September 2009

City of Portland Fire and Police Disability and Retirement (FPDR) Fund

Pension Actuarial Valuation Report Under GASB 25 & 27 as of July 1, 2008

MERCER

MARSH MERCER KROLL
GUY CARPENTER OLIVER WYMAN

Contents

Section I: Report Highlights

Mercer has prepared this report for the City of Portland Fire and Police Disability and Retirement Fund (“FPDR”) to:

- Present the results of the valuation of the post-employment pension and disability benefits provided by FPDR as of July 1, 2008,
- Provide the Annual Required Contribution (ARC) for the plan and fiscal years ending June 30, 2009 and June 30, 2010, and
- Provide reporting information that may be used for financial statements, government agencies and other interested parties pursuant to Government Accounting Standards Board Statements Nos. 25 and 27 (GASB 25 and GASB 27).

Summary of Principal Results

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

	July 1, 2008
Discount Rate	4.50%
Actuarial Accrued Liability (AAL)	$2,217,414,215
Unfunded Actuarial Accrued Liability (UAAL)	$2,216,664,215
Normal Cost as a % of Base Pay	50.48%
Projected Base Pay for Next Year	$112,200,110
Normal Cost	$56,638,616
30-Year Level Dollar Amortization of UAAL	$130,224,341
Annual Required Contribution (ARC)	**$186,862,957**

FPDR is funded on a pay-as-you-go basis via a property tax levy, but still FPDR must report an expense in accordance with the requirements of GASB 25 and 27 like other governmental entities that sponsor defined benefit pension programs.

This valuation is intended to provide the information necessary to assist the City and FPDR in completing disclosures for the fiscal year ending June 30, 2009 and June 30, 2010. GASB 25 and GASB 27 permit the use of a valuation that is up to 24 months prior to the beginning of the first fiscal year for which the valuation provides the ARC. Historically, full actuarial valuations have been conducted each even-numbered year, and results from that valuation are used to develop the ARC for the fiscal year coincident with the valuation year and the fiscal year subsequent to that. Following this procedure and generally accepted financial reporting practices for governmental entities, this report is intended to provide the ARC for the fiscal years ending in 2009 and 2010.

We understand that a $750,000 Reserve Fund has been established by the governing City Charter and that fund is considered the sole plan asset for purposes of developing the ARC in this GASB valuation.

Section I: Report Highlights *(continued)*

Assumptions

As part of our actuarial valuation, we collected historical census data from both FPDR and the prior actuary in order to review historical experience as a guide to setting demographic and economic assumptions. The data collected extended from July 1, 2002, to July 1, 2008, which provided a statistically credible sample for most assumptions. As an outcome of this study we are making the following key recommendations regarding assumption changes. In summary, we are recommending changes to:

- Discount Rate – 4.50 percent to be aligned with current long-term expectations for yields on short-to-mid duration high-quality fixed income instruments
- Disability Incidence – A lowering of rates based on experience analysis
- Salary Increase – A decrease at most service levels, with much of the decrease caused by a lowering of the inflation assumption from 3.50 percent to 2.75 percent
- Participant & Beneficiary Mortality – Update to a more modern table, with an adjustment based on recent safety officer mortality experience in the larger (and thus, more statistically credible) Oregon PERS program
- Retirement Timing – A change to rates based on recent experience, with some rates increasing and others decreasing
- Pre-retirement Termination of Employment – Introduction of a modest termination assumption for mid-career participants based on historical termination levels

Unless otherwise noted, the methods and assumptions used in this valuation are the same as those used in the July 1, 2006 valuation conducted by EFI Actuaries, including use of the Attained Age Normal (AAN) actuarial cost allocation method. The Unfunded Actuarial Accrued Liability (UAAL) developed by the AAN method is amortized over a period of 30 years as a level dollar amount for purposes of developing the Annual Required Contribution (ARC).

The discount rate is to be selected as the estimated long-term investment return on the investments that are expected to be used to finance the payment of benefits. For unfunded plans, the discount rate should be determined with reference to the employer’s general assets. Since unrestricted general assets are invested in short-term fixed income securities, the City and FPDR have adopted an assumption of 4.50 percent.

All actuarial assumptions and plan provisions valued are summarized in the Actuarial Basis section of this report.

