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March 14, 2023

Jake Winship  
Actuarial Manager  
Oregon PERS

**Re: 2023 IRC 415 Limit Factor Tables for Tier One/Tier Two**

Dear Jake:

As requested, we have prepared information to assist PERS in testing member benefits for compliance with IRC Section 415 for benefit limitation year 2023. This letter provides age-adjusted Section 415 limits for 2023, information needed for reflecting after-tax member contributions in the testing, and actuarial tables for adjusting certain member-selected optional forms of benefits into a single life annuity form for IRC Section 415 testing purposes for the 2023 benefit limitation year.

**Note that the tables provided with this letter are intended for use with Tier One and Tier Two members only. The interpretations described below are specific to the benefit provisions, compensation limitations and optional form adjustment factors applicable to Tier One/Tier Two members and may not hold for OPSRP members. Furthermore, we understand the likelihood of OPSRP members triggering 415 limit issues is very low, and PERS neither requires nor requests separate factors for OPSRP at this time.**

The factors included with this letter are:

- Table 1: Age-adjusted IRC 415(b) limit – Not Qualified Police & Fire, No Late Retirement Increase
- Table 2: Age-adjusted IRC 415(b) limit – Qualified Police & Fire, No Late Retirement Increase
- Table 3: Age-adjusted IRC 415(b) limit – Not Qualified Police & Fire, Late Retirement Increase
- Table 4: Age-adjusted IRC 415(b) limit – Qualified Police & Fire, Late Retirement Increase
- Table 5: Conversion factors for accumulated after-tax employee contributions
- Table 6: Refund Annuity (Option 0) to Single Life Annuity (Option 1)
- Table 7: 15-Year Certain and Life Annuity (Option 4) to Single Life Annuity (Option 1)
- Table 8: 100% Joint and Survivor Annuity (Option 2) to Single Life Annuity (Option 1)
- Table 9: 50% Joint and Survivor Annuity (Option 3) to Single Life Annuity (Option 1)
- Table 10: 100% Joint and Survivor Annuity with Pop-up (Option 2a) Feature to Single Life Annuity (Option 1)
- Table 11: 50% Joint and Survivor Annuity with Pop-up (Option 3a) Feature to Single Life Annuity (Option 1)

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## BACKGROUND

Our letter dated March 21, 2022 provided factor tables for preliminary testing of member benefits for limitation year 2022. We understand that the 415 limit testing does not reduce the actual benefit paid to any PERS member, but is necessary to identify situations where part of a benefit should be paid from the Benefit Equalization Fund (BEF) rather than the Oregon PERS Fund.

This letter provides updated factor tables for use with limitation year 2023. We understand PERS intends to use the attached factor tables to conduct an initial screening of current retirees to determine members near the 415 limit for a given benefit limitation year. With the exception of members who elected a Qualified Joint & Survivor Annuity (QJSA) form with the member's spouse as the contingent annuitant (as discussed in the next section), members who have elected a form of benefit **other** than the single life annuity (Option 1) should have their benefit converted to the actuarially equivalent single life annuity amount for comparison with the applicable 415 limit. The identified group will then be sent to Milliman for more refined testing.

The factors contained in the attached tables were developed on the basis described more fully below, which resulted from input provided by PERS and the guidance PERS received from Ice Miller regarding interpretation of 415 regulations as applied to Oregon PERS.

### TABLES 1 -4: AGE-ADJUSTED IRC 415(B) LIMITS

In accordance with IRS Regulation 1.415(b)-1, the published annual dollar limit under 415(b)(1)(A) must be adjusted for annuity starting dates prior to age 62 or after age 65.

For ages prior to age 62, the age-adjusted limit is the smaller of:

- 1.) The actuarial equivalent of the age 62 limit, calculated using 5% interest and the IRS applicable mortality table under IRC 417(e).
- 2.) The age 62 limit multiplied by the plan's implied reduction factor. The implied reduction factor is the ratio of the plan's Option 1 benefit (before reflecting 415) at the benefit starting age to the Option 1 benefit (before reflecting 415) at age 62.

For calculation of the plan's implied reduction factor, we understand growth in a member's account balance between the benefit starting date and age 62 is ignored (which would affect a Money Match calculation). Under this interpretation, for Tier One and Tier Two members it was determined that the first approach above produces the smaller limit, so that is what is reflected in Tables 1 through 4. The applicable mortality table under IRC 417(e) is updated annually, so amounts in the attached table reflect the 2023 applicable mortality table.

The reduction in the 415(b) limit for ages prior to 62 does not apply to members who are considered "qualified participants" under 415(b)(2)(G). For PERS, we understand the relevant type of qualified participant is a member with 15 or more years of service as a full-time employee of a police department or fire department that meets criteria specified in the Code. As

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a result, Tables 2 and 4 do not reduce the 415(b) limit prior to age 62 and are intended to apply to qualified police & fire members who satisfy the 415(b)(2)(G) definition.

For ages after 65 the age-adjusted limit is the smaller of:

- 1.) The actuarial equivalent of the age 65 limit, calculated using 5% interest and the IRS applicable mortality table under IRC 417(e).
- 2.) The age 65 limit multiplied by the plan's implied adjustment factor. The implied adjustment factor is the ratio of the plan's Option 1 benefit (before reflecting 415) at the benefit starting age to the Option 1 benefit (before reflecting 415) at age 65.

For a member whose benefit is determined under Full Formula, we understand there is considered to be no late retirement increase factor, and so the implied adjustment factor is 1.0. As a result, the 415(b) limit is not increased for ages beyond 65. Tables 1 and 2 are meant for use in this situation.

For a member whose benefit is determined under Money Match, we understand the implied adjustment factor is based on the change in Option 1 factors between age 65 and the benefit commencement age. However, future growth in the account balance subsequent to age 65 is not reflected in the adjustment ratio. Tables 3 and 4 reflect this increase in the limit for ages after 65.

When determining an actuarial equivalent limit under IRS prescribed assumptions (5% and 417(e) mortality) for comparison to plan factors, the regulations provide that adjustments for pre-retirement death apply if a forfeiture occurs if the member dies prior to retirement. For Oregon PERS, we understand that the extent of forfeiture – if any – that occurs on death may vary based on individual circumstances, including size of the member's account balance and whether Full Formula or Money Match provides a greater benefit.

As directed by PERS after discussions with PERS staff, we have reflected a mortality adjustment in developing the pre-62 limits in Tables 1 and 3. We understand PERS will apply these values even to participants where it would be possible to demonstrate no forfeiture occurs upon pre-retirement death. Because reflecting a mortality adjustment in the pre-62 age-adjusted limit produces a lower limit than if no mortality adjustment is included, this treatment is considered conservative in the sense of making it more likely a benefit is judged to exceed the limit. The preamble to the current 415 regulations permits plan sponsors to follow this approach and apply a mortality adjustment even when no forfeiture occurs.

Note that the post-65 age-adjusted limit is determined by the plan factors, which produce a lower limit than would be developed on the IRS actuarial equivalent basis regardless of the mortality treatment.

In accordance with OAR 459-005-0535(3)(a) and our understanding that the PERS COLA qualifies for the exception for certain automatic benefit increase features under the 415 regulations, the limits do not reflect any adjustment for post-retirement cost-of-living increases.

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## TREATMENT OF AFTER-TAX EMPLOYEE CONTRIBUTIONS

The 415 regulations specify that the annual benefit tested against the adjusted limit excludes benefits attributable to certain employee contributions. We understand for Oregon PERS, this means benefits attributable to after-tax employee contributions should be excluded from the benefit tested. The regulations specify the basis on which such contributions will be accumulated and converted into an equivalent benefit to deduct from the gross benefit. The interest rates described below and the factors in Table 5 provide the information needed to perform this step.

## INTEREST RATES FOR ACCUMULATING AFTER-TAX EMPLOYEE CONTRIBUTIONS

The first step in determining the benefit offset for employee contributions under 415 is to accumulate the contributions to the annuity starting date using rates specified in IRC 411(c). These rates are:

- Prior to January 1, 1976: use the rate specified in the plan document. We understand for Oregon PERS, this means 8%.
- From January 1, 1976 to December 31, 1987: use 5%
- From January 1, 1988 to the annuity starting date: use 120% of the mid-term applicable federal rate published for the first month of a plan year
- From the annuity starting date to normal retirement date (if applicable): applicable rates under IRC 417(e)

The rates for years through 2022 were provided in the relevant prior letters. The rate for 2023 is 4.62%. We understand PERS will use these rates to determine the accumulated after-tax contribution.

## TABLE 5: CONVERSION FACTORS FOR ACCUMULATED AFTER-TAX EMPLOYEE CONTRIBUTIONS

Once the accumulated value of after-tax contributions has been determined in accordance with IRC 411(c), the second step is to convert the value into a single life annuity using the applicable IRC 417(e) interest rates and applicable mortality table for the limitation year. Table 5 provides factors on this basis using the 417(e) assumptions applicable to limitation year 2023. In determining applicable interest rates we have used the November prior to the limitation year for the look-back month, as discussed. The factors in the table are shown as the amount of monthly straight life annuity per \$1,000 of accumulated after-tax employee contributions.

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## CONVERTING TO SINGLE LIFE ANNUITY FOR 415 TESTING

The factors provided in the Tables 6 through 11 are intended for use in performing the adjustment to a single life annuity for benefit forms to which section 417(e)(3) does not apply, as described in 1.415(b)-1(c)(2). According to the regulation, the actuarially equivalent single life annuity benefit to be used for testing is the greater of:

- 1) The annual amount of the single life annuity payable under the plan, or
- 2) The annual amount obtained by converting the benefit payable to the participant to a single life annuity using 5% interest and the IRS required mortality table under 1.417(e)-1(d)(2).

**The factors provided in the tables accompanying this letter can be used to determine the second item above. PERS will need to compare the resulting amount to the actual single life annuity (Option 1 benefit) payable to the member at the annuity starting date, and use the greater number for 415 testing.**

As directed by PERS, we have used a COLA of 1.80% where noted in developing these factors, which is the same assumption used to develop the actuarial equivalence factors effective January 1, 2022. This is a rounded estimate of the benefits-weighted average COLA for recent new retirees and reflects a blend of the 2.00% COLA provided for service prior to October 2013 and the lower 1.25%/0.15% COLA provided for later service. Over time the average COLA is expected to decrease as post-October 2013 service becomes a large share of total service for new retirees.

For members who have elected a Qualified Joint and Survivor Annuity (QJSA) where the contingent annuitant is a surviving spouse, no conversion is necessary. Conversion is required for:

- Members who elected a non-QJSA form of benefit (whether or not the beneficiary is a spouse), and
- Members who elected a contingent annuitant who is not a surviving spouse.

### TABLE 6: CONVERSION FROM REFUND ANNUITY

Members have the option of electing a refund annuity (Option 0). The actuarial equivalency factors provided in Table 6 should be used to convert the Option 0 optional form of benefit to the single life annuity (Option 1) for comparison to the applicable 415 limit.

**Note that the factors provided in these tables should only be applied to the account balance-based portion of the member's benefit.** For a member whose final benefit was determined by the Money Match calculation, the factors can be applied to the total benefit. However, for a member for whom the Full Formula calculation determined the final benefit, the relevant factor should only be applied to the appropriate account-based portion of the final benefit. An example is shown below to illustrate.

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Assume a 58 year-old member has a final monthly benefit determined by the Full Formula calculation of \$14,000 as an Option 0 refund annuity. If this member has a \$75,000 member account at retirement, we understand the benefit can be deconstructed (using 2023 actuarial equivalent Option 0 actuarial equivalency factors) into two parts:

$$\text{Member account-related benefit: } \$75,000/\$1,000 \times 6.54 = \$490.50$$

$$\text{Non-account-related benefit: } \$14,000 - \$490.50 = \$13,509.50$$

In this example, 6.54 is the relevant age 58 Option 0 factor per \$1,000 of account balance from the January 1, 2022 actuarial equivalency tables.

The age 58 factor from the attached Table 6 is 1.057. Therefore, the conversion to a single life annuity for 415 testing would be:

$$\$490.50 \times 1.057 + \$13,509.50 = \$14,027.96$$

The monthly amount of \$14,027.96 is then compared to the benefit that would have been payable to this member as a single life annuity (Option 1) under the plan terms. The **larger** of these two amounts should be annualized and tested against the appropriate age-adjusted 415 limit.

Factors are provided for retirees between the ages of 15 and 100. If a member age falls outside of this range, please contact us so that we can provide the correct conversion factor.

#### **TABLE 7: CONVERSION FROM 15-YEAR CERTAIN AND LIFE ANNUITY**

Members have the option of electing a 15-year certain & life annuity (Option 4). The actuarial equivalency factors provided in these tables should be used to convert the optional form of benefit to the single life annuity (Option 1) for comparison to the applicable age-adjusted 415 limit. Factors are provided for retirees between the ages of 15 and 100. If a member age falls outside of this range, please contact us so that we can provide the correct conversion factor.

