

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

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Early Retirement Reduction Factors - General Service without 30 Years of Service

<u>Age at Retirement</u>		# Mo. Early	Factor	<u>Age at Retirement</u>		# Mo. Early	Factor	<u>Age at Retirement</u>		# Mo. Early	Factor
Years	Months			Years	Months			Years	Months		
55	0	120	0.369	57	0	96	0.446	59	0	72	0.541
	1	119	0.372		1	95	0.450		1	71	0.546
	2	118	0.375		2	94	0.453		2	70	0.550
	3	117	0.378		3	93	0.457		3	69	0.555
	4	116	0.381		4	92	0.461		4	68	0.560
	5	115	0.385		5	91	0.465		5	67	0.564
	6	114	0.388		6	90	0.468		6	66	0.569
	7	113	0.391		7	89	0.472		7	65	0.574
	8	112	0.394		8	88	0.476		8	64	0.578
	9	111	0.397		9	87	0.480		9	63	0.583
	10	110	0.400		10	86	0.483		10	62	0.588
11	109	0.403	11	85	0.487	11	61	0.592			
56	0	108	0.406	58	0	84	0.491	60	0	60	0.597
	1	107	0.409		1	83	0.495		1	59	0.602
	2	106	0.412		2	82	0.499		2	58	0.607
	3	105	0.416		3	81	0.503		3	57	0.613
	4	104	0.419		4	80	0.508		4	56	0.618
	5	103	0.422		5	79	0.512		5	55	0.623
	6	102	0.426		6	78	0.516		6	54	0.628
	7	101	0.429		7	77	0.520		7	53	0.633
	8	100	0.433		8	76	0.524		8	52	0.639
	9	99	0.436		9	75	0.528		9	51	0.644
	10	98	0.439		10	74	0.533		10	50	0.649
11	97	0.443	11	73	0.537	11	49	0.654			

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Early Retirement Reduction Factors - General Service without 30 Years of Service

<u>Age at Retirement</u>		# Mo. Early	Factor	<u>Age at Retirement</u>		# Mo. Early	Factor
Years	Months			Years	Months		
61	0	48	0.660	63	0	24	0.809
	1	47	0.665		1	23	0.817
	2	46	0.671		2	22	0.824
	3	45	0.677		3	21	0.832
	4	44	0.683		4	20	0.839
	5	43	0.689		5	19	0.847
	6	42	0.695		6	18	0.854
	7	41	0.701		7	17	0.861
	8	40	0.707		8	16	0.869
	9	39	0.712		9	15	0.876
	10	38	0.718		10	14	0.884
11	37	0.724	11	13	0.891		
62	0	36	0.730	64	0	12	0.899
	1	35	0.737		1	11	0.907
	2	34	0.743		2	10	0.916
	3	33	0.750		3	9	0.924
	4	32	0.756		4	8	0.933
	5	31	0.763		5	7	0.941
	6	30	0.770		6	6	0.949
	7	29	0.776		7	5	0.958
	8	28	0.783		8	4	0.966
	9	27	0.789		9	3	0.975
	10	26	0.796		10	2	0.983
11	25	0.803	11	1	0.992		

**Oregon Public Service Retirement Plan
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Early Retirement Reduction Factors - General Service with 30 Years of Service

<u>Age at Retirement</u>		# Mo. Early	Factor	<u>Age at Retirement</u>		# Mo. Early	Factor	<u>Age at Retirement</u>		# Mo. Early	Factor
Years	Months			Years	Months			Years	Months		
55	0	36	0.753	56	0	24	0.826	57	0	12	0.909
	1	35	0.759		1	23	0.833		1	11	0.916
	2	34	0.765		2	22	0.840		2	10	0.924
	3	33	0.771		3	21	0.847		3	9	0.931
	4	32	0.777		4	20	0.854		4	8	0.939
	5	31	0.783		5	19	0.861		5	7	0.947
	6	30	0.790		6	18	0.868		6	6	0.954
	7	29	0.796		7	17	0.874		7	5	0.962
	8	28	0.802		8	16	0.881		8	4	0.970
	9	27	0.808		9	15	0.888		9	3	0.977
	10	26	0.814		10	14	0.895		10	2	0.985
11	25	0.820	11	13	0.902	11	1	0.992			

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

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Early Retirement Reduction Factors - Police & Fire without 25 Years of Service

<u>Age at Retirement</u>		# Mo. Early	Factor	<u>Age at Retirement</u>		# Mo. Early	Factor	<u>Age at Retirement</u>		# Mo. Early	Factor
Years	Months			Years	Months			Years	Months		
50	0	120	0.384	52	0	96	0.461	54	0	72	0.555
	1	119	0.387		1	95	0.465		1	71	0.560
	2	118	0.390		2	94	0.468		2	70	0.565
	3	117	0.393		3	93	0.472		3	69	0.569
	4	116	0.396		4	92	0.476		4	68	0.574
	5	115	0.399		5	91	0.480		5	67	0.578
	6	114	0.402		6	90	0.483		6	66	0.583
	7	113	0.405		7	89	0.487		7	65	0.588
	8	112	0.408		8	88	0.491		8	64	0.592
	9	111	0.411		9	87	0.495		9	63	0.597
	10	110	0.415		10	86	0.498		10	62	0.601
11	109	0.418	11	85	0.502	11	61	0.606			
51	0	108	0.421	53	0	84	0.506	55	0	60	0.611
	1	107	0.424		1	83	0.510		1	59	0.616
	2	106	0.427		2	82	0.514		2	58	0.621
	3	105	0.431		3	81	0.518		3	57	0.626
	4	104	0.434		4	80	0.522		4	56	0.631
	5	103	0.437		5	79	0.526		5	55	0.636
	6	102	0.441		6	78	0.531		6	54	0.641
	7	101	0.444		7	77	0.535		7	53	0.647
	8	100	0.448		8	76	0.539		8	52	0.652
	9	99	0.451		9	75	0.543		9	51	0.657
	10	98	0.454		10	74	0.547		10	50	0.662
11	97	0.458	11	73	0.551	11	49	0.667			

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2004 OPSRP Actuarial Equivalent Factors**

Table 1(c) Page 2 of 2

Early Retirement Reduction Factors - Police & Fire without 25 Years of Service

<u>Age at Retirement</u>		# Mo. Early	Factor	<u>Age at Retirement</u>		# Mo. Early	Factor
Years	Months			Years	Months		
56	0	48	0.672	58	0	24	0.817
	1	47	0.678		1	23	0.825
	2	46	0.684		2	22	0.832
	3	45	0.689		3	21	0.839
	4	44	0.695		4	20	0.846
	5	43	0.701		5	19	0.853
	6	42	0.706		6	18	0.860
	7	41	0.712		7	17	0.868
	8	40	0.718		8	16	0.875
	9	39	0.724		9	15	0.882
	10	38	0.729		10	14	0.889
11	37	0.735	11	13	0.896		
57	0	36	0.741	59	0	12	0.903
	1	35	0.747		1	11	0.911
	2	34	0.754		2	10	0.920
	3	33	0.760		3	9	0.928
	4	32	0.766		4	8	0.936
	5	31	0.773		5	7	0.944
	6	30	0.779		6	6	0.952
	7	29	0.786		7	5	0.960
	8	28	0.792		8	4	0.968
	9	27	0.798		9	3	0.976
	10	26	0.805		10	2	0.984
11	25	0.811	11	1	0.992		

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 1(d) Page 1 of 1

Early Retirement Reduction Factors - Police & Fire with 25 Years of Service

<u>Age at Retirement</u>		# Mo. Early	Factor	<u>Age at Retirement</u>		# Mo. Early	Factor	<u>Age at Retirement</u>		# Mo. Early	Factor
Years	Months			Years	Months			Years	Months		
50	0	36	0.759	51	0	24	0.832	52	0	12	0.911
	1	35	0.765		1	23	0.838		1	11	0.919
	2	34	0.771		2	22	0.845		2	10	0.926
	3	33	0.777		3	21	0.852		3	9	0.934
	4	32	0.783		4	20	0.858		4	8	0.941
	5	31	0.789		5	19	0.865		5	7	0.948
	6	30	0.796		6	18	0.872		6	6	0.956
	7	29	0.802		7	17	0.878		7	5	0.963
	8	28	0.808		8	16	0.885		8	4	0.970
	9	27	0.814		9	15	0.892		9	3	0.978
	10	26	0.820		10	14	0.898		10	2	0.985
11	25	0.826	11	13	0.905	11	1	0.993			

Table 2(a)
 100% Joint and Survivor Annuity - Option 2
 (Factor Multiplied by Normal or Early Retirement Benefit)

