

## **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  
Lake Oswego, Oregon 97035  
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[www.independentactuaries.com](http://www.independentactuaries.com)**



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

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**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.**



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**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.



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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 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.  
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**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.

<b>Plan Provision Under Comparison</b>	<b>City of Forest Grove</b>	<b>PERS Tier 1/Tier 2 (Full Formula)</b>
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



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<b>Plan Provision Under Comparison</b>	<b>City of Forest Grove</b>	<b>PERS Tier 1/Tier 2 (Full Formula)</b>
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**



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**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%



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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	<p>Normal Retirement Benefit credited with years of service as if the employee worked to age 55, commencing immediately.</p> <p>In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation.</p> <p>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.</p>

**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.



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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.



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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.



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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.



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**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.



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**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.
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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.
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Vacation Cash-Out	Unused vacation may be included in final average earnings.
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Normal Form of Benefit	60 months certain and life annuity.
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**Actuarial Equivalent**

Interest	8.0% pre- and post-retirement.
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Mortality	1984 Unisex Pension.
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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.
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**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



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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	<b>Duration</b>	<b>Annual Increase</b>
	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.	



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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:

	<b>Service Disability Rate</b>	<b>Ordinary Disability Rate</b>
<b>Age</b>		
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.



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

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**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.



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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 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



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**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.

<b>Benefit Group</b>	<b>Distinction</b>
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.

<b>Plan Provision Under Comparison</b>	<b>City of Portland (FPDR 2)</b>	<b>PERS Tier 1/Tier 2 (Full Formula)</b>
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



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<b>Plan Provision Under Comparison</b>	<b>City of Portland (FPDR 2)</b>	<b>PERS Tier 1/Tier 2 (Full Formula)</b>
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,



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**DECEMBER 31, 2020**

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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



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**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	<p>Normal Retirement Benefit credited with years of service as if the employee worked to age 55, commencing immediately.</p> <p>In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation.</p> <p>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.</p>

**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.



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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.



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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.



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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.



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**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%.
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**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.
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Benefits Earned After October, 2013	1.75%.
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## 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



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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	<b>Duration</b>	<b>Annual Increase</b>
	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.	



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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:

<b>Age</b>	<b>Service Disability Rate</b>	<b>Ordinary Disability Rate</b>
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.



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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%
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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**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**

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**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.



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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 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**  
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**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.

<b>PERS Benefit Tier Type</b>	<b>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</b>		<b>City of Seaside Benefits as a Percentage of PERS</b>
	<b>City of Seaside<sup>1</sup></b>	<b>PERS</b>	
Retirement – Tier 1	870%	705 %	123%
Disability – Tier 1	7%	3%	228 %
<b>Total – Tier 1</b>	<b>877%</b>	<b>708%</b>	<b>124%</b>
Retirement – Tier 2	723%	597%	121 %
Disability – Tier 2	12%	7%	171%
<b>Total – Tier 2</b>	<b>735%</b>	<b>604%</b>	<b>122%</b>
Retirement – OPSRP	566 %	377%	150%
Disability – OPSRP	19%	14%	134%
<b>Total – OPSRP</b>	<b>585%</b>	<b>391%</b>	<b>149%</b>

<sup>1</sup> 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.



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**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.

	<b>Tier 1</b>	<b>Tier 2</b>	<b>OPSRP</b>	<b>Total</b>
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  
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**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	<p>Normal Retirement Benefit credited with years of service as if the employee worked to age 55, commencing immediately.</p> <p>In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation.</p> <p>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.</p>

**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.



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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.



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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 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**

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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.



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

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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 SEASIDE  
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**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  
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**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	<p>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.</p> <p>In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation.</p>

**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  
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**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  
ORS 237.620 ETOB DETERMINATION REPORT  
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**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**  
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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	<b>Duration</b>	<b>Annual Increase</b>
	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.	



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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:

	<b>Service Disability Rate</b>	<b>Ordinary Disability Rate</b>
<b>Age</b>		
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**  
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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.



**CITY OF SEASIDE  
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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%.
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  
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**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**



**Five Centerpointe Dr., Suite 520  
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**CITY OF SPRINGFIELD  
ORS 237.620 ETOB DETERMINATION REPORT  
DECEMBER 31, 2020**

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**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**

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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 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.

<b>PERS Benefit Tier</b>	<b>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</b>		<b>City of Springfield Benefits as a Percentage of PERS</b>
	<b>City of Springfield<sup>1</sup></b>	<b>PERS</b>	
Retirement – Tier 1	1,102%	705%	156%
Disability – Tier 1	7%	3%	205%
<b>Total – Tier 1</b>	<b>1,108%</b>	<b>708%</b>	<b>156%</b>
Retirement – Tier 2	838%	597%	140%
Disability – Tier 2	9%	7%	134%
<b>Total – Tier 2</b>	<b>847%</b>	<b>604%</b>	<b>140%</b>
Retirement – OPSRP	626%	377%	166%
Disability – OPSRP	11%	14%	81%
<b>Total – OPSRP</b>	<b>637%</b>	<b>391%</b>	<b>163%</b>

<sup>1</sup> 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**

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**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.