#### **TABLES 8 - 11: CONVERSION FROM JOINT & SURVIVOR FORMS**

Members also have the option of electing an optional form of benefit that provides a survivor benefit equal to 50 percent or 100 percent of the member's benefit, with or without a pop-up feature. The actuarial equivalency factors provided in these tables should be used to convert the optional form of benefit to the single life annuity (Option 1) for comparison to the applicable age-adjusted 415 limit. Factors are provided for retirees between the ages of 45 and 84 with beneficiaries up to 20 years younger or older than the retiree. If a member/beneficiary age combination falls outside of this range, please contact us so that we can provide the correct conversion factor.

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These tables are structured by age difference between retiree and beneficiary. If you would like the tables in a different format, please let us know.

## **CALCULATION BASIS**

The factors accompanying this letter were developed for the purpose of assisting Oregon PERS to complete initial testing of member benefits against 415 limits for limitation year 2023. They were developed based on our understanding of federal regulations and interpretations made by Oregon PERS and Ice Miller regarding applying the regulations to the system, as described above.

The results contained in this letter were developed using models that use standard actuarial techniques.

Where the age-adjusted 415 limit is increased beyond age 65 to reflect plan factors (Table 3 and 4), the increase is based on Option 1 factors in effect for the relevant limitation year. The development of such factors is described in the letters accompanying the relevant actuarial equivalency factors.

Our analysis and conclusions are based on our understanding of the request and the interpretations, methods and assumptions described above. Differences in these factors may produce different results.

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The consultants who worked on this assignment are retirement actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

The signing actuaries are independent of the plan sponsor. We are not aware of any relationship that would impair the objectivity of our work.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the principles prescribed by the Actuarial Standards Board and the Code of Professional Conduct and Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States published by the American Academy of Actuaries. We are members of the American

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Jake Winship  
March 14, 2023  
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Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

If you have any questions about the attached tables or need any additional information, please let us know.

Sincerely,

  
Scott Preppernau, FSA, EA, MAAA  
Principal and Consulting Actuary

SDP:plk  
encl.

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**Oregon Public Employees Retirement System**  
IRC 415 for Limitation Year 2023

Member Category:	<u>Table 1:</u>	<u>Table 2:</u>	<u>Table 3:</u>	<u>Table 4:</u>	<u>Table 5:</u>
	NOT Considered Qualified Police & Fire Under IRC 415(b)(2)(G)	Qualified Police & Fire Under IRC 415(b)(2)(G)	NOT Considered Qualified Police & Fire Under IRC 415(b)(2)(G)	Qualified Police & Fire Under IRC 415(b)(2)(G)	Amount of Monthly Straight Life Annuity (Option 1) per \$1,000 of After-Tax Employee Contributions
	<i>Limits Reflect No Actuarial Increase for Late Retirement</i>		<i>Limits Reflect Actuarial Increase for Late Retirement</i>		
Age					
45	88,125	265,000	88,125	265,000	5.15
46	93,434	265,000	93,434	265,000	5.19
47	99,118	265,000	99,118	265,000	5.24
48	105,210	265,000	105,210	265,000	5.29
49	111,745	265,000	111,745	265,000	5.34
50	118,766	265,000	118,766	265,000	5.40
51	126,317	265,000	126,317	265,000	5.46
52	134,450	265,000	134,450	265,000	5.52
53	143,222	265,000	143,222	265,000	5.59
54	152,699	265,000	152,699	265,000	5.67
55	162,953	265,000	162,953	265,000	5.74
56	174,066	265,000	174,066	265,000	5.83
57	186,132	265,000	186,132	265,000	5.92
58	199,254	265,000	199,254	265,000	6.01
59	213,555	265,000	213,555	265,000	6.11
60	229,170	265,000	229,170	265,000	6.22
61	246,258	265,000	246,258	265,000	6.34
62	265,000	265,000	265,000	265,000	6.46
63	265,000	265,000	265,000	265,000	6.59
64	265,000	265,000	265,000	265,000	6.73
65	265,000	265,000	265,000	265,000	6.88
66	265,000	265,000	270,007	270,007	7.04
67	265,000	265,000	275,371	275,371	7.21
68	265,000	265,000	281,451	281,451	7.40
69	265,000	265,000	287,888	287,888	7.60
70	265,000	265,000	295,040	295,040	7.81
71	265,000	265,000	302,908	302,908	8.04
72	265,000	265,000	311,491	311,491	8.30
73	265,000	265,000	320,432	320,432	8.58
74	265,000	265,000	330,445	330,445	8.88
75	265,000	265,000	341,532	341,532	9.20
76	265,000	265,000	353,333	353,333	9.56
77	265,000	265,000	366,565	366,565	9.95
78	265,000	265,000	380,870	380,870	10.38
79	265,000	265,000	396,606	396,606	10.85
80	265,000	265,000	414,130	414,130	11.36
81	265,000	265,000	433,084	433,084	11.92
82	265,000	265,000	454,184	454,184	12.54
83	265,000	265,000	477,429	477,429	13.22
84	265,000	265,000	502,821	502,821	13.96
85	265,000	265,000	530,715	530,715	14.78

*For adjustments prior to age 62, based on applicable IRC 417(e) mortality for the limitation year and 5% interest.*

*No adjustment prior to age 62 for members considered Qualified Police and Fire.*

*For adjustments prior to age 62, based on applicable IRC 417(e) mortality for the limitation year and 5% interest.*

*No adjustment prior to age 62 for members considered Qualified Police and Fire.*

*Based on 417(e) applicable interest (November look-back) and mortality for the limitation year.*

*No adjustment after age 65, as factors apply to members who would receive no increase for late retirement.*

*For adjustments after age 65, based on implied plan late retirement increase factors based on Option 1 factors.*

*1st segment: 5.09%*  
*2nd segment: 5.60%*  
*3rd segment: 5.41%*

**Oregon Public Employees Retirement System**  
IRC 415 for Limitation Year 2023

**Table 6: Convert from Refund Annuity to Single Life Annuity**  
(Factor Multiplied by Option 0 Annuity)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
15	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002
16	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002
17	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002
18	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002
19	1.002	1.002	1.002	1.002	1.002	1.002	1.003	1.003	1.003	1.003	1.003	1.003
20	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003
21	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003
22	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003
23	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003
24	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003
25	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003
26	1.003	1.003	1.003	1.003	1.003	1.003	1.004	1.004	1.004	1.004	1.004	1.004
27	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004
28	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004
29	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004
30	1.004	1.004	1.004	1.004	1.004	1.004	1.005	1.005	1.005	1.005	1.005	1.005
31	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005
32	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.005
33	1.005	1.005	1.005	1.005	1.005	1.005	1.006	1.006	1.006	1.006	1.006	1.006
34	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.006
35	1.006	1.006	1.006	1.006	1.006	1.006	1.007	1.007	1.007	1.007	1.007	1.007
36	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.007
37	1.007	1.007	1.007	1.007	1.007	1.007	1.008	1.008	1.008	1.008	1.008	1.008
38	1.008	1.008	1.008	1.008	1.008	1.008	1.009	1.009	1.009	1.009	1.009	1.009
39	1.009	1.009	1.009	1.009	1.009	1.009	1.010	1.010	1.010	1.010	1.010	1.010
40	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010
41	1.010	1.010	1.010	1.011	1.011	1.011	1.011	1.011	1.011	1.012	1.012	1.012
42	1.012	1.012	1.012	1.012	1.012	1.012	1.013	1.013	1.013	1.013	1.013	1.013
43	1.013	1.013	1.013	1.013	1.013	1.013	1.014	1.014	1.014	1.014	1.014	1.014
44	1.014	1.014	1.014	1.015	1.015	1.015	1.015	1.015	1.015	1.016	1.016	1.016
45	1.016	1.016	1.016	1.016	1.016	1.016	1.017	1.017	1.017	1.017	1.017	1.017
46	1.017	1.017	1.017	1.018	1.018	1.018	1.018	1.018	1.018	1.019	1.019	1.019
47	1.019	1.019	1.019	1.020	1.020	1.020	1.020	1.020	1.020	1.021	1.021	1.021
48	1.021	1.021	1.022	1.022	1.022	1.022	1.023	1.023	1.023	1.023	1.024	1.024
49	1.024	1.024	1.024	1.025	1.025	1.025	1.025	1.025	1.025	1.026	1.026	1.026
50	1.026	1.026	1.027	1.027	1.027	1.027	1.028	1.028	1.028	1.028	1.029	1.029
51	1.029	1.029	1.030	1.030	1.030	1.030	1.031	1.031	1.031	1.031	1.032	1.032
52	1.032	1.032	1.033	1.033	1.033	1.033	1.034	1.034	1.034	1.034	1.035	1.035
53	1.035	1.035	1.036	1.036	1.036	1.037	1.037	1.037	1.038	1.038	1.038	1.039
54	1.039	1.039	1.040	1.040	1.040	1.041	1.041	1.041	1.042	1.042	1.042	1.043
55	1.043	1.043	1.044	1.044	1.044	1.045	1.045	1.045	1.046	1.046	1.046	1.047
56	1.047	1.047	1.048	1.048	1.049	1.049	1.050	1.050	1.050	1.051	1.051	1.052
57	1.052	1.052	1.053	1.053	1.054	1.054	1.055	1.055	1.055	1.056	1.056	1.057
58	1.057	1.057	1.058	1.058	1.059	1.059	1.060	1.060	1.060	1.061	1.061	1.062
59	1.062	1.063	1.063	1.064	1.064	1.065	1.065	1.066	1.066	1.067	1.067	1.068
60	1.068	1.069	1.069	1.070	1.070	1.071	1.071	1.072	1.072	1.073	1.073	1.074
61	1.074	1.075	1.075	1.076	1.076	1.077	1.077	1.078	1.078	1.079	1.079	1.080
62	1.080	1.081	1.081	1.082	1.082	1.083	1.084	1.084	1.085	1.085	1.086	1.086
63	1.087	1.088	1.088	1.089	1.089	1.090	1.091	1.091	1.092	1.092	1.093	1.093
64	1.094	1.095	1.095	1.096	1.096	1.097	1.098	1.098	1.099	1.099	1.100	1.100
65	1.101	1.102	1.102	1.103	1.104	1.104	1.105	1.106	1.106	1.107	1.108	1.108
66	1.109	1.110	1.111	1.111	1.112	1.113	1.114	1.114	1.115	1.116	1.117	1.117
67	1.118	1.119	1.120	1.121	1.121	1.122	1.123	1.124	1.125	1.126	1.126	1.127
68	1.128	1.129	1.130	1.131	1.131	1.132	1.133	1.134	1.135	1.136	1.136	1.137
69	1.138	1.139	1.140	1.141	1.142	1.143	1.144	1.145	1.146	1.147	1.148	1.149
70	1.150	1.151	1.152	1.153	1.154	1.155	1.156	1.157	1.158	1.159	1.160	1.161
71	1.162	1.163	1.164	1.166	1.167	1.168	1.169	1.170	1.171	1.173	1.174	1.175
72	1.176	1.177	1.179	1.180	1.181	1.182	1.184	1.185	1.186	1.187	1.189	1.190
73	1.191	1.192	1.194	1.195	1.197	1.198	1.200	1.201	1.202	1.204	1.205	1.207
74	1.208	1.210	1.211	1.213	1.214	1.216	1.217	1.219	1.220	1.222	1.223	1.225
75	1.226	1.228	1.229	1.231	1.233	1.234	1.236	1.238	1.239	1.241	1.243	1.244
76	1.246	1.248	1.250	1.252	1.253	1.255	1.257	1.259	1.261	1.263	1.264	1.266
77	1.268	1.270	1.272	1.274	1.276	1.278	1.280	1.281	1.283	1.285	1.287	1.289
78	1.291	1.293	1.296	1.298	1.300	1.302	1.305	1.307	1.309	1.311	1.314	1.316
79	1.318	1.320	1.323	1.325	1.327	1.330	1.332	1.334	1.337	1.339	1.341	1.344
80	1.346	1.349	1.351	1.354	1.356	1.359	1.362	1.364	1.367	1.369	1.372	1.374
81	1.377	1.380	1.383	1.386	1.389	1.392	1.395	1.397	1.400	1.403	1.406	1.409
82	1.412	1.415	1.418	1.421	1.424	1.427	1.430	1.433	1.436	1.439	1.442	1.445
83	1.448	1.451	1.455	1.458	1.461	1.465	1.468	1.471	1.475	1.478	1.481	1.485
84	1.488	1.492	1.495	1.499	1.503	1.506	1.510	1.514	1.517	1.521	1.525	1.528
85	1.532	1.536	1.539	1.543	1.547	1.550	1.554	1.558	1.561	1.565	1.569	1.572
86	1.576	1.580	1.584	1.588	1.591	1.595	1.599	1.603	1.607	1.611	1.614	1.618
87	1.622	1.626	1.630	1.634	1.638	1.642	1.647	1.651	1.655	1.659	1.663	1.667
88	1.671	1.675	1.679	1.683	1.686	1.690	1.694	1.698	1.702	1.706	1.709	1.713
89	1.717	1.721	1.725	1.728	1.732	1.736	1.740	1.743	1.747	1.751	1.755	1.758
90	1.762	1.766	1.769	1.773	1.777	1.780	1.784	1.788	1.791	1.795	1.799	1.802
91	1.806	1.809	1.813	1.816	1.819	1.822	1.826	1.829	1.832	1.835	1.839	1.842
92	1.845	1.848	1.851	1.854	1.857	1.860	1.863	1.866	1.869	1.872	1.875	1.878
93	1.881	1.884	1.887	1.890	1.893	1.896	1.900	1.903	1.906	1.909	1.912	1.915
94	1.918	1.921	1.924	1.926	1.929	1.932	1.935	1.937	1.940	1.943	1.946	1.948
95	1.951	1.953	1.956	1.958	1.960	1.962	1.965	1.967	1.969	1.971	1.974	1.976
96	1.978	1.981	1.983	1.986	1.989	1.991	1.994	1.997	1.999	2.002	2.005	2.007
97	2.010	2.012	2.014	2.016	2.018	2.020	2.023	2.025	2.027	2.029	2.031	2.033
98	2.035	2.037	2.038	2.040	2.041	2.043	2.045	2.046	2.048	2.049	2.051	2.052
99	2.054	2.056	2.057	2.059	2.060	2.062	2.063	2.065	2.066	2.068	2.069	2.071
100	2.072											