Annual Required Contribution

The basic annual expense recognized under GASB 25 & 27 is called the Annual Required Contribution (ARC), even though there is no requirement to fund this amount. The ARC depends on the actuarial cost method selected and typically consists of the normal cost plus amortization of the Unfunded Actuarial Accrued Liability (UAAL). For FPDR, the ARC is expressed as a level dollar amount.

The difference between the ARC and the amounts contributed (in the case of FPDR, pay-as-you-go benefit payments) is accumulated as the Net Pension Obligation (NPO). The annual pension cost reported as an expense in the employer’s financial statements is equal to the ARC plus an adjustment related to any outstanding NPO.

Section II: Certification

Mercer has prepared this report exclusively for Trustees of the City of Portland, Oregon Fire and Police Disability and Retirement Fund (FPDR) for the following purposes:

- Present the results of a valuation of the FPDR Fund as of July 1, 2008
- Review plan experience for the year ended June 30, 2008
- Provide reporting and disclosure information for financial statements for governmental agencies pursuant to GASB Statements Number 25 and 27.

This valuation report may not be relied upon for any other purpose or by any party other than the Trustees, the City of Portland or the plan or City's auditors solely for the purpose of completing an audit related to the matters herein. Mercer is not responsible for the consequences of any other use.

A valuation report is a snapshot of a plan's estimated financial condition at a particular point in time; it does not predict a plan's future financial condition or its ability to pay benefits in the future.

Over time, a plan's total cost will depend on a number of factors, including the amount of benefits the plan pays, the number of people paid benefits, plan expenses and the amount earned on any assets invested to pay the benefits. These amounts and other variables are uncertain and unknowable at the valuation date, but are predicted to fall within a reasonable range of possibilities.

To prepare this report, *Actuarial Assumptions*, as described in Section VII, are used to select a single scenario from a range of possibilities. The results of that single scenario are included in this report. However, the future is uncertain and the plan's actual experience will differ from those assumptions; these differences may be significant or material. In addition, different assumptions or scenarios may also be within the reasonable range and results based on those assumptions would be different. Due to the limited scope of our assignment, we did not perform, nor do we present, an analysis of the potential range of future possibilities and scenarios.

Because actual plan experience will differ from the assumptions, decisions about benefit changes, investment policy, funding amounts, benefit security and/or benefit-related issues should be made only after careful consideration of alternative future financial conditions and scenarios, and not solely on the basis of a valuation report or reports.

Data and Plan Provisions

To prepare this report, Mercer has used and relied on financial data submitted by FPDR, as well as participant data supplied by FPDR and by the prior actuary. We have reviewed the financial and participant data for internal consistency and general reasonableness, but we have not verified or audited any of the data or information provided. We have also used and relied on the plan documents, including amendments, supplied by FPDR and on plan provisions as described in the City Charter. A summary of the plan provisions valued is presented in our report. The Trustees are solely responsible for the accuracy, validity and comprehensiveness of this information. If the data or plan provisions supplied are not accurate and complete the valuation results may differ significantly from the results that would be obtained with accurate and complete information; this may require a later revision of this report.

Section II: Certification *(continued)*

Actuarial Calculations, Methods and Assumptions

To the best of our knowledge and belief, this report is complete and accurate and all costs, liabilities and other factors under the plan were determined in accordance with generally accepted actuarial principles and procedures, using an actuarial cost method approved by the Board. Assumptions used are based on the last experience study, as adopted by the Board. This valuation is based on assumptions, plan provisions, methods and other parameters as summarized in this report. If this information is inaccurate or incomplete or does not reflect current statutes, regulations or Board directives, the reader of this report should not rely on the valuation results and should notify Mercer promptly. In our opinion, this report fully and fairly discloses the actuarial position of the plan on an ongoing basis.

Professional Qualifications

We are available to answer any questions on the material in this report or to provide explanations or further details as appropriate. Collectively, the undersigned credentialed actuaries meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report. We are not aware of any direct or material indirect financial interest or relationship, including investments or other services that could create a conflict of interest, that would impair the objectivity of our work.

