OPSRP UAL	<u>1.69%</u>	<u>1.69%</u>	<u>1.69%</u>	<u>1.51%</u>	<u>1.51%</u>	<u>1.51%</u>
Uncollared Total Rate	29.23%	24.42%	26.13%	25.62%	21.03%	22.38%
Increase/(Decrease)				(3.61%)	(3.39%)	(3.75%)

¹ Weighting based on pool payroll levels (Tier One/Tier Two, OPSRP) as of the valuation date

The pool-average collared base and net rates for 2023-2025 are shown on subsequent slides

Rates shown on this slide are “total” rates and include the member EPSA contribution component of the normal cost

Effect of Rate Collar – School Districts

	12/31/2021 Valuation Uncollared Rates			12/31/2021 Valuation Collared Base Rates		
	Tier One / Tier Two	Payroll OPSRP	Weighted Average ¹	Tier One / Tier Two	Payroll OPSRP	Weighted Average ¹
Total Normal Cost	14.48%	9.89%	11.24%	14.48%	9.89%	11.24%
Tier One/Tier Two UAL	9.63%	9.63%	9.63%	14.10%	14.10%	14.10% ²
OPSRP UAL	1.51%	1.51%	1.51%	1.69%	1.69%	1.69%
Total Rate	25.62%	21.03%	22.38%	30.27%	25.68%	27.03%
Effect of Rate Collar				4.65%	4.65%	4.65%

¹ Weighting based on pool payroll levels (Tier One/Tier Two, OPSRP) as of the valuation date

² Includes 0.01% of payroll increase for Multnomah Fire District #10 UAL, which is not subject to rate collar

Funded status of School District Pool and OPSRP are both below 87%, so rate collar does not allow UAL Rates to decrease from current levels

Collared Total Pension Base Rates – School Districts

Excludes Retiree Health Care & IAP Contributions, Side Account Offsets

	12/31/2019 Valuation 2021 – 2023 Final Rates			12/31/2021 Valuation 2023 – 2025 Final Rates		
	Payroll			Payroll		
	Tier One / Tier Two	OPSRP	Weighted Average ¹	Tier One / Tier Two	OPSRP	Weighted Average ¹
Uncollared Total Rate	29.23%	24.42%	26.13%	25.62%	21.03%	22.38%
Effect of Rate Collar	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>4.65%</u>	<u>4.65%</u>	<u>4.65%</u>
Collared Total Base Rate	29.23%	24.42%	26.13%	30.27%	25.68%	27.03%
Increase/(Decrease)				1.04%	1.26%	0.90%

¹ Weighting based on pool payroll levels (Tier One/Tier Two, OPSRP) as of the valuation date

The 2023 – 2025 collared total base rates increased due to the combined effects of the reduction in the assumed return from 7.20% to 6.90% and the rate collar’s restriction on collared UAL rate decreases prior to satisfaction of funded status thresholds

The increase in the 2023 – 2025 collared total base rates was less than shown in the 12/31/2020 advisory valuation due to the investment gain from actual returns during 2021

Rates shown on this slide are “total” rates and include the member EPSA contribution

Collared Employer Pension Rates – School Districts

Excludes Retiree Health Care & IAP Contributions

	12/31/2019 ¹ Valuation 2021 – 2023 Final Rates			12/31/2021 ¹ Valuation 2023 – 2025 Final Rates		
	Tier One / Tier Two	Payroll OPSRP	Weighted Average ²	Tier One / Tier Two	Payroll OPSRP	Weighted Average ²
Collared Total Base Rate	29.23%	24.42%	26.13%	30.27%	25.68%	27.03%
Member Redirect Offset	<u>(2.45%)</u>	<u>(0.70%)</u>	<u>(1.25%)</u>	<u>(2.40%)</u>	<u>(0.65%)</u>	<u>(1.10%)</u>
Collared Base Employer Rate	26.78%	23.72%	24.88%	27.87%	25.03%	25.93%
Side Account Rate (Offset)	<u>(9.93%)</u>	<u>(9.93%)</u>	<u>(9.93%)</u>	<u>(10.77%)</u>	<u>(10.77%)</u>	<u>(10.77%)</u>
Collared Net Employer Rate	16.85%	13.79%	14.95%	17.10%	14.26%	15.16%
Increase/(Decrease)				0.25%	0.47%	0.21%

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

² Weighting based on pool payroll levels (Tier One/Tier Two, OPSRP) as of the valuation date, OPSRP's payroll weighting increased between valuation dates

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

Weighted-average net employer rates increased less than collared base employer rates, due to an increase in the average side account offset as an outcome of strong actual returns during 2021 and new side account deposits

School Districts Rate Summary

Weighted Average Total Rates (Tier One/Tier Two and OPSRP)

	Final 2021 - 2023	Final 2023 - 2025	Increase/ (Decrease)
Uncollared Total Base Rate	26.13%	22.38%	(3.75%)
Collared Total Base Rate	26.13%	27.03%	0.90%
Collared Base Employer Rate	24.88%	25.93%	1.05%
Collared Net Employer Rate	14.95%	15.16%	0.21%