**Oregon Public Employees Retirement System**  
**IRC 415 for Limitation Year 2023**

**Table 7: Convert from 15-Year Certain and Life Annuity to Single Life Annuity**  
 (Factor Multiplied by Option 4 Annuity)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
15	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
16	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
17	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
18	1.000	1.000	1.000	1.000	1.000	1.000	1.001	1.001	1.001	1.001	1.001	1.001
19	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
20	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
21	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
22	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
23	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
24	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
25	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
26	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
27	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
28	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
29	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
30	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
31	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
32	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
33	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
34	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
35	1.001	1.001	1.001	1.001	1.001	1.001	1.002	1.002	1.002	1.002	1.002	1.002
36	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002
37	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002
38	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002
39	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002
40	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002	1.002
41	1.002	1.002	1.002	1.002	1.002	1.002	1.003	1.003	1.003	1.003	1.003	1.003
42	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003
43	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003
44	1.003	1.003	1.003	1.003	1.003	1.003	1.004	1.004	1.004	1.004	1.004	1.004
45	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.004
46	1.004	1.004	1.004	1.004	1.004	1.004	1.004	1.005	1.005	1.005	1.005	1.005
47	1.005	1.005	1.005	1.005	1.005	1.005	1.005	1.006	1.006	1.006	1.006	1.006
48	1.006	1.006	1.006	1.006	1.006	1.006	1.006	1.007	1.007	1.007	1.007	1.007
49	1.007	1.007	1.007	1.007	1.007	1.007	1.007	1.008	1.008	1.008	1.008	1.008
50	1.008	1.008	1.008	1.008	1.008	1.008	1.009	1.009	1.009	1.009	1.009	1.009
51	1.009	1.009	1.009	1.009	1.009	1.009	1.010	1.010	1.010	1.010	1.010	1.010
52	1.010	1.010	1.010	1.011	1.011	1.011	1.011	1.011	1.011	1.012	1.012	1.012
53	1.012	1.012	1.012	1.013	1.013	1.013	1.013	1.013	1.013	1.014	1.014	1.014
54	1.014	1.014	1.014	1.015	1.015	1.015	1.015	1.015	1.015	1.016	1.016	1.016
55	1.016	1.016	1.017	1.017	1.017	1.017	1.018	1.018	1.018	1.018	1.019	1.019
56	1.019	1.019	1.020	1.020	1.020	1.020	1.021	1.021	1.021	1.021	1.022	1.022
57	1.022	1.022	1.023	1.023	1.023	1.023	1.024	1.024	1.024	1.024	1.025	1.025
58	1.025	1.025	1.026	1.026	1.026	1.027	1.027	1.027	1.028	1.028	1.028	1.029
59	1.029	1.029	1.030	1.030	1.030	1.031	1.031	1.031	1.032	1.032	1.032	1.033
60	1.033	1.033	1.034	1.034	1.035	1.035	1.036	1.036	1.036	1.037	1.037	1.038
61	1.038	1.038	1.039	1.039	1.040	1.040	1.041	1.041	1.041	1.042	1.042	1.043
62	1.043	1.044	1.044	1.045	1.045	1.046	1.046	1.047	1.047	1.048	1.048	1.049
63	1.049	1.050	1.050	1.051	1.051	1.052	1.052	1.053	1.053	1.054	1.054	1.055
64	1.055	1.056	1.056	1.057	1.058	1.058	1.059	1.060	1.060	1.061	1.062	1.062
65	1.063	1.064	1.065	1.065	1.066	1.067	1.068	1.068	1.069	1.070	1.071	1.071
66	1.072	1.073	1.074	1.074	1.075	1.076	1.077	1.077	1.078	1.079	1.080	1.080
67	1.081	1.082	1.083	1.084	1.085	1.086	1.087	1.088	1.089	1.090	1.091	1.092
68	1.093	1.094	1.095	1.096	1.097	1.098	1.100	1.101	1.102	1.103	1.104	1.105
69	1.106	1.107	1.109	1.110	1.111	1.112	1.114	1.115	1.116	1.117	1.119	1.120
70	1.121	1.123	1.124	1.126	1.127	1.129	1.130	1.132	1.133	1.135	1.136	1.138
71	1.139	1.141	1.143	1.144	1.146	1.148	1.150	1.151	1.153	1.155	1.157	1.158
72	1.160	1.162	1.164	1.166	1.168	1.170	1.172	1.174	1.176	1.178	1.180	1.182
73	1.184	1.186	1.189	1.191	1.193	1.196	1.198	1.200	1.203	1.205	1.207	1.210
74	1.212	1.215	1.217	1.220	1.223	1.225	1.228	1.231	1.233	1.236	1.239	1.241
75	1.244	1.247	1.250	1.253	1.256	1.259	1.263	1.266	1.269	1.272	1.275	1.278
76	1.281	1.285	1.288	1.292	1.295	1.299	1.302	1.306	1.309	1.313	1.316	1.320
77	1.323	1.327	1.331	1.335	1.339	1.343	1.348	1.352	1.356	1.360	1.364	1.368
78	1.372	1.377	1.381	1.386	1.391	1.395	1.400	1.405	1.409	1.414	1.419	1.423
79	1.428	1.433	1.439	1.444	1.449	1.454	1.460	1.465	1.470	1.475	1.481	1.486
80	1.491	1.497	1.503	1.509	1.515	1.521	1.527	1.533	1.539	1.545	1.551	1.557
81	1.563	1.570	1.576	1.583	1.590	1.596	1.603	1.610	1.616	1.623	1.630	1.636
82	1.643	1.651	1.658	1.666	1.673	1.681	1.689	1.696	1.704	1.711	1.719	1.726
83	1.734	1.742	1.751	1.759	1.768	1.776	1.785	1.793	1.801	1.810	1.818	1.827
84	1.835	1.844	1.854	1.863	1.872	1.882	1.891	1.900	1.910	1.919	1.928	1.938
85	1.947	1.957	1.968	1.978	1.989	1.999	2.010	2.020	2.030	2.041	2.051	2.062
86	2.072	2.083	2.095	2.106	2.118	2.129	2.141	2.152	2.163	2.175	2.186	2.198
87	2.209	2.222	2.234	2.247	2.259	2.272	2.284	2.297	2.309	2.322	2.334	2.347
88	2.359	2.373	2.386	2.400	2.413	2.427	2.440	2.454	2.467	2.481	2.494	2.508
89	2.521	2.536	2.550	2.565	2.580	2.594	2.609	2.624	2.638	2.653	2.668	2.682
90	2.697	2.713	2.728	2.744	2.759	2.775	2.791	2.806	2.822	2.837	2.853	2.868
91	2.884	2.900	2.917	2.933	2.950	2.966	2.983	2.999	3.015	3.032	3.048	3.065
92	3.081	3.098	3.116	3.133	3.150	3.167	3.185	3.202	3.219	3.236	3.254	3.271
93	3.288	3.306	3.324	3.342	3.360	3.378	3.397	3.415	3.433	3.451	3.469	3.487
94	3.505	3.524	3.543	3.563	3.582	3.601	3.620	3.639	3.658	3.678	3.697	3.716
95	3.735	3.755	3.776	3.796	3.816	3.837	3.857	3.877	3.898	3.918	3.938	3.959
96	3.979	4.001	4.022	4.044	4.065	4.087	4.108	4.130	4.151	4.173	4.194	4.216
97	4.237	4.260	4.282	4.305	4.327	4.350	4.372	4.395	4.417	4.440	4.462	4.485
98	4.507	4.531	4.554	4.578	4.601	4.625	4.648	4.672	4.695	4.719	4.742	4.766
99	4.789	4.813	4.838	4.862	4.887	4.911	4.936	4.960	4.984	5.009	5.033	5.058
100	5.082											

**Oregon Public Employees Retirement System  
IRC 415 for Limitation Year 2023**

**Table 8: Convert from 100% Joint and Survivor Annuity to Single Life Annuity  
(Factor Multiplied by Option 2 Annuity)**