	September 11, 2009
Matthew R. Larrabee, FSA, EA, MAAA	**Date**
Angela D. Schiebout	September 11, 2009
Angela D. Schiebout, EA, MAAA	**Date**

Mercer (US) Inc.
111 SW Columbia Street, Suite 500
Portland, OR 97201

503 273 5900

Section III: Valuation Results

Calculation of Annual Required Contribution (ARC)

			July 1, 2006		July 1, 2008
Benefit Obligations and Amortization Payment					
1.	Discount Rate		6.04%		4.50%
2.	Total Projected Liability (includes projected future service)	$	2,392,770,726	$	2,910,197,199
3.	Actuarial Accrued Liability				
	a. Retirees *(Includes all Inactives as of July 2006)*	$	1,115,000,971	$	1,175,804,838
	b. Disabled Retirees *(Included in Retirees at July 2006)*		*		106,977,971
	c. Surviving Spouses *(Included in Retirees at July 2006)*		*		118,292,727
	d. Vested Terminated Participants *(Included in Retirees at July 2006)*		*		10,955,717
	e. Active Employees		702,660,343		805,382,962
	f. Total	**$**	**1,817,661,314**	**$**	**2,217,414,215**
4.	Present Value of Future Normal Costs *(2. – 3.f.)*	$	575,109,412	$	692,782,984
5.	Present Value of Future Base Pay	$	1,277,848,222	$	1,372,406,467
6.	Normal Cost as a Percentage of Base Pay *(4. ÷ 5.)*		45.01%		50.48%
7.	Projected Next Year's Base Pay	$	105,767,120	$	112,200,110
8.	Normal Cost in Dollars *(6. x 7.)*	$	47,605,781	$	56,638,616
9.	Assets	$	750,000	$	750,000
10.	Unfunded Actuarial Accrued Liability (UAAL) *(3.f. – 9.)*	$	1,816,911,314	$	2,216,664,215
11.	Amortization Factor (30-Year Level-Dollar)		14.5339661		17.0218885
12.	Amortization Payment *(10. ÷ 11.)*	$	125,011,391	$	130,224,341
Calculation of ARC					
1.	Amortization Payment	$	125,011,391	$	130,224,341
2.	Normal Cost	$	47,605,781	$	56,638,616
3.	Annual Required Contribution *(1. + 2.)*	$	172,617,172	$	186,862,957
4.	Projected Next Year's Base Pay	$	105,767,120	$	112,200,110
5.	ARC as a Percent of Base Pay *(3. / 4.)*		163.20%		166.54%

Section III: Valuation Results *(continued)*

Projected Benefit Payments

The table below shows the projected benefit payments assuming no new entrants and all valuation assumptions realized. The payment projections shown include the effect of assumed future service and salary increases for current actives.

Fiscal Year	Projected Benefit Payments
2008-09	$ 94,340,000
2009-10	97,858,000
2010-11	101,415,000
2011-12	104,986,000
2012-13	108,298,000
2013-14	111,577,000
2014-15	114,734,000
2015-16	118,242,000
2016-17	121,592,000
2017-18	125,272,000
2018-19	128,840,000
2019-20	132,896,000
2020-21	136,848,000
2021-22	140,894,000
2022-23	144,681,000
2023-24	149,111,000
2024-25	154,166,000
2025-26	159,477,000
2026-27	165,122,000
2027-28	170,239,000
2028-29	175,375,000
2029-30	179,753,000
2030-31	184,582,000
2031-32	188,779,000
2032-33	192,742,000
2033-34	195,384,000
2034-35	197,046,000
2035-36	197,595,000

Section III: Valuation Results *(continued)*

Schedule of Funding Progress

The table below shows the Schedule of Funding Progress. This schedule is required to be disclosed (on the appropriate basis) as a part of the Required Supplementary Information in the notes to the City's and FPDR's financial statements. Because this is the first valuation conducted by Mercer, only the entry for the June 30, 2008 valuation conducted by Mercer is shown in this Schedule. In the future, information from at least the three most recent valuations will be presented. In preparing this schedule, Mercer used the value of the Reserve Fund as the sole plan asset as of the actuarial valuation date. This is consistent with the development of the ARC in the current and prior valuations.

Actuarial Valuation Date	Actuarial Value of Assets *(a)*	Actuarial Accrued Liability (AAL) *(b)*	Unfunded AAL *(b – a)*	Funded Ratio *(a ÷ b)*	Covered Payroll *(c)*	Unfunded AAL as a Percentage of Covered Payroll *((b – a) ÷ c)*
7/1/2008	750,000	2,217,414,215	2,216,664,215	0.03%	118,231,502	1,874.85%

Section IV: Supplemental Information

The remainder of the report includes information supporting the results presented in the previous section.