	<b>Tier 1</b>	<b>Tier 2</b>	<b>OPSRP</b>	<b>Total</b>
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**

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**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**

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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	<p>Normal Retirement Benefit credited with years of service as if the employee worked to age 55, commencing immediately.</p> <p>In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation.</p> <p>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.</p>

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

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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.



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

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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.



**CITY OF SPRINGFIELD  
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 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**

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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.



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

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

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**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**

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

Pay (or Principal) Credits

<b>Period</b>	<b>Employer Contribution Account</b>	<b>Employer Additional Contribution or Pick-up Account</b>
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  
ORS 237.620 ETOB DETERMINATION REPORT  
DECEMBER 31, 2020**

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**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	<p>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".</p> <p>The monthly premium charged is \$595.38 for a retiree, and \$1,308.98 for a retiree and their spouse.</p>
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**

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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	<b>Duration</b>	<b>Annual Increase</b>
	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**

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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:

	<b>Service Disability Rate</b>	<b>Ordinary Disability Rate</b>
<b>Age</b>		
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.



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

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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%
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**

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**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**



**Five Centerpointe Dr., Suite 520  
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**CITY OF THE DALLES  
ORS 237.620 ETOB DETERMINATION REPORT  
DECEMBER 31, 2020**

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**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.



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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 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**  
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**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.

<b>PERS Benefit Tier Type</b>	<b>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</b>		<b>City of The Dalles Benefits as a Percentage of PERS</b>
	<b>City of The Dalles<sup>1</sup></b>	<b>PERS</b>	
Retirement – Tier 1	824%	705%	117%
Disability – Tier 1	10%	3%	317%
<b>Total – Tier 1</b>	<b>835%</b>	<b>708%</b>	<b>118%</b>
Retirement – Tier 2	657%	597%	110%
Disability – Tier 2	15%	7%	212%
<b>Total – Tier 2</b>	<b>671%</b>	<b>604%</b>	<b>111%</b>
Retirement – OPSRP	513%	377%	136%
Disability – OPSRP	19%	14%	136%
<b>Total – OPSRP</b>	<b>531%</b>	<b>391%</b>	<b>136%</b>

<sup>1</sup> 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.



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**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.

	<b>Tier 1</b>	<b>Tier 2</b>	<b>OPSRP</b>	<b>Total</b>
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**  
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**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	<p>Normal Retirement Benefit credited with years of service as if the employee worked to age 55, commencing immediately.</p> <p>In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation.</p> <p>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.</p>

**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.



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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.



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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.



**CITY OF THE DALLES**  
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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.



**CITY OF THE DALLES**  
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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.





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**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.



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**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.



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**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**  
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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	<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.	



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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

<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**  
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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%
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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**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%		



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**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**

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**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.**



**MORROW COUNTY  
ORS 237.620 ETOB DETERMINATION REPORT  
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**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.



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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 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**  
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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.

<b>Benefit Group</b>	<b>Distinction</b>
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.

<b>Plan Provision Under Comparison</b>	<b>Morrow County (Non-Bargaining Employees hired after 12/31/2004)</b>	<b>PERS Tier 1/Tier 2 (Full Formula)</b>
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





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<b>Plan Provision Under Comparison</b>	<b>Morrow County (Non-Bargaining Employees hired after 12/31/2004)</b>	<b>PERS Tier 1/Tier 2 (Full Formula)</b>
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  
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**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)	<b>Years</b>	<b>Rate</b>
	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	<p>Normal Retirement Benefit credited with years of service as if the employee worked to age 55, commencing immediately.</p> <p>In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation.</p> <p>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.</p>

**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.



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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.



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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.



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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.
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Plan	Total Compensation excluding overtime and bonuses.
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Average Monthly	Plan compensation averaged over the three consecutive plan years out of the last ten years that produce the highest average.
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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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Unused Sick Leave	50% of unused sick leave is paid as a lump sum.
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Normal Form of Benefit	Cash refund annuity.
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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.
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Actuarial Equivalent

Interest	7.0% pre- and post-retirement.
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Mortality	Retirement Plan 2000 Mortality Table, blend of 50% Male Combined Healthy and 50% Female Combined Healthy.
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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.
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**MORROW COUNTY  
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**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	<b>Duration</b>	<b>Annual Increase</b>
	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:

	<b>Service Disability Rate</b>	<b>Ordinary Disability Rate</b>
<b>Age</b>		
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.





**MORROW COUNTY  
ORS 237.620 ETOB DETERMINATION REPORT  
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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.



