CITY OF PORTLAND FIRE & POLICE DISABILITY & RETIREMENT (FPDR) FUND

Pension Actuarial Valuation Report as of June 30, 2024

Prepared by:

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January 17, 2025

Stacy Jones
FPDR Financial Manager
Bureau of Fire & Police Disability & Retirement

Dear Stacy,

As part of our engagement with the Bureau of Fire & Police Disability & Retirement and the City of Portland, we performed an actuarial valuation of the Fire & Police Disability & Retirement Fund (“FPDR” or “the System”) sponsored by the City as of June 30, 2024. Our findings are set forth in this actuarial valuation report. This report reflects the benefit provisions in effect as of June 30, 2024.

FPDR is effectively funded on a pay-as-you-go basis via a property tax levy, with the directive to use pay-as-you-go funding coming from the governing City Charter. The results contained in this report are not intended to be used to determine plan contributions for pre-funding the benefits and this report does not constitute a funding valuation. Instead, this report provides information on recent experience and projected future benefits of the plan and will provide the basis for later financial reporting and levy adequacy analysis.

Actuarial assumptions, including discount rates, mortality tables, and others identified in this report, and actuarial cost methods are adopted by the FPDR Board. That entity is responsible for selecting the plan’s actuarial valuation methods and assumptions. The policies, methods, and assumptions used in this valuation are those that have been so adopted and are described in this report. The System is solely responsible for communicating to Milliman any changes required thereto. All costs, liabilities, rates of interest, and other factors for the System have been determined on the basis of actuarial assumptions and methods which are individually reasonable (taking into account the experience of the System and reasonable expectations); and which, in combination, offer a reasonable estimate of anticipated experience affecting the System and are expected to have no significant bias.

This valuation report is only an estimate of the System’s financial condition as of a single date. It can neither predict the System’s future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of System benefits, only the timing of System contributions or cost recognition. While the valuation is based on an array of individually reasonable assumptions, other assumption sets may also be reasonable and valuation results based on those assumptions would be different. No one set of assumptions is uniquely correct. Determining results using alternative assumptions is outside the scope of our engagement.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: System experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements; and changes in System benefit provisions or applicable law. Due to the limited scope of this assignment, we did not perform an analysis of the potential range of future measurements. The FPDR Board has the final decision regarding the appropriateness of the assumptions and cost methods used in this report and reviewed and accepted them in its September 2020 Board meeting related to the 2020 experience study. Updates since that study were reviewed with FPDR staff in November 2024.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by the System's staff. This information includes, but is not limited to, System benefit provisions as defined by City Charter, employee data, and financial information. We found this information to be reasonably consistent and comparable with information used for other purposes. The valuation results depend on the integrity of this information. If any of this information is inaccurate or incomplete our results may be different and our calculations may need to be revised. The valuation results were developed using models intended for valuations that use standard actuarial techniques. We have reviewed the models, including their inputs, calculations, and outputs for consistency, reasonableness, and appropriateness to the intended purpose and in compliance with generally accepted actuarial practice and relevant actuarial standards of practice.

Milliman's work is prepared solely for the use and benefit of FPDR and the City of Portland. Milliman does not intend to benefit or create a legal duty to any third-party recipient of this report. No third-party recipient of Milliman's work product should rely upon this report. Such recipients should engage qualified professionals for advice appropriate to their own specific needs.

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

The 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 Academy of Actuaries and meet the Qualification Standards to render the actuarial opinion contained herein.

Sincerely,

Matthew R. Larrabee, FSA, EA, MAAA
Principal and Consulting Actuary

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

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Section I – Summary of the Findings

Summary of the Findings

Milliman has prepared this report for the City of Portland and its Fire & Police Disability & Retirement Fund ("FPDR" or "the Plan") to:

- Estimate the Plan's actuarial liabilities as of June 30, 2024 for FPDR and the City of Portland,
- Provide a multi-year estimate of projected benefit payments from the Plan, and
- Provide the basis for later financial reporting results and levy adequacy analysis requested by FPDR, which will build from these June 30, 2024 valuation results.

Summary of Principal Results

The following table summarizes the primary results of the valuation which are discussed further below.

	June 30, 2022	June 30, 2024
Discount Rate	3.54%	3.93%
Actuarial Cost Method	Entry Age Normal	Entry Age Normal
Actuarial Accrued Liability (AAL)	$ 3,864,950,099	$ 3,907,867,099
Assets	27,684,607	17,917,971
Unfunded Actuarial Accrued Liability (UAAL)	3,837,265,492	3,889,949,128
Projected Base Pay for Next Year	169,755,064	187,127,922
Normal Cost	66,551,670	54,296,463

FPDR is essentially funded on a pay-as-you-go basis via a property tax levy. The actuarial liabilities contained in this report are not appropriate for or intended to be used as a basis for pre-funding the plan or for assessing the cost of settling the plan's obligations, but do provide a measure of the present value of the financial obligation associated with the program. The actuarial liabilities are calculated from a projection of benefit payments. The projection reflects the current provisions, assumptions, and demographic information documented in this report. The stream of projected future benefit payments is converted to a net present value as of the valuation date based on the valuation discount rate, which is 3.93% for the current valuation. The total net present value is then assigned to past, present, and future service according to the actuarial cost method. The portion assigned to the past is called the **actuarial accrued liability (AAL)**[1], while the portion assigned to the current year is referred to as the **normal cost**.

The results from this valuation will also be used to assist the City and FPDR in completing disclosures for financial reporting **measurement dates** as of June 30, 2025 and June 30, 2026 under **GASB 67** (which governs plan financial reporting) and **GASB 68** (which governs the City's reporting). Results calculated as of the June 30, 2024 **valuation date** in this report will be recalculated as of these later dates using standard actuarial roll-forward techniques. GASB 67 and GASB 68 permit the use of a valuation date that is up to 24 months prior to the measurement date. Actuarial valuations are conducted each even-numbered year, and results from that valuation will be used to develop the fiscal year-end financial reporting for measurement dates 12 and 24 months subsequent to the valuation date. Following this procedure and generally accepted financial reporting practices for governmental entities, the results from this report will be used to develop GASB 67 and 68 results for the fiscal years ending in 2025 and 2026. However, the actual fiscal year-ending 2025 and 2026 results are not included in this report, as the measurements must be adjusted to reflect

[1] *Bolded terms from the Executive Summary are defined in the report glossary.*

experience (including bond market information to identify the appropriate discount rate and audited fund asset levels) through the relevant dates. These results will be provided separately according to the relevant financial reporting timeframe.

The discount rate used to determine a net present value changed from 3.54% for the previous valuation as of June 30, 2022 to 3.93% for the current valuation as of June 30, 2024, which had the effect of decreasing the measured plan liabilities. The discount rate of 3.93% is the same rate used by FPDR in plan financial reporting as of June 30, 2024 and was selected to be consistent with the rate selection basis required under GASB 67. Because of the primarily unfunded nature of the FPDR plan, the discount rate under GASB 67 is set equal to a municipal bond rate or index selected by FPDR that represents yields for 20-year tax-exempt general obligation municipal bonds.

In this valuation, there are two categories of plan assets considered for FPDR: a $750,000 Reserve Fund established by the governing City Charter, and the FPDR Fund, which held $17,167,971 in trust for pension benefits as of June 30, 2024. Assets are reported by FPDR and are measured on a fair market value basis. We understand these funds are invested in short-term fixed income securities, in a similar manner to the general assets of the City of Portland. Both funds are included as assets in this valuation based upon consultation with FPDR, the City of Portland, and the City's external auditor.

The City of Portland also provides an "indirect subsidy" retiree healthcare benefit for FPDR members via allowing access to the medical plans offered to active FPDR members. We understand the indirect (or implicit) subsidy for these benefits is valued in a separate actuarial valuation conducted by another actuary.

In addition to the indirect subsidy noted above, FPDR also provides a benefit that reimburses medical expenses associated with service-connected injuries and illness. In consultation with FPDR and the City's external auditor, it was decided that beginning with the June 30, 2012 valuation the liability for post-retirement disability-related expenses could be estimated by applying a fixed percentage load to the pension liabilities. This percentage load was 0.65% for the previous valuation. We reviewed this assumption as part of the current valuation and have maintained the 0.65% load assumption based on recent observed experience over the prior eight years and expectations regarding future experience.

Plan Provisions

Since the previous valuation, there have been no changes to the plan provisions that had a material effect on the valuation liabilities.

Assumptions and Methods

Most demographic and economic assumptions used in this valuation are based on an experience study presented to the FPDR Board on September 22, 2020, which also formed the basis for the assumptions used in the June 30, 2022 valuation.