- **Plan assets**
- **Participant data** presents and describes the participant data used in the valuation.
- **Actuarial basis** describes the plan provisions, as well as the methods and assumptions used to value the plan. The valuation is based on the premise that the plan is ongoing.

Section V: Plan Assets

Summary of Assets

The FPDR Board of Trustees administers a Reserve Fund, authorized under provisions of Chapter 5 (Section 5-104) of the City of Portland's Charter. The Reserve Fund's 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 July 1, 2008. We understand that the Reserve is the sole asset of the plan that meets the requirements of GASB 25 and is the sole asset used for plan actuarial valuation purposes in developing the ARC.

Section VI: Participant Data

Distribution of FPDR One/Two Active Participants as of July 1, 2008

Age	0–4	5–9	10–14	15–19	20–24	25–29	30–34	35+	Total
Under 20									**0**
20–24	14								**14**
25–29	110	30							**140**
30–34	95	178	17						**290**
35–39	51	133	123	16					**323**
40–44	21	63	72	86	11				**253**
45–49	5	18	43	77	63	19			**225**
50–54		7	11	40	55	73	10		**196**
55–59		1	5	16	11	17	9		**59**
60–64		1	1	1	2	1	3		**9**
65–69								2	**2**
70+									**0**
Total	**296**	**431**	**272**	**236**	**142**	**110**	**22**	**2**	**1,511**

Average Age: 40.3

Average Years of Service: 12.4

Average Annualized Basic Monthly Earnings: $71,914

Section VI: Participant Data *(continued)*

Distribution of FPDR One/Two Active Police Participants as of July 1, 2008

Age	0–4	5–9	10–14	15–19	20–24	25–29	30–34	35+	Total
Under 20									**0**
20–24	6								**6**
25–29	64	8							**72**
30–34	38	105	9						**152**
35–39	28	86	97	14					**225**
40–44	9	39	47	70	3				**168**
45–49	5	12	30	58	35	7			**147**
50–54		6	10	31	32	9			**88**
55–59		1	3	15	5	2	1		**27**
60–64		1	1	1		1	1		**5**
65–69								1	**1**
70+									**0**
Total	**150**	**258**	**197**	**189**	**75**	**19**	**2**	**1**	**891**

Average Age: 40.1

Average Years of Service: 11.9

Average Annualized Basic Monthly Earnings: $70,227

Section VI: Participant Data *(continued)*

Distribution of FPDR One/Two Active Fire Participants as of July 1, 2008

Age	0–4	5–9	10–14	15–19	20–24	25–29	30–34	35+	Total
Under 20									**0**
20–24	8								**8**
25–29	46	22							**68**
30–34	57	73	8						**138**
35–39	23	47	26	2					**98**
40–44	12	24	25	16	8				**85**
45–49		6	13	19	28	12			**78**
50–54		1	1	9	23	64	10		**108**
55–59			2	1	6	15	8		**32**
60–64					2		2		**4**
65–69								1	**1**
70+									**0**
Total	**146**	**173**	**75**	**47**	**67**	**91**	**20**	**1**	**620**

Average Age: 40.5

Average Years of Service: 13.2

Average Annualized Basic Monthly Earnings: $74,339

Section VI: Participant Data *(continued)*

Statistics for FPDR One/FPDR Two Participants as of July 1, 2008

	Police	Fire	Total
Actives[1]			
▪ Headcount	891	620	1,511
▪ Average age	40.1	40.5	40.3
▪ Average service	11.9	13.2	12.4
▪ Average salary	$70,227	$74,339	$71,914
Current Retirees & Beneficiaries[2]			
▪ Headcount	966	788	1,754
▪ Average age	67.8	70.6	69.1
▪ Average monthly benefit	$4,034	$4,024	$4,029
Disabled Participants			
▪ Headcount	67	29	96
▪ Average age	52.8	53.2	52.9
▪ Average monthly benefit	$3,736	$3,837	$3,766
Inactive Deferred Participants			
▪ Headcount	45	2	47
▪ Average age	41.5	34.4	41.2
▪ Average monthly benefit	$1,405	$852	$1,381

Average Salary represents annualized basic monthly earnings as of July 1, 2008.