**MORROW COUNTY**  
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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**



**Five Centerpointe Dr., Suite 520  
Lake Oswego, Oregon 97035  
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**TILLAMOOK COUNTY**  
**ORS 237.620 ETOB DETERMINATION REPORT**  
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**TILLAMOOK COUNTY  
ORS 237.620 ETOB DETERMINATION REPORT  
DECEMBER 31, 2020**

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**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.**



**TILLAMOOK COUNTY**  
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**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.



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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



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**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.

<b>Plan Provision Under Comparison</b>	<b>Tillamook County</b>	<b>PERS Tier 2 (Full Formula)</b>
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.





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<b>Plan Provision Under Comparison</b>	<b>Tillamook County</b>	<b>PERS Tier 2 (Full Formula)</b>
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



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

Disability Benefit

Eligibility	10 years of service (immediate if disability is service related).
Benefit	<p>Normal Retirement Benefit credited with years of service as if the employee worked to age 55, commencing immediately.</p> <p>In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation.</p> <p>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.</p>

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.



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**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.



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**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.



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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.



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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.





**TILLAMOOK 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.



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**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.



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**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.
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**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.



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**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	<p>The County pays \$733 of the premium for medical insurance for the retiree until Medicare eligibility.</p> <p>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.</p>



## ACTUARIAL ASSUMPTIONS



**TILLAMOOK 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	<b>Duration</b>	<b>Annual Increase</b>
	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**  
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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:

<b>Age</b>	<b>Service Disability Rate</b>	<b>Ordinary Disability Rate</b>
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.



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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%
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.



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**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**



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

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**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  
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DECEMBER 31, 2020**

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**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.



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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 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





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**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.

<b>PERS Benefit Tier Type</b>	<b>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</b>		<b>Union County (Certified Employees) Benefits as a Percentage of PERS</b>
	<b>Union County (Certified Employees)<sup>1</sup></b>	<b>PERS</b>	
Retirement – Tier 1	847%	705%	120%
Disability – Tier 1	10%	3%	311%
<b>Total – Tier 1</b>	<b>858%</b>	<b>708%</b>	<b>121%</b>
Retirement – Tier 2	700%	597%	117%
Disability – Tier 2	13%	7%	188%
<b>Total – Tier 2</b>	<b>713%</b>	<b>604%</b>	<b>118%</b>
Retirement – OPSRP	550%	377%	146%
Disability – OPSRP	16%	14%	112%
<b>Total – OPSRP</b>	<b>565%</b>	<b>391%</b>	<b>144%</b>

<sup>1</sup> 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.



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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) <sup>1</sup>	PERS	
Retirement – OPSRP	451%	377%	119%
Disability – OPSRP	14%	14%	103%
<b>Total – OPSRP</b>	<b>465%</b>	<b>391%</b>	<b>119%</b>

<sup>1</sup> 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.



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**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.

	<b>Tier 1</b>	<b>Tier 2</b>	<b>OPSRP</b>	<b>Total</b>
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



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**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)	<b>Years</b>	<b>Rate</b>
	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	<p>Normal Retirement Benefit credited with years of service as if the employee worked to age 55, commencing immediately.</p> <p>In lieu of the above, in case of service-related disability an election can be made to receive 50% of final monthly compensation.</p> <p>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.</p>

**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.



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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.





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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.



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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.



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**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**

<b>Period</b>	<b>Contribution rate</b>
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



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**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.



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**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 <sup>2</sup> / <sub>3</sub> %, 75%, 100%).



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**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





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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	<b>Duration</b>	<b>Annual Increase</b>
	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.	



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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:

	<b>Service Disability Rate</b>	<b>Ordinary Disability Rate</b>
<b>Age</b>		
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.



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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%
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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**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**

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**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  
Main: 503.520.0848  
[www.independentactuaries.com](http://www.independentactuaries.com)**



**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**

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**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.**



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

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**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**

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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 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**

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**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.

<b>PERS Benefit Tier Type</b>	<b>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</b>		<b>Wheeler County Benefits as a Percentage of PERS</b>
	<b>Wheeler County<sup>1</sup></b>	<b>PERS</b>	
Retirement – OPSRP	478%	377%	126%
Disability – OPSRP	17%	14%	126%
<b>Total – OPSRP</b>	<b>493%</b>	<b>391%</b>	<b>126%</b>

<sup>1</sup> 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**

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**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.

	<b>OPSRP</b>
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**

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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.



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

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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.





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

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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.



**WHEELER COUNTY  
ORS 237.620 ETOB DETERMINATION REPORT  
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**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**

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**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  
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**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**

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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	<b>Duration</b>	<b>Annual Increase</b>
	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  
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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:

	<b>Service Disability Rate</b>	<b>Ordinary Disability Rate</b>
<b>Age</b>		
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**  
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Retirement Rates

Age	OPSRP		
	Years of Service		
	<u>&lt; 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.





**WHEELER COUNTY  
ORS 237.620 ETOB DETERMINATION REPORT  
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**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**

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**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**

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**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.