The following assumptions were updated in the current valuation, in keeping with the procedures adopted by the FPDR Board with the 2020 experience study, and were reviewed with FPDR staff in November 2024:

- The discount rate used for the valuation is selected to be consistent with the discount rate used for GASB financial reporting at the valuation date. The GASB standards require the use of a municipal bond rate or index for a plan such as FPDR, which led to the current valuation's discount rate of 3.93%. This is an increase of 39 basis points from the prior valuation, and the discount rate change decreased the Actuarial Accrued Liability (AAL) as of the valuation date by $209 million.

- The assumption for the cost-of-living adjustment (COLA) paid to FPDR Two members was updated to assume the maximum COLA level of 2.00% is provided by the FPDR Board for all service. In the previous valuation, the FPDR Two COLA was assumed to be a blend of 2.00% for service prior to October 8, 2013 and 1.75% for service thereafter. Updating this assumption increased the AAL by $37 million in the current valuation.

- The mortality assumptions used for all members and beneficiaries have been selected to be consistent with the same assumptions used by the Oregon Public Employees Retirement System (OPERS) for police and fire members and beneficiaries in the most recently published OPERS valuation. The OPERS assumptions are used because the much larger size of the OPERS system generates more statistically credible mortality experience for Oregon public safety personnel than would result from examining FPDR experience in isolation. Updating this assumption increased the AAL by $0.6 million in the current valuation.

- The assumed disability retirement age for FPDR Three members was updated from 60 to 55 to reflect the change made to OPSRP normal retirement age by House Bill 4045 from the 2024 legislative session. Updating this assumption decreased the AAL by $3 million in the current valuation.

These changes are discussed more fully in the appendices to this report, and their effects on measured liabilities are shown in Section II of this report. All actuarial assumptions, methods, and plan provisions valued are summarized in the appendices of this report.

Section II – Valuation Results

Valuation Results

Calculation of the Unfunded Actuarial Accrued Liability (UAAL)

The development of the Unfunded Actuarial Accrued Liability is shown in the table below.

Benefit Obligations and UAAL	June 30, 2022	June 30, 2024
Actuarial Cost Method	Entry Age Normal	Entry Age Normal
1 Discount Rate	3.54%	3.93%
2 Total Present Value of Benefits (includes future accruals)	$ 4,340,310,753	$ 4,244,739,484
3 Actuarial Accrued Liability		
a. Retirees	2,284,098,659	2,447,431,325
b. Pre-retirement disableds	53,399,049	52,869,641
c. Surviving spouses and alternate payees	157,979,985	159,676,109
d. Inactive participants with deferred benefits	71,167,486	74,930,258
e. Active employees	1,298,304,920	1,172,959,766
f. **Total**	**3,864,950,099**	**3,907,867,099**
4 Present value of future normal costs *(2.-3.f.)*	475,360,654	336,872,385
5 Projected next year's base pay	169,755,064	187,127,922
6 Normal cost	66,551,670	54,296,463
7 Assets	27,684,607	17,917,971
8 Unfunded Actuarial Accrued Liability (UAAL) *(3.f. -7.)*	3,837,265,492	3,889,949,128

Projected Benefit Payments

The table below shows the projected benefit payments assuming no new entrants and all valuation assumptions are realized. The payment projections shown include the effect of assumed future service and salary increases for current actives, as well as the assumed load for disability-related medical expenses in retirement. The amounts shown do not include any projected benefit payments to members and their survivor beneficiaries from the Oregon Public Employees Retirement System (OPERS) in which FPDR Three members also participate. The amounts shown also do not include any employer contributions to OPERS for service by FPDR Three members. For comparison, the actual benefit payments during the 2023-2024 fiscal year on this basis were approximately $160.6 million.

Fiscal Year	Projected Benefit Payments
2024-2025	$ 167,191,000
2025-2026	174,420,000
2026-2027	182,105,000
2027-2028	189,895,000
2028-2029	197,797,000
2029-2030	204,918,000
2030-2031	212,281,000
2031-2032	219,347,000
2032-2033	225,297,000
2033-2034	229,608,000
2034-2035	232,479,000
2035-2036	234,141,000
2036-2037	234,782,000
2037-2038	234,727,000
2038-2039	233,924,000
2039-2040	232,516,000
2040-2041	230,625,000
2041-2042	228,233,000
2042-2043	225,441,000
2043-2044	222,231,000
2044-2045	218,711,000
2045-2046	214,910,000
2046-2047	210,810,000
2047-2048	206,451,000
2048-2049	201,864,000
2049-2050	197,094,000
2050-2051	192,043,000
2051-2052	186,904,000
2052-2053	181,569,000
2053-2054	176,051,000

Actuarial Liabilities by Tier

	June 30, 2024						
	FPDR One Police	FPDR One Fire	FPDR Two Police	FPDR Two Fire	FPDR Three Police	FPDR Three Fire	Total
Total Present Value of Benefits							
Active	-	-	$ 755,814,439	$ 732,945,321	$ 11,698,615	$ 9,373,776	**$ 1,509,832,151**
Inactive	62,536,981	48,719,076	1,703,817,689	919,036,074	797,513	-	**2,734,907,333**
Total	62,536,981	48,719,076	2,459,632,128	1,651,981,395	12,496,128	9,373,776	**4,244,739,484**
Actuarial Accrued Liability							
Active	-	-	613,804,957	557,248,971	1,224,147	681,691	**1,172,959,766**
Inactive	62,536,981	48,719,076	1,703,817,689	919,036,074	797,513	-	**2,734,907,333**
Total	62,536,981	48,719,076	2,317,622,646	1,476,285,045	2,021,660	681,691	**3,907,867,099**
Normal Cost	-	-	27,592,923	25,572,778	627,022	503,740	**54,296,463**
Projected next year's base pay	-	-	41,327,094	41,512,561	59,220,285	45,067,982	**187,127,922**
Normal Cost as % of base pay	N/A	N/A	66.8%	61.6%	1.1%	1.1%	**29.0%**

Analysis of Gains and Losses

The table below shows Actuarial Accrued Liability (AAL) as of the previous valuation date of June 30, 2022, the expected AAL at the current valuation date if all assumptions were met with no changes to benefit provisions or assumptions, and the actual AAL calculated in this valuation before reflecting any changes to benefit provisions or assumptions. As detailed in the table, actual experience compared to assumption since the last valuation led to a $122 million demographic experience loss, or increase in liability, compared to the expected liability. The main reasons for this loss were higher salary increases than expected and fewer deaths among the inactive population than expected.

Actuarial Accrued Liability Gain/(Loss) Analysis

	Actuarial Accrued Liability
June 30, 2022 AAL	$ 3,864,950,099
Expected June 30, 2024 AAL before changes	3,960,508,897
Actual June 30, 2024 AAL before changes	4,082,951,917
Gain/(Loss)	(122,443,020)
Gain/(Loss) as % of expected AAL	-3.1%
Sources of Gain/(Loss)	
Salary experience	(91,465,706)
FPDR One COLA experience	(2,700,501)
FPDR Two COLA experience	(787,586)
Oregon residency experience	2,062,142
Inactive mortality experience	(13,134,973)
New actives	(248,179)
New alternate payee benefit reversions	(1,205,297)
New retiree spouses	(3,320,182)
Total	(110,800,282)
Remaining Gain/(Loss) from other sources	(11,642,738)
Remaining Gain/(Loss) as % of expected AAL	-0.3%

Effect of Assumption, Method, and Plan Changes

The table below shows the changes in plan AAL and Normal Cost that occurred as a result of updating the valuation assumptions, as discussed in Appendix C of this report.

Effect of Assumption, Method, and Plan Changes

	Actuarial Accrued Liability (AAL)	Normal Cost
June 30, 2022 Valuation	$ 3,864,950,099	$ 66,551,670
June 30, 2024 before changes	4,082,951,917	59,943,952
Plan provision changes	N/A	N/A
Assumption/method changes		
Discount rate assumption	(209,016,189)	(6,217,548)
Mortality assumption	621,407	35,241
FPDR 2 COLA assumption	36,543,284	1,101,290
FPDR 3 disability retirement age assumption	(3,233,320)	(566,472)
Total change	(175,084,818)	(5,647,489)
June 30, 2024 Final Valuation Results	3,907,867,099	54,296,463

Section III – Plan Assets

Plan Assets

The FPDR Board of Trustees administers both the FPDR Fund and a Reserve Fund.

The FPDR Fund is invested primarily in cash and short-term investments. As of June 30, 2024, the Fund had a total of $17,917,971 in net assets considered held in trust for pension benefits.

The Reserve Fund is authorized under provisions of Chapter 5 (Section 5-104) of the City of Portland's Charter; and its purpose is to provide a reserve from which advances can be made to the FPDR Fund in the event the Fund is depleted to the extent that it cannot meet its current obligations. Under provisions of the City Charter, the Reserve Fund maximum is established at $750,000 and is fully funded as of June 30, 2024.