Beneficiary Age Difference	Attained Age at Retirement																			
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
20	1.208	1.217	1.226	1.236	1.246	1.257	1.269	1.281	1.294	1.307	1.322	1.337	1.353	1.369	1.386	1.405	1.424	1.444	1.465	1.487
19	1.202	1.210	1.219	1.229	1.239	1.249	1.261	1.272	1.285	1.298	1.312	1.326	1.342	1.358	1.374	1.392	1.410	1.430	1.450	1.471
18	1.195	1.204	1.212	1.222	1.231	1.242	1.252	1.264	1.276	1.288	1.302	1.316	1.330	1.346	1.362	1.379	1.397	1.415	1.435	1.455
17	1.189	1.197	1.206	1.214	1.224	1.234	1.244	1.255	1.267	1.279	1.292	1.305	1.319	1.334	1.350	1.366	1.383	1.401	1.419	1.439
16	1.183	1.190	1.198	1.207	1.216	1.226	1.236	1.246	1.257	1.269	1.281	1.294	1.308	1.322	1.337	1.353	1.369	1.386	1.404	1.422
15	1.176	1.184	1.191	1.200	1.208	1.217	1.227	1.237	1.248	1.259	1.271	1.284	1.296	1.310	1.324	1.339	1.355	1.371	1.388	1.406
14	1.170	1.177	1.184	1.192	1.200	1.209	1.218	1.228	1.238	1.249	1.261	1.273	1.285	1.298	1.311	1.326	1.341	1.356	1.372	1.389
13	1.163	1.170	1.177	1.185	1.193	1.201	1.210	1.219	1.229	1.239	1.250	1.262	1.273	1.286	1.299	1.312	1.326	1.341	1.356	1.372
12	1.156	1.163	1.170	1.177	1.185	1.193	1.201	1.210	1.219	1.229	1.240	1.250	1.262	1.273	1.286	1.299	1.312	1.326	1.340	1.355
11	1.150	1.156	1.163	1.170	1.177	1.184	1.192	1.201	1.210	1.219	1.229	1.239	1.250	1.261	1.273	1.285	1.298	1.311	1.324	1.338
10	1.143	1.149	1.155	1.162	1.169	1.176	1.184	1.192	1.200	1.209	1.219	1.228	1.238	1.249	1.260	1.271	1.283	1.296	1.308	1.322
9	1.137	1.142	1.148	1.154	1.161	1.168	1.175	1.183	1.191	1.199	1.208	1.217	1.227	1.237	1.247	1.258	1.269	1.281	1.293	1.305
8	1.130	1.135	1.141	1.147	1.153	1.160	1.167	1.174	1.181	1.189	1.198	1.206	1.215	1.225	1.235	1.245	1.255	1.266	1.277	1.289
7	1.124	1.129	1.134	1.140	1.145	1.152	1.158	1.165	1.172	1.180	1.187	1.196	1.204	1.213	1.222	1.231	1.241	1.251	1.262	1.272
6	1.117	1.122	1.127	1.132	1.138	1.144	1.150	1.156	1.163	1.170	1.177	1.185	1.193	1.201	1.210	1.218	1.228	1.237	1.247	1.256
Beneficiary younger than Retiree																				
5	1.111	1.115	1.120	1.125	1.130	1.136	1.141	1.147	1.154	1.160	1.167	1.175	1.182	1.190	1.197	1.206	1.214	1.223	1.232	1.241
4	1.105	1.109	1.113	1.118	1.123	1.128	1.133	1.139	1.145	1.151	1.158	1.164	1.171	1.178	1.186	1.193	1.201	1.209	1.217	1.226
3	1.099	1.103	1.107	1.111	1.116	1.120	1.125	1.131	1.136	1.142	1.148	1.154	1.161	1.167	1.174	1.181	1.188	1.196	1.203	1.211
2	1.093	1.097	1.100	1.104	1.109	1.113	1.118	1.123	1.128	1.133	1.139	1.144	1.150	1.156	1.163	1.169	1.176	1.183	1.189	1.196
1	1.087	1.091	1.094	1.098	1.102	1.106	1.110	1.115	1.120	1.124	1.130	1.135	1.140	1.146	1.152	1.158	1.164	1.170	1.176	1.183
Beneficiary same age as Retiree																				
0	1.082	1.085	1.088	1.092	1.095	1.099	1.103	1.107	1.112	1.116	1.121	1.126	1.131	1.136	1.141	1.147	1.152	1.158	1.163	1.169
Beneficiary older than Retiree																				
-1	1.076	1.079	1.082	1.085	1.089	1.092	1.096	1.100	1.104	1.108	1.113	1.117	1.122	1.126	1.131	1.136	1.141	1.146	1.151	1.156
-2	1.071	1.074	1.077	1.080	1.083	1.086	1.089	1.093	1.097	1.100	1.104	1.109	1.113	1.117	1.121	1.126	1.130	1.135	1.140	1.144
-3	1.066	1.069	1.071	1.074	1.077	1.080	1.083	1.086	1.090	1.093	1.097	1.101	1.104	1.108	1.112	1.116	1.120	1.124	1.129	1.133
-4	1.061	1.064	1.066	1.069	1.071	1.074	1.077	1.080	1.083	1.086	1.089	1.093	1.096	1.100	1.103	1.107	1.111	1.114	1.118	1.122
-5	1.057	1.059	1.061	1.063	1.066	1.068	1.071	1.074	1.076	1.079	1.082	1.086	1.089	1.092	1.095	1.098	1.102	1.105	1.108	1.111
-6	1.053	1.055	1.057	1.059	1.061	1.063	1.065	1.068	1.070	1.073	1.076	1.079	1.082	1.084	1.087	1.090	1.093	1.096	1.099	1.101
-7	1.049	1.050	1.052	1.054	1.056	1.058	1.060	1.062	1.065	1.067	1.070	1.072	1.075	1.077	1.080	1.082	1.085	1.087	1.090	1.092
-8	1.045	1.046	1.048	1.050	1.051	1.053	1.055	1.057	1.059	1.062	1.064	1.066	1.068	1.071	1.073	1.075	1.077	1.079	1.081	1.083
-9	1.041	1.043	1.044	1.046	1.047	1.049	1.051	1.052	1.054	1.056	1.058	1.060	1.062	1.064	1.066	1.068	1.070	1.072	1.074	1.075
-10	1.038	1.039	1.040	1.042	1.043	1.045	1.046	1.048	1.050	1.051	1.053	1.055	1.057	1.059	1.060	1.062	1.064	1.065	1.067	1.068
-11	1.035	1.036	1.037	1.038	1.040	1.041	1.042	1.044	1.045	1.047	1.049	1.050	1.052	1.053	1.055	1.056	1.057	1.059	1.060	1.061
-12	1.032	1.033	1.034	1.035	1.036	1.037	1.039	1.040	1.041	1.043	1.044	1.046	1.047	1.048	1.049	1.051	1.052	1.053	1.054	1.054
-13	1.029	1.030	1.031	1.032	1.033	1.034	1.035	1.036	1.037	1.039	1.040	1.041	1.042	1.044	1.045	1.046	1.047	1.047	1.048	1.049
-14	1.026	1.027	1.028	1.029	1.030	1.031	1.032	1.033	1.034	1.035	1.036	1.037	1.038	1.039	1.040	1.041	1.042	1.042	1.043	1.043
-15	1.024	1.025	1.025	1.026	1.027	1.028	1.029	1.030	1.031	1.032	1.033	1.034	1.034	1.035	1.036	1.037	1.037	1.038	1.038	1.038
-16	1.022	1.022	1.023	1.024	1.025	1.025	1.026	1.027	1.028	1.029	1.029	1.030	1.031	1.032	1.032	1.033	1.033	1.034	1.034	1.034
-17	1.020	1.020	1.021	1.022	1.022	1.023	1.023	1.024	1.025	1.026	1.026	1.027	1.028	1.028	1.029	1.029	1.029	1.030	1.030	1.030
-18	1.018	1.018	1.019	1.019	1.020	1.021	1.021	1.022	1.022	1.023	1.024	1.024	1.025	1.025	1.026	1.026	1.026	1.026	1.026	1.026
-19	1.016	1.017	1.017	1.018	1.018	1.019	1.019	1.020	1.020	1.021	1.021	1.022	1.022	1.023	1.023	1.023	1.023	1.023	1.023	1.023
-20	1.015	1.015	1.015	1.016	1.016	1.017	1.017	1.017	1.018	1.018	1.019	1.019	1.019	1.020	1.020	1.020	1.020	1.020	1.020	1.020

**Oregon Public Employees Retirement System  
IRC 415 for Limitation Year 2023**

**Table 8: Convert from 100% Joint and Survivor Annuity to Single Life Annuity**  
(Factor Multiplied by Option 2 Annuity)

Beneficiary Age Difference	Attained Age at Retirement																			
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
20	1.510	1.535	1.561	1.588	1.617	1.648	1.681	1.717	1.754	1.795	1.838	1.885	1.934	1.988	2.045	2.106	2.171	2.240	2.315	2.395
19	1.493	1.517	1.542	1.568	1.596	1.625	1.657	1.691	1.727	1.766	1.807	1.851	1.899	1.949	2.003	2.061	2.123	2.189	2.260	2.335
18	1.476	1.499	1.522	1.547	1.574	1.602	1.632	1.665	1.699	1.736	1.775	1.817	1.862	1.911	1.962	2.017	2.075	2.138	2.205	2.276
17	1.459	1.480	1.503	1.527	1.552	1.579	1.608	1.638	1.671	1.706	1.743	1.783	1.826	1.872	1.920	1.972	2.028	2.087	2.149	2.216
16	1.442	1.462	1.483	1.506	1.530	1.556	1.583	1.612	1.643	1.676	1.712	1.749	1.790	1.833	1.879	1.928	1.980	2.035	2.094	2.156
15	1.424	1.443	1.464	1.485	1.508	1.532	1.558	1.585	1.615	1.646	1.680	1.715	1.753	1.794	1.837	1.883	1.932	1.984	2.039	2.096
14	1.406	1.425	1.444	1.464	1.486	1.509	1.533	1.559	1.587	1.616	1.648	1.681	1.717	1.755	1.796	1.839	1.884	1.932	1.983	2.037
13	1.389	1.406	1.424	1.443	1.463	1.485	1.508	1.532	1.558	1.586	1.616	1.647	1.681	1.716	1.754	1.794	1.837	1.881	1.928	1.977
12	1.371	1.387	1.404	1.422	1.441	1.461	1.483	1.506	1.530	1.556	1.584	1.613	1.645	1.678	1.713	1.750	1.789	1.830	1.873	1.918
11	1.353	1.368	1.384	1.401	1.419	1.438	1.458	1.480	1.502	1.527	1.553	1.580	1.609	1.640	1.672	1.707	1.742	1.780	1.819	1.860
10	1.335	1.350	1.365	1.380	1.397	1.415	1.434	1.454	1.475	1.497	1.521	1.547	1.574	1.602	1.632	1.663	1.696	1.730	1.766	1.803
9	1.318	1.331	1.345	1.360	1.375	1.392	1.409	1.428	1.448	1.468	1.491	1.514	1.539	1.565	1.592	1.620	1.650	1.681	1.713	1.746
8	1.301	1.313	1.326	1.340	1.354	1.369	1.385	1.403	1.421	1.440	1.460	1.482	1.504	1.528	1.553	1.578	1.605	1.633	1.662	1.691
7	1.283	1.295	1.307	1.320	1.333	1.347	1.362	1.378	1.394	1.412	1.430	1.450	1.470	1.492	1.514	1.537	1.561	1.586	1.612	1.638
6	1.267	1.277	1.288	1.300	1.312	1.325	1.339	1.353	1.368	1.384	1.401	1.419	1.437	1.456	1.476	1.497	1.518	1.540	1.563	1.587
Beneficiary younger than Retiree																				
5	1.250	1.260	1.270	1.281	1.292	1.304	1.316	1.329	1.343	1.358	1.373	1.389	1.405	1.422	1.440	1.458	1.477	1.496	1.516	1.537
4	1.234	1.243	1.252	1.262	1.272	1.283	1.294	1.306	1.318	1.331	1.345	1.359	1.374	1.389	1.405	1.421	1.437	1.454	1.472	1.489
3	1.219	1.227	1.235	1.244	1.253	1.263	1.273	1.284	1.295	1.306	1.318	1.331	1.343	1.357	1.371	1.385	1.399	1.414	1.429	1.444
2	1.204	1.211	1.219	1.226	1.235	1.243	1.252	1.262	1.272	1.282	1.292	1.303	1.314	1.326	1.338	1.350	1.363	1.375	1.389	1.402
1	1.189	1.196	1.202	1.210	1.217	1.225	1.232	1.241	1.249	1.258	1.267	1.277	1.287	1.297	1.307	1.318	1.328	1.339	1.350	1.362
Beneficiary same age as Retiree																				
0	1.175	1.181	1.187	1.193	1.200	1.206	1.213	1.221	1.228	1.236	1.244	1.252	1.260	1.269	1.278	1.287	1.296	1.305	1.315	1.324
Beneficiary older than Retiree																				
-1	1.162	1.167	1.172	1.178	1.183	1.189	1.195	1.201	1.208	1.214	1.221	1.228	1.236	1.243	1.250	1.258	1.266	1.273	1.281	1.290
-2	1.149	1.153	1.158	1.163	1.168	1.173	1.178	1.183	1.189	1.194	1.200	1.206	1.212	1.218	1.225	1.231	1.237	1.244	1.251	1.258
-3	1.137	1.141	1.145	1.149	1.153	1.157	1.162	1.166	1.171	1.175	1.180	1.185	1.190	1.196	1.201	1.206	1.211	1.217	1.223	1.229
-4	1.125	1.128	1.132	1.135	1.139	1.142	1.146	1.150	1.154	1.158	1.162	1.166	1.170	1.174	1.179	1.183	1.188	1.192	1.197	1.203
-5	1.114	1.117	1.120	1.123	1.126	1.129	1.132	1.135	1.138	1.141	1.145	1.148	1.151	1.155	1.158	1.162	1.166	1.170	1.174	1.179
-6	1.104	1.106	1.109	1.111	1.113	1.116	1.118	1.121	1.123	1.126	1.129	1.131	1.134	1.137	1.140	1.143	1.146	1.150	1.154	1.158
-7	1.094	1.096	1.098	1.100	1.102	1.104	1.106	1.108	1.110	1.112	1.114	1.116	1.119	1.121	1.123	1.126	1.129	1.132	1.136	1.140
-8	1.085	1.087	1.088	1.090	1.091	1.093	1.094	1.096	1.098	1.099	1.101	1.103	1.104	1.106	1.108	1.111	1.113	1.116	1.119	1.123
-9	1.077	1.078	1.079	1.080	1.082	1.083	1.084	1.085	1.086	1.088	1.089	1.090	1.092	1.093	1.095	1.097	1.099	1.102	1.105	1.109
-10	1.069	1.070	1.071	1.072	1.073	1.073	1.074	1.075	1.076	1.077	1.078	1.079	1.080	1.082	1.083	1.085	1.087	1.090	1.093	1.097
-11	1.062	1.062	1.063	1.064	1.064	1.065	1.066	1.066	1.067	1.068	1.068	1.069	1.070	1.071	1.073	1.075	1.077	1.079	1.082	1.086
-12	1.055	1.056	1.056	1.056	1.057	1.057	1.058	1.058	1.059	1.059	1.060	1.060	1.061	1.062	1.064	1.066	1.068	1.070	1.073	1.076
-13	1.049	1.049	1.050	1.050	1.050	1.051	1.051	1.051	1.051	1.052	1.052	1.053	1.054	1.055	1.056	1.058	1.060	1.062	1.064	1.067
-14	1.044	1.044	1.044	1.044	1.044	1.044	1.044	1.044	1.045	1.045	1.045	1.045	1.046	1.047	1.048	1.049	1.051	1.052	1.054	1.057
-15	1.039	1.039	1.039	1.039	1.039	1.039	1.039	1.039	1.039	1.039	1.040	1.040	1.041	1.042	1.043	1.045	1.046	1.048	1.050	1.053
-16	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.034	1.035	1.035	1.036	1.037	1.038	1.039	1.041	1.043	1.045	1.047
-17	1.030	1.030	1.030	1.030	1.029	1.029	1.029	1.029	1.029	1.030	1.030	1.031	1.032	1.032	1.033	1.035	1.036	1.038	1.040	1.042
-18	1.026	1.026	1.026	1.026	1.026	1.025	1.025	1.025	1.026	1.026	1.026	1.027	1.028	1.029	1.030	1.031	1.032	1.034	1.036	1.038
-19	1.023	1.023	1.023	1.022	1.022	1.022	1.022	1.022	1.022	1.023	1.023	1.024	1.024	1.025	1.026	1.027	1.028	1.030	1.032	1.034
-20	1.020	1.020	1.020	1.019	1.019	1.019	1.019	1.019	1.020	1.020	1.020	1.021	1.021	1.022	1.023	1.024	1.025	1.027	1.029	1.031