- The uncollared total base rate decrease was primarily due to investment gains, partially offset by the reduction in the assumed return from 7.20% to 6.90%
- The collared total base rate for School Districts is greater than the uncollared total base rate because the collar does not allow the UAL rate to decrease when the rate pool funded status excluding side accounts is less than 87%
- The collared base employer rate increase was larger than the increase in the collared total base rate due to the reduction in assumed member EPSA redirect contributions based on the provisions of HB 2906 and the continued increase in the percentage of actives that are in OPSRP

SLGRP Rate Summary

Weighted Average Total Rates (Tier One/Tier Two and OPSRP)

	Final 2021 - 2023	Final 2023 - 2025	Increase/ (Decrease)
Uncollared Total Base Rate	25.54%	23.89%	(1.65%)
Collared Total Base Rate	25.54%	26.41%	0.87%
Collared Base Employer Rate	24.29%	25.31%	1.02%
Collared Net Employer Rate	18.61%	19.51%	0.90%

- The uncollared total base rate decrease was primarily due to investment gains, partially offset by the reduction in the assumed return from 7.20% to 6.90%
- The collared total base rate for the SLGRP is greater than the uncollared total base rate because the collar does not allow the UAL rate to decrease when the rate pool funded status excluding side accounts is less than 87%
- The collared base employer rate increase was larger than the increase in the collared total base rate due to the reduction in assumed member EPSA redirect contributions based on the provisions of HB 2906 and the continued increase in the percentage of actives that are in OPSRP

System-Wide Rate Summary

Weighted Average Total Rates (Tier One/Tier Two and OPSRP)

	Final 2021 - 2023	Final 2023 - 2025	Increase/ (Decrease)
Uncollared Total Base Rate	25.91%	23.73%	(2.18%)
Collared Total Base Rate	25.82%	26.74%	0.92%
Collared Base Employer Rate	24.57%	25.64%	1.07%
Collared Net Employer Rate	17.93%	18.61%	0.68%

- System-wide rates are the payroll-weighted average of rates for School Districts, the SLGRP, and independent employers that do not pool their Tier One/Tier Two liability experience
- At a system-wide level, the uncollared total base rate of 23.73% is 3.01% of pay lower than the collared total base rate of 26.74%, reflecting that for most employers the rate collar prevents a decrease in the 2023-2025 UAL rate that would otherwise have occurred due to 2021 investment gains

Projected 2023-2025 Total (Employer + Member) Contributions

(\$ millions)	Projected 2021-23 Payroll*	(A) Projected 2021-23 Total Contribution	Projected 2023-25 Payroll*	(B) Projected 2023-25 Total Contribution	(B - A) Projected Total Contribution Increase / (Decrease)
State Agencies	\$ 7,820	\$ 1,560	\$ 8,360	\$ 1,740	\$ 180
School Districts	8,285	1,320	8,860	1,420	100
All Others	<u>9,270</u>	<u>1,900</u>	<u>9,910</u>	<u>2,115</u>	<u>215</u>
Total	\$25,375	\$ 4,780	\$27,130	\$ 5,275	\$ 495

- Collared net rates are used to project 2023-2025 contributions
- Last year's advisory valuation projected a total contribution increase of \$1,175 million between the 2021-23 and 2023-25 biennia, compared to a projected \$495 million increase in this valuation
- Projected 2021-23 contributions increased by \$85 million compared to prior estimate (based on the 12/31/2020 advisory valuation) as a result of a larger-than-expected increase in system payroll

* Assumes total payroll grows at 3.40% annually based on 12/31/2021 active member census. The collared net rate applied to this payroll reflects the projected change over time in payroll composition as new OPSRP members are hired to replace retiring Tier One/Tier Two members

Factors Driving the Projected Contribution Increase

- The projected \$0.5 billion 2023 - 2025 total contribution increase consists of:
 - \$0.2 billion due to system-wide average increase in collared net employer contribution rates
 - Primarily driven by the decrease in the assumed return from 7.2% to 6.9% and rate collar policy not allowing 2021 investment gains to reduce collared UAL Rates at the current funded status
 - Includes impact on average contribution rate of projected change over time in payroll distribution between Tier One/Tier Two and OPSRP
 - \$0.3 billion due to projected system payroll growth between 2021-2023 and 2023-2025
 - Assumed system payroll growth of 3.4% per year / 6.9% per biennium means the collared net employer rate increase is applied to a larger payroll base in non-inflation-adjusted dollars
 - Does not reflect projected change in payroll distribution between Tier One/Tier Two and OPSRP
- In 2023-2025, redirected member EPSA contributions will continue to pay a portion of total contribution rates
 - An estimate of this effect is shown on the next slide

Projected Split of 2023-2025 Total Contributions

(\$ millions)	Estimated 2021-23 Member Redirect Contributions*	Estimated 2023-25 Member Redirect Contributions*	Projected 2021-23 Employer Contribution	Projected 2023-25 Employer Contribution
State Agencies	\$ 90	\$ 85	\$ 1,470	\$ 1,655
School Districts	100	95	1,220	1,325
All Others	<u>110</u>	<u>105</u>	<u>1,790</u>	<u>2,010</u>
Total	\$ 300	\$ 285	\$ 4,480	\$ 4,990