Based on input from FPDR, the City of Portland, and its external auditor, we understand both the FPDR Fund held in trust for pension benefits and the Reserve Fund are considered to meet GASB requirements of plan assets for financial reporting, and thus are used for plan actuarial valuation purposes.

The amounts shown below for both the current and prior valuation date are provided to us by FPDR and the City of Portland and are reported on a fair market value basis.

Asset Summary			
Valuation Date	FPDR Fund - Held in Trust for Pension	Reserve Fund	Total Pension Assets
June 30, 2022	$26,934,607	$750,000	$27,684,607
June 30, 2024	$17,167,971	$750,000	$17,917,971

Appendix A

Participant Data

Statistics for FPDR Participants as of June 30, 2024

	FPDR One		FPDR Two		FPDR Three		Total		Grand
	Police	Fire	Police	Fire	Police	Fire	Police	Fire	Total
Actives									
Headcount	0	0	260	292	475	378	735	670	1,405
Average Age	N/A	N/A	49.8	49.6	36.9	39.6	41.5	44.0	42.6
Average Service	N/A	N/A	22.5	22.3	7.6	9.2	12.9	14.9	13.8
Average Salary*	N/A	N/A	$160,070	$142,166	$124,674	$119,227	$137,195	$129,225	$133,394
Current Retiree & Beneficiaries**									
Headcount	132	109	1,142	631	0	0	1,274	740	2,014
Average Age	83.9	84.8	67.9	70.8	N/A	N/A	69.6	72.9	70.8
Average Monthly Benefit	$4,213	$4,197	$6,561	$7,265	N/A	N/A	$6,318	$6,813	$6,500
Current Disabled Members									
Headcount	0	0	18	4	1	0	19	4	23
Average Age	N/A	N/A	55.5	55.5	40.0	N/A	54.7	55.5	54.8
Average Monthly Benefit	N/A	N/A	$5,012	$4,590	$5,279	N/A	$5,026	$4,590	$4,950
Inactive Deferred Members									
Headcount	0	0	51	20	0	0	51	20	71
Average Age	N/A	N/A	48.6	48.1	N/A	N/A	48.6	48.1	48.5
Average Monthly Benefit	N/A	N/A	$3,690	$3,845	N/A	N/A	$3,690	$3,845	$3,734

* *Average Salary is projected 2024-2025 basic annualized earnings.*

** *Headcount does not include 142 Alternate Payees receiving benefits via a Domestic Relations Order. The average monthly benefit for that group is $1,766.*

Distribution of FPDR Two Active Participants as of June 30, 2024

FPDR Two Police

	Years of Service							
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30**	**Total**
0-20	0	0	0	0	0	0	0	**0**
20-24	0	0	0	0	0	0	0	**0**
25-29	0	0	0	0	0	0	0	**0**
30-34	0	0	0	0	0	0	0	**0**
35-39	0	0	0	0	0	0	0	**0**
40-44	0	0	0	16	16	0	0	**32**
45-49	0	0	0	21	73	11	0	**105**
50-54	0	0	0	13	47	28	1	**89**
55-59	0	0	0	8	10	8	0	**26**
60-64	0	0	0	2	2	1	1	**6**
65-69	0	0	0	0	0	1	1	**2**
70-74	0	0	0	0	0	0	0	**0**
75+	0	0	0	0	0	0	0	**0**
Total	**0**	**0**	**0**	**60**	**148**	**49**	**3**	**260**

FPDR Two Fire

	Years of Service							
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30**	**Total**
0-20	0	0	0	0	0	0	0	**0**
20-24	0	0	0	0	0	0	0	**0**
25-29	0	0	0	0	0	0	0	**0**
30-34	0	0	0	0	0	0	0	**0**
35-39	0	0	0	0	0	0	0	**0**
40-44	0	1	0	29	13	0	0	**43**
45-49	0	0	0	35	60	11	0	**106**
50-54	0	0	0	16	49	26	0	**91**
55-59	0	0	0	7	15	19	2	**43**
60-64	0	0	0	0	3	3	3	**9**
65-69	0	0	0	0	0	0	0	**0**
70-74	0	0	0	0	0	0	0	**0**
75+	0	0	0	0	0	0	0	**0**
Total	**0**	**1**	**0**	**87**	**140**	**59**	**5**	**292**

FPDR Two Total

	Years of Service							
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30**	**Total**
0-20	0	0	0	0	0	0	0	**0**
20-24	0	0	0	0	0	0	0	**0**
25-29	0	0	0	0	0	0	0	**0**
30-34	0	0	0	0	0	0	0	**0**
35-39	0	0	0	0	0	0	0	**0**
40-44	0	1	0	45	29	0	0	**75**
45-49	0	0	0	56	133	22	0	**211**
50-54	0	0	0	29	96	54	1	**180**
55-59	0	0	0	15	25	27	2	**69**
60-64	0	0	0	2	5	4	4	**15**
65-69	0	0	0	0	0	1	1	**2**
70-74	0	0	0	0	0	0	0	**0**
75+	0	0	0	0	0	0	0	**0**
Total	**0**	**1**	**0**	**147**	**288**	**108**	**8**	**552**

Distribution of FPDR Three Active Participants as of June 30, 2024

FPDR Three Police

	Years of Service							
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30**	**Total**
0-20	0	0	0	0	0	0	0	**0**
20-24	25	0	0	0	0	0	0	**25**
25-29	70	6	0	0	0	0	0	**76**
30-34	45	41	1	0	0	0	0	**87**
35-39	23	36	42	11	0	0	0	**112**
40-44	16	30	21	24	0	0	0	**91**
45-49	5	10	13	21	0	0	0	**49**
50-54	5	2	10	12	0	0	0	**29**
55-59	0	1	3	1	0	0	0	**5**
60-64	0	0	1	0	0	0	0	**1**
65-69	0	0	0	0	0	0	0	**0**
70-74	0	0	0	0	0	0	0	**0**
75+	0	0	0	0	0	0	0	**0**
Total	**189**	**126**	**91**	**69**	**0**	**0**	**0**	**475**

FPDR Three Fire

	Years of Service							
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30**	**Total**
0-20	0	0	0	0	0	0	0	**0**
20-24	6	0	0	0	0	0	0	**6**
25-29	24	5	0	0	0	0	0	**29**
30-34	29	28	0	0	0	0	0	**57**
35-39	26	41	20	4	0	0	0	**91**
40-44	13	26	22	38	0	0	0	**99**
45-49	5	12	23	29	0	0	0	**69**
50-54	0	4	9	10	0	0	0	**23**
55-59	0	0	2	2	0	0	0	**4**
60-64	0	0	0	0	0	0	0	**0**
65-69	0	0	0	0	0	0	0	**0**
70-74	0	0	0	0	0	0	0	**0**
75+	0	0	0	0	0	0	0	**0**
Total	**103**	**116**	**76**	**83**	**0**	**0**	**0**	**378**

FPDR Three Total

	Years of Service							
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30**	**Total**
0-20	0	0	0	0	0	0	0	**0**
20-24	31	0	0	0	0	0	0	**31**
25-29	94	11	0	0	0	0	0	**105**
30-34	74	69	1	0	0	0	0	**144**
35-39	49	77	62	15	0	0	0	**203**
40-44	29	56	43	62	0	0	0	**190**
45-49	10	22	36	50	0	0	0	**118**
50-54	5	6	19	22	0	0	0	**52**
55-59	0	1	5	3	0	0	0	**9**
60-64	0	0	1	0	0	0	0	**1**
65-69	0	0	0	0	0	0	0	**0**
70-74	0	0	0	0	0	0	0	**0**
75+	0	0	0	0	0	0	0	**0**
Total	**292**	**242**	**167**	**152**	**0**	**0**	**0**	**853**

Distribution of All Active Participants as of June 30, 2024

Police Total

	Years of Service							
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30**	**Total**
0-20	0	0	0	0	0	0	0	**0**
20-24	25	0	0	0	0	0	0	**25**
25-29	70	6	0	0	0	0	0	**76**
30-34	45	41	1	0	0	0	0	**87**
35-39	23	36	42	11	0	0	0	**112**
40-44	16	30	21	40	16	0	0	**123**
45-49	5	10	13	42	73	11	0	**154**
50-54	5	2	10	25	47	28	1	**118**
55-59	0	1	3	9	10	8	0	**31**
60-64	0	0	1	2	2	1	1	**7**
65-69	0	0	0	0	0	1	1	**2**
70-74	0	0	0	0	0	0	0	**0**
75+	0	0	0	0	0	0	0	**0**
Total	**189**	**126**	**91**	**129**	**148**	**49**	**3**	**735**