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[1] *Actives counts do not include 90 FPDR Three participants with an average age of 30.8, average service of 0.5 years, and average annualized pay of $44,727.*

[2] *Headcount does not include 65 Alternate Payees receiving benefits via a Domestic Relations Order (DRO).*

Section VI: Participant Data *(continued)*

Distribution of Current Retirees and Beneficiaries as of July 1, 2008

	Police		Fire		Total	
Age	Count	Total Monthly Benefit	Count	Total Monthly Benefit	Count	Total Monthly Benefit
Under 40	7	15,246	6	11,232	13	26,478
40 – 44	2	4,180	2	2,407	4	6,586
45 – 49	2	3,505	6	8,968	8	12,474
50 – 54	70	386,259	57	310,693	127	696,951
55 – 59	186	884,168	112	565,556	298	1,449,724
60 – 64	199	902,197	96	467,356	295	1,369,553
65 – 69	131	517,051	97	417,226	228	934,277
70 – 74	66	227,102	77	284,159	143	511,261
75 – 79	87	291,258	79	259,973	166	551,231
80 – 84	109	340,012	132	461,897	241	801,909
85 – 89	76	242,191	80	260,109	156	502,300
90 – 94	23	62,500	40	111,613	63	174,113
95+	8	20,886	4	9,852	12	30,739
Total	**966**	**3,896,555**	**788**	**3,171,041**	**1,754**	**7,067,596**

Section VII: Actuarial Basis

Accounting Actuarial Cost Method and Policies

Actuarial cost method: Liabilities shown in this report are computed using the Attained Age Normal Cost method allocated as a level percent of pay from the date of hire to decrement age.

Unfunded Actuarial Accrued Liability amortization method: UAAL is amortized as a level dollar amount over a rolling period of 30 years for purposes of developing the ARC.

Census data: We have used participant data as supplied by FPDR and the prior actuary. This information would not customarily be verified by a plan’s actuary. We have reviewed the information for internal consistency and we have no reason to doubt its substantial accuracy. Assumptions and estimates were made for incomplete or missing data in consultation with FPDR.

Participants included: The plan sponsor provides us with data on all employees as of the valuation date, but only those employees who have completed the plan’s eligibility requirements are included in the valuation of liabilities.

Funding policy: The plan’s benefits are currently 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 is the $750,000 Reserve Fund noted in the assets section of this report.

Section VII: Actuarial Basis *(continued)*

Summary of Actuarial Assumptions

The following assumptions were used in valuing the liabilities and benefits under the plan. Note that for any given individual Member, the anticipated pay increase in a given year is the combined effect of inflation, real wage growth and salary merit increase.

Discount rate	4.50% per annum
Inflation	2.75% per annum
Real wage growth	1.00% per annum
Payroll growth	3.75% per annum (combination of above two factors)

Salary merit increase	**Years of Service**	**Police**	**Fire**
	0	10.25%	10.25%
	1	10.25%	10.25%
	2	10.25%	10.25%
	3	4.25%	8.25%
	4	4.25%	8.25%
	5	4.25%	6.25%
	6	1.25%	3.75%
	7 + Over	0.00%	0.50%

Mortality, healthy lives	Mortality rates for healthy lives are based on the rates for Police & Fire members in the December 31, 2007 valuation of Oregon PERS. For active members, 50% of deaths are assumed to be service related, and 50% are assumed to be non-service related.	
	Male Retiree	RP2000 Male, Combined Active/Healthy Retired, No Collar, set back 12 months
	Female Retiree	RP2000 Female, Combined Active/Healthy Retired, No Collar, set back 18 months
	Male Beneficiary	RP2000 Male, Combined Active/Healthy Retiree, No Collar, set back 24 months
	Female Beneficiary	RP2000 Female, Combined Active/Healthy Retiree, No Collar, set back 18 months
	Male Non-Retiree	70% of rates for Male Retiree
	Female Non-Retiree	55% of rates for Female Retiree
Disabled mortality	Disabled Male Retiree	RP2000 Male, Combined Active/Healthy Retired, No Collar, set forward 36 months
	Disabled Female Retiree	RP2000 Female, Combined Active/Healthy Retired, No Collar, set forward 30 months

Withdrawal	Rates of withdrawal from causes other than death, disability, and retirement are shown in the following select and ultimate table:			
		Service		
	Attained Age	**0 Years**	**1 Year**	**2 + Years**
	Any	25.00%	25.00%	0.75%

Section VII: Actuarial Basis *(continued)*

Summary of Actuarial Assumptions *(continued)*

Disability incidence

95 percent of disabilities are assumed to be service related, while the other 5 percent are assumed to be non-service related. Rates are shown below:

Age	Rate Per Year
Under 40	0.25%
40-49	0.60%
50 +	0.90%

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 from date of hire.