**Oregon Public Employees Retirement System**  
**IRC 415 for Limitation Year 2023**

**Table 9: Convert from 50% Joint and Survivor Annuity to Single Life Annuity**  
 (Factor Multiplied by Option 3 Annuity)

Beneficiary Age Difference	Attained Age at Retirement																				
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	
20	1.104	1.108	1.113	1.118	1.123	1.129	1.134	1.140	1.147	1.154	1.161	1.168	1.176	1.185	1.193	1.202	1.212	1.222	1.233	1.244	
19	1.101	1.105	1.110	1.114	1.119	1.125	1.130	1.136	1.142	1.149	1.156	1.163	1.171	1.179	1.187	1.196	1.205	1.215	1.225	1.236	
18	1.098	1.102	1.106	1.111	1.116	1.121	1.126	1.132	1.138	1.144	1.151	1.158	1.165	1.173	1.181	1.189	1.198	1.208	1.217	1.228	
17	1.095	1.099	1.103	1.107	1.112	1.117	1.122	1.127	1.133	1.139	1.146	1.153	1.160	1.167	1.175	1.183	1.191	1.200	1.210	1.219	
16	1.091	1.095	1.099	1.104	1.108	1.113	1.118	1.123	1.129	1.134	1.141	1.147	1.154	1.161	1.168	1.176	1.184	1.193	1.202	1.211	
15	1.088	1.092	1.096	1.100	1.104	1.109	1.113	1.119	1.124	1.130	1.136	1.142	1.148	1.155	1.162	1.170	1.177	1.186	1.194	1.203	
14	1.085	1.088	1.092	1.096	1.100	1.105	1.109	1.114	1.119	1.125	1.130	1.136	1.142	1.149	1.156	1.163	1.170	1.178	1.186	1.194	
13	1.082	1.085	1.089	1.092	1.096	1.100	1.105	1.110	1.114	1.120	1.125	1.131	1.137	1.143	1.149	1.156	1.163	1.170	1.178	1.186	
12	1.078	1.081	1.085	1.089	1.092	1.096	1.101	1.105	1.110	1.115	1.120	1.125	1.131	1.137	1.143	1.149	1.156	1.163	1.170	1.178	
11	1.075	1.078	1.081	1.085	1.088	1.092	1.096	1.100	1.105	1.110	1.115	1.120	1.125	1.131	1.136	1.143	1.149	1.155	1.162	1.169	
10	1.072	1.075	1.078	1.081	1.084	1.088	1.092	1.096	1.100	1.105	1.109	1.114	1.119	1.125	1.130	1.136	1.142	1.148	1.154	1.161	
9	1.068	1.071	1.074	1.077	1.081	1.084	1.088	1.091	1.095	1.100	1.104	1.109	1.113	1.118	1.124	1.129	1.135	1.140	1.146	1.153	
8	1.065	1.068	1.071	1.074	1.077	1.080	1.083	1.087	1.091	1.095	1.099	1.103	1.108	1.112	1.117	1.122	1.128	1.133	1.139	1.144	
7	1.062	1.064	1.067	1.070	1.073	1.076	1.079	1.082	1.086	1.090	1.094	1.098	1.102	1.106	1.111	1.116	1.121	1.126	1.131	1.136	
6	1.059	1.061	1.064	1.066	1.069	1.072	1.075	1.078	1.081	1.085	1.089	1.092	1.096	1.101	1.105	1.109	1.114	1.118	1.123	1.128	
Beneficiary younger than Retiree	5	1.055	1.058	1.060	1.063	1.065	1.068	1.071	1.074	1.077	1.080	1.084	1.087	1.091	1.095	1.099	1.103	1.107	1.111	1.116	1.120
	4	1.052	1.054	1.057	1.059	1.061	1.064	1.067	1.069	1.072	1.076	1.079	1.082	1.086	1.089	1.093	1.097	1.100	1.104	1.109	1.113
	3	1.049	1.051	1.053	1.056	1.058	1.060	1.063	1.065	1.068	1.071	1.074	1.077	1.080	1.084	1.087	1.090	1.094	1.098	1.102	1.105
	2	1.046	1.048	1.050	1.052	1.054	1.057	1.059	1.061	1.064	1.067	1.069	1.072	1.075	1.078	1.081	1.085	1.088	1.091	1.095	1.098
	1	1.044	1.045	1.047	1.049	1.051	1.053	1.055	1.057	1.060	1.062	1.065	1.067	1.070	1.073	1.076	1.079	1.082	1.085	1.088	1.091
Beneficiary same age as Retiree	0	1.041	1.042	1.044	1.046	1.048	1.049	1.051	1.054	1.056	1.058	1.060	1.063	1.065	1.068	1.071	1.073	1.076	1.079	1.082	1.085
Beneficiary older than Retiree	-1	1.038	1.040	1.041	1.043	1.044	1.046	1.048	1.050	1.052	1.054	1.056	1.059	1.061	1.063	1.066	1.068	1.071	1.073	1.076	1.078
	-2	1.036	1.037	1.038	1.040	1.041	1.043	1.045	1.046	1.048	1.050	1.052	1.054	1.056	1.059	1.061	1.063	1.065	1.068	1.070	1.072
	-3	1.033	1.034	1.036	1.037	1.038	1.040	1.041	1.043	1.045	1.047	1.048	1.050	1.052	1.054	1.056	1.058	1.060	1.062	1.064	1.066
	-4	1.031	1.032	1.033	1.034	1.036	1.037	1.038	1.040	1.041	1.043	1.045	1.046	1.048	1.050	1.052	1.054	1.055	1.057	1.059	1.061
	-5	1.028	1.029	1.031	1.032	1.033	1.034	1.035	1.037	1.038	1.040	1.041	1.043	1.044	1.046	1.048	1.049	1.051	1.052	1.054	1.056
	-6	1.026	1.027	1.028	1.029	1.030	1.032	1.033	1.034	1.035	1.037	1.038	1.039	1.041	1.042	1.044	1.045	1.047	1.048	1.049	1.051
	-7	1.024	1.025	1.026	1.027	1.028	1.029	1.030	1.031	1.032	1.034	1.035	1.036	1.037	1.039	1.040	1.041	1.042	1.044	1.045	1.046
	-8	1.022	1.023	1.024	1.025	1.026	1.027	1.028	1.029	1.030	1.031	1.032	1.033	1.034	1.035	1.036	1.038	1.039	1.040	1.041	1.042
	-9	1.021	1.021	1.022	1.023	1.024	1.024	1.025	1.026	1.027	1.028	1.029	1.030	1.031	1.032	1.033	1.034	1.035	1.036	1.037	1.038
	-10	1.019	1.020	1.020	1.021	1.022	1.022	1.023	1.024	1.025	1.026	1.027	1.028	1.028	1.029	1.030	1.031	1.032	1.033	1.033	1.034
	-11	1.017	1.018	1.018	1.019	1.020	1.020	1.021	1.022	1.023	1.023	1.024	1.025	1.026	1.027	1.027	1.028	1.029	1.029	1.030	1.030
	-12	1.016	1.016	1.017	1.017	1.018	1.019	1.019	1.020	1.021	1.021	1.022	1.023	1.023	1.024	1.025	1.025	1.026	1.026	1.027	1.027
	-13	1.014	1.015	1.015	1.016	1.016	1.017	1.018	1.018	1.019	1.019	1.020	1.021	1.021	1.022	1.022	1.023	1.023	1.024	1.024	1.024
	-14	1.013	1.014	1.014	1.014	1.015	1.015	1.016	1.016	1.017	1.018	1.018	1.019	1.019	1.020	1.020	1.020	1.021	1.021	1.021	1.022
	-15	1.012	1.012	1.013	1.013	1.014	1.014	1.014	1.015	1.015	1.016	1.016	1.017	1.017	1.018	1.018	1.018	1.019	1.019	1.019	1.019
	-16	1.011	1.011	1.012	1.012	1.012	1.013	1.013	1.013	1.014	1.014	1.015	1.015	1.016	1.016	1.016	1.016	1.017	1.017	1.017	1.017
	-17	1.010	1.010	1.010	1.011	1.011	1.011	1.012	1.012	1.012	1.013	1.013	1.014	1.014	1.014	1.015	1.015	1.015	1.015	1.015	1.015
	-18	1.009	1.009	1.009	1.010	1.010	1.010	1.011	1.011	1.011	1.011	1.012	1.012	1.012	1.013	1.013	1.013	1.013	1.013	1.013	1.013
	-19	1.008	1.008	1.009	1.009	1.009	1.009	1.009	1.010	1.010	1.010	1.011	1.011	1.011	1.011	1.011	1.011	1.012	1.012	1.012	1.012
	-20	1.007	1.007	1.008	1.008	1.008	1.008	1.008	1.009	1.009	1.009	1.009	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010

**Oregon Public Employees Retirement System  
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**Table 9: Convert from 50% Joint and Survivor Annuity to Single Life Annuity  
(Factor Multiplied by Option 3 Annuity)**