Fire Total

	Years of Service							
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30**	**Total**
0-20	0	0	0	0	0	0	0	**0**
20-24	6	0	0	0	0	0	0	**6**
25-29	24	5	0	0	0	0	0	**29**
30-34	29	28	0	0	0	0	0	**57**
35-39	26	41	20	4	0	0	0	**91**
40-44	13	27	22	67	13	0	0	**142**
45-49	5	12	23	64	60	11	0	**175**
50-54	0	4	9	26	49	26	0	**114**
55-59	0	0	2	9	15	19	2	**47**
60-64	0	0	0	0	3	3	3	**9**
65-69	0	0	0	0	0	0	0	**0**
70-74	0	0	0	0	0	0	0	**0**
75+	0	0	0	0	0	0	0	**0**
Total	**103**	**117**	**76**	**170**	**140**	**59**	**5**	**670**

Grand Total

	Years of Service							
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30**	**Total**
0-20	0	0	0	0	0	0	0	**0**
20-24	31	0	0	0	0	0	0	**31**
25-29	94	11	0	0	0	0	0	**105**
30-34	74	69	1	0	0	0	0	**144**
35-39	49	77	62	15	0	0	0	**203**
40-44	29	57	43	107	29	0	0	**265**
45-49	10	22	36	106	133	22	0	**329**
50-54	5	6	19	51	96	54	1	**232**
55-59	0	1	5	18	25	27	2	**78**
60-64	0	0	1	2	5	4	4	**16**
65-69	0	0	0	0	0	1	1	**2**
70-74	0	0	0	0	0	0	0	**0**
75+	0	0	0	0	0	0	0	**0**
Total	**292**	**243**	**167**	**299**	**288**	**108**	**8**	**1,405**

Distribution of Current Retirees and Beneficiaries as of June 30, 2024

	FPDR One				FPDR Two			
	Police		Fire		Police		Fire	
Age	Count	Total Monthly Benefit	Count	Total Monthly Benefit	Count	Total Monthly Benefit	Count	Total Monthly Benefit
<40	0	-	0	-	1	1,848	0	-
40-44	0	-	0	-	0	-	0	-
45-49	0	-	0	-	1	4,586	0	-
50-54	0	-	0	-	99	811,941	12	110,339
55-59	1	2,301	0	-	185	1,350,979	45	362,909
60-64	0	-	1	1,795	145	1,017,276	80	679,690
65-69	5	21,072	3	14,362	177	1,232,336	143	1,129,447
70-74	9	38,276	11	45,826	195	1,199,023	155	1,111,245
75-79	29	133,441	11	53,896	212	1,198,988	89	582,158
80-84	22	96,027	19	82,306	94	517,682	69	393,305
85-89	24	83,119	31	126,192	26	122,696	28	158,204
90-94	31	137,222	20	76,422	5	24,786	10	56,604
95+	11	44,717	13	56,688	2	11,086	0	-
Total	**132**	**$556,176**	**109**	**$457,487**	**1142**	**$7,493,229**	**631**	**$4,583,900**

*Headcount does not include 142 Alternate Payees receiving benefits via a Domestic Relations Order (DRO). Total monthly benefits for that group was $250,723

Distribution of Disabled Participants as of June 30, 2024

	FPDR One				FPDR Two				FPDR Three			
	Police		Fire		Police		Fire		Police		Fire	
Age	Count	Total Monthly Benefit	Count	Total Monthly Benefit	Count	Total Monthly Benefit	Count	Total Monthly Benefit	Count	Total Monthly Benefit	Count	Total Monthly Benefit
<40	0	-	0	-	0	-	0	-	0	-	0	-
40-44	0	-	0	-	0	-	0	-	1	5,279	0	-
45-49	0	-	0	-	2	5,004	1	2,380	0	-	0	-
50-54	0	-	0	-	6	30,932	1	8,657	0	-	0	-
55-59	0	-	0	-	5	25,589	0	-	0	-	0	-
60-64	0	-	0	-	5	28,685	2	7,322	0	-	0	-
65-69	0	-	0	-	0	-	0	-	0	-	0	-
70-74	0	-	0	-	0	-	0	-	0	-	0	-
75-79	0	-	0	-	0	-	0	-	0	-	0	-
80-84	0	-	0	-	0	-	0	-	0	-	0	-
85-89	0	-	0	-	0	-	0	-	0	-	0	-
90-94	0	-	0	-	0	-	0	-	0	-	0	-
95+	0	-	0	-	0	-	0	-	0	-	0	-
Total	**0**	**-**	**0**	**-**	**18**	**$90,209**	**4**	**$18,359**	**1**	**$5,279**	**0**	**-**

Distribution of Inactive Deferred Participants as of June 30, 2024

	FPDR One				FPDR Two			
	Police		Fire		Police		Fire	
Age	Count	Total Monthly Benefit	Count	Total Monthly Benefit	Count	Total Monthly Benefit	Count	Total Monthly Benefit
<40	0	-	0	-	0	-	1	4,521
40-44	0	-	0	-	6	15,559	2	8,810
45-49	0	-	0	-	26	96,014	8	28,180
50-54	0	-	0	-	18	75,773	9	35,391
55-59	0	-	0	-	1	842	0	-
60-64	0	-	0	-	0	-	0	-
65-69	0	-	0	-	0	-	0	-
70-74	0	-	0	-	0	-	0	-
75-79	0	-	0	-	0	-	0	-
80-84	0	-	0	-	0	-	0	-
85-89	0	-	0	-	0	-	0	-
90-94	0	-	0	-	0	-	0	-
95+	0	-	0	-	0	-	0	-
Total	**0**	**-**	**0**	**-**	**51**	**$188,187**	**20**	**$76,902**

Appendix B

Actuarial Cost Method and Policies

Actuarial Cost Method and Policies

Actuarial cost method: Liabilities shown in this report are computed using the Individual Entry Age Normal cost method allocated as a level percent of projected pay from the date of entry to projected exit age. Under this method, the total Actuarial Present Value of Benefits is allocated over the service for each active member from their date of entry into the Plan until their assumed date of exit from the Plan, as a level percent of the compensation they are projected to receive over the same time period.

The amount allocated to the year following the valuation date is referred to as the Normal Cost and is calculated individually for each active member. It is calculated by dividing the total Actuarial Present Value of Projected Benefits at entry age by the Actuarial Present Value of Projected Payroll at entry age to determine a Normal Cost rate, and by multiplying that rate by the member's projected compensation for the year following the valuation date. The Normal Cost equals $0 for non-active members. The sum of the individual Normal Costs is the Normal Cost for the Plan.

The amount allocated to service completed prior to the valuation date is referred to as the Accrued Liability and is calculated individually for each active member. It is calculated by multiplying the same Normal Cost rate described above by the member's Actuarial Present Value of Projected Payroll measured as of the valuation date based on their projected future service and compensation, and by subtracting that amount from the member's Actuarial Present Value of Benefits measured as of the valuation date. The Accrued Liability is equal to the Actuarial Present Value of Benefits for non-active members. The sum of the individual Accrued Liabilities is the Accrued Liability for the Plan.

Actuarial Value of Assets: Assets are provided by FPDR and the City of Portland and are reported on a fair market value basis. The considered assets have two components: the FPDR Fund and the Reserve Fund.

Census data: To prepare this report Milliman has used and relied on participant data supplied by FPDR and summarized in the valuation report in Appendix A. FPDR is responsible for ensuring that such participant data provides an accurate description of all persons who are participants under the terms of the plan or otherwise entitled to benefits as of June 30, 2024, that is sufficiently comprehensive and accurate for the purposes of this report. Although we have reviewed the data in accordance with Actuarial Standards of Practice No. 23, we have not verified or audited any of the data or information provided. Assumptions and estimates were made for any incomplete or missing data in consultation with FPDR.

Funding policy: Currently, the plan's benefits are effectively funded on a pay-as-you-go basis. FPDR funds on a cash basis as benefits are paid. The only assets that have been segregated and restricted to provide plan benefits are the amounts noted in the assets section of this report.

The valuation is based on the premise that the plan is ongoing and that the pay-as-you-go funding mechanism specified in City Charter continues.

Appendix C

Actuarial Assumptions

Actuarial Assumptions

The following assumptions were used in valuing the liabilities and benefits under the plan. The underlying basis for each assumption was reviewed and adopted in conjunction with an experience study presented to the FPDR Board in September 2020. The assumption selection process and rationale are described in detail in that study.