* Reflects member redirect offset of 2.40% of payroll for Tier One and Tier Two, and 0.65% for OPSRP for 2023-25 (2.45% and 0.70% for 2021-23); the statutory 2.50% and 0.75% redirection levels were adjusted downward to estimate the anticipated effect of members below the statutory pay threshold who will not have contributions redirected

12/31/2021 Retiree Health Care Valuations

- Cumulative retiree health liabilities are less than 1% of the pension liability
- Two separate retiree health care benefit subsidies are valued:
 - RHIA provides a \$60 per month subsidy toward healthcare premiums for Medicare-eligible Tier One/Tier Two retirees
 - RHIPA provides Tier One/Tier Two state employees who retire prior to age 65 with an alternative to PEBB coverage until they reach Medicare eligibility
- OPSRP retirees are not eligible for either subsidy
- The combination of a shortened UAL amortization period and recent experience has improved both RHIA and RHIPA funded status to over 100%
- With the 2020 Experience Study, the Board adopted a new amortization policy for when these programs are over 100% funded
 - Amortizes the actuarial surplus over Tier One/Tier Two payroll using a rolling 20-year amortization, and allows the subsequent negative UAL rate to offset the normal cost, but not below a total contribution rate of 0.0%

12/31/2021 Retiree Health Care Valuations

UAL and 2023-25 Contribution Rates

(\$ millions)	RHIA		RHIPA*	
	12/31/2020	12/31/2021	12/31/2020	12/31/2021
Actuarial Liability	\$ 384	\$ 369	\$ 48	\$ 46
Assets	<u>660</u>	<u>763</u>	<u>64</u>	<u>83</u>
UAL	\$ (277)	\$ (394)	\$ (16)	\$ (37)
Funded Status	172%	207%	133%	180%
Normal Cost Rate (Tier One/Tier Two payroll only)	0.05%	0.04%	0.09%	0.09%
UAL Rate applied to Tier One/Tier Two payroll**	<u>(0.05%)</u>	<u>(0.04%)</u>	<u>(0.09%)</u>	<u>(0.09%)</u>
Total Rate	0.00%	0.00%	0.00%	0.00%

* State Agencies, OUS, and State Judiciary are the only employers who pay RHIPA rates

** UAL Rate applied to OPSRP payroll is limited to a minimum of 0.00%

Valuation Next Steps

- Between now and the September 30, 2022 meeting we will:
 - Prepare listings of employer-specific 2023-2025 contribution rates for adoption at the meeting
 - Issue system-wide December 31, 2021 actuarial valuation report
 - Prepare employer-specific rate-setting December 31, 2021 actuarial valuation reports
 - PERS to distribute to employers after the September meeting

Contribution Rate & Funded Status Projections

- In December, we will return with contribution rate and funded status projections based on this valuation
 - That analysis will use the latest year-to-date investment return information at the time the projections are made
- Projections will be developed using two types of models
 - Steady return
 - Straight lines reflecting steady future actual investment returns
 - Variable return
 - Probability distributions reflecting a wide variety of noisy scenarios for possible actual future investment returns
 - The modeling will include updates to the risk metrics we have used in projection studies conducted in previous years



Appendix

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Certification

This presentation summarizes key preliminary results of an actuarial valuation of the Oregon Public Employees Retirement System (“PERS” or “the System”) as of December 31, 2021, for the Plan Year ending December 31, 2021. The results are preliminary in nature and may not be relied upon to, for example, prepare the System’s Annual Comprehensive Financial Report. The reliance document will be the forthcoming formal December 31, 2021 System-Wide Actuarial Valuation Report.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System’s staff. 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 valuation 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.

All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System. The valuation results were developed using models intended for valuations that use standard actuarial techniques.

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. Due to the limited scope of our assignment, we did not perform an analysis of the potential range of future measurements. Our annual financial modeling presentation to the PERS Board should be referenced for additional analysis of the potential variation in future measurements. Our forthcoming December 31, 2021 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.

Actuarial computations presented in this report are for purposes of presenting advisory contribution rates consistent with the adopted funding policy the System. The computations prepared for other purposes may differ as disclosed in our report. The calculations in the enclosed report have been made on a basis consistent with our understanding of the System’s funding requirements and goals. The calculations in this report have been made on a basis consistent with our understanding of the plan provisions described in the appendix of this report. Determinations for purposes other than meeting these requirements may be significantly different from the results contained in this report. Accordingly, additional determinations may be needed for other purposes.

Certification

Milliman's work is prepared solely for the internal business use of the Oregon Public Employees Retirement System. 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. Milliman's consent to release its work product to any third party may be conditioned on the third party signing a Release, subject to the following exception(s):

- (a) The System may provide a copy of Milliman's work, in its entirety, to the System's professional service advisors who are subject to a duty of confidentiality and who agree to not use Milliman's work for any purpose other than to benefit the System.
- (b) The System may provide a copy of Milliman's work, in its entirety, to other governmental entities, as required by law.