Beneficiary Age Difference	Attained Age at Retirement																			
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84
20	1.255	1.267	1.280	1.294	1.309	1.324	1.341	1.358	1.377	1.397	1.419	1.442	1.467	1.494	1.522	1.553	1.585	1.620	1.658	1.697
19	1.247	1.258	1.271	1.284	1.298	1.313	1.328	1.345	1.363	1.383	1.403	1.426	1.449	1.475	1.502	1.531	1.562	1.595	1.630	1.668
18	1.238	1.249	1.261	1.274	1.287	1.301	1.316	1.332	1.350	1.368	1.388	1.409	1.431	1.455	1.481	1.508	1.538	1.569	1.602	1.638
17	1.230	1.240	1.251	1.263	1.276	1.290	1.304	1.319	1.336	1.353	1.372	1.392	1.413	1.436	1.460	1.486	1.514	1.543	1.575	1.608
16	1.221	1.231	1.242	1.253	1.265	1.278	1.291	1.306	1.321	1.338	1.356	1.375	1.395	1.416	1.439	1.464	1.490	1.518	1.547	1.578
15	1.212	1.222	1.232	1.243	1.254	1.266	1.279	1.293	1.307	1.323	1.340	1.358	1.377	1.397	1.419	1.442	1.466	1.492	1.519	1.548
14	1.203	1.212	1.222	1.232	1.243	1.254	1.266	1.279	1.293	1.308	1.324	1.341	1.358	1.378	1.398	1.419	1.442	1.466	1.492	1.518
13	1.194	1.203	1.212	1.222	1.232	1.242	1.254	1.266	1.279	1.293	1.308	1.324	1.340	1.358	1.377	1.397	1.418	1.441	1.464	1.489
12	1.185	1.194	1.202	1.211	1.221	1.231	1.241	1.253	1.265	1.278	1.292	1.307	1.322	1.339	1.357	1.375	1.395	1.415	1.437	1.459
11	1.177	1.184	1.192	1.201	1.210	1.219	1.229	1.240	1.251	1.263	1.276	1.290	1.305	1.320	1.336	1.353	1.371	1.390	1.410	1.430
10	1.168	1.175	1.182	1.190	1.199	1.207	1.217	1.227	1.237	1.249	1.261	1.273	1.287	1.301	1.316	1.332	1.348	1.365	1.383	1.401
9	1.159	1.166	1.173	1.180	1.188	1.196	1.205	1.214	1.224	1.234	1.245	1.257	1.269	1.282	1.296	1.310	1.325	1.340	1.357	1.373
8	1.150	1.156	1.163	1.170	1.177	1.185	1.193	1.201	1.210	1.220	1.230	1.241	1.252	1.264	1.276	1.289	1.303	1.316	1.331	1.346
7	1.142	1.148	1.153	1.160	1.166	1.173	1.181	1.189	1.197	1.206	1.215	1.225	1.235	1.246	1.257	1.269	1.281	1.293	1.306	1.319
6	1.133	1.139	1.144	1.150	1.156	1.163	1.169	1.177	1.184	1.192	1.201	1.209	1.219	1.228	1.238	1.249	1.259	1.270	1.282	1.293
Beneficiary younger than Retiree																				
5	1.125	1.130	1.135	1.140	1.146	1.152	1.158	1.165	1.172	1.179	1.186	1.194	1.202	1.211	1.220	1.229	1.238	1.248	1.258	1.268
4	1.117	1.122	1.126	1.131	1.136	1.142	1.147	1.153	1.159	1.166	1.172	1.180	1.187	1.194	1.202	1.210	1.219	1.227	1.236	1.245
3	1.109	1.113	1.118	1.122	1.127	1.131	1.136	1.142	1.147	1.153	1.159	1.165	1.172	1.178	1.185	1.192	1.199	1.207	1.214	1.222
2	1.102	1.105	1.109	1.113	1.117	1.122	1.126	1.131	1.136	1.141	1.146	1.152	1.157	1.163	1.169	1.175	1.181	1.188	1.194	1.201
1	1.095	1.098	1.101	1.105	1.108	1.112	1.116	1.120	1.125	1.129	1.134	1.138	1.143	1.148	1.154	1.159	1.164	1.170	1.175	1.181
Beneficiary same age as Retiree																				
0	1.088	1.090	1.094	1.097	1.100	1.103	1.107	1.110	1.114	1.118	1.122	1.126	1.130	1.135	1.139	1.143	1.148	1.153	1.157	1.162
Beneficiary older than Retiree																				
-1	1.081	1.083	1.086	1.089	1.092	1.095	1.098	1.101	1.104	1.107	1.111	1.114	1.118	1.121	1.125	1.129	1.133	1.137	1.141	1.145
-2	1.074	1.077	1.079	1.081	1.084	1.086	1.089	1.092	1.094	1.097	1.100	1.103	1.106	1.109	1.112	1.116	1.119	1.122	1.125	1.129
-3	1.068	1.070	1.072	1.074	1.076	1.079	1.081	1.083	1.085	1.088	1.090	1.093	1.095	1.098	1.100	1.103	1.106	1.108	1.111	1.114
-4	1.062	1.064	1.066	1.068	1.069	1.071	1.073	1.075	1.077	1.079	1.081	1.083	1.085	1.087	1.089	1.092	1.094	1.096	1.099	1.101
-5	1.057	1.058	1.060	1.061	1.063	1.064	1.066	1.067	1.069	1.071	1.072	1.074	1.076	1.077	1.079	1.081	1.083	1.085	1.087	1.090
-6	1.052	1.053	1.054	1.055	1.057	1.058	1.059	1.060	1.062	1.063	1.064	1.066	1.067	1.069	1.070	1.072	1.073	1.075	1.077	1.079
-7	1.047	1.048	1.049	1.050	1.051	1.052	1.053	1.054	1.055	1.056	1.057	1.058	1.059	1.060	1.062	1.063	1.064	1.066	1.068	1.070
-8	1.043	1.043	1.044	1.045	1.046	1.046	1.047	1.048	1.049	1.050	1.050	1.051	1.052	1.053	1.054	1.055	1.057	1.058	1.060	1.062
-9	1.038	1.039	1.040	1.040	1.041	1.041	1.042	1.043	1.043	1.044	1.044	1.045	1.046	1.047	1.048	1.049	1.050	1.051	1.053	1.055
-10	1.034	1.035	1.035	1.036	1.036	1.037	1.037	1.038	1.038	1.039	1.039	1.040	1.040	1.041	1.042	1.043	1.044	1.045	1.047	1.048
-11	1.031	1.031	1.032	1.032	1.032	1.032	1.033	1.033	1.033	1.034	1.034	1.035	1.035	1.036	1.036	1.037	1.038	1.040	1.041	1.043
-12	1.028	1.028	1.028	1.028	1.028	1.029	1.029	1.029	1.029	1.030	1.030	1.030	1.031	1.031	1.032	1.033	1.034	1.035	1.036	1.038
-13	1.025	1.025	1.025	1.025	1.025	1.025	1.025	1.025	1.026	1.026	1.026	1.026	1.027	1.027	1.028	1.029	1.030	1.031	1.032	1.034
-14	1.022	1.022	1.022	1.022	1.022	1.022	1.022	1.022	1.022	1.022	1.023	1.023	1.023	1.024	1.025	1.025	1.026	1.027	1.028	1.030
-15	1.019	1.019	1.019	1.019	1.019	1.019	1.019	1.019	1.019	1.020	1.020	1.020	1.020	1.021	1.022	1.022	1.023	1.024	1.025	1.026
-16	1.017	1.017	1.017	1.017	1.017	1.017	1.017	1.017	1.017	1.017	1.017	1.018	1.018	1.018	1.019	1.020	1.020	1.021	1.022	1.024
-17	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.015	1.016	1.016	1.016	1.017	1.017	1.018	1.019	1.020	1.021
-18	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.013	1.014	1.014	1.015	1.015	1.016	1.017	1.018	1.019
-19	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.011	1.012	1.012	1.012	1.013	1.013	1.014	1.014	1.015	1.016	1.017
-20	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.010	1.011	1.011	1.012	1.012	1.013	1.013	1.014	1.015

**Oregon Public Employees Retirement System  
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**Table 10: Convert from 100% Joint and Survivor Annuity with Pop-up Feature to Single Life Annuity  
(Factor Multiplied by Option 2a Annuity)**

Beneficiary Age Difference	Attained Age at Retirement																			
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
20	1.210	1.219	1.229	1.239	1.249	1.261	1.272	1.285	1.298	1.312	1.327	1.342	1.358	1.375	1.393	1.412	1.432	1.453	1.475	1.498
19	1.204	1.213	1.222	1.232	1.242	1.253	1.264	1.277	1.289	1.303	1.317	1.332	1.348	1.364	1.382	1.400	1.419	1.439	1.460	1.483
18	1.198	1.207	1.216	1.225	1.235	1.245	1.257	1.268	1.281	1.294	1.308	1.322	1.337	1.353	1.370	1.388	1.406	1.426	1.446	1.467
17	1.192	1.200	1.209	1.218	1.228	1.238	1.248	1.260	1.272	1.284	1.298	1.312	1.327	1.342	1.358	1.375	1.393	1.412	1.432	1.452
16	1.186	1.194	1.202	1.211	1.220	1.230	1.240	1.251	1.263	1.275	1.288	1.302	1.316	1.331	1.346	1.363	1.380	1.398	1.417	1.437
15	1.179	1.187	1.195	1.204	1.213	1.222	1.232	1.243	1.254	1.266	1.278	1.291	1.305	1.319	1.334	1.350	1.367	1.384	1.402	1.421
14	1.173	1.181	1.188	1.197	1.205	1.214	1.224	1.234	1.245	1.256	1.268	1.281	1.294	1.308	1.322	1.338	1.353	1.370	1.388	1.406
13	1.167	1.174	1.181	1.189	1.198	1.206	1.216	1.226	1.236	1.247	1.258	1.271	1.283	1.296	1.310	1.325	1.340	1.356	1.373	1.390
12	1.160	1.167	1.175	1.182	1.190	1.199	1.207	1.217	1.227	1.237	1.249	1.260	1.272	1.285	1.298	1.312	1.327	1.342	1.358	1.375
11	1.154	1.161	1.168	1.175	1.183	1.191	1.199	1.208	1.218	1.228	1.239	1.250	1.261	1.274	1.286	1.300	1.314	1.328	1.343	1.359
10	1.148	1.154	1.161	1.168	1.175	1.183	1.191	1.200	1.209	1.219	1.229	1.239	1.251	1.262	1.274	1.287	1.300	1.314	1.329	1.344
9	1.141	1.147	1.154	1.161	1.168	1.175	1.183	1.191	1.200	1.209	1.219	1.229	1.240	1.251	1.262	1.275	1.287	1.301	1.314	1.329
8	1.135	1.141	1.147	1.153	1.160	1.167	1.175	1.183	1.191	1.200	1.209	1.219	1.229	1.240	1.251	1.262	1.274	1.287	1.300	1.314
7	1.129	1.134	1.140	1.146	1.153	1.160	1.167	1.174	1.182	1.191	1.200	1.209	1.219	1.229	1.239	1.250	1.262	1.274	1.286	1.299
6	1.123	1.128	1.134	1.139	1.146	1.152	1.159	1.166	1.174	1.182	1.190	1.199	1.208	1.218	1.228	1.238	1.249	1.260	1.272	1.284
Beneficiary younger than Retiree																				
5	1.117	1.122	1.127	1.133	1.138	1.145	1.151	1.158	1.165	1.173	1.181	1.189	1.198	1.207	1.217	1.226	1.237	1.247	1.259	1.270
4	1.111	1.116	1.121	1.126	1.131	1.137	1.143	1.150	1.157	1.164	1.172	1.180	1.188	1.197	1.206	1.215	1.225	1.235	1.245	1.256
3	1.105	1.110	1.114	1.119	1.125	1.130	1.136	1.142	1.149	1.156	1.163	1.170	1.178	1.186	1.195	1.204	1.213	1.222	1.232	1.242
2	1.100	1.104	1.108	1.113	1.118	1.123	1.129	1.135	1.141	1.147	1.154	1.161	1.169	1.176	1.184	1.193	1.201	1.210	1.220	1.229
1	1.094	1.098	1.102	1.107	1.111	1.116	1.122	1.127	1.133	1.139	1.146	1.152	1.159	1.167	1.174	1.182	1.190	1.199	1.207	1.216
Beneficiary same age as Retiree																				
0	1.089	1.093	1.097	1.101	1.105	1.110	1.115	1.120	1.126	1.131	1.138	1.144	1.150	1.157	1.164	1.172	1.179	1.187	1.195	1.204
Beneficiary older than Retiree																				
-1	1.084	1.087	1.091	1.095	1.099	1.104	1.108	1.113	1.118	1.124	1.130	1.136	1.142	1.148	1.155	1.162	1.169	1.176	1.184	1.192
-2	1.079	1.082	1.086	1.089	1.093	1.097	1.102	1.107	1.111	1.117	1.122	1.128	1.134	1.140	1.146	1.152	1.159	1.166	1.173	1.180
-3	1.074	1.077	1.080	1.084	1.088	1.092	1.096	1.100	1.105	1.110	1.115	1.120	1.126	1.131	1.137	1.143	1.149	1.156	1.162	1.169
-4	1.069	1.072	1.076	1.079	1.082	1.086	1.090	1.094	1.098	1.103	1.108	1.113	1.118	1.123	1.129	1.134	1.140	1.146	1.152	1.158
-5	1.065	1.068	1.071	1.074	1.077	1.081	1.084	1.088	1.092	1.097	1.101	1.106	1.111	1.116	1.121	1.126	1.132	1.137	1.143	1.148
-6	1.061	1.064	1.066	1.069	1.072	1.076	1.079	1.083	1.086	1.091	1.095	1.099	1.104	1.108	1.113	1.118	1.123	1.128	1.133	1.139
-7	1.057	1.059	1.062	1.065	1.068	1.071	1.074	1.077	1.081	1.085	1.089	1.093	1.097	1.101	1.106	1.111	1.115	1.120	1.125	1.130
-8	1.053	1.056	1.058	1.061	1.063	1.066	1.069	1.072	1.076	1.079	1.083	1.087	1.091	1.095	1.099	1.103	1.108	1.112	1.117	1.121
-9	1.050	1.052	1.054	1.057	1.059	1.062	1.065	1.068	1.071	1.074	1.078	1.081	1.085	1.089	1.093	1.097	1.101	1.105	1.109	1.113
-10	1.046	1.048	1.051	1.053	1.055	1.058	1.060	1.063	1.066	1.069	1.072	1.076	1.079	1.083	1.086	1.090	1.094	1.098	1.101	1.105
-11	1.043	1.045	1.047	1.049	1.051	1.054	1.056	1.059	1.062	1.065	1.068	1.071	1.074	1.077	1.081	1.084	1.087	1.091	1.094	1.098
-12	1.040	1.042	1.044	1.046	1.048	1.050	1.052	1.055	1.057	1.060	1.063	1.066	1.069	1.072	1.075	1.078	1.081	1.085	1.088	1.091
-13	1.037	1.039	1.041	1.043	1.045	1.047	1.049	1.051	1.053	1.056	1.059	1.061	1.064	1.067	1.070	1.073	1.076	1.079	1.082	1.084
-14	1.035	1.036	1.038	1.040	1.041	1.043	1.045	1.047	1.050	1.052	1.055	1.057	1.060	1.062	1.065	1.068	1.071	1.073	1.076	1.078
-15	1.032	1.034	1.035	1.037	1.039	1.040	1.042	1.044	1.046	1.048	1.051	1.053	1.056	1.058	1.061	1.063	1.066	1.068	1.070	1.073
-16	1.030	1.031	1.033	1.034	1.036	1.037	1.039	1.041	1.043	1.045	1.047	1.049	1.052	1.054	1.056	1.059	1.061	1.063	1.065	1.068
-17	1.028	1.029	1.030	1.032	1.033	1.035	1.036	1.038	1.040	1.042	1.044	1.046	1.048	1.050	1.052	1.054	1.057	1.059	1.061	1.063
-18	1.026	1.027	1.028	1.029	1.031	1.032	1.034	1.035	1.037	1.039	1.041	1.043	1.045	1.047	1.048	1.050	1.052	1.054	1.056	1.058
-19	1.024	1.025	1.026	1.027	1.028	1.030	1.031	1.033	1.034	1.036	1.038	1.040	1.041	1.043	1.045	1.047	1.049	1.050	1.052	1.054
-20	1.022	1.023	1.024	1.025	1.026	1.028	1.029	1.030	1.032	1.033	1.035	1.037	1.038	1.040	1.042	1.043	1.045	1.047	1.048	1.050



**Oregon Public Employees Retirement System  
IRC 415 for Limitation Year 2023**

**Table 10: Convert from 100% Joint and Survivor Annuity with Pop-up Feature to Single Life Annuity  
(Factor Multiplied by Option 2a Annuity)**