Discount Rate

3.93% per annum. This rate was selected by the City of Portland via a reference to a bond rate or index as of June 30, 2024 for high-quality tax-exempt 20-year general obligation municipal bonds, as described in GASB No. 67. The results of this valuation will also be used to develop liabilities at June 30, 2025 and June 30, 2026 using standard roll-forward techniques. The discount rates used for that purpose will be determined based upon relevant municipal bond rate information at the applicable measurement date.

Inflation

2.25% per annum

Real Wage Growth

1.00% per annum

Payroll Growth

3.25% per annum (combination of above two factors)

Total Salary Increase

Total salary increases for individual active members are shown in the following table. These rates include the impact of overall payroll growth in additional to individual merit and longevity increases. For the year immediately following the valuation date, these rates are adjusted to replace the assumed impact of overall payroll growth with actual base pay increases effective July 1 following the valuation date, as reported to us by FPDR.

Completed Years Since Sworn Date	Fire	Police
0	21.75%	9.75%
1-4	10.00	9.00
5-7	3.25	5.00
8-13	3.25	4.00
14	6.25	6.75
15-18	3.25	4.00
19	6.25	6.75
20-23	3.25	4.00
24	6.25	6.75
25+	3.25	4.00

Mortality

Mortality rates are based on the rates for Police & Fire members in the December 31, 2023 valuation of Oregon PERS. Future improvement in life expectancies is assumed via a generational projection of mortality improvement as described below. For active members, 50% of deaths are assumed to be service related, and 50% are assumed to be non-service related.

Male Retiree	Pub-2010 Healthy Public Safety Retiree Male, generational projection with unisex Social Security data scale, no set back
Female Retiree	Pub-2010 Healthy Public Safety Retiree Female, generational projection with unisex Social Security data scale, set back 12 months
Male Beneficiary	Pub-2010 Healthy General Employees Retiree Male, generational projection with unisex Social Security data scale, set back 12 months
Female Beneficiary	Pub-2010 Healthy General Employees Retiree Female, generational projection with unisex Social Security data scale, no set back
Male Active	125% of Pub-2010 Healthy Public Safety Employee Male, generational projection with unisex Social Security data scale, no set back
Female Active	Pub-2010 Healthy Public Safety Employee Female, generational projection with unisex Social Security data scale, set back 12 months
Disabled Male Retiree	Pub-2010 Disabled Retiree Male, blended 50% Public Safety / 50% Non-Safety, generational projection with unisex Social Security data scale, no set back
Disabled Female Retiree	Pub-2010 Disabled Retiree Female, blended 50% Public Safety / 50% Non-Safety, generational projection with unisex Social Security data scale, no set back

Withdrawal

Rates of withdrawal from causes other than death, disability, and retirement are shown in the following select and ultimate table:

Years of Service	Fire	Police
0	10.00%	15.00%
1	1.00	7.50
2+	0.75	1.25

Disability Incidence

Rates of disability are assumed to follow 70% of the 1985 Disability Study Class 1 rates. 90% of disabilities are assumed to be service related, while the other 10% are assumed to be non-service related. Sample rates are shown below:

Age	Rate Per Year
30	0.0448%
35	0.0686%
40	0.1106%
45	0.1813%
50	0.3136%
55	0.5915%

Retirement

Active members are assumed to retire at the rates shown below. Vested terminated members are assumed to retire at the earliest age they would have been eligible to retire had they remained in active employment., i.e., the earlier of a) age 55 or b) age 50 with 25 Years of Service.

	Fire		Police	
Age	Under 25 Years of Service	25+ Years of Service	Under 25 Years of Service	25+ Years of Service
50-54		25%		45%
55	10%	25	30%	45
56	10	25	15	45
57-58	25	25	15	45
59-64	25	25	30	45
65+	100	100	100	100

Percentage Married

Active and vested terminated members are assumed to be married with 70% probability. Actual marital status is used for retirees.

Age Difference of Spouses

For active and vested terminated members, spouses of male members are assumed to be 3 years younger and spouses of female members are assumed to be 3 years older than the member. Actual spouse ages are used for retirees.

Load to Final Pay for 27 Pay Periods

The valuation includes a load of 2.9% in the calculation of Final Pay for retirement benefits. This is based on the assumption that 75% of members retiring from active status will do so in certain months that enable the inclusion of 27 biweekly pay periods during the one-year averaging period, rather than the usual 26.

Form of Payment for Future Retirees from Active or Vested Terminated Status

Active and vested terminated members are assumed to select the following forms of payment at the rates shown below:

Benefit Formula Elected	Percent Electing
2.8%	80%
2.6%	20%

Taken in combination with the percentage married assumption:

- 30% of active and vested terminated members are assumed to be unmarried and to select the 2.8% benefit formula at retirement,
- 50% are assumed to be married and to select the 2.8% benefit formula, and
- 20% are assumed to be married and to select the 2.6% benefit formula.

Form of Payment for Future Retirees from Disability Status

FPDR One: Marital status at Disability Retirement Age is assumed to be the same as currently reported. Married participants are valued including a survivor benefit percentage as specified in City Charter based on the age difference between a member and spouse.

FPDR Two: Currently disabled members reported as non-married are assumed to elect the 2.8% benefit formula. Those reported as married are assumed to have a 71.4% (five-sevenths) likelihood of selecting the 2.8% benefit formula and a 28.6% (two-sevenths) likelihood of selecting the 2.6% benefit formula.

Future Cost of Living Increases for Retiree Benefits

FPDR One: 3.25% per annum, representing the assumed annual increase in pay for a First Class Officer or Firefighter.

FPDR Two: 2.00% per annum, based on recent COLA experience.

Employment of Disabled Members

Disabled members are assumed not to return to active service. One-third of those disabled are assumed to become gainfully employed with earnings equal to 20% of their base pay prior to disability.

Oregon Residency Post-Retirement

For purposes of determining eligibility for tax offset benefits, 70% of active and vested terminated members are assumed to reside in Oregon for retirement. For current retirees, actual current tax offset benefit status is assumed to continue throughout retirement.

Disability Retirement Age

FPDR One:	Age 64
FPDR Two:	Age 55
FPDR Three:	Age 55

FPDR One and Two members currently receiving disability benefits prior to their Disability Retirement Age are assumed to be credited with 30 years of service for the calculation of their benefit at Disability Retirement Age.

Offset for OPSRP Benefits

Benefits payable to FPDR Three members upon disability or pre-retirement death are offset by benefits paid from the OPSRP program. For valuation purposes, we have assumed OPSRP benefits offset FPDR benefits as follows:

FPDR Three Disability Benefits: OPSRP pre-retirement disability benefits are assumed to replace 0% of final salary. This assumption was employed at FPDR's request in recognition that eligibility for disability benefits under OPSRP is more limited than under FPDR. This assumption will be reviewed as experience emerges. After age 55, the OPSRP benefit is assumed to exceed the benefit provided by the FPDR program.

FPDR Three Death Benefits: OPSRP benefits are assumed to begin at age 50. At that time, they are assumed to be equal to 50% of the benefit calculated using a 1.8% multiplier, times Years of Service, times Final Salary, times an OPSRP early retirement reduction factor of 0.7. OPSRP benefits are assumed to increase at 1.25% per year.

Liability Load for Disability-Related Medical Expense Reimbursements

To estimate the projected future costs attributable to disability-related medical reimbursement payments occurring after retirement, projected pension payments are increased by 0.65%.

Changes since Prior Valuation

The discount rate was updated from 3.54% to 3.93%.

The unisex Social Security data scale used to project generational mortality improvements for healthy and disabled members and beneficiaries was updated based on the rates for Police & Fire members and beneficiaries in the December 31, 2023 valuation of Oregon PERS.

The assumption for the cost-of-living adjustment (COLA) paid to FPDR Two members was updated to assume the maximum COLA level of 2% is provided by the FPDR Board for all service.

The assumed disability retirement age for FPDR Three members was updated from 60 to 55 to reflect the change made to OPSRP normal retirement age by House Bill 4045 from the 2024 legislative session.

Appendix D

Plan Provisions

Plan Provisions

Plan Eligibility

Prior to January 1, 2013, a sworn employee of the Bureau of Fire or Bureau of Police became a Member of the Fund at the time of permanent appointment. Effective January 1, 2013, a new sworn employee will become a Member of the Fund after completing six months of service.

FPDR One: Retired on or before January 1, 1990. Includes benefits provided by the Supplementary Retirement Program. (At the current valuation date, 1 surviving FPDR member continues to receive Supplementary benefits.)

FPDR Two: Not FPDR One, and permanently appointed as sworn employees of the Bureau of Fire or Bureau of Police prior to January 1, 2007.

FPDR Three: All other employees of the Bureau of Fire and Bureau of Police first sworn on or after January 1, 2007. FPDR Three members are also enrolled in the Oregon Public Service Retirement Plan (OPSRP), and OPSRP benefits are not payable from this Fund.