(Y) Age Difference	Attained Age at Retirement											
	50 or less	51	52	53	54	55	56	57	58	59	60	
*	15 or more	0.879	0.873	0.866	0.859	0.852	0.845	0.837	0.828	0.820	0.811	0.802
	14	0.882	0.876	0.869	0.863	0.856	0.848	0.841	0.832	0.824	0.815	0.806
	13	0.884	0.879	0.872	0.866	0.859	0.852	0.844	0.837	0.828	0.820	0.811
	12	0.887	0.882	0.876	0.869	0.863	0.856	0.848	0.841	0.833	0.825	0.816
	11	0.890	0.885	0.879	0.873	0.866	0.860	0.853	0.845	0.837	0.829	0.821
	10	0.893	0.888	0.882	0.876	0.870	0.864	0.857	0.850	0.842	0.834	0.826
	9	0.897	0.891	0.886	0.880	0.874	0.868	0.861	0.854	0.847	0.839	0.832
	8	0.900	0.895	0.889	0.884	0.878	0.872	0.866	0.859	0.852	0.845	0.837
	7	0.903	0.898	0.893	0.888	0.882	0.876	0.870	0.864	0.857	0.850	0.843
	6	0.906	0.902	0.897	0.892	0.886	0.881	0.875	0.868	0.862	0.855	0.848
	5	0.910	0.905	0.901	0.896	0.890	0.885	0.879	0.873	0.867	0.861	0.854
	4	0.913	0.909	0.904	0.900	0.895	0.889	0.884	0.878	0.872	0.866	0.860
	3	0.917	0.912	0.908	0.904	0.899	0.894	0.889	0.883	0.878	0.872	0.866
	2	0.920	0.916	0.912	0.908	0.903	0.898	0.894	0.888	0.883	0.878	0.872
	1	0.923	0.920	0.916	0.912	0.907	0.903	0.898	0.893	0.888	0.883	0.878
	0	0.927	0.923	0.920	0.916	0.912	0.908	0.903	0.899	0.894	0.889	0.884
	1	0.930	0.927	0.923	0.920	0.916	0.912	0.908	0.904	0.899	0.895	0.890
	2	0.934	0.930	0.927	0.924	0.920	0.917	0.913	0.909	0.904	0.900	0.896
	3	0.937	0.934	0.931	0.928	0.924	0.921	0.917	0.914	0.910	0.906	0.902
	4	0.940	0.937	0.935	0.932	0.929	0.925	0.922	0.918	0.915	0.911	0.907
	5	0.943	0.941	0.938	0.935	0.933	0.930	0.926	0.923	0.920	0.916	0.913
	6	0.947	0.944	0.942	0.939	0.937	0.934	0.931	0.928	0.925	0.922	0.918
	7	0.950	0.948	0.945	0.943	0.940	0.938	0.935	0.932	0.930	0.927	0.924
	8	0.953	0.951	0.949	0.946	0.944	0.942	0.939	0.937	0.934	0.931	0.929
	9	0.956	0.954	0.952	0.950	0.948	0.946	0.943	0.941	0.939	0.936	0.934
	10	0.959	0.957	0.955	0.953	0.951	0.949	0.947	0.945	0.943	0.941	0.938
	11	0.961	0.960	0.958	0.957	0.955	0.953	0.951	0.949	0.947	0.945	0.943
	12	0.964	0.963	0.961	0.960	0.958	0.956	0.955	0.953	0.951	0.949	0.947
	13	0.966	0.965	0.964	0.963	0.961	0.960	0.958	0.957	0.955	0.953	0.952
	14	0.969	0.968	0.967	0.965	0.964	0.963	0.961	0.960	0.959	0.957	0.956
	15 or more	0.971	0.970	0.969	0.968	0.967	0.966	0.964	0.963	0.962	0.961	0.959
*	If age difference (Y) is greater than 15 years, use (A) – (B) x (Y); Add five years to a disabled member's age.											
	(A)	0.9105	0.9060	0.9005	0.8950	0.8895	0.8855	0.8790	0.8715	0.8665	0.8590	0.8530
	(B)	0.0021	0.0022	0.0023	0.0024	0.0025	0.0027	0.0028	0.0029	0.0031	0.0032	0.0034

Table 2(a)

100% Joint and Survivor Annuity - Option 2
 (Factor Multiplied by Normal or Early Retirement Benefit)

(Y) Age Difference	Attained Age at Retirement										
	61	62	63	64	65	66	67	68	69	70 or more	
*	15 or more	0.792	0.782	0.772	0.762	0.751	0.741	0.730	0.719	0.707	0.696
	14	0.797	0.787	0.778	0.767	0.757	0.747	0.736	0.725	0.714	0.703
	13	0.802	0.793	0.783	0.773	0.763	0.753	0.743	0.732	0.722	0.711
	12	0.807	0.798	0.789	0.779	0.770	0.760	0.750	0.739	0.729	0.719
	11	0.813	0.804	0.795	0.785	0.776	0.766	0.757	0.747	0.737	0.727
	10	0.818	0.810	0.801	0.792	0.783	0.774	0.764	0.755	0.745	0.735
	9	0.824	0.815	0.807	0.798	0.790	0.781	0.772	0.763	0.753	0.744
	8	0.829	0.822	0.813	0.805	0.797	0.788	0.780	0.771	0.762	0.753
	7	0.835	0.828	0.820	0.812	0.804	0.796	0.787	0.779	0.771	0.762
	6	0.841	0.834	0.827	0.819	0.811	0.803	0.796	0.788	0.780	0.771
	5	0.847	0.841	0.833	0.826	0.819	0.811	0.804	0.796	0.789	0.781
	4	0.854	0.847	0.840	0.833	0.826	0.819	0.812	0.805	0.798	0.790
	3	0.860	0.854	0.847	0.841	0.834	0.827	0.821	0.814	0.807	0.800
	2	0.866	0.860	0.854	0.848	0.842	0.835	0.829	0.823	0.816	0.810
	1	0.872	0.867	0.861	0.855	0.849	0.843	0.837	0.831	0.825	0.819
	0	0.879	0.873	0.868	0.862	0.857	0.851	0.846	0.840	0.835	0.829
	1	0.885	0.880	0.875	0.870	0.865	0.859	0.854	0.849	0.844	0.839
	2	0.891	0.886	0.882	0.877	0.872	0.867	0.862	0.858	0.853	0.848
	3	0.897	0.893	0.888	0.884	0.880	0.875	0.871	0.866	0.862	0.858
	4	0.903	0.899	0.895	0.891	0.887	0.883	0.879	0.875	0.871	0.867
	5	0.909	0.905	0.902	0.898	0.894	0.890	0.887	0.883	0.880	0.876
	6	0.915	0.911	0.908	0.904	0.901	0.898	0.894	0.891	0.888	0.885
	7	0.920	0.917	0.914	0.911	0.908	0.905	0.902	0.899	0.896	0.894
	8	0.926	0.923	0.920	0.917	0.914	0.912	0.909	0.907	0.904	0.902
	9	0.931	0.928	0.926	0.923	0.921	0.918	0.916	0.914	0.912	0.910
	10	0.936	0.934	0.931	0.929	0.927	0.925	0.923	0.921	0.919	0.917
	11	0.941	0.939	0.937	0.935	0.933	0.931	0.929	0.928	0.926	0.925
	12	0.946	0.944	0.942	0.940	0.938	0.937	0.935	0.934	0.933	0.932
	13	0.950	0.948	0.947	0.945	0.944	0.942	0.941	0.940	0.939	0.938
	14	0.954	0.953	0.951	0.950	0.949	0.948	0.946	0.946	0.945	0.944
	15 or more	0.958	0.957	0.956	0.954	0.953	0.952	0.952	0.951	0.950	0.949
*	If age difference (Y) is greater than 15 years, use (A) – (B) x (Y); Add five years to a disabled member's age.										
	(A)	0.8445	0.8375	0.8290	0.8220	0.8140	0.8070	0.7990	0.7910	0.7805	0.7740
	(B)	0.0035	0.0037	0.0038	0.0040	0.0042	0.0044	0.0046	0.0048	0.0049	0.0052

Table 2(b)
50% Joint and Survivor Annuity - Option 3
(Factor Multiplied by Normal or Early Retirement Benefit)