Age	Fire	Police
50	25%	60%
51	20	40
52	20	40
53	20	40
54	20	40
55	25	40
56	25	40
57	25	40
58	33	40
59	50	40
60	100	40
61	100	40
62	100	60
63	100	60
64	100	60
65+	100	100

Percentage married

Males	88%
Females	88%

When available, actual marital status is used for retirees.

Age difference of spouses

Spouses are assumed to be 4 years younger than members. When available, actual spouse ages are used for retirees.

Form of payment for future retirees

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

Section VII: Actuarial Basis *(continued)*

Summary of Actuarial Assumptions *(continued)*

Cost of living increase for retiree benefits	**FPDR One:** 3.75% per annum, representing the assumed annual increase in pay for a First Class Officer **FPDR Two** : 2.00% per annum
Oregon Income Tax Rate	For purposes of estimating the income tax adjustments under HB3349, the highest Oregon Income Tax rate is assumed to remain at 9%.
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 9% of their base pay prior to disability.
Disability Retirement Age	**FPDR Two:** Age 55 **FPDR Three:** Age 60

Section VII: Actuarial Basis *(continued)*

Plan Provisions

Disability and Retirement Fund

Plan Eligibility	A sworn employee of the Bureau of Fire or Bureau of Police will become a Member of the Fund at the time of permanent appointment. **FPDR One:** Retired on or before January 1, 1990 **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 OPSRP, and OPSRP benefits are not payable from the fund.
Plan Type	Defined Benefit
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 on deposit in the Fund.
Normal Retirement – *FPDR Two and FPDR Three*	**Eligibility** — A Member is eligible for service 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 service 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 Form — **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. The increase is not subject to the 2 percent cap currently in place for FPDR Two cost of living increases.
Cost of Living Increases – FPDR Two	Benefits will be increased in step with the statutory and ad hoc cost of living increases granted to PERS retired members. Statutory increases are currently limited to 2 percent per year.

Section VII: Actuarial Basis *(continued)*

Plan Provisions

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 heart disease, hernia of the abdominal cavity or diaphragm, AIDS, ARC, tuberculosis, hepatitis B, or pneumonia. Five Years of Service is required to qualify for occupational disability due to heart disease. **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 disability 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 disability 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. Disability retirement benefits will be increased in step with the statutory and ad hoc cost of living increases granted to PERS retired members.

Section VII: Actuarial Basis *(continued)*

Plan Provisions

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 Two** — The benefit is 50% of the Member's Base Pay, reduced by 50% of any wages earned in other employment while disabled, less any non-service disability benefits paid. At Disability Retirement Age the above benefits stop; the Member is then entitled to a service 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 disability 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. Disability retirement benefits will be increased in step with the statutory and ad hoc cost of living increases granted to PERS retired members.
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 heart disease, hernia of the abdominal cavity or diaphragm, AIDS, ARC, tuberculosis, hepatitis B, or pneumonia (other than terminal pneumonia). Five Years of Service is required to qualify for occupational death benefits due to heart disease. **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 the death of the surviving spouse (or the majority of the dependent minor children). Death benefits will be increased in step with the statutory and ad hoc cost of living increases granted to PERS retired members.

Section VII: Actuarial Basis *(continued)*

Plan Provisions

Preretirement Nonservice Death Benefit	**Eligibility** — A Member's surviving spouse or dependent minor children are eligible for a non-service 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 ten 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 ten or more Years of Service, the surviving spouse or dependent minor children will receive a benefit equal to 50% of the Member's service 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 ten 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 ten 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 majority of the minor children. Death benefits will be increased in step with the statutory and ad hoc cost of living increases granted to PERS retired members.
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 service retirement pension earned to the date of termination. **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 increased in step with the statutory and ad hoc cost of living increases granted to PERS retired members.