Member Contributions

No Member contributions are required after July 1, 1990. Prior to that date, Member contributions of 7% of First Class Pay were required; accumulated Member contributions prior to July 1, 1990 remain in the Fund.

Normal Retirement – FPDR Two and FPDR Three

Eligibility – A Member is eligible for retirement upon attaining the age of 50 and earning 25 or more Years of Service, or upon reaching age 55 with no service requirement.

Benefit – FPDR Two – The annual retirement benefit is a percentage of the Member's Final Pay for each Year of Service up to 30 years. The percentage is based on the Member's choice of a survivor benefit when the Member applies for a retirement benefit, according to the table below:

Percentage of Benefit Continuing to Surviving Spouse or Minor Children	Percentage of Final Pay Per Year of Service
100%	2.2%
75%	2.4%
50%	2.6%
25% or no survivors	2.8%

Benefit – FPDR Three – None.

Benefit Form – The benefit begins at retirement and continues for the Member's life, with the selected percentage continuing to the Member's surviving spouse or minor children after the Member's death.

Cost of Living Increases – FPDR One

Benefits for FPDR One retirees will increase annually in line with increases with the Base Pay of a First Class Officer or Firefighter as appropriate. The increase is not subject to the 2.00 percent cap currently in place for FPDR Two cost of living increases. Benefits provided by the Supplementary Retirement Program do not receive cost of living increases.

Cost of Living Increases – FPDR Two and FPDR Three

Future benefits will be increased at the discretion of the Board of Trustees up to the current Oregon PERS statutory maximum of 2.00 percent per year.

- In 2016, 2017, and 2018, the Board selected a blended COLA, calculated as 2.00% for benefits related to service through October 8, 2013 and 1.25% for benefits related to service after that date.
- In 2019, the Board selected a COLA equal to the maximum of 2.00%.
- In 2020 the Board selected a blended COLA, calculated as 2.00% for benefits related to service through October 8, 2013 and 1.75% for benefits related to service after that date.
- In 2021, 2022, 2023 and 2024, the Board selected a COLA equal to the maximum of 2.00%.

Service-Connected or Occupational Disability Benefit

Eligibility – A Member is eligible for a service disability benefit upon sustaining an injury or illness in the performance of duty that prevents the Member from engaging in the duties of a firefighter or police officer.

A Member is eligible for an occupational disability benefit if the Member is unable to perform the duties of a firefighter or police officer due to certain illnesses or injuries as specified in City Charter.

Benefit – FPDR One – The benefit payable prior to Disability Retirement Date for a FPDR One member is 60% of the Base Pay of a First Class Officer or Firefighter, as appropriate. Upon reaching Disability Retirement Age, the member will receive his or her maximum earned pension.

Benefit – FPDR Two – During the first year of disability, the benefit is 75% of the Member's Base Pay, reduced by 50% of any wages earned in other employment while disabled.

If the Member is capable of Substantial Gainful Employment, then after one year of disability and after the Member becomes Medically Stationary, but before four years of disability have elapsed, the Member's benefit will change to 50% of Base Pay minus 25% of wages earned in other employment.

Under any circumstances, a minimum benefit of 25% of Base Pay for member's position at disability will continue as long as the disability continues.

At Disability Retirement Age the above benefits stop; the Member is then entitled to a retirement benefit computed using his Base Pay and Years of Service at his Disability Retirement Age.

Benefit – FPDR Three – The same as the benefit for FPDR Two, but offset by any disability benefits received from OPSRP.

Benefit Form – The disability benefit begins at disability and continues until the Member's recovery, death, or Disability Retirement Age, whichever occurs first. Disability benefits will be increased in step with the Base Pay of the position held by the Member at disability.

The retirement benefit begins at Disability Retirement Age and continues for the Member's life, with the selected percentage (or for FPDR One, determined percentage) continuing to the Member's surviving spouse or minor children after the Member's death.

Retirement benefits payable after Disability Retirement Age will be increased in the same manner as Normal Retirement Benefits.

Nonservice-Connected Disability Benefit

Eligibility – A Member is eligible for a nonservice disability benefit if the Member has ten Years of Service and sustains an injury or illness other than in the performance of duty that prevents the Member from engaging in duties as a firefighter or police officer.

Benefit – FPDR One – The benefit payable prior to Disability Retirement Date for a FPDR One member is the maximum earned pension, but not less than 20% of the salary of a First Class Officer or Firefighter, as appropriate. Upon reaching Disability Retirement Age, the member will receive his or her maximum earned pension.

Benefit – FPDR Two – The benefit is 50% of the Member's Base Pay, reduced by 50% of any wages earned in other employment while disabled.

At Disability Retirement Age the above benefits stop; the Member is then entitled to a retirement benefit computed using his Base Pay and Years of Service at his Disability Retirement Age.

Benefit – FPDR Three – The same as the benefit for FPDR Two, but offset by any disability benefits received from OPSRP.

Benefit Form – The disability benefit begins at disability and continues until the Member's recovery, death, or Disability Retirement Age, whichever occurs first. Disability benefits will be increased in step with the Base Pay of the position held by the Member at disability.

The retirement benefit begins at Disability Retirement Age and continues for the Member's life, with the selected percentage continuing to the Member's surviving spouse or minor children after the Member's death.

Retirement benefits payable after Disability Retirement Age will be increased in the same manner as Normal Retirement benefits.

Preretirement Service-Connected or Occupational Death Benefit

Eligibility – A Member's surviving spouse or dependent minor children are eligible for a service death benefit if the Member dies as a result of an injury or illness sustained in the performance of duty.

A Member's surviving spouse or dependent minor children are eligible for an occupational death benefit if the Member dies as a result of certain illnesses or injuries as specified in City Charter.

Benefit – FPDR Two – Prior to the date the Member would have reached the earliest retirement age, the surviving spouse or dependent minor children will receive an annual benefit equal to 75% of the Member’s Base Pay.

After the date the Member would have reached the Member's earliest retirement age, the surviving spouse or dependent minor children will receive an annual benefit equal to 50% of the Member's Final Pay.

Benefit – FPDR Three – The same as the benefit for FPDR Two, but offset by any death benefits received from OPSRP.

Benefit Form – The death benefit begins when the Member dies and continues until the Member's beneficiaries cease to be eligible, which occurs at death for benefits paid to a surviving spouse and at age 18 for benefits paid to minor children.

Death benefits will be increased in the same manner as Normal Retirement benefits.

Preretirement Nonservice Death Benefit

Eligibility – A Member's surviving spouse or dependent minor children are eligible for a nonservice death benefit if a Member has earned one or more Years of Service and dies as a result of an injury or illness not sustained in the performance of duty.

Benefit – FPDR Two – If the Member has earned fewer than five Years of Service, the Member's beneficiaries will receive a refund of the Member's contributions accumulated to July 1, 1990.

If the Member has earned five or more Years of Service, the surviving spouse or dependent minor children will receive a benefit equal to 50% of the Member's retirement pension earned to the date of death, assuming an accrual rate of 2.6% of Final Pay for each Year of Service.

Benefit – FPDR Three – The same as the benefit for FPDR Two, but offset by any death benefits received from OPSRP.

Benefit Form – If the Member had five or more Years of Service, the death benefit to the surviving spouse begins when the spouse reaches age 55 and continues until the death of the surviving spouse.

If the Member had five or more Years of Service, a death benefit is payable to the dependent minor children if there is no surviving spouse or if the spouse is under age 55; the benefit to the dependent minor children begins when the Member dies and continues until the child is no longer a minor.

Death benefits will be increased in the same manner as Normal Retirement benefits.

Vested Termination Benefit

Eligibility – A Member is eligible for a vested termination benefit after earning five years of service.

Benefit – FPDR Two – If the Member terminates after earning five or more Years of Service, the termination benefit is the Member's retirement pension earned to the date of termination payable at the age the Member would have been eligible for retirement had he or she continued employment.

Benefit – FPDR Three – None.

Benefit Form – If the Member had earned five or more Years of Service at termination, the benefit begins when the Member would first have been eligible for retirement and continues for the Member's life, with the selected percentage continuing to the Member's surviving spouse or minor children after the Member's death.

Benefits will be subject to cost of living increases in the same manner as Normal Retirement benefits.

Oregon State Income Tax Adjustment

For Members hired prior to July 14, 1995, benefits will be eligible for an adjustment to compensate the Member for state income taxes paid. Senate Bill 822, enacted in 2013, limits eligibility for these adjustments to individuals residing in Oregon for tax purposes. There are two adjustment formulas and the Member or beneficiary will receive the greater of the two adjustments if eligible for both formulas.

SB 656 Increase: The amount of the adjustment is determined by the Member's Years of Service at termination, in accordance with the table below.