* (Y) Age Difference	Attained Age at Retirement										
	50 or less	51	52	53	54	55	56	57	58	59	60
15 or more	0.937	0.934	0.930	0.926	0.922	0.918	0.913	0.908	0.903	0.898	0.893
14	0.939	0.935	0.932	0.928	0.924	0.920	0.915	0.911	0.906	0.901	0.895
13	0.940	0.937	0.934	0.930	0.926	0.922	0.918	0.913	0.908	0.904	0.898
12	0.942	0.939	0.935	0.932	0.928	0.924	0.920	0.916	0.911	0.906	0.901
11	0.944	0.940	0.937	0.934	0.930	0.926	0.922	0.918	0.914	0.909	0.904
10	0.945	0.942	0.939	0.936	0.932	0.929	0.925	0.921	0.917	0.912	0.908
9	0.947	0.944	0.941	0.938	0.935	0.931	0.927	0.923	0.919	0.915	0.911
8	0.949	0.946	0.943	0.940	0.937	0.934	0.930	0.926	0.922	0.918	0.914
7	0.951	0.948	0.945	0.942	0.939	0.936	0.933	0.929	0.925	0.921	0.917
6	0.952	0.950	0.947	0.944	0.941	0.938	0.935	0.932	0.928	0.924	0.921
5	0.954	0.952	0.949	0.947	0.944	0.941	0.938	0.934	0.931	0.928	0.924
4	0.956	0.954	0.951	0.949	0.946	0.943	0.940	0.937	0.934	0.931	0.927
3	0.958	0.956	0.953	0.951	0.948	0.946	0.943	0.940	0.937	0.934	0.931
2	0.960	0.958	0.955	0.953	0.951	0.948	0.946	0.943	0.940	0.937	0.934
1	0.961	0.960	0.958	0.955	0.953	0.951	0.948	0.946	0.943	0.940	0.937
0	0.963	0.961	0.960	0.958	0.955	0.953	0.951	0.948	0.946	0.943	0.941
1	0.965	0.963	0.962	0.960	0.958	0.956	0.953	0.951	0.949	0.946	0.944
2	0.967	0.965	0.964	0.962	0.960	0.958	0.956	0.954	0.952	0.949	0.947
3	0.969	0.967	0.966	0.964	0.962	0.960	0.959	0.957	0.955	0.952	0.950
4	0.970	0.969	0.967	0.966	0.964	0.963	0.961	0.959	0.957	0.955	0.953
5	0.972	0.971	0.969	0.968	0.967	0.965	0.963	0.962	0.960	0.958	0.956
6	0.974	0.972	0.971	0.970	0.969	0.967	0.966	0.964	0.963	0.961	0.959
7	0.975	0.974	0.973	0.972	0.971	0.969	0.968	0.967	0.965	0.964	0.962
8	0.977	0.976	0.975	0.974	0.973	0.971	0.970	0.969	0.967	0.966	0.965
9	0.978	0.977	0.976	0.975	0.974	0.973	0.972	0.971	0.970	0.969	0.967
10	0.980	0.979	0.978	0.977	0.976	0.975	0.974	0.973	0.972	0.971	0.970
11	0.981	0.980	0.980	0.979	0.978	0.977	0.976	0.975	0.974	0.973	0.972
12	0.982	0.982	0.981	0.980	0.980	0.979	0.978	0.977	0.976	0.975	0.974
13	0.984	0.983	0.982	0.982	0.981	0.980	0.980	0.979	0.978	0.977	0.977
14	0.985	0.984	0.984	0.983	0.983	0.982	0.981	0.981	0.980	0.979	0.979
15 or more	0.986	0.986	0.985	0.985	0.984	0.983	0.983	0.982	0.982	0.981	0.980
* If age difference (Y) is greater than 15 years, use (A) – (B) x (Y); Add five years to a disabled member's age.											
(A)	0.9550	0.9535	0.9495	0.9470	0.9445	0.9420	0.9385	0.9350	0.9315	0.9280	0.9260
(B)	0.0012	0.0013	0.0013	0.0014	0.0015	0.0016	0.0017	0.0018	0.0019	0.0020	0.0022

Table 2(b)

50% Joint and Survivor Annuity - Option 3
 (Factor Multiplied by Normal or Early Retirement Benefit)

(Y) Age Difference	Attained Age at Retirement										
	61	62	63	64	65	66	67	68	69	70 or more	
*	15 or more	0.887	0.881	0.875	0.868	0.861	0.855	0.848	0.840	0.833	0.825
	14	0.890	0.884	0.878	0.872	0.865	0.859	0.852	0.845	0.838	0.830
	13	0.893	0.887	0.881	0.875	0.869	0.863	0.856	0.850	0.843	0.836
	12	0.896	0.891	0.885	0.879	0.873	0.867	0.861	0.854	0.848	0.841
	11	0.899	0.894	0.889	0.883	0.877	0.871	0.865	0.859	0.853	0.846
	10	0.903	0.898	0.892	0.887	0.882	0.876	0.870	0.864	0.858	0.852
	9	0.906	0.901	0.896	0.891	0.886	0.881	0.875	0.869	0.864	0.858
	8	0.910	0.905	0.900	0.895	0.890	0.885	0.880	0.875	0.869	0.864
	7	0.913	0.909	0.904	0.899	0.895	0.890	0.885	0.880	0.875	0.869
	6	0.917	0.912	0.908	0.904	0.899	0.895	0.890	0.885	0.880	0.875
	5	0.920	0.916	0.912	0.908	0.904	0.899	0.895	0.890	0.886	0.881
	4	0.924	0.920	0.916	0.912	0.908	0.904	0.900	0.896	0.892	0.887
	3	0.927	0.924	0.920	0.916	0.913	0.909	0.905	0.901	0.897	0.893
	2	0.931	0.927	0.924	0.921	0.917	0.914	0.910	0.906	0.903	0.899
	1	0.934	0.931	0.928	0.925	0.922	0.918	0.915	0.912	0.908	0.905
	0	0.938	0.935	0.932	0.929	0.926	0.923	0.920	0.917	0.914	0.910
	1	0.941	0.939	0.936	0.933	0.930	0.927	0.925	0.922	0.919	0.916
	2	0.945	0.942	0.940	0.937	0.935	0.932	0.929	0.927	0.924	0.922
	3	0.948	0.946	0.943	0.941	0.939	0.936	0.934	0.932	0.929	0.927
	4	0.951	0.949	0.947	0.945	0.943	0.941	0.938	0.936	0.934	0.932
	5	0.954	0.952	0.951	0.949	0.947	0.945	0.943	0.941	0.939	0.937
	6	0.957	0.956	0.954	0.952	0.950	0.949	0.947	0.945	0.944	0.942
	7	0.960	0.959	0.957	0.956	0.954	0.952	0.951	0.950	0.948	0.947
	8	0.963	0.962	0.960	0.959	0.958	0.956	0.955	0.954	0.952	0.951
	9	0.966	0.965	0.963	0.962	0.961	0.960	0.959	0.957	0.956	0.955
	10	0.969	0.967	0.966	0.965	0.964	0.963	0.962	0.961	0.960	0.959
	11	0.971	0.970	0.969	0.968	0.967	0.966	0.965	0.965	0.964	0.963
	12	0.973	0.973	0.972	0.971	0.970	0.969	0.969	0.968	0.967	0.967
	13	0.976	0.975	0.974	0.973	0.973	0.972	0.971	0.971	0.970	0.970
	14	0.978	0.977	0.976	0.976	0.975	0.975	0.974	0.974	0.973	0.973
	15 or more	0.980	0.979	0.979	0.978	0.978	0.977	0.977	0.976	0.976	0.976
*	If age difference (Y) is greater than 15 years, use (A) – (B) x (Y); Add five years to a disabled member's age.										
	(A)	0.9215	0.9170	0.9140	0.9085	0.9030	0.9015	0.8975	0.8910	0.8870	0.8820
	(B)	0.0023	0.0024	0.0026	0.0027	0.0028	0.0031	0.0033	0.0034	0.0036	0.0038

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 3(a) Page 1 of 2

Lump Sum Cash Out Factor before Normal Retirement Age 65 - General Service
(Factor Multiplied by Monthly Retirement Benefit at Normal Retirement Age 65)