No third-party recipient of Milliman's work product should rely upon Milliman's work product. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

The consultants who worked on this assignment are actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel. The 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 which are consistent with the principles prescribed by the Actuarial Standards Board and the Code of Professional Conduct and Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States of the American Academy of Actuaries. We are members of the American Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein. Assumptions related to the claims costs and healthcare trend (cost inflation) rates for the retiree healthcare program discussed in this report were determined by Milliman actuaries qualified in such matters.

Data Exhibits

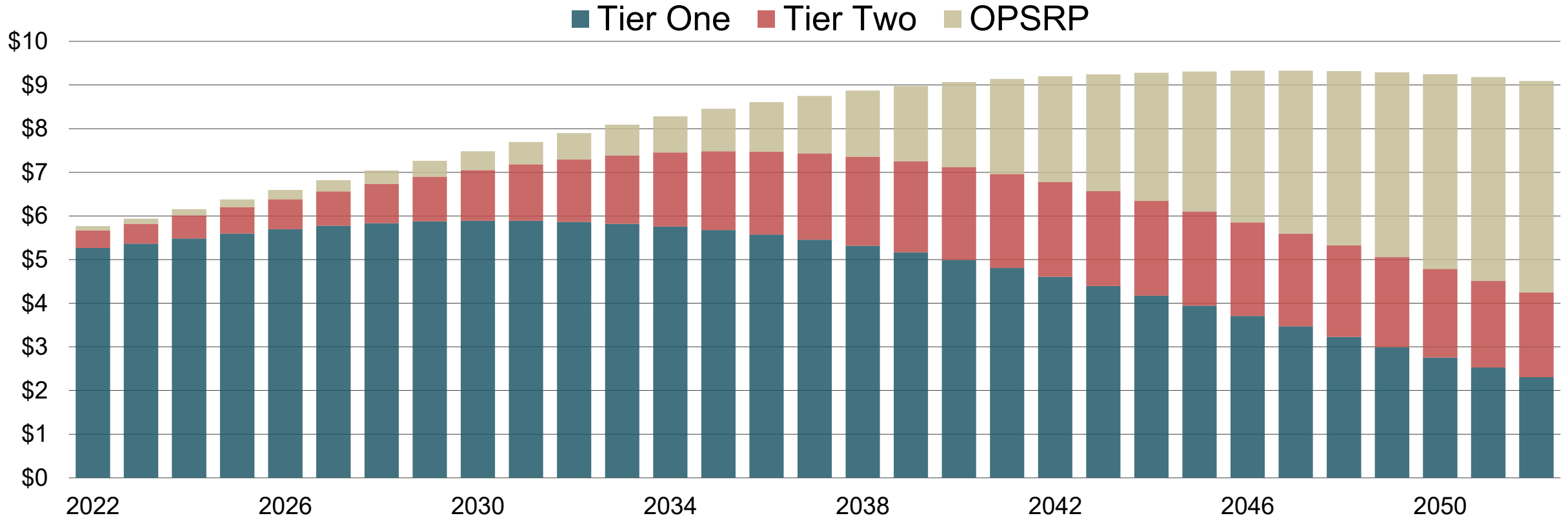
	December 31, 2021				December 31, 2020	
	Tier One	Tier Two	OPSRP	Total	Total	
Active Members						
Count	12,225	27,975	137,539	177,739	180,685	
Average Age	57.7	53.0	43.6	46.0	46.0	
Average Service	27.7	20.6	7.5	11.0	10.8	
Average prior year Covered Salary	\$ 91,245	\$ 85,536	\$ 62,523	\$ 68,120	\$ 63,741	
Inactive Members¹						
Count	9,517	13,546	27,678	50,741	48,180	
Average Age	61.8	55.5	48.4	52.8	53.0	
Average Monthly Benefit	\$ 2,323	\$ 965	\$ 487	\$ 959	\$ 972	
Retired Members and Beneficiaries¹						
Count	129,796	20,163	9,626	159,585	156,156	
Average Age	73.7	68.8	68.3	72.8	72.5	
Average Monthly Benefit	\$ 3,184	\$ 1,323	\$ 628	\$ 2,795	\$ 2,743	
Total Members	151,538	61,684	174,843	388,065	385,021	

¹ Inactive and Retiree counts are shown by lives within the system. In other words, a member is counted once for purposes of this exhibit, regardless of their service history for different rate pools. This contrasts with the method used to count inactive participants in some of the later exhibits.