Section VII: Actuarial Basis *(continued)*

Plan Provisions

Oregon State Income Tax Adjustment

For all Members hired prior to July 14, 1995 and retired on or after January 1, 1991, all benefits will be eligible for an adjustment to compensate the Member for the taxes paid. There are two adjustments, and the Member or beneficiary will receive the greater of the two.

SB 656

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%

HB 3349 Increase

$$\frac{1}{1 - \text{maximum Oregon personal income tax rate}} \times \frac{\text{Service prior to October 1, 1991}}{\text{All Service}}$$

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 401(a)(17).
Disability Retirement Age	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.
Final Pay	A Member's Final Pay is the Member's highest Base Pay during anyone of the three consecutive twelve-month periods preceding the month in which the Member retires, dies, becomes disabled, or terminates employment. If the Member's benefit is deferred due to disability or employment covered by the Oregon Public Employees' Retirement System (PERS), 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.
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 for at least twelve months.
Substantial Gainful Activity	A disabled Member is capable of Substantial Gainful Activity if the Board 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. (Max of 30 years) In addition, a 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).

Section VII: Actuarial Basis *(continued)*

Plan Provisions

Excluded Benefits

Additional benefits were valued separately under GASB 45. Please see our July 1, 2008 GASB 45 valuation report for a description of those benefits. The benefits described below were excluded from either valuation. We do not believe valuing these benefits would materially change the results of this valuation.

Preretirement Service-Connected or Occupational 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.
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.
Non-Vested Termination Benefit	If the Member terminates after earning six months of Service but before earning five or more Years of Service, the Member’s contributions accumulated to July 1, 1990, will be paid. In addition, an amount equal to 7% of the Member’s cumulative Base Pay from the later of July 1, 1990, and six months after the Member’s hire is payable.
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.

Section VIII: Glossary *(continued)*

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 required contribution to 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.

Agent Multiple-Employer Plan (Agent Plan). An aggregation of single-employer plans, with pooled administrative and investment functions. Separate accounts are maintained for each employer so that the employer's contributions provide benefits only for the employees of that employer. A separate actuarial valuation is performed for each individual employer's plan to determine the employer's periodic contribution rate and other information for the individual plan.

Annual Pension Cost. A measure of the periodic cost of an employer's participation in a defined benefit pension plan.

Annual Required Contributions (ARC). The employer's periodic required contributions to a defined benefit pension plan, calculated in accordance with the parameters of GASB 27.

Contribution Deficiencies (excess contributions). The difference between the annual required contributions of the employer(s) (ARC) and the employer's actual contributions in relation to the ARC.

Cost Sharing Multiple-Employer Plan. A single plan with pooling (cost-sharing) arrangements for the participating employers. All risks, rewards, and costs, including benefit costs, are shared and are not attributed individually to employers. A single actuarial valuation covers all plan members and the same contribution rate(s) applies for each employer.

Employer's Contributions. Contributions made in relation to the annual required contributions of the employer (ARC).

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

Section VIII: Glossary *(continued)*

Net Pension Obligation (NPO). The cumulative difference since the effective date of GASB 27 between annual pension cost and the employer's contributions to the plan, including the pension liability (asset) at transition, and excluding (a) short-term differences and (b) unpaid contributions that have been converted to pension-related debt.

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.

Required Supplementary Information (RSI). Schedules, statistical data, and other information that are an essential part of financial reporting and should be presented with, but are not part of, the basic financial statements of a governmental entity.

Statement No. 25 of the Governmental Accounting Standards Board (GASB 25). The accounting standard establishing financial reporting standards for defined benefit pension plans.

Statement No. 27 of the Governmental Accounting Standards Board (GASB 27). The accounting standard governing a state or local governmental employer's accounting for pensions.

Statement No. 43 of the Governmental Accounting Standards Board (GASB 45). The accounting standard establishing financial reporting standards for post-employment benefits other than pensions.

Statement No. 45 of the Governmental Accounting Standards Board (GASB 45). The accounting standard governing a state or local governmental employer's accounting for post-employment benefits other than pensions.

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

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MARSH MERCER KROLL
GUY CARPENTER OLIVER WYMAN

Mercer (US) Inc.
111 SW Columbia Street, Suite 500
Portland, OR 97201
503 273 5900

Consulting. Outsourcing. Investments.