Age	Months of Attained Age When Cashed Out											
	0	1	2	3	4	5	6	7	8	9	10	11
15	2.28533	2.30061	2.31589	2.33116	2.34644	2.36172	2.37699	2.39227	2.40755	2.42282	2.43810	2.45338
16	2.46866	2.48516	2.50166	2.51816	2.53466	2.55117	2.56767	2.58417	2.60067	2.61718	2.63368	2.65018
17	2.66668	2.68451	2.70234	2.72016	2.73799	2.75582	2.77364	2.79147	2.80930	2.82713	2.84495	2.86278
18	2.88061	2.89986	2.91912	2.93838	2.95764	2.97690	2.99616	3.01542	3.03468	3.05394	3.07320	3.09245
19	3.11171	3.13252	3.15333	3.17413	3.19494	3.21575	3.23655	3.25736	3.27817	3.29897	3.31978	3.34059
20	3.36139	3.38387	3.40635	3.42883	3.45131	3.47379	3.49627	3.51874	3.54122	3.56370	3.58618	3.60866
21	3.63114	3.65542	3.67971	3.70399	3.72827	3.75256	3.77684	3.80113	3.82541	3.84970	3.87398	3.89827
22	3.92255	3.94878	3.97502	4.00126	4.02749	4.05373	4.07996	4.10620	4.13243	4.15867	4.18490	4.21114
23	4.23737	4.26571	4.29406	4.32240	4.35074	4.37908	4.40742	4.43577	4.46411	4.49245	4.52079	4.54914
24	4.57748	4.60810	4.63871	4.66933	4.69995	4.73057	4.76119	4.79181	4.82243	4.85305	4.88366	4.91428
25	4.94490	4.97798	5.01106	5.04414	5.07721	5.11029	5.14337	5.17645	5.20953	5.24261	5.27568	5.30876
26	5.34184	5.37757	5.41331	5.44904	5.48478	5.52051	5.55625	5.59198	5.62772	5.66345	5.69919	5.73492
27	5.77066	5.80926	5.84787	5.88648	5.92508	5.96369	6.00229	6.04090	6.07950	6.11811	6.15671	6.19532
28	6.23393	6.27563	6.31734	6.35905	6.40076	6.44247	6.48418	6.52588	6.56759	6.60930	6.65101	6.69272
29	6.73442	6.77949	6.82455	6.86961	6.91467	6.95973	7.00479	7.04986	7.09492	7.13998	7.18504	7.23010
30	7.27516	7.32385	7.37254	7.42123	7.46992	7.51860	7.56729	7.61598	7.66467	7.71335	7.76204	7.81073
31	7.85942	7.91203	7.96464	8.01725	8.06986	8.12247	8.17508	8.22769	8.28030	8.33291	8.38552	8.43813
32	8.49074	8.54759	8.60445	8.66131	8.71816	8.77502	8.83188	8.88874	8.94559	9.00245	9.05931	9.11616
33	9.17302	9.23448	9.29594	9.35740	9.41886	9.48032	9.54178	9.60324	9.66469	9.72615	9.78761	9.84907
34	9.91053	9.97698	10.04342	10.10987	10.17631	10.24276	10.30920	10.37565	10.44209	10.50854	10.57498	10.64143
35	10.70787	10.77971	10.85155	10.92339	10.99523	11.06707	11.13892	11.21076	11.28260	11.35444	11.42628	11.49812
36	11.56996	11.64764	11.72531	11.80299	11.88067	11.95835	12.03602	12.11370	12.19138	12.26905	12.34673	12.42441
37	12.50208	12.58607	12.67007	12.75406	12.83805	12.92204	13.00603	13.09002	13.17401	13.25800	13.34200	13.42599
38	13.50998	13.60080	13.69162	13.78244	13.87326	13.96408	14.05490	14.14572	14.23654	14.32737	14.41819	14.50901
39	14.59983	14.69804	14.79625	14.89446	14.99266	15.09087	15.18908	15.28729	15.38550	15.48371	15.58192	15.68013
40	15.77834	15.88454	15.99075	16.09696	16.20316	16.30937	16.41558	16.52178	16.62799	16.73420	16.84040	16.94661
41	17.05282	17.16768	17.28255	17.39741	17.51228	17.62714	17.74201	17.85687	17.97174	18.08660	18.20147	18.31633
42	18.43120	18.55544	18.67969	18.80393	18.92818	19.05243	19.17667	19.30092	19.42516	19.54941	19.67366	19.79790
43	19.92215	20.05656	20.19098	20.32540	20.45981	20.59423	20.72865	20.86307	20.99748	21.13190	21.26632	21.40073
44	21.53515	21.68060	21.82605	21.97150	22.11695	22.26240	22.40785	22.55330	22.69875	22.84420	22.98964	23.13509

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

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Lump Sum Cash Out Factor before Normal Retirement Age 65 - General Service
(Factor Multiplied by Monthly Retirement Benefit at Normal Retirement Age 65)

Age	Months of Attained Age When Cashed Out											
	0	1	2	3	4	5	6	7	8	9	10	11
45	23.28054	23.43796	23.59538	23.75279	23.91021	24.06763	24.22504	24.38246	24.53988	24.69729	24.85471	25.01212
46	25.16954	25.33994	25.51035	25.68075	25.85115	26.02155	26.19196	26.36236	26.53276	26.70317	26.87357	27.04397
47	27.21437	27.39887	27.58336	27.76785	27.95234	28.13683	28.32133	28.50582	28.69031	28.87480	29.05930	29.24379
48	29.42828	29.62805	29.82783	30.02760	30.22738	30.42715	30.62693	30.82670	31.02647	31.22625	31.42602	31.62580
49	31.82557	32.04193	32.25829	32.47465	32.69100	32.90736	33.12372	33.34008	33.55644	33.77280	33.98915	34.20551
50	34.42187	34.65624	34.89060	35.12497	35.35934	35.59370	35.82807	36.06243	36.29680	36.53117	36.76553	36.99990
51	37.23427	37.48819	37.74212	37.99605	38.24998	38.50391	38.75784	39.01176	39.26569	39.51962	39.77355	40.02748
52	40.28140	40.55668	40.83197	41.10725	41.38253	41.65781	41.93309	42.20837	42.48365	42.75893	43.03421	43.30949
53	43.58477	43.88338	44.18199	44.48060	44.77921	45.07782	45.37643	45.67505	45.97366	46.27227	46.57088	46.86949
54	47.16810	47.49209	47.81607	48.14005	48.46404	48.78802	49.11201	49.43599	49.75998	50.08396	50.40795	50.73193
55	51.05591	51.40757	51.75923	52.11089	52.46255	52.81421	53.16586	53.51752	53.86918	54.22084	54.57250	54.92416
56	55.27581	55.65784	56.03987	56.42190	56.80393	57.18596	57.56799	57.95002	58.33204	58.71407	59.09610	59.47813
57	59.86016	60.27575	60.69133	61.10692	61.52251	61.93810	62.35368	62.76927	63.18486	63.60045	64.01604	64.43162
58	64.84721	65.29982	65.75243	66.20503	66.65764	67.11025	67.56286	68.01546	68.46807	68.92068	69.37329	69.82589
59	70.27850	70.77181	71.26512	71.75842	72.25173	72.74504	73.23834	73.73165	74.22496	74.71826	75.21157	75.70488
60	76.19818	76.73647	77.27476	77.81305	78.35134	78.88963	79.42792	79.96621	80.50449	81.04278	81.58107	82.11936
61	82.65765	83.24593	83.83420	84.42248	85.01075	85.59903	86.18731	86.77558	87.36386	87.95213	88.54041	89.12869
62	89.71696	90.36111	91.00526	91.64941	92.29356	92.93770	93.58185	94.22600	94.87015	95.51430	96.15845	96.80260
63	97.44674	98.15354	98.86033	99.56712	100.27392	100.98071	101.68750	102.39430	103.10109	103.80788	104.51468	105.22147
64	105.92826	106.70570	107.48314	108.26057	109.03801	109.81545	110.59288	111.37032	112.14776	112.92519	113.70263	114.48007
65	115.25751											

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 3(b) Page 1 of 2

Lump Sum Cash Out Factor before Normal Retirement Age 60 - Police & Fire
(Factor Multiplied by Monthly Retirement Benefit at Normal Retirement Age 60)