Beneficiary Age Difference	Attained Age at Retirement																				
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	
20	1.522	1.547	1.574	1.603	1.633	1.666	1.701	1.738	1.778	1.821	1.868	1.917	1.970	2.027	2.088	2.154	2.223	2.298	2.379	2.464	
19	1.506	1.530	1.556	1.584	1.613	1.645	1.678	1.714	1.753	1.794	1.839	1.886	1.937	1.992	2.050	2.113	2.180	2.251	2.328	2.409	
18	1.490	1.513	1.538	1.565	1.593	1.624	1.656	1.690	1.728	1.767	1.810	1.855	1.904	1.957	2.012	2.072	2.136	2.204	2.277	2.354	
17	1.474	1.496	1.520	1.546	1.573	1.602	1.633	1.666	1.702	1.740	1.781	1.824	1.871	1.921	1.974	2.031	2.092	2.157	2.226	2.299	
16	1.457	1.479	1.502	1.527	1.553	1.581	1.610	1.642	1.676	1.713	1.752	1.793	1.838	1.885	1.936	1.990	2.048	2.109	2.175	2.244	
15	1.441	1.462	1.484	1.508	1.533	1.559	1.588	1.618	1.650	1.685	1.722	1.762	1.805	1.850	1.898	1.950	2.004	2.062	2.124	2.189	
14	1.425	1.445	1.466	1.488	1.512	1.538	1.565	1.594	1.625	1.658	1.693	1.731	1.771	1.814	1.860	1.909	1.960	2.015	2.073	2.134	
13	1.408	1.428	1.448	1.469	1.492	1.516	1.542	1.570	1.599	1.631	1.664	1.700	1.738	1.779	1.822	1.868	1.917	1.968	2.023	2.080	
12	1.392	1.410	1.430	1.450	1.472	1.495	1.519	1.545	1.573	1.603	1.635	1.669	1.705	1.744	1.785	1.828	1.873	1.922	1.973	2.026	
11	1.376	1.393	1.412	1.431	1.451	1.473	1.497	1.522	1.548	1.576	1.606	1.639	1.673	1.709	1.747	1.788	1.830	1.876	1.923	1.974	
10	1.360	1.376	1.394	1.412	1.431	1.452	1.474	1.498	1.523	1.550	1.578	1.608	1.640	1.674	1.710	1.748	1.788	1.830	1.875	1.921	
9	1.344	1.359	1.376	1.393	1.412	1.431	1.452	1.474	1.498	1.523	1.550	1.578	1.608	1.640	1.674	1.709	1.747	1.786	1.827	1.871	
8	1.328	1.343	1.358	1.375	1.392	1.411	1.430	1.451	1.473	1.497	1.522	1.549	1.577	1.607	1.638	1.671	1.706	1.742	1.781	1.821	
7	1.312	1.326	1.341	1.356	1.373	1.390	1.409	1.428	1.449	1.471	1.495	1.520	1.546	1.574	1.603	1.634	1.666	1.700	1.735	1.772	
6	1.297	1.310	1.324	1.338	1.354	1.370	1.388	1.406	1.425	1.446	1.468	1.491	1.516	1.541	1.569	1.597	1.627	1.658	1.691	1.725	
Beneficiary younger than Retiree	5	1.282	1.294	1.307	1.321	1.335	1.351	1.367	1.384	1.402	1.421	1.442	1.463	1.486	1.510	1.535	1.562	1.589	1.618	1.648	1.680
	4	1.267	1.279	1.291	1.304	1.317	1.331	1.347	1.363	1.379	1.397	1.416	1.436	1.457	1.480	1.503	1.527	1.553	1.579	1.607	1.636
	3	1.253	1.264	1.275	1.287	1.299	1.313	1.327	1.342	1.357	1.374	1.392	1.410	1.430	1.450	1.472	1.494	1.517	1.542	1.567	1.594
	2	1.239	1.249	1.260	1.271	1.282	1.295	1.308	1.321	1.336	1.351	1.368	1.385	1.403	1.422	1.441	1.462	1.484	1.506	1.530	1.554
	1	1.225	1.235	1.245	1.255	1.266	1.277	1.289	1.302	1.315	1.330	1.345	1.360	1.377	1.394	1.412	1.431	1.451	1.472	1.493	1.516
Beneficiary same age as Retiree	0	1.212	1.221	1.230	1.240	1.250	1.260	1.271	1.283	1.295	1.309	1.322	1.337	1.352	1.368	1.385	1.402	1.420	1.439	1.459	1.480
Beneficiary older than Retiree	-1	1.200	1.208	1.216	1.225	1.234	1.244	1.254	1.265	1.276	1.288	1.301	1.314	1.328	1.343	1.358	1.374	1.391	1.408	1.427	1.446
	-2	1.187	1.195	1.203	1.211	1.219	1.228	1.238	1.248	1.258	1.269	1.281	1.293	1.306	1.319	1.333	1.348	1.363	1.379	1.396	1.414
	-3	1.176	1.183	1.190	1.197	1.205	1.213	1.222	1.231	1.241	1.251	1.261	1.273	1.284	1.297	1.310	1.323	1.337	1.352	1.368	1.384
	-4	1.165	1.171	1.178	1.184	1.192	1.199	1.207	1.215	1.224	1.233	1.243	1.253	1.264	1.275	1.287	1.300	1.312	1.326	1.341	1.356
	-5	1.154	1.160	1.166	1.172	1.179	1.186	1.193	1.200	1.208	1.217	1.226	1.235	1.245	1.255	1.266	1.278	1.290	1.302	1.316	1.331
	-6	1.144	1.149	1.155	1.160	1.166	1.173	1.179	1.186	1.194	1.201	1.209	1.218	1.227	1.237	1.247	1.257	1.268	1.280	1.293	1.307
	-7	1.134	1.139	1.144	1.149	1.155	1.161	1.167	1.173	1.180	1.187	1.194	1.202	1.210	1.219	1.228	1.238	1.248	1.260	1.272	1.285
	-8	1.125	1.130	1.134	1.139	1.144	1.149	1.155	1.160	1.166	1.173	1.180	1.187	1.195	1.203	1.211	1.220	1.230	1.241	1.253	1.265
	-9	1.117	1.121	1.125	1.129	1.134	1.138	1.143	1.149	1.154	1.160	1.166	1.173	1.180	1.187	1.196	1.204	1.213	1.224	1.235	1.247
	-10	1.109	1.112	1.116	1.120	1.124	1.128	1.133	1.138	1.143	1.148	1.154	1.160	1.166	1.173	1.181	1.189	1.198	1.208	1.218	1.230
	-11	1.101	1.104	1.108	1.111	1.115	1.119	1.123	1.127	1.132	1.137	1.142	1.148	1.154	1.161	1.168	1.176	1.184	1.193	1.203	1.214
	-12	1.094	1.097	1.100	1.103	1.107	1.110	1.114	1.118	1.122	1.126	1.131	1.137	1.142	1.149	1.156	1.163	1.171	1.180	1.189	1.199
	-13	1.087	1.090	1.093	1.096	1.099	1.102	1.105	1.109	1.113	1.117	1.121	1.126	1.132	1.138	1.144	1.151	1.159	1.167	1.176	1.186
	-14	1.081	1.083	1.086	1.089	1.091	1.094	1.097	1.101	1.104	1.108	1.112	1.117	1.122	1.128	1.134	1.141	1.148	1.156	1.164	1.174
	-15	1.075	1.077	1.080	1.082	1.084	1.087	1.090	1.093	1.096	1.100	1.104	1.109	1.113	1.119	1.125	1.131	1.138	1.145	1.153	1.162
	-16	1.070	1.072	1.074	1.076	1.078	1.080	1.083	1.086	1.089	1.093	1.096	1.101	1.105	1.110	1.116	1.122	1.128	1.135	1.143	1.152
	-17	1.065	1.066	1.068	1.070	1.072	1.074	1.077	1.080	1.083	1.086	1.089	1.093	1.098	1.103	1.108	1.114	1.120	1.127	1.134	1.143
	-18	1.060	1.061	1.063	1.065	1.067	1.069	1.071	1.074	1.076	1.080	1.083	1.087	1.091	1.096	1.101	1.106	1.112	1.119	1.126	1.134
	-19	1.055	1.057	1.058	1.060	1.062	1.064	1.066	1.068	1.071	1.074	1.077	1.081	1.085	1.089	1.094	1.099	1.105	1.111	1.119	1.127
	-20	1.051	1.053	1.054	1.056	1.057	1.059	1.061	1.063	1.066	1.069	1.072	1.075	1.079	1.083	1.088	1.093	1.098	1.105	1.112	1.120

**Oregon Public Employees Retirement System  
IRC 415 for Limitation Year 2023**

**Table 11: Convert from 50% Joint and Survivor Annuity with Pop-up Feature to Single Life Annuity  
(Factor Multiplied by Option 3a Annuity)**

Beneficiary Age Difference	Attained Age at Retirement																			
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
20	1.105	1.110	1.114	1.119	1.125	1.130	1.136	1.142	1.149	1.156	1.163	1.171	1.179	1.188	1.197	1.206	1.216	1.226	1.237	1.249
19	1.102	1.107	1.111	1.116	1.121	1.127	1.132	1.138	1.145	1.151	1.159	1.166	1.174	1.182	1.191	1.200	1.210	1.220	1.230	1.241
18	1.099	1.103	1.108	1.113	1.117	1.123	1.128	1.134	1.140	1.147	1.154	1.161	1.169	1.177	1.185	1.194	1.203	1.213	1.223	1.234
17	1.096	1.100	1.104	1.109	1.114	1.119	1.124	1.130	1.136	1.142	1.149	1.156	1.163	1.171	1.179	1.188	1.197	1.206	1.216	1.226
16	1.093	1.097	1.101	1.105	1.110	1.115	1.120	1.126	1.131	1.138	1.144	1.151	1.158	1.165	1.173	1.181	1.190	1.199	1.208	1.218
15	1.090	1.094	1.098	1.102	1.106	1.111	1.116	1.121	1.127	1.133	1.139	1.146	1.152	1.160	1.167	1.175	1.183	1.192	1.201	1.211
14	1.087	1.090	1.094	1.098	1.103	1.107	1.112	1.117	1.122	1.128	1.134	1.140	1.147	1.154	1.161	1.169	1.177	1.185	1.194	1.203
13	1.083	1.087	1.091	1.095	1.099	1.103	1.108	1.113	1.118	1.123	1.129	1.135	1.142	1.148	1.155	1.162	1.170	1.178	1.186	1.195
12	1.080	1.084	1.087	1.091	1.095	1.099	1.104	1.108	1.113	1.119	1.124	1.130	1.136	1.142	1.149	1.156	1.163	1.171	1.179	1.187
11	1.077	1.080	1.084	1.087	1.091	1.095	1.100	1.104	1.109	1.114	1.119	1.125	1.131	1.137	1.143	1.150	1.157	1.164	1.172	1.180
10	1.074	1.077	1.080	1.084	1.088	1.091	1.096	1.100	1.104	1.109	1.114	1.120	1.125	1.131	1.137	1.144	1.150	1.157	1.164	1.172
9	1.071	1.074	1.077	1.080	1.084	1.088	1.091	1.096	1.100	1.105	1.109	1.115	1.120	1.125	1.131	1.137	1.144	1.150	1.157	1.164
8	1.068	1.070	1.074	1.077	1.080	1.084	1.087	1.091	1.096	1.100	1.105	1.109	1.115	1.120	1.125	1.131	1.137	1.144	1.150	1.157
7	1.065	1.067	1.070	1.073	1.076	1.080	1.083	1.087	1.091	1.095	1.100	1.104	1.109	1.114	1.120	1.125	1.131	1.137	1.143	1.149
6	1.061	1.064	1.067	1.070	1.073	1.076	1.079	1.083	1.087	1.091	1.095	1.099	1.104	1.109	1.114	1.119	1.125	1.130	1.136	1.142
Beneficiary younger than Retiree																				
5	1.058	1.061	1.064	1.066	1.069	1.072	1.076	1.079	1.083	1.086	1.090	1.095	1.099	1.104	1.108	1.113	1.118	1.124	1.129	1.135
4	1.055	1.058	1.060	1.063	1.066	1.069	1.072	1.075	1.078	1.082	1.086	1.090	1.094	1.098	1.103	1.107	1.112	1.117	1.123	1.128
3	1.053	1.055	1.057	1.060	1.062	1.065	1.068	1.071	1.074	1.078	1.081	1.085	1.089	1.093	1.097	1.102	1.106	1.111	1.116	1.121
2	1.050	1.052	1.054	1.056	1.059	1.062	1.064	1.067	1.070	1.074	1.077	1.081	1.084	1.088	1.092	1.096	1.101	1.105	1.110	1.114
1	1.047	1.049	1.051	1.053	1.056	1.058	1.061	1.064	1.067	1.070	1.073	1.076	1.080	1.083	1.087	1.091	1.095	1.099	1.104	1.108
Beneficiary same age as Retiree																				
0	1.044	1.046	1.048	1.050	1.053	1.055	1.057	1.060	1.063	1.066	1.069	1.072	1.075	1.079	1.082	1.086	1.090	1.094	1.098	1.102
Beneficiary older than Retiree																				
-1	1.042	1.044	1.045	1.047	1.050	1.052	1.054	1.057	1.059	1.062	1.065	1.068	1.071	1.074	1.077	1.081	1.085	1.088	1.092	1.096
-2	1.039	1.041	1.043	1.045	1.047	1.049	1.051	1.053	1.056	1.058	1.061	1.064	1.067	1.070	1.073	1.076	1.080	1.083	1.086	1.090
-3	1.037	1.039	1.040	1.042	1.044	1.046	1.048	1.050	1.052	1.055	1.057	1.060	1.063	1.066	1.069	1.072	1.075	1.078	1.081	1.084
-4	1.035	1.036	1.038	1.039	1.041	1.043	1.045	1.047	1.049	1.051	1.054	1.056	1.059	1.062	1.064	1.067	1.070	1.073	1.076	1.079
-5	1.033	1.034	1.035	1.037	1.039	1.040	1.042	1.044	1.046	1.048	1.051	1.053	1.055	1.058	1.060	1.063	1.066	1.069	1.071	1.074
-6	1.030	1.032	1.033	1.035	1.036	1.038	1.039	1.041	1.043	1.045	1.047	1.050	1.052	1.054	1.057	1.059	1.062	1.064	1.067	1.069
-7	1.029	1.030	1.031	1.032	1.034	1.035	1.037	1.039	1.040	1.042	1.044	1.046	1.049	1.051	1.053	1.055	1.058	1.060	1.062	1.065
-8	1.027	1.028	1.029	1.030	1.032	1.033	1.035	1.036	1.038	1.040	1.042	1.043	1.045	1.047	1.050	1.052	1.054	1.056	1.058	1.060
-9	1.025	1.026	1.027	1.028	1.030	1.031	1.032	1.034	1.035	1.037	1.039	1.041	1.042	1.044	1.046	1.048	1.050	1.052	1.054	1.056
-10	1.023	1.024	1.025	1.026	1.028	1.029	1.030	1.032	1.033	1.035	1.036	1.038	1.040	1.041	1.043	1.045	1.047	1.049	1.051	1.052
-11	1.022	1.023	1.024	1.025	1.026	1.027	1.028	1.029	1.031	1.032	1.034	1.035	1.037	1.039	1.040	1.042	1.044	1.045	1.047	1.049
-12	1.020	1.021	1.022	1.023	1.024	1.025	1.026	1.027	1.029	1.030	1.032	1.033	1.034	1.036	1.038	1.039	1.041	1.042	1.044	1.045
-13	1.019	1.020	1.020	1.021	1.022	1.023	1.024	1.026	1.027	1.028	1.029	1.031	1.032	1.034	1.035	1.036	1.038	1.039	1.041	1.042
-14	1.017	1.018	1.019	1.020	1.021	1.022	1.023	1.024	1.025	1.026	1.027	1.029	1.030	1.031	1.033	1.034	1.035	1.037	1.038	1.039
-15	1.016	1.017	1.018	1.018	1.019	1.020	1.021	1.022	1.023	1.024	1.025	1.027	1.028	1.029	1.030	1.032	1.033	1.034	1.035	1.036
-16	1.015	1.016	1.016	1.017	1.018	1.019	1.020	1.021	1.021	1.023	1.024	1.025	1.026	1.027	1.028	1.029	1.030	1.032	1.033	1.034
-17	1.014	1.015	1.015	1.016	1.017	1.017	1.018	1.019	1.020	1.021	1.022	1.023	1.024	1.025	1.026	1.027	1.028	1.029	1.030	1.031
-18	1.013	1.013	1.014	1.015	1.015	1.016	1.017	1.018	1.018	1.019	1.020	1.021	1.022	1.023	1.024	1.025	1.026	1.027	1.028	1.029
-19	1.012	1.012	1.013	1.014	1.014	1.015	1.016	1.016	1.017	1.018	1.019	1.020	1.021	1.022	1.022	1.023	1.024	1.025	1.026	1.027
-20	1.011	1.012	1.012	1.013	1.013	1.014	1.014	1.015	1.016	1.017	1.017	1.018	1.019	1.020	1.021	1.022	1.023	1.024	1.025	1.026