Projected Benefit Payments by Tier for Members as of 12/31/2021

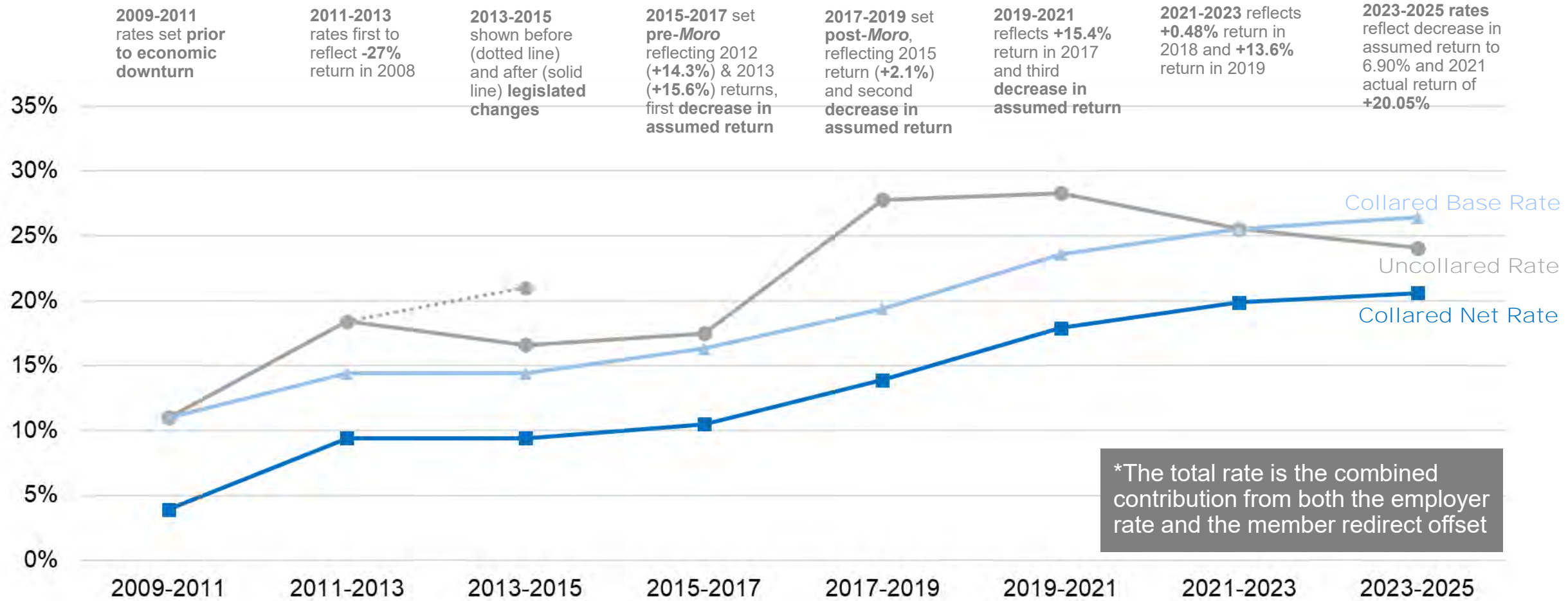
Does Not Include Projected Benefit Payments for Anyone Joining OPSRP After 12/31/2021

Tier One/Tier Two & OPSRP Expected Benefit Payments
by Tier as of 12/31/2021 (in \$ billions)



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SLGRP Weighted Total* Pension-Only Rates



Assumed Return: 8.00% 8.00% 8.00% 7.75% 7.50% 7.20% 7.20% 6.90%



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Funded Status and UAL by Program

Pension Funded Status (\$ billions) at 12/31/2021 <i>totals may not add due to rounding</i>			
	Tier One/ Tier Two	OPSRP	Combined
Actuarial liability	\$ 86.6	\$ 11.8	\$ 98.4
Assets (excluding side accounts)	<u>\$ 68.1</u>	<u>\$ 10.3</u>	<u>\$ 78.4</u>
UAL (excluding side accounts)	\$ 18.5	\$ 1.5	\$ 20.0
Funded status (excluding side accounts)	79%	87%	80%
Side account assets			<u>\$ 6.6</u>
UAL (including side accounts)			\$13.4
Funded status (including side accounts)			86%

Uncollared Total Pension Rates – SLGRP Average

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

	12/31/2019 Valuation 2021 – 2023 Final Rates			12/31/2021 Valuation 2023 – 2025 Final Rates		
	Payroll			Payroll		
	Tier One / Tier Two	OPSRP	Weighted Average ¹	Tier One / Tier Two	OPSRP	Weighted Average ¹
Normal Cost	15.41%	9.16%	11.18%	16.35%	10.47%	12.04%
Tier One/Tier Two UAL	12.67%	12.67%	12.67%	10.34%	10.34%	10.34%
OPSRP UAL	<u>1.69%</u>	<u>1.69%</u>	<u>1.69%</u>	<u>1.51%</u>	<u>1.51%</u>	<u>1.51%</u>
Uncollared Total Rate	29.77%	23.52%	25.54%	28.20%	22.32%	23.89%
Increase				(1.57%)	(1.20%)	(1.65%)

¹ Weighting based on pool payroll levels (Tier One/Tier Two, OPSRP) as of the valuation date.