Age	Months of Attained Age When Cashed Out											
	0	1	2	3	4	5	6	7	8	9	10	11
15	3.60007	3.62415	3.64823	3.67231	3.69639	3.72047	3.74455	3.76863	3.79271	3.81680	3.84088	3.86496
16	3.88904	3.91505	3.94107	3.96708	3.99309	4.01911	4.04512	4.07114	4.09715	4.12317	4.14918	4.17519
17	4.20121	4.22931	4.25742	4.28553	4.31364	4.34174	4.36985	4.39796	4.42606	4.45417	4.48228	4.51039
18	4.53849	4.56886	4.59923	4.62960	4.65997	4.69034	4.72071	4.75108	4.78145	4.81182	4.84219	4.87256
19	4.90293	4.93575	4.96856	5.00137	5.03419	5.06700	5.09982	5.13263	5.16544	5.19826	5.23107	5.26389
20	5.29670	5.33216	5.36761	5.40307	5.43852	5.47398	5.50943	5.54489	5.58034	5.61580	5.65126	5.68671
21	5.72217	5.76048	5.79878	5.83709	5.87540	5.91371	5.95202	5.99033	6.02864	6.06695	6.10526	6.14357
22	6.18188	6.22327	6.26467	6.30606	6.34745	6.38884	6.43024	6.47163	6.51302	6.55442	6.59581	6.63720
23	6.67859	6.72332	6.76804	6.81276	6.85749	6.90221	6.94693	6.99166	7.03638	7.08110	7.12582	7.17055
24	7.21527	7.26359	7.31191	7.36023	7.40855	7.45687	7.50519	7.55352	7.60184	7.65016	7.69848	7.74680
25	7.79512	7.84732	7.89953	7.95174	8.00394	8.05615	8.10836	8.16056	8.21277	8.26497	8.31718	8.36939
26	8.42159	8.47799	8.53440	8.59080	8.64720	8.70360	8.76001	8.81641	8.87281	8.92921	8.98562	9.04202
27	9.09842	9.15936	9.22030	9.28124	9.34217	9.40311	9.46405	9.52499	9.58593	9.64686	9.70780	9.76874
28	9.82968	9.89552	9.96136	10.02720	10.09304	10.15888	10.22472	10.29056	10.35640	10.42224	10.48808	10.55392
29	10.61976	10.69090	10.76204	10.83318	10.90433	10.97547	11.04661	11.11776	11.18890	11.26004	11.33118	11.40233
30	11.47347	11.55035	11.62723	11.70411	11.78099	11.85787	11.93475	12.01163	12.08851	12.16539	12.24227	12.31915
31	12.39603	12.47912	12.56222	12.64531	12.72840	12.81150	12.89459	12.97768	13.06078	13.14387	13.22696	13.31006
32	13.39315	13.48299	13.57283	13.66266	13.75250	13.84234	13.93218	14.02201	14.11185	14.20169	14.29153	14.38136
33	14.47120	14.56835	14.66549	14.76264	14.85979	14.95693	15.05408	15.15122	15.24837	15.34551	15.44266	15.53981
34	15.63695	15.74201	15.84708	15.95214	16.05720	16.16226	16.26732	16.37238	16.47745	16.58251	16.68757	16.79263
35	16.89769	17.01132	17.12495	17.23859	17.35222	17.46585	17.57948	17.69311	17.80674	17.92037	18.03400	18.14764
36	18.26127	18.38418	18.50708	18.62999	18.75290	18.87581	18.99871	19.12162	19.24453	19.36744	19.49035	19.61325
37	19.73616	19.86911	20.00205	20.13500	20.26794	20.40089	20.53383	20.66678	20.79972	20.93267	21.06561	21.19856
38	21.33150	21.47530	21.61911	21.76291	21.90671	22.05052	22.19432	22.33812	22.48192	22.62573	22.76953	22.91333
39	23.05714	23.21269	23.36824	23.52380	23.67935	23.83491	23.99046	24.14602	24.30157	24.45713	24.61268	24.76823
40	24.92379	25.09206	25.26033	25.42860	25.59687	25.76515	25.93342	26.10169	26.26996	26.43823	26.60650	26.77477
41	26.94305	27.12509	27.30713	27.48917	27.67122	27.85326	28.03530	28.21734	28.39939	28.58143	28.76347	28.94552
42	29.12756	29.32453	29.52149	29.71846	29.91543	30.11240	30.30937	30.50633	30.70330	30.90027	31.09724	31.29421
43	31.49118	31.70433	31.91749	32.13065	32.34381	32.55697	32.77013	32.98329	33.19645	33.40960	33.62276	33.83592
44	34.04908	34.27981	34.51054	34.74126	34.97199	35.20272	35.43345	35.66418	35.89490	36.12563	36.35636	36.58709

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 3(b) Page 2 of 2

Lump Sum Cash Out Factor before Normal Retirement Age 60 - Police & Fire
(Factor Multiplied by Monthly Retirement Benefit at Normal Retirement Age 60)

<u>Age</u>	<u>Months of Attained Age When Cashed Out</u>											
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>
45	36.81781	37.06762	37.31743	37.56724	37.81705	38.06686	38.31667	38.56647	38.81628	39.06609	39.31590	39.56571
46	39.81552	40.08605	40.35659	40.62713	40.89766	41.16820	41.43873	41.70927	41.97981	42.25034	42.52088	42.79141
47	43.06195	43.35496	43.64796	43.94097	44.23398	44.52698	44.81999	45.11300	45.40600	45.69901	45.99202	46.28502
48	46.57803	46.89544	47.21285	47.53026	47.84767	48.16508	48.48249	48.79990	49.11732	49.43473	49.75214	50.06955
49	50.38696	56.30747	62.22797	68.14848	74.06899	79.98950	85.91001	91.83051	97.75102	103.67153	109.59204	115.51255
50	54.51402	54.88675	55.25949	55.63222	56.00495	56.37768	56.75041	57.12315	57.49588	57.86861	58.24134	58.61407
51	58.98681	59.39086	59.79492	60.19897	60.60303	61.00708	61.41114	61.81519	62.21925	62.62330	63.02736	63.43141
52	63.83546	64.27434	64.71322	65.15210	65.59098	66.02985	66.46873	66.90761	67.34649	67.78536	68.22424	68.66312
53	69.10200	69.57838	70.05477	70.53115	71.00754	71.48392	71.96031	72.43670	72.91308	73.38947	73.86585	74.34224
54	74.81862	75.33601	75.85340	76.37078	76.88817	77.40556	77.92294	78.44033	78.95772	79.47510	79.99249	80.50988
55	81.02726	81.58952	82.15178	82.71403	83.27629	83.83855	84.40081	84.96306	85.52532	86.08758	86.64983	87.21209
56	87.77435	88.38655	88.99875	89.61095	90.22315	90.83535	91.44755	92.05975	92.67195	93.28415	93.89635	94.50855
57	95.12075	95.78874	96.45672	97.12471	97.79269	98.46067	99.12866	99.79664	100.46463	101.13261	101.80060	102.46858
58	103.13656	103.86525	104.59393	105.32262	106.05130	106.77998	107.50867	108.23735	108.96604	109.69472	110.42340	111.15209
59	111.88077	112.67680	113.47282	114.26884	115.06487	115.86089	116.65691	117.45294	118.24896	119.04498	119.84101	120.63703
60	121.43306											

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 3(c) Page 1 of 2

Lump Sum Cash Out Factor at or after Early Retirement Age 55 - General Service
(Factor Multiplied by Monthly Retirement Benefit at or after Early Retirement Age 55)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
55	133.27168	133.15181	133.03193	132.91205	132.79218	132.67230	132.55242	132.43255	132.31267	132.19279	132.07292	131.95304
56	131.83316	131.70634	131.57951	131.45269	131.32586	131.19904	131.07221	130.94539	130.81856	130.69174	130.56491	130.43809
57	130.31126	130.17780	130.04434	129.91089	129.77743	129.64397	129.51051	129.37706	129.24360	129.11014	128.97668	128.84323
58	128.70977	128.56977	128.42977	128.28977	128.14977	128.00977	127.86977	127.72977	127.58977	127.44977	127.30976	127.16976
59	127.02976	126.88286	126.73596	126.58906	126.44216	126.29526	126.14836	126.00146	125.85456	125.70766	125.56076	125.41386
60	125.26696	125.11306	124.95917	124.80528	124.65138	124.49749	124.34359	124.18970	124.03580	123.88191	123.72801	123.57412
61	123.42022	123.25946	123.09871	122.93795	122.77719	122.61643	122.45567	122.29491	122.13415	121.97339	121.81263	121.65187
62	121.49111	121.32385	121.15659	120.98933	120.82206	120.65480	120.48754	120.32028	120.15302	119.98576	119.81849	119.65123
63	119.48397	119.31061	119.13724	118.96388	118.79052	118.61715	118.44379	118.27042	118.09706	117.92369	117.75033	117.57697
64	117.40360	117.22476	117.04592	116.86708	116.68824	116.50940	116.33055	116.15171	115.97287	115.79403	115.61519	115.43635
65	115.25751	115.07327	114.88904	114.70481	114.52058	114.33635	114.15211	113.96788	113.78365	113.59942	113.41519	113.23095
66	113.04672	112.85711	112.66749	112.47788	112.28826	112.09864	111.90903	111.71941	111.52980	111.34018	111.15057	110.96095
67	110.77134	110.57644	110.38155	110.18665	109.99176	109.79686	109.60197	109.40707	109.21218	109.01728	108.82238	108.62749
68	108.43259	108.23246	108.03232	107.83219	107.63205	107.43191	107.23178	107.03164	106.83151	106.63137	106.43124	106.23110
69	106.03096	105.82523	105.61949	105.41376	105.20802	105.00229	104.79655	104.59082	104.38508	104.17935	103.97361	103.76788
70	103.56214	103.35028	103.13842	102.92656	102.71469	102.50283	102.29097	102.07911	101.86725	101.65539	101.44353	101.23166
71	101.01980	100.80240	100.58500	100.36760	100.15020	99.93280	99.71539	99.49799	99.28059	99.06319	98.84579	98.62839
72	98.41099	98.18863	97.96628	97.74392	97.52156	97.29921	97.07685	96.85450	96.63214	96.40978	96.18743	95.96507
73	95.74272	95.51590	95.28909	95.06227	94.83545	94.60864	94.38182	94.15500	93.92819	93.70137	93.47456	93.24774
74	93.02092	92.78971	92.55851	92.32730	92.09609	91.86488	91.63367	91.40246	91.17125	90.94004	90.70883	90.47762
75	90.24641	90.01155	89.77668	89.54182	89.30696	89.07209	88.83723	88.60237	88.36751	88.13264	87.89778	87.66292
76	87.42805	87.18999	86.95194	86.71388	86.47582	86.23777	85.99971	85.76165	85.52359	85.28554	85.04748	84.80942
77	84.57136	84.33034	84.08932	83.84830	83.60728	83.36626	83.12524	82.88422	82.64320	82.40218	82.16116	81.92014
78	81.67912	81.43522	81.19131	80.94741	80.70350	80.45960	80.21569	79.97178	79.72788	79.48397	79.24007	78.99616
79	78.75225	78.50567	78.25908	78.01250	77.76591	77.51933	77.27274	77.02616	76.77957	76.53299	76.28640	76.03982
80	75.79323	75.54445	75.29566	75.04688	74.79809	74.54931	74.30052	74.05174	73.80295	73.55417	73.30538	73.05660
81	72.80781	72.55751	72.30720	72.05690	71.80659	71.55628	71.30598	71.05567	70.80537	70.55506	70.30475	70.05445
82	69.80414	69.55348	69.30281	69.05215	68.80148	68.55081	68.30015	68.04948	67.79882	67.54815	67.29749	67.04682
83	66.79616	66.54675	66.29735	66.04794	65.79854	65.54914	65.29973	65.05033	64.80093	64.55152	64.30212	64.05272
84	63.80331	63.55616	63.30900	63.06184	62.81469	62.56753	62.32038	62.07322	61.82606	61.57891	61.33175	61.08460