Years of Service	Adjustment
10 – 19	1.0%
20 – 24	2.5%
25 and over	4.0%

$$\textbf{HB 3349 Increase}\ \left(\frac{1}{\begin{array}{c}1-\text{maximum Oregon personal}\\ \text{income tax rate (limited to 9\%)}\end{array}}-1\right)\times\frac{\begin{array}{c}\text{Service prior to}\\ \text{October 1, 1991}\end{array}}{\text{All Service}}$$

Supplemental Retirement Benefits

A specified group of FPDR One retirees receive additional monthly supplemental benefits provided by special ordinance. These benefits do not receive a COLA.

Disability-Related Medical Expenses

FPDR reimburses reasonable medical and hospital expenses arising from a service-connected or occupational injury or illness. The Fund Administrator may limit reimbursement to particular medical and hospital service providers with which it has made fee arrangements and may join in the purchase of services and administration of claims for other employees of the City of Portland.

For Members retired on or before January 1, 2007:

For FPDR One/Two Members, reimbursement is for expenses incurred:

a) While serving as an active Member,

b) While disability benefits continue, and

c) While the retirement benefits are paid, assuming the member receives disability benefits through Disability Retirement Age

For Members retiring after January 1, 2007:

Reimbursement for expenses incurred at any time, regardless of whether the Member continued to receive disability benefits through Disability Retirement Age (FPDR One or FPDR Two) or Oregon PERS Normal Retirement Age (FPDR Three) or retired with a retirement benefit under Section 5-304 (FPDR Two) or under Oregon PERS (FPDR Three).

Changes since Prior Valuation

None that had a material effect on liabilities.

Definitions

Base Pay

A Member's Base Pay is the base pay in the Member's position, including premium pay, but excluding overtime and excluding any payments for unused vacation or sick leave, limited by Internal Revenue Code 401(a)(17).

Disability Retirement Age

FPDR One: Age 64

FPDR Two: A Member's Disability Retirement Age is the earlier of Social Security normal retirement age and the age at which the Member has earned 30 Years of Service.

FPDR Three: Normal Retirement Age under Oregon PERS.

Final Pay

A Member's Final Pay is the Member's highest Base Pay during any one of the three consecutive one-year periods preceding the month in which the Member retires, dies, becomes disabled, or terminates employment. For this purpose, a one-year period is defined to include 365 days of pay (366 in a leap year).

If the Member's benefit is deferred due to disability or employment covered by the Oregon Public Employees' Retirement System (OPERS), the Member's Final Pay will be increased during the deferral period with increases in the Base Pay of the Member's position at termination if the termination occurred prior to 2013.

Medically Stationary

A disabled Member is judged to be Medically Stationary when the Member's prognosis is clear and the Member's medical condition has stabilized and is unlikely to change.

Spouse

A Member's spouse must have been designated by marriage, or by a registered same-sex domestic partnership certified by June 26, 2013, for at least twelve months.

Substantial Gainful Activity

A disabled Member is capable of Substantial Gainful Activity if the FPDR Director determines that the Member is capable of being employed with earnings of at least one-third of the Member's Base Pay.

Year of Service

A Member will be credited with one twelfth of a Year of Service for each completed month of active employment as a City firefighter or police officer. (Maximum of 30 years)

In addition, a FPDR Two disabled Member will earn a portion of a Year of Service for each year during which the Member receives disability benefits. The portion of a Year of Service earned will equal the Member's disability pension during the year divided by 75% of current base pay for position held at disablement (the maximum disability benefit).

Excluded Benefits

The benefits described below were excluded from the valuation. We do not believe valuing these benefits would materially change the results of this valuation.

Preretirement Nonservice Death Benefit

A lump sum funeral benefit equal to 50% of one month of First Class Pay will be paid to the beneficiaries of Members who die while active, disabled, or retired.

Minimum Total Payments for Normal Retirement, Disability, Death, and Termination Benefits

The total of all payments to the Member and the Member's survivors will at least equal the Member's contributions accumulated to July 1, 1990.

Funeral Benefits

Upon the death of an active or retired FPDR One Member, the Board shall pay a sum not to exceed $200 to be used for funeral expenses. A lump sum funeral benefit equal to 50% of one month of First Class Pay will be paid to the beneficiaries of FPDR Two and FPDR Three Members who die while active, disabled, or retired.

Appendix E

Risk Disclosure

Risk Disclosure

The purpose of this appendix is to identify, assess, and provide illustrations of risks that are significant to FPDR, and in some cases to FPDR members.

The results of any actuarial valuation are based on one set of assumptions. Although we believe the current assumptions for FPDR provide a reasonable estimate of future expectations, it is almost certain that future experience will differ from the assumptions to some extent. It is therefore important to consider the potential impacts of these potential differences between assumptions and experience when making decisions that may affect the future financial health of the Plan, or of the Plan's members.

Actuarial Standard of Practice No. 51 (ASOP 51) addresses these issues by providing actuaries with guidance for assessing and disclosing the risk associated with measuring pension liabilities and the determination of pension plan contributions. Specifically, it directs the actuary to:

- Identify risks that may be significant to the plan.
- Assess the risks identified as significant to the plan. The assessment does not need to include numerical calculations.
- Disclose plan maturity measures and historical information that are significant to understanding the plan's risks.

ASOP 51 states that if in the actuary's professional judgment, a more detailed assessment would be significantly beneficial in helping the individuals responsible for the plan to understand the risks identified by the actuary, then the actuary should recommend that such an assessment be performed.

This Section uses the framework of ASOP 51 to communicate important information about significant risks to the FDPR, the Plan's maturity, and relevant historical data.

Identification of Risks

There are a number of factors that affect future valuation results. To the extent actual experience for these factors varies from the assumptions, this will likely cause either increases or decreases in the Plan's future projected benefit payments. Examples of factors that can have a significant impact on valuation results are:

- Individual member salary variation, as this will impact the size of benefits members receive
- Cost of living adjustments that differ from the level assumed in the valuation, as this affects the size of retiree benefits.
- Any changes in benefit amounts or other plan provisions resulting from Charter changes, negotiations, and judicial or arbitration decisions.
- Mortality, as this will impact how long retirees receive benefits
- Individual member retirement decisions, as this will impact how long retirees receive benefits, and the size of retiree benefits
- Termination (members leaving active employment for reasons other than death, disability or service retirement), as this will impact the size of benefits for those members
- While not directly affecting results shown in this valuation, changes to Portland property tax structure and variations in Real Market Value (RMV) amounts can affect the pay-as-you-go funding for these benefits.

Demographic Experience

There are many assumptions made in an actuarial valuation. For these assumptions, differences between actual and assumed experience will result in actuarial gains and losses. The body of this report provides a look at the impact in the past two years of actual experience deviating from assumed.

Contribution Risk

Contribution risk is the potential that actual future contributions will be materially different than expected, or that significant changes occur to sources of funding. For FPDR benefits, material changes in the property tax structure or the City's cumulative RMV subject to the property tax levy would be examples of contribution risk.

We understand that the levy amount assessed for FPDR is limited by City Charter to no more than $2.80 per $1,000 of RMV. The proceeds from the levy are used to fund the FPDR benefits described in this report on a pay-as-you-go basis, as well as to fund the contributions required to Oregon PERS to pre-fund OPSRP and IAP benefits for FPDR Three members. The levy amount is also adjusted for considerations such as expected property tax discounts, delinquencies, and tax compression effects. For the fiscal year ending June 30, 2025 we understand the total FPDR levy was set at approximately $1.40 per $1,000 of RMV.

Our understanding is that if the $2.80 property tax limit was ever reached or exceeded, the full benefits owed to FPDR members would still be paid, but the City may have to fund a portion of the payments and/or contributions to Oregon PERS from another source (e.g., the general fund).

The FPDR Board has engaged Milliman to prepare a biennial projection to assess adequacy of the levy to meet required costs within the $2.80 limit. Please see our January 2025 presentation to the Board for additional information.

Pay-as-you-go Funding Approach

As discussed throughout the report, FPDR benefits are funded on a pay-as-you-go basis through a property tax levy, as prescribed in the City Charter. Because retiree benefits are not pre-funded during each member's working career with pre-funding contributions invested for the future, there is no significant accumulated asset base to pay benefits. Instead, payment of future benefits is entirely reliant on continued annual assessments from the property tax levy. This approach heightens the relevance of contribution risk described above, since any interruption or deviation in annual contributions would cause a near-term concern for payment of that year's benefits. At the same time, a pay-as-you-go funding approach is not exposed to significant investment risk, unlike a pre-funded plan.