The pool-average advisory collared net rates which employers would be charged are shown on subsequent slides
 Rates shown on this slide are “total” rates and include the member EPSA contribution component of the normal cost
 Rates vary, sometimes widely among employers in the SLGRP

Collared Total Pension Base Rates – SLGRP Average

Excludes Retiree Health Care & IAP Contributions, Side Account Offsets

	12/31/2019 ¹ Valuation 2021 – 2023 Final Rates			12/31/2021 ¹ Valuation 2023 – 2025 Final Rates		
	Payroll			Payroll		
	Tier One / Tier Two	OPSRP	Weighted Average ²	Tier One / Tier Two	OPSRP	Weighted Average ²
Uncollared Total Rate	29.77%	23.52%	25.54%	28.20%	22.32%	23.89%
Effect of Rate Collar	<u>0.00%</u>	<u>0.00%</u>	<u>0.00%</u>	<u>2.52%</u>	<u>2.52%</u>	<u>2.52%</u>
Collared Total Base Rate	29.77%	23.52%	25.54%	30.72%	24.84%	26.41%
Increase				0.95%	1.32%	0.87%

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

² Weighting based on pool payroll levels (Tier One/Tier Two, OPSRP) as of the valuation date

Rates shown on this slide are “total” rates and include the member EPSA contribution

Collared Employer Pension Rates – SLGRP Average

Excludes Retiree Health Care & IAP Contributions

	12/31/2019 ¹ Valuation 2021 – 2023 Final Rates			12/31/2021 ¹ Valuation 2023 – 2025 Final Rates		
	Tier One / Tier Two	Payroll		Tier One / Tier Two	Payroll	
		OPSRP	Weighted Average ²		OPSRP	Weighted Average ²
Collared Total Base Rate	29.77%	23.52%	25.54%	30.72%	24.84%	26.41%
Member Redirect Offset	<u>(2.45%)</u>	<u>(0.70%)</u>	<u>(1.25%)</u>	<u>(2.40%)</u>	<u>(0.65%)</u>	<u>(1.10%)</u>
Collared Base Employer Rate	27.32%	22.82%	24.29%	28.32%	24.19%	25.31%
Side Account (Offset)	(4.99%)	(4.99%)	(4.99%)	(5.14%)	(5.14%)	(5.14%)
SLGRP Charge/(Offset)	<u>(0.69%)</u>	<u>(0.69%)</u>	<u>(0.69%)</u>	<u>(0.66%)</u>	<u>(0.66%)</u>	<u>(0.66%)</u>
Collared Net Rate	21.64%	17.14%	18.61%	22.52%	18.39%	19.51%
Increase				0.88%	1.25%	0.90%

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

² Weighting based on pool payroll levels (Tier One/Tier Two, OPSRP) as of the valuation date

Rates vary by employer, sometimes significantly, as only some employers have side accounts and the SLGRP charge/(offset) varies by employer

Uncollared Total Pension Rates – System-Wide

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

	12/31/2019 Valuation 2021 – 2023 Final Rates			12/31/2021 Valuation 2023 – 2025 Final Rates		
	Tier One / Tier Two	Payroll OPSRP	Weighted Average ¹	Tier One / Tier Two	Payroll OPSRP	Weighted Average ¹
Normal Cost	14.92%	9.16%	11.09%	15.91%	10.47%	11.98%
Tier One/Tier Two UAL	13.13%	13.13%	13.13%	10.24%	10.24%	10.24%
OPSRP UAL	1.69%	1.69%	1.69%	1.51%	1.51%	1.51%
Uncollared Total Rate	29.74%	23.98%	25.91%	27.66%	22.22%	23.73%
Increase				(2.08%)	(1.76%)	(2.18%)

¹ Weighting based on system-wide payroll levels (Tier One/Tier Two, OPSRP) as of the valuation date.

Rates shown on this slide are “total” rates and include the member EPSA contribution component of the normal cost

Collared Total Pension Base Rates – System-Wide

Excludes Retiree Health Care & IAP Contributions, Side Account Offsets

	12/31/2019 Valuation 2021 – 2023 Final Rates			12/31/2021 Valuation 2023 – 2025 Final Rates		
	Tier One / Tier Two	Payroll OPSRP	Weighted Average ¹	Tier One / Tier Two	Payroll OPSRP	Weighted Average ¹
Uncollared Total Rate	29.74%	23.98%	25.91%	27.66%	22.22%	23.73%
Effect of Rate Collar	(0.09%)	(0.09%)	(0.09%)	3.01%	3.01%	3.01%
Collared Total Base Rate	29.65%	23.89%	25.82%	30.67%	25.23%	26.74%
Increase				1.02%	1.34%	0.92%

¹ Weighting based on system-wide payroll levels (Tier One/Tier Two, OPSRP) as of the valuation date.

Rates shown on this slide are “total” rates and include the member EPSA contribution

Collared Employer Pension Rates – System-Wide

Excludes Retiree Health Care & IAP Contributions

	12/31/2019 ¹ Valuation 2021 – 2023 Final Rates			12/31/2021 ¹ Valuation 2023 – 2025 Final Rates		
	Payroll			Payroll		
	Tier One / Tier Two	OPSRP	Weighted Average ²	Tier One / Tier Two	OPSRP	Weighted Average ²
Collared Base Rate	29.65%	23.89%	25.82%	30.67%	25.23%	26.74%
Member Redirect Offset	<u>(2.45%)</u>	<u>(0.70%)</u>	<u>(1.25%)</u>	<u>(2.40%)</u>	<u>(0.65%)</u>	<u>(1.10%)</u>
Collared Base Employer Rate	27.20%	23.19%	24.57%	28.27%	24.58%	25.64%
Side Account (Offset)	(6.24%)	(6.24%)	(6.24%)	(6.64%)	(6.64%)	(6.64%)
SLGRP Charge/(Offset)	(0.40%)	(0.40%)	(0.40%)	(0.39%)	(0.39%)	(0.39%)
Collared Net Rate	20.56%	16.55%	17.93%	21.24%	17.55%	18.61%
Increase				0.68%	1.00%	0.68%