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 3(c) Page 2 of 2

Lump Sum Cash Out Factor at or after Early Retirement Age 55 - General Service
(Factor Multiplied by Monthly Retirement Benefit at or after Early Retirement Age 55)

<u>Age</u>	<u>Months of Attained Age at Retirement</u>											
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>
85	60.83744	60.59359	60.34974	60.10589	59.86204	59.61820	59.37435	59.13050	58.88665	58.64280	58.39895	58.15510
86	57.91126	57.67194	57.43262	57.19330	56.95398	56.71466	56.47535	56.23603	55.99671	55.75739	55.51807	55.27875
87	55.03943	54.80612	54.57280	54.33949	54.10617	53.87285	53.63954	53.40622	53.17290	52.93959	52.70627	52.47296
88	52.23964	52.01414	51.78864	51.56314	51.33764	51.11214	50.88664	50.66115	50.43565	50.21015	49.98465	49.75915
89	49.53365	49.31802	49.10238	48.88675	48.67111	48.45548	48.23985	48.02421	47.80858	47.59294	47.37731	47.16168
90	46.94604	46.74240	46.53876	46.33511	46.13147	45.92782	45.72418	45.52054	45.31689	45.11325	44.90961	44.70596
91	44.50232	44.31269	44.12305	43.93342	43.74379	43.55416	43.36452	43.17489	42.98526	42.79563	42.60600	42.41636
92	42.22673	42.05202	41.87730	41.70259	41.52787	41.35316	41.17844	41.00373	40.82901	40.65430	40.47958	40.30487
93	40.13015	39.96988	39.80960	39.64932	39.48904	39.32877	39.16849	39.00821	38.84793	38.68766	38.52738	38.36710
94	38.20682	38.06112	37.91541	37.76971	37.62400	37.47830	37.33259	37.18689	37.04118	36.89548	36.74977	36.60407
95	36.45836	36.32688	36.19539	36.06391	35.93242	35.80094	35.66945	35.53797	35.40649	35.27500	35.14352	35.01203
96	34.88055	34.76253	34.64450	34.52648	34.40846	34.29043	34.17241	34.05439	33.93637	33.81834	33.70032	33.58230
97	33.46427	33.35864	33.25301	33.14738	33.04175	32.93612	32.83048	32.72485	32.61922	32.51359	32.40796	32.30233
98	32.19669	32.10211	32.00753	31.91294	31.81836	31.72378	31.62919	31.53461	31.44003	31.34544	31.25086	31.15628
99	31.06169	30.97650	30.89131	30.80612	30.72093	30.63574	30.55056	30.46537	30.38018	30.29499	30.20980	30.12461
100	30.03942											

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 3(d) Page 1 of 2

Lump Sum Cash Out Factor at or after Early Retirement Age 50 - Police & Fire
(Factor Multiplied by Monthly Retirement Benefit at or after Early Retirement Age 50)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
50	137.09347	136.99307	136.89266	136.79226	136.69186	136.59145	136.49105	136.39065	136.29025	136.18984	136.08944	135.98904
51	135.88864	135.78162	135.67461	135.56760	135.46058	135.35357	135.24656	135.13954	135.03253	134.92552	134.81850	134.71149
52	134.60448	134.49188	134.37928	134.26668	134.15408	134.04148	133.92888	133.81628	133.70368	133.59108	133.47849	133.36589
53	133.25329	133.13379	133.01430	132.89480	132.77531	132.65581	132.53632	132.41682	132.29733	132.17783	132.05834	131.93884
54	131.81935	131.69263	131.56592	131.43920	131.31249	131.18577	131.05906	130.93234	130.80563	130.67891	130.55220	130.42548
55	130.29877	130.16450	130.03023	129.89597	129.76170	129.62743	129.49316	129.35889	129.22463	129.09036	128.95609	128.82182
56	128.68756	128.54645	128.40535	128.26424	128.12314	127.98204	127.84093	127.69983	127.55872	127.41762	127.27651	127.13541
57	126.99431	126.84713	126.69996	126.55279	126.40562	126.25845	126.11128	125.96411	125.81693	125.66976	125.52259	125.37542
58	125.22825	125.07375	124.91926	124.76477	124.61027	124.45578	124.30128	124.14679	123.99230	123.83780	123.68331	123.52881
59	123.37432	123.21255	123.05078	122.88900	122.72723	122.56546	122.40369	122.24192	122.08014	121.91837	121.75660	121.59483
60	121.43306	121.26411	121.09517	120.92622	120.75728	120.58833	120.41939	120.25044	120.08150	119.91256	119.74361	119.57467
61	119.40572	119.23000	119.05429	118.87857	118.70285	118.52713	118.35142	118.17570	117.99998	117.82426	117.64855	117.47283
62	117.29711	117.11505	116.93298	116.75092	116.56886	116.38680	116.20473	116.02267	115.84061	115.65854	115.47648	115.29442
63	115.11235	114.92449	114.73664	114.54878	114.36092	114.17306	113.98520	113.79734	113.60948	113.42163	113.23377	113.04591
64	112.85805	112.66507	112.47210	112.27912	112.08614	111.89316	111.70019	111.50721	111.31423	111.12126	110.92828	110.73530
65	110.54233	110.34353	110.14474	109.94595	109.74716	109.54837	109.34958	109.15079	108.95200	108.75321	108.55441	108.35562
66	108.15683	107.95270	107.74856	107.54443	107.34030	107.13616	106.93203	106.72789	106.52376	106.31963	106.11549	105.91136
67	105.70723	105.49851	105.28979	105.08107	104.87235	104.66363	104.45491	104.24619	104.03747	103.82875	103.62003	103.41131
68	103.20259	102.98828	102.77396	102.55965	102.34533	102.13101	101.91670	101.70238	101.48806	101.27375	101.05943	100.84512
69	100.63080	100.41057	100.19033	99.97010	99.74986	99.52963	99.30939	99.08916	98.86893	98.64869	98.42846	98.20822
70	97.98799	97.76161	97.53523	97.30885	97.08247	96.85609	96.62971	96.40333	96.17695	95.95057	95.72419	95.49781
71	95.27143	95.04108	94.81073	94.58038	94.35003	94.11969	93.88934	93.65899	93.42864	93.19829	92.96794	92.73759
72	92.50725	92.27161	92.03598	91.80035	91.56472	91.32909	91.09346	90.85783	90.62219	90.38656	90.15093	89.91530
73	89.67967	89.43941	89.19915	88.95889	88.71863	88.47837	88.23811	87.99785	87.75759	87.51733	87.27708	87.03682
74	86.79656	86.55268	86.30880	86.06493	85.82105	85.57718	85.33330	85.08942	84.84555	84.60167	84.35780	84.11392
75	83.87004	83.62337	83.37671	83.13004	82.88337	82.63670	82.39003	82.14336	81.89669	81.65003	81.40336	81.15669
76	80.91002	80.66122	80.41242	80.16362	79.91483	79.66603	79.41723	79.16843	78.91963	78.67083	78.42204	78.17324
77	77.92444	77.67386	77.42327	77.17269	76.92211	76.67153	76.42094	76.17036	75.91978	75.66920	75.41861	75.16803
78	74.91745	74.66528	74.41310	74.16093	73.90876	73.65658	73.40441	73.15224	72.90007	72.64789	72.39572	72.14355
79	71.89137	71.63801	71.38464	71.13127	70.87790	70.62453	70.37116	70.11779	69.86443	69.61106	69.35769	69.10432