**Oregon Public Employees Retirement System  
IRC 415 for Limitation Year 2023**

**Table 11: Convert from 50% Joint and Survivor Annuity with Pop-up Feature to Single Life Annuity  
(Factor Multiplied by Option 3a Annuity)**

Beneficiary Age Difference	Attained Age at Retirement																				
	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	
20	1.261	1.274	1.287	1.301	1.317	1.333	1.350	1.369	1.389	1.411	1.434	1.459	1.485	1.514	1.544	1.577	1.612	1.649	1.689	1.732	
19	1.253	1.265	1.278	1.292	1.307	1.322	1.339	1.357	1.377	1.397	1.419	1.443	1.469	1.496	1.525	1.556	1.590	1.626	1.664	1.705	
18	1.245	1.257	1.269	1.283	1.297	1.312	1.328	1.345	1.364	1.384	1.405	1.428	1.452	1.478	1.506	1.536	1.568	1.602	1.638	1.677	
17	1.237	1.248	1.260	1.273	1.287	1.301	1.317	1.333	1.351	1.370	1.390	1.412	1.436	1.460	1.487	1.516	1.546	1.578	1.613	1.650	
16	1.229	1.240	1.251	1.263	1.276	1.290	1.305	1.321	1.338	1.356	1.376	1.397	1.419	1.443	1.468	1.495	1.524	1.555	1.587	1.622	
15	1.221	1.231	1.242	1.254	1.266	1.280	1.294	1.309	1.325	1.343	1.361	1.381	1.402	1.425	1.449	1.475	1.502	1.531	1.562	1.594	
14	1.212	1.222	1.233	1.244	1.256	1.269	1.282	1.297	1.312	1.329	1.347	1.365	1.386	1.407	1.430	1.454	1.480	1.507	1.537	1.567	
13	1.204	1.214	1.224	1.235	1.246	1.258	1.271	1.285	1.300	1.315	1.332	1.350	1.369	1.389	1.411	1.434	1.458	1.484	1.511	1.540	
12	1.196	1.205	1.215	1.225	1.236	1.247	1.260	1.273	1.287	1.302	1.318	1.335	1.353	1.372	1.392	1.414	1.437	1.461	1.486	1.513	
11	1.188	1.197	1.206	1.215	1.226	1.237	1.248	1.261	1.274	1.288	1.303	1.319	1.336	1.354	1.374	1.394	1.415	1.438	1.462	1.487	
10	1.180	1.188	1.197	1.206	1.216	1.226	1.237	1.249	1.261	1.275	1.289	1.304	1.320	1.337	1.355	1.374	1.394	1.415	1.437	1.461	
9	1.172	1.180	1.188	1.197	1.206	1.216	1.226	1.237	1.249	1.262	1.275	1.289	1.304	1.320	1.337	1.355	1.373	1.393	1.414	1.435	
8	1.164	1.171	1.179	1.187	1.196	1.205	1.215	1.226	1.237	1.249	1.261	1.274	1.288	1.303	1.319	1.336	1.353	1.371	1.390	1.410	
7	1.156	1.163	1.170	1.178	1.186	1.195	1.204	1.214	1.225	1.236	1.247	1.260	1.273	1.287	1.301	1.317	1.333	1.350	1.368	1.386	
6	1.148	1.155	1.162	1.169	1.177	1.185	1.194	1.203	1.213	1.223	1.234	1.246	1.258	1.271	1.284	1.299	1.313	1.329	1.346	1.363	
Beneficiary younger than Retiree	5	1.141	1.147	1.154	1.160	1.168	1.175	1.183	1.192	1.201	1.211	1.221	1.232	1.243	1.255	1.268	1.281	1.295	1.309	1.324	1.340
	4	1.134	1.139	1.145	1.152	1.159	1.166	1.173	1.181	1.190	1.199	1.208	1.218	1.229	1.240	1.251	1.264	1.276	1.290	1.304	1.318
	3	1.126	1.132	1.137	1.143	1.150	1.156	1.163	1.171	1.179	1.187	1.196	1.205	1.215	1.225	1.236	1.247	1.259	1.271	1.284	1.297
	2	1.119	1.124	1.130	1.135	1.141	1.147	1.154	1.161	1.168	1.176	1.184	1.192	1.201	1.211	1.221	1.231	1.242	1.253	1.265	1.277
	1	1.113	1.117	1.122	1.127	1.133	1.139	1.145	1.151	1.158	1.165	1.172	1.180	1.188	1.197	1.206	1.216	1.226	1.236	1.247	1.258
Beneficiary same age as Retiree	0	1.106	1.110	1.115	1.120	1.125	1.130	1.136	1.142	1.148	1.154	1.161	1.168	1.176	1.184	1.192	1.201	1.210	1.220	1.230	1.240
Beneficiary older than Retiree	-1	1.100	1.104	1.108	1.112	1.117	1.122	1.127	1.132	1.138	1.144	1.151	1.157	1.164	1.172	1.179	1.187	1.195	1.204	1.213	1.223
	-2	1.094	1.097	1.101	1.105	1.110	1.114	1.119	1.124	1.129	1.135	1.140	1.146	1.153	1.160	1.167	1.174	1.182	1.190	1.198	1.207
	-3	1.088	1.091	1.095	1.099	1.103	1.107	1.111	1.116	1.120	1.125	1.131	1.136	1.142	1.148	1.155	1.162	1.169	1.176	1.184	1.192
	-4	1.082	1.086	1.089	1.092	1.096	1.100	1.103	1.108	1.112	1.117	1.122	1.127	1.132	1.138	1.144	1.150	1.156	1.163	1.170	1.178
	-5	1.077	1.080	1.083	1.086	1.089	1.093	1.096	1.100	1.104	1.108	1.113	1.118	1.122	1.128	1.133	1.139	1.145	1.151	1.158	1.165
	-6	1.072	1.075	1.077	1.080	1.083	1.086	1.090	1.093	1.097	1.101	1.105	1.109	1.114	1.118	1.123	1.129	1.134	1.140	1.147	1.154
	-7	1.067	1.070	1.072	1.075	1.077	1.080	1.083	1.086	1.090	1.093	1.097	1.101	1.105	1.109	1.114	1.119	1.124	1.130	1.136	1.143
	-8	1.063	1.065	1.067	1.070	1.072	1.075	1.077	1.080	1.083	1.086	1.090	1.093	1.097	1.101	1.106	1.110	1.115	1.120	1.126	1.133
	-9	1.058	1.060	1.062	1.065	1.067	1.069	1.072	1.074	1.077	1.080	1.083	1.086	1.090	1.094	1.098	1.102	1.107	1.112	1.117	1.123
	-10	1.054	1.056	1.058	1.060	1.062	1.064	1.066	1.069	1.071	1.074	1.077	1.080	1.083	1.087	1.091	1.095	1.099	1.104	1.109	1.115
	-11	1.051	1.052	1.054	1.056	1.057	1.059	1.061	1.064	1.066	1.068	1.071	1.074	1.077	1.080	1.084	1.088	1.092	1.097	1.102	1.107
	-12	1.047	1.048	1.050	1.052	1.053	1.055	1.057	1.059	1.061	1.063	1.066	1.068	1.071	1.074	1.078	1.081	1.085	1.090	1.094	1.100
	-13	1.044	1.045	1.046	1.048	1.049	1.051	1.053	1.054	1.056	1.058	1.061	1.063	1.066	1.069	1.072	1.076	1.079	1.084	1.088	1.093
	-14	1.040	1.042	1.043	1.044	1.046	1.047	1.049	1.050	1.052	1.054	1.056	1.059	1.061	1.064	1.067	1.070	1.074	1.078	1.082	1.087
	-15	1.038	1.039	1.040	1.041	1.042	1.044	1.045	1.046	1.048	1.050	1.052	1.054	1.057	1.059	1.062	1.065	1.069	1.073	1.077	1.081
	-16	1.035	1.036	1.037	1.038	1.039	1.040	1.042	1.043	1.045	1.046	1.048	1.050	1.053	1.055	1.058	1.061	1.064	1.068	1.072	1.076
	-17	1.032	1.033	1.034	1.035	1.036	1.037	1.038	1.040	1.041	1.043	1.045	1.047	1.049	1.051	1.054	1.057	1.060	1.063	1.067	1.071
	-18	1.030	1.031	1.032	1.032	1.033	1.034	1.036	1.037	1.038	1.040	1.042	1.043	1.046	1.048	1.050	1.053	1.056	1.059	1.063	1.067
	-19	1.028	1.028	1.029	1.030	1.031	1.032	1.033	1.034	1.035	1.037	1.039	1.040	1.042	1.045	1.047	1.050	1.052	1.056	1.059	1.063
	-20	1.026	1.026	1.027	1.028	1.029	1.030	1.031	1.032	1.033	1.034	1.036	1.038	1.040	1.042	1.044	1.046	1.049	1.052	1.056	1.060