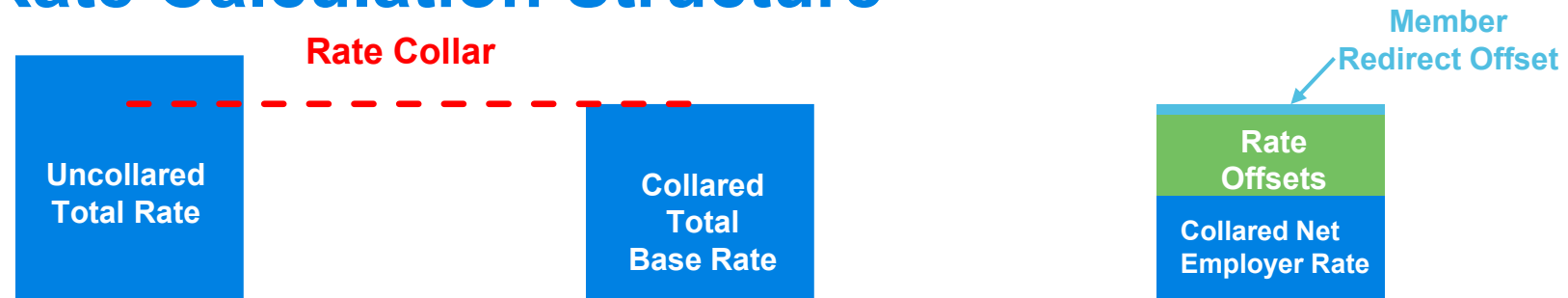
¹ For this exhibit, adjustments are assumed not to be limited due to an individual employer reaching a 0.00% contribution rate.

² Weighting based on system-wide payroll levels (Tier One/Tier Two, OPSRP) as of the valuation date

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

Changes in side account offsets are not collared

Overview of Rate Calculation Structure



- The ***uncollared total rate*** is the theoretical contribution rate to reach 100% funded status over a specified amortization period if:
 - Contributions at that rate started on the actuarial valuation date, and
 - Actual future experience mirrors the actuarial valuation's assumptions, and
 - The normal cost rate does not change in subsequent years
- The rate collar sets a biennium's ***collared total base rate***, limiting the base rate change for a single biennium when there is a large change in the uncollared rate
- ***Member redirect offset*** reflects estimated portion of collared total base rate paid by redirected member contributions
- Employers pay the ***collared net employer rate***, which reflects the member redirect offset and any rate offset adjustments from:
 - Side account rate offsets for employers with side accounts
 - SLGRP charges/offsets (e.g., Transition Liability/Surplus)

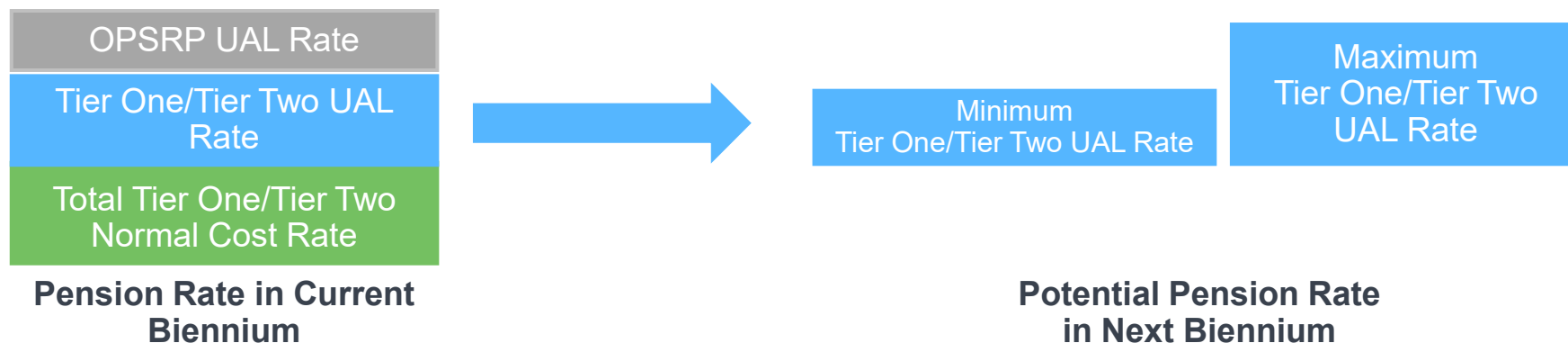
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Rate Collar Design

The rate collar structure was revised with the assumptions and methods adopted for the 2020 Experience Study