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 3(d) Page 2 of 2

Lump Sum Cash Out Factor at or after Early Retirement Age 50 - Police & Fire
(Factor Multiplied by Monthly Retirement Benefit at or after Early Retirement Age 50)

Age	Months of Attained Age at Retirement											
	0	1	2	3	4	5	6	7	8	9	10	11
80	68.85095	68.59711	68.34327	68.08942	67.83558	67.58174	67.32789	67.07405	66.82021	66.56636	66.31252	66.05868
81	65.80483	65.55121	65.29759	65.04396	64.79034	64.53672	64.28309	64.02947	63.77585	63.52222	63.26860	63.01498
82	62.76135	62.51105	62.26075	62.01045	61.76015	61.50985	61.25955	61.00925	60.75895	60.50865	60.25834	60.00804
83	59.75774	59.51168	59.26562	59.01956	58.77350	58.52745	58.28139	58.03533	57.78927	57.54321	57.29715	57.05109
84	56.80503	56.56398	56.32293	56.08188	55.84083	55.59978	55.35873	55.11768	54.87663	54.63558	54.39453	54.15348
85	53.91243	53.67712	53.44182	53.20651	52.97121	52.73590	52.50060	52.26529	52.02999	51.79468	51.55938	51.32407
86	51.08877	50.86010	50.63144	50.40277	50.17411	49.94545	49.71678	49.48812	49.25945	49.03079	48.80212	48.57346
87	48.34479	48.12405	47.90332	47.68258	47.46184	47.24110	47.02036	46.79963	46.57889	46.35815	46.13741	45.91667
88	45.69594	45.48481	45.27369	45.06257	44.85145	44.64033	44.42921	44.21809	44.00696	43.79584	43.58472	43.37360
89	43.16248	42.96300	42.76352	42.56403	42.36455	42.16507	41.96559	41.76611	41.56663	41.36715	41.16767	40.96819
90	40.76870	40.58300	40.39729	40.21158	40.02588	39.84017	39.65446	39.46876	39.28305	39.09734	38.91164	38.72593
91	38.54022	38.37042	38.20062	38.03082	37.86102	37.69122	37.52142	37.35162	37.18182	37.01202	36.84222	36.67241
92	36.50261	36.34576	36.18890	36.03205	35.87519	35.71834	35.56148	35.40463	35.24777	35.09092	34.93406	34.77721
93	34.62035	34.47664	34.33292	34.18920	34.04549	33.90177	33.75805	33.61433	33.47062	33.32690	33.18318	33.03947
94	32.89575	32.76495	32.63415	32.50334	32.37254	32.24174	32.11094	31.98014	31.84934	31.71853	31.58773	31.45693
95	31.32613	31.20766	31.08918	30.97071	30.85224	30.73376	30.61529	30.49682	30.37835	30.25987	30.14140	30.02293
96	29.90445	29.79748	29.69051	29.58354	29.47656	29.36959	29.26262	29.15564	29.04867	28.94170	28.83473	28.72775
97	28.62078	28.52434	28.42790	28.33146	28.23502	28.13858	28.04214	27.94570	27.84926	27.75282	27.65638	27.55994
98	27.46350	27.37660	27.28970	27.20279	27.11589	27.02898	26.94208	26.85518	26.76827	26.68137	26.59446	26.50756
99	26.42066	26.34233	26.26401	26.18568	26.10736	26.02903	25.95071	25.87238	25.79406	25.71573	25.63741	25.55908
100	25.48076											

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 3(e) Page 1 of 3

Lump Sum Cash Out Factor - Beneficiaries
(Factor Multiplied by Survivor Benefit Payable to Spouse at Commencement Date)

<u>Age</u>	<u>Months of Attained Age at Date Cashed Out</u>											
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>
15	153.65888	153.64957	153.64026	153.63094	153.62163	153.61232	153.60300	153.59369	153.58438	153.57506	153.56575	153.55644
16	153.54713	153.53706	153.52700	153.51694	153.50688	153.49682	153.48676	153.47670	153.46664	153.45658	153.44652	153.43646
17	153.42640	153.41560	153.40480	153.39400	153.38319	153.37239	153.36159	153.35079	153.33999	153.32919	153.31839	153.30759
18	153.29678	153.28528	153.27377	153.26226	153.25075	153.23924	153.22774	153.21623	153.20472	153.19321	153.18170	153.17019
19	153.15869	153.14640	153.13411	153.12183	153.10954	153.09726	153.08497	153.07269	153.06040	153.04812	153.03583	153.02354
20	153.01126	152.99811	152.98495	152.97180	152.95865	152.94550	152.93235	152.91919	152.90604	152.89289	152.87974	152.86658
21	152.85343	152.83934	152.82525	152.81117	152.79708	152.78299	152.76890	152.75481	152.74072	152.72663	152.71255	152.69846
22	152.68437	152.66924	152.65411	152.63899	152.62386	152.60873	152.59361	152.57848	152.56335	152.54822	152.53310	152.51797
23	152.50284	152.48658	152.47032	152.45406	152.43779	152.42153	152.40527	152.38901	152.37274	152.35648	152.34022	152.32396
24	152.30770	152.29019	152.27269	152.25519	152.23769	152.22018	152.20268	152.18518	152.16768	152.15018	152.13267	152.11517
25	152.09767	152.07883	152.05999	152.04114	152.02230	152.00346	151.98462	151.96578	151.94694	151.92809	151.90925	151.89041
26	151.87157	151.85125	151.83094	151.81062	151.79031	151.76999	151.74968	151.72936	151.70905	151.68873	151.66842	151.64810
27	151.62778	151.60588	151.58397	151.56206	151.54015	151.51825	151.49634	151.47443	151.45252	151.43062	151.40871	151.38680
28	151.36489	151.34131	151.31772	151.29413	151.27054	151.24695	151.22336	151.19977	151.17619	151.15260	151.12901	151.10542
29	151.08183	151.05647	151.03110	151.00574	150.98037	150.95501	150.92964	150.90428	150.87891	150.85355	150.82818	150.80281
30	150.77745	150.75023	150.72301	150.69579	150.66857	150.64135	150.61413	150.58691	150.55969	150.53247	150.50525	150.47803
31	150.45081	150.42167	150.39252	150.36337	150.33423	150.30508	150.27594	150.24679	150.21764	150.18850	150.15935	150.13021
32	150.10106	150.07005	150.03905	150.00804	149.97703	149.94603	149.91502	149.88401	149.85301	149.82200	149.79099	149.75999
33	149.72898	149.69614	149.66331	149.63047	149.59763	149.56479	149.53196	149.49912	149.46628	149.43344	149.40061	149.36777
34	149.33493	149.30016	149.26540	149.23063	149.19586	149.16110	149.12633	149.09156	149.05679	149.02203	148.98726	148.95249
35	148.91773	148.88089	148.84406	148.80723	148.77040	148.73357	148.69674	148.65991	148.62308	148.58625	148.54942	148.51259
36	148.47576	148.43670	148.39763	148.35857	148.31950	148.28044	148.24137	148.20231	148.16325	148.12418	148.08512	148.04605
37	148.00699	147.96548	147.92397	147.88246	147.84095	147.79945	147.75794	147.71643	147.67492	147.63341	147.59190	147.55039
38	147.50889	147.46471	147.42052	147.37634	147.33216	147.28798	147.24380	147.19962	147.15544	147.11126	147.06708	147.02290
39	146.97872	146.93163	146.88455	146.83746	146.79038	146.74329	146.69621	146.64912	146.60203	146.55495	146.50786	146.46078
40	146.41369	146.36347	146.31325	146.26304	146.21282	146.16260	146.11238	146.06216	146.01194	145.96173	145.91151	145.86129
41	145.81107	145.75750	145.70393	145.65036	145.59678	145.54321	145.48964	145.43607	145.38250	145.32893	145.27536	145.22178
42	145.16821	145.11108	145.05396	144.99683	144.93970	144.88258	144.82545	144.76832	144.71120	144.65407	144.59694	144.53981
43	144.48269	144.42181	144.36093	144.30005	144.23918	144.17830	144.11742	144.05654	143.99567	143.93479	143.87391	143.81303
44	143.75215	143.68734	143.62252	143.55771	143.49289	143.42807	143.36326	143.29844	143.23362	143.16881	143.10399	143.03917