The ultimate long-term cost of any pension program is determined by the following relationship, which is sometimes referred to as the "fundamental cost equation":

Benefits + Expenses = Contributions + Investment Earnings

Because pay-as-you-go funding does not benefit from investment returns, it is the most expensive funding approach in terms of long-term contribution costs. A transition from pay-as-you-go to pre-funding requires higher contributions in the near term in order to establish an asset base, but investment returns on those assets would reduce total contributions over the long term.

Since most post-employment benefits provided to FPDR Three members will be from Oregon PERS, total post-employment benefits payable to the City of Portland's sworn police & fire members is slowly transitioning from a pay-as-you-go program (for benefits paid directly from the FPDR fund) to a primarily pre-funded one (for benefits paid from Oregon PERS). This transition process will continue for a long time, as the pay-as-you-go benefits paid from FPDR (primarily for FPDR Two members) will remain significant for decades, as illustrated earlier in this report.

An alternative approach to transition more quickly from a pay-as-you-go to pre-funding would be to contribute more than the pay-as-you-go costs to build up an asset base in the nearer term to ultimately pay out expected FPDR benefit payments in later decades rather than continue to fund those benefits as they are due. A simple illustration of a hypothetical scenario for FPDR is as follows:

- If the City pre-funded FPDR benefits over a 20-year period assuming a 6% annual return on invested assets, contributions would increase significantly during the 20-year funding period but be expected to decrease significantly for each year after that period.
    - In that hypothetical funding scenario, contributions after 20 years would reflect ongoing normal costs for FPDR Three death and disability benefits, operating expenses, and any remaining ancillary benefits that still might be handled on a pay-as-you-go basis. In practice, these later contributions would also reflect adjustments resulting from gains and losses on actual plan investment experience compared to the assumed 6% level.
- Under the assumptions described below for this scenario:
    - The initial year of contributions for FPDR benefits would increase from approximately $180 million (on a pay-as-you-go basis) to approximately $305 million (on a pre-funding basis).
    - The transition to pre-funding is estimated to <u>increase</u> total contributions during the first 20 years by $1.2 billion on an undiscounted basis compared to pay-as-you-go funding.
    - However, pre-funding the benefits would result in substantially lower annual contribution costs after the 20-year amortization period. For example, the first year after the end of the amortization period is projected to have a $25 million contribution under pre-funding compared to approximately $240 million under pay-as-you-go.
    - As a result, pre-funding would produce lower total contributions overall. For example, in this scenario over the first 30 years the pre-funded approach requires over $0.7 billion <u>less</u> in contributions on an undiscounted basis than pay-as-you-go, and long-term savings from pre-funding would continue to grow in the future.

<u>This illustration is shown only as a high-level comparison between pre-funding and pay-as-you-go approaches – we understand any change in funding approach for FPDR would require Portland voters to approve a change to City Charter.</u>

Key assumptions:

- The pre-funding projection assumes 6.0% annual investment return and a 20-year level dollar amortization of the initial unfunded accrued liability. Future normal costs for FPDR Two come from an actuarial projection of that closed membership population. Future normal costs for FPDR Three are assumed to be 0.87% of projected FPDR Three payroll.
    - The 20-year amortization period is an example of a typical public plan amortization period that might be used as part of a reasonable actuarially determined contribution for a pre-funded plan. If any actual change in the rules and policies for future FPDR funding was made, different amortization periods and methods could be considered.
- Expenses are added to both projections for administrative & operating expenses and for short-term disability & disability-related medical costs funded by the levy. Administrative & operating expenses are modeled as $6.75 million in the first year of our model and in subsequent years are assumed to

increase with CPI assumption of 2.25%. Short-term disability & disability-related medical costs are modeled as $5.18 million in the first year of our model and in subsequent years are assumed to increase with CPI plus 1.65%.

- The pre-funding illustration does not reflect any variance in annual investment returns. In practice, investment returns above or below expectations (along with demographic experience gains or losses, changes in actuarial assumptions, and changes in plan provisions or administrative procedures) would result in new amortization bases being established at each valuation date, which could significantly increase or decrease future contribution requirements.

Please be aware that the amounts described above are only contributions for benefits to be paid for the FPDR Plan. They do not include projected future pre-funding contributions to Oregon PERS to fund OPSRP benefits for FPDR Three members. These amounts also do not reflect adjustments made when calculating the total requirements in the annual levy (e.g., adjustment for discount and delinquency or effects of compression.)

Historical Information

The remainder of this section contains historical information relevant to FPDR.

Plan Headcount

The table below shows changes in member headcount since the June 30, 2012 valuation. During this time, the percentage of the active population that are FPDR Three members increased from 22% (361 ÷ 1,615) to 61% (853 ÷ 1,405).

	Active Members				
Valuation Date	FPDR Two	FPDR Three	Total	Inactive Deferred Members	Current Retired, Disabled & Beneficiary Members
June 30, 2012	1,254	361	1,615	65	1,848
June 30, 2014	1,173	388	1,561	76	1,830
June 30, 2016	1,055	462	1,517	87	1,851
June 30, 2018	932	600	1,532	79	1,893
June 30, 2020	849	695	1,544	67	1,905
June 30, 2022	698	724	1,422	83	1,949
June 30, 2024	552	853	1,405	71	2,037

Benefit Payments and Real Market Value

The table below lists total annual FPDR benefit payments since the 2013-2014 fiscal year, along with Real Market Value (RMV) for each fiscal year, as provided to us by the City and FPDR. We understand the actual levy rate per $1,000 of RMV calculated by the City reflects more than FPDR benefit payments shown below, including contributions for OPSRP benefits provided to FPDR Three members, as well as adjustments for discounts and delinquencies and the effects of tax compression. The table below is only meant to illustrate the relative change in the specific FPDR benefit payments compared to the RMV.

From the 2013-2014 fiscal year to the 2023-2024 fiscal year, FPDR benefit payments increased approximately 49%. During that same time, RMV increased approximately 119%.

Fiscal year	FPDR Benefit Payments*	Real Market Value *(rounded to nearest $1M)*
2013 - 2014	$108,003,419	$81,494,000,000
2014 - 2015	110,900,284	92,618,000,000
2015 - 2016	114,001,126	102,628,000,000
2016 - 2017	120,351,973	120,786,000,000
2017 - 2018	125,666,995	137,483,000,000
2018 - 2019	130,733,191	149,692,000,000
2019 - 2020	135,411,347	152,774,000,000
2020 - 2021	144,738,509	159,018,000,000
2021 - 2022	148,086,359	166,899,000,000
2022 - 2023	153,776,728	178,529,000,000
2023 - 2024	160,585,336	178,815,000,000
2024 - 2025	TBD	173,599,000,000

**As shown in GASB financial reporting*

Appendix F

Glossary

Glossary

Actuarial Accrued Liability. The portion of the present value of prospective benefits allocated to service before the valuation date in accordance with the actuarial cost method.

Actuarial Asset Value. The value of assets used in calculating the required contributions. The actuarial asset value may be equal to the fair market value of assets, or it may spread the recognition of certain investment gains or losses over a period of years in accordance with an asset valuation method.

Actuarial Assumptions. Assumptions as to the occurrence of future events affecting pension costs, such as: mortality, withdrawal, disablement and retirement; rates of investment earnings and other relevant items.

Actuarial Cost Method. Sometimes called "funding method," a particular technique used by actuaries to establish the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily, the annual actuarial cost of the plan comprises the normal cost and an amount for amortization of the unfunded actuarial accrued liability.

Actuarial Gain or (Loss). A measure of the difference between actual experience and that expected based upon a set of actuarial assumptions, during the period between two actuarial valuation dates, as determined in accordance with a particular actuarial cost method.

Funded Ratio. The actuarial value of assets expressed as a percentage of the actuarial accrued liability.

Measurement Date. The date as of which the Actuarial Accrued Liability (called the Total Pension Liability) is determined under GASB 67 and 68. Under GASB 67, the Measurement Date is required to be the plan's fiscal year-end, but the liability can be recalculated based on a Valuation Date up to 24 months earlier.

Normal Cost. The annual cost assigned to the current year, under the actuarial cost method in use.

Present Value. Sometimes called "actuarial present value," the current worth (on the valuation date) of an amount or series of amounts payable or receivable in the future. The present value is determined by discounting the future payments at a predetermined rate of interest, taking into account the probability of payment.

Statement No. 67 of the Governmental Accounting Standards Board (GASB 67). The accounting standard that sets financial reporting standards for defined benefit pension plans.

Statement No. 68 of the Governmental Accounting Standards Board (GASB 68). The accounting standard that governs a state or local governmental employer's pension accounting.

Unfunded Actuarial Accrued Liability. The excess of the Actuarial Accrued Liability over the Actuarial Value of Assets.

Valuation Date. The date as of which the actuarial valuation is performed.