- Rate collar focuses on the biennium-to-biennium change in the UAL Rate component
 - Normal Cost Rate component is always paid in full and is not subject to a rate collar limitation
- The maximum biennium to biennium change in UAL Rate permitted by the rate collar is:
 - **SLGRP and School District Pools Tier One/Tier Two UAL Rates:** 3% of pay
 - **OPSRP UAL rate:** 1% of pay
 - **Tier One/Tier Two UAL Rates of Independent Employers:** greater of 4% of pay or 1/3rd of the difference between the collared and uncollared Tier One/Tier Two UAL Rates at the last rate-setting valuation
- UAL Rate is not allowed to decrease at all unless funded status excluding side accounts is at least 87%, and a full collar width decrease is not allowed unless funded status is at least 90%

Illustration of Rate Collar for Tier One/Tier Two UAL Rate



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Retirement System Risks

- Oregon PERS, like all defined benefit systems, is subject to various risks that will affect future system liabilities and contribution requirements, including:
 - **Investment risk:** the potential that investment returns will be different than assumed
 - **Demographic risks:** the potential that mortality experience, retirement behavior, or other demographic experience for the system membership will be different than assumed
 - **Contribution risk:** the potential that actual future contributions will be materially different than expected, for example if there are material changes in the system's covered payroll
- The results of an actuarial valuation are based on one set of reasonable assumptions, but it is almost certain that future experience will not exactly match the assumptions.
- Further discussion of system risks and historical information regarding system experience are shown in our annual actuarial valuations. In addition, our annual financial modeling presentation to the PERS Board illustrates future outcomes under a wide range of future scenarios reflecting variation in key risk factors.

Actuarial Basis

Data

We have based our calculation of the liabilities on the data supplied by the Oregon Public Employees Retirement System and summarized in the data exhibits on the preceding slides.

Assets as of December 31, 2021, were based on values provided by Oregon PERS reflecting the Board's earnings crediting decisions for 2021.

Methods / Policies

Actuarial Cost Method: Entry Age Normal, adopted effective December 31, 2012.

UAL Amortization: The UAL for OPSRP and Retiree Health Care as of December 31, 2007 were amortized as a level percentage of combined valuation payroll over a closed 16 year period for OPSRP and a closed 10 year period for Retiree Health Care. For the Tier One/Tier Two UAL, the amortization period was reset at 20 years as of December 31, 2013. Senate Bill 1049 was signed into law in June 2019 and requires a one-time re-amortization of Tier One/Tier Two UAL over a closed 22 year period at the December 31, 2019 rate-setting valuation which will set actuarially determined contribution rates for the 2021-2023 biennium. Gains and losses between subsequent odd-year valuations are amortized as a level percentage of combined valuation payroll over the amortization period (20 years for Tier One/Tier Two, 16 years for OPSRP, 10 years for Retiree Health Care) from the odd-year valuation in which they are first recognized.

For the Retiree Health Care programs (RHIA and RHIPA), beginning with the December 31, 2021 rate-setting valuation the amortization policy when a program is over 100% funded status will be to amortize the actuarial surplus over Tier One/Tier Two payroll using a rolling 20-year amortization basis. The resulting negative UAL Rate will offset the normal cost rate for the program, but not below 0.0%. If either program subsequently fell below 100%, the UAL would be amortized over combined payroll following the 10-year closed, layered amortization policy.

Actuarial Basis

Methods / Policies (cont'd)

Contribution rate stabilization method: The UAL Rate contribution rate component for a rate pool (e.g. Tier One/Tier Two SLGRP, Tier One/Tier Two School Districts, OPSRP) is confined to a collared range based on the prior biennium's collared UAL Rate contribution rate component (prior to consideration of side account offsets, SLGRP transition liability or surplus rates, or pre-SLGRP liability rate charges or offsets).

Collar Width: the rate pool's new UAL Rate contribution rate component will generally not increase or decrease from the prior biennium's collared UAL Rate contribution rate component by more than the following amount:

- Tier One/Tier Two SLGRP and Tier One/Tier Two School District Pool: 3% of payroll
- OPSRP: 1% of payroll
- Tier One/Tier Two rates for independent employers: greater of 4% of payroll or one-third of the difference between the collared and uncollared UAL Rate at the prior rate-setting valuation. In addition, the UAL Rate will not be allowed to be less than 0.00% of payroll for any Tier One/Tier Two independent employer with a funded status (excluding side accounts) less than 100%.

UAL Rate decrease restrictions: the UAL Rate for any rate pool will not be allowed to decrease if the pool's funded status is 87% (excluding side accounts) or lower; the allowable decrease will phase into the full collar width from 87% funded to 90% funded.

Expenses: System-wide administration expenses are assumed to be equal to \$59.0M. The assumed expenses are allocated between Tier One/Tier Two and OPSRP based on projected payroll and are added to the respective normal costs.

Actuarial Value of Assets: Equal to Market Value of Assets excluding Contingency and Tier One Rate Guarantee Reserves. The Tier One Rate Guarantee Reserve is not excluded from assets if it is negative (i.e. in deficit status). The Actuarial Value of Assets includes the value of Employee Pension Stability Accounts (EPSA).

Assumptions

Assumptions for valuation calculations are as described in the 2020 Experience Study for Oregon PERS and presented to the PERS Board in July 2021.

Provisions

Provisions valued are as detailed in the forthcoming 2021 Valuation Report.