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 3(e) Page 2 of 3

Lump Sum Cash Out Factor - Beneficiaries
(Factor Multiplied by Survivor Benefit Payable to Spouse at Commencement Date)

Age	Months of Attained Age at Date Cashed Out											
	0	1	2	3	4	5	6	7	8	9	10	11
45	142.97436	142.90540	142.83643	142.76747	142.69851	142.62955	142.56059	142.49163	142.42266	142.35370	142.28474	142.21578
46	142.14682	142.07347	142.00013	141.92678	141.85343	141.78009	141.70674	141.63340	141.56005	141.48671	141.41336	141.34002
47	141.26667	141.18862	141.11056	141.03251	140.95446	140.87641	140.79836	140.72030	140.64225	140.56420	140.48615	140.40809
48	140.33004	140.24694	140.16384	140.08075	139.99765	139.91455	139.83145	139.74835	139.66525	139.58216	139.49906	139.41596
49	139.33286	139.24436	139.15586	139.06735	138.97885	138.89035	138.80185	138.71334	138.62484	138.53634	138.44784	138.35934
50	138.27083	138.17655	138.08226	137.98798	137.89369	137.79941	137.70512	137.61084	137.51656	137.42227	137.32799	137.23370
51	137.13942	137.03897	136.93853	136.83808	136.73763	136.63719	136.53674	136.43630	136.33585	136.23541	136.13496	136.03452
52	135.93407	135.82764	135.72121	135.61478	135.50835	135.40192	135.29549	135.18905	135.08262	134.97619	134.86976	134.76333
53	134.65690	134.54428	134.43165	134.31903	134.20640	134.09378	133.98116	133.86853	133.75591	133.64328	133.53066	133.41804
54	133.30541	133.18589	133.06638	132.94686	132.82734	132.70783	132.58831	132.46879	132.34927	132.22976	132.11024	131.99072
55	131.87121	131.74450	131.61778	131.49107	131.36436	131.23765	131.11094	130.98423	130.85752	130.73081	130.60410	130.47738
56	130.35067	130.21692	130.08317	129.94943	129.81568	129.68193	129.54818	129.41443	129.28068	129.14693	129.01318	128.87943
57	128.74568	128.60550	128.46531	128.32513	128.18494	128.04476	127.90457	127.76438	127.62420	127.48401	127.34383	127.20364
58	127.06346	126.91662	126.76978	126.62294	126.47610	126.32926	126.18242	126.03558	125.88874	125.74190	125.59506	125.44821
59	125.30137	125.14738	124.99338	124.83938	124.68538	124.53138	124.37738	124.22338	124.06938	123.91538	123.76138	123.60738
60	123.45338	123.29230	123.13122	122.97014	122.80906	122.64798	122.48689	122.32581	122.16473	122.00365	121.84257	121.68149
61	121.52041	121.35250	121.18459	121.01669	120.84878	120.68088	120.51297	120.34506	120.17716	120.00925	119.84134	119.67344
62	119.50553	119.33127	119.15701	118.98276	118.80850	118.63424	118.45998	118.28573	118.11147	117.93721	117.76295	117.58870
63	117.41444	117.23430	117.05416	116.87401	116.69387	116.51373	116.33359	116.15345	115.97330	115.79316	115.61302	115.43288
64	115.25274	115.06727	114.88181	114.69635	114.51089	114.32542	114.13996	113.95450	113.76903	113.58357	113.39811	113.21265
65	113.02718	112.83632	112.64545	112.45458	112.26371	112.07285	111.88198	111.69111	111.50025	111.30938	111.11851	110.92764
66	110.73678	110.54030	110.34382	110.14735	109.95087	109.75440	109.55792	109.36144	109.16497	108.96849	108.77202	108.57554
67	108.37907	108.17761	107.97616	107.77471	107.57325	107.37180	107.17035	106.96889	106.76744	106.56599	106.36454	106.16308
68	105.96163	105.75495	105.54826	105.34158	105.13490	104.92822	104.72153	104.51485	104.30817	104.10149	103.89480	103.68812
69	103.48144	103.26877	103.05611	102.84345	102.63078	102.41812	102.20545	101.99279	101.78012	101.56746	101.35479	101.14213
70	100.92946	100.71063	100.49179	100.27296	100.05413	99.83529	99.61646	99.39762	99.17879	98.95995	98.74112	98.52229
71	98.30345	98.07974	97.85602	97.63231	97.40859	97.18488	96.96116	96.73744	96.51373	96.29001	96.06630	95.84258
72	95.61887	95.39069	95.16252	94.93435	94.70617	94.47800	94.24983	94.02166	93.79348	93.56531	93.33714	93.10896
73	92.88079	92.64776	92.41474	92.18171	91.94869	91.71566	91.48264	91.24961	91.01659	90.78356	90.55054	90.31751
74	90.08449	89.84745	89.61041	89.37337	89.13633	88.89929	88.66225	88.42522	88.18818	87.95114	87.71410	87.47706

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 3(e) Page 3 of 3

Lump Sum Cash Out Factor - Beneficiaries
(Factor Multiplied by Survivor Benefit Payable to Spouse at Commencement Date)

<u>Age</u>	<u>Months of Attained Age at Date Cashed Out</u>											
	<u>0</u>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>
75	87.24002	86.99965	86.75927	86.51890	86.27852	86.03815	85.79777	85.55740	85.31702	85.07665	84.83627	84.59590
76	84.35552	84.11226	83.86901	83.62575	83.38249	83.13923	82.89597	82.65272	82.40946	82.16620	81.92294	81.67968
77	81.43642	81.19056	80.94470	80.69884	80.45298	80.20713	79.96127	79.71541	79.46955	79.22369	78.97783	78.73197
78	78.48611	78.23787	77.98964	77.74140	77.49317	77.24493	76.99670	76.74846	76.50023	76.25199	76.00376	75.75552
79	75.50729	75.25702	75.00676	74.75649	74.50622	74.25596	74.00569	73.75543	73.50516	73.25490	73.00463	72.75436
80	72.50410											

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 4(a) Page 1 of 6

Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age										
	50	51	52	53	54	55	56	57	58	59	60
15	0.848	0.839	0.829	0.819	0.808	0.797	0.786	0.773	0.761	0.748	0.734
16	0.850	0.840	0.831	0.820	0.810	0.799	0.787	0.775	0.762	0.749	0.736
17	0.851	0.842	0.832	0.822	0.811	0.800	0.788	0.776	0.763	0.750	0.737
18	0.853	0.843	0.833	0.823	0.812	0.801	0.790	0.777	0.765	0.752	0.738
19	0.854	0.845	0.835	0.825	0.814	0.803	0.791	0.779	0.766	0.753	0.740
20	0.856	0.847	0.837	0.826	0.816	0.804	0.793	0.780	0.768	0.755	0.741
21	0.858	0.848	0.839	0.828	0.817	0.806	0.794	0.782	0.769	0.756	0.743
22	0.860	0.850	0.840	0.830	0.819	0.808	0.796	0.784	0.771	0.758	0.744
23	0.862	0.852	0.842	0.832	0.821	0.810	0.798	0.786	0.773	0.760	0.746
24	0.864	0.854	0.844	0.834	0.823	0.812	0.800	0.788	0.775	0.762	0.748
25	0.866	0.857	0.847	0.836	0.825	0.814	0.802	0.790	0.777	0.764	0.750
26	0.869	0.859	0.849	0.839	0.828	0.816	0.804	0.792	0.779	0.766	0.752
27	0.871	0.862	0.852	0.841	0.830	0.819	0.807	0.794	0.782	0.768	0.754
28	0.874	0.864	0.854	0.844	0.833	0.821	0.809	0.797	0.784	0.771	0.757
29	0.877	0.867	0.857	0.847	0.836	0.824	0.812	0.800	0.787	0.773	0.759
30	0.880	0.870	0.860	0.850	0.839	0.827	0.815	0.802	0.789	0.776	0.762
31	0.883	0.874	0.864	0.853	0.842	0.830	0.818	0.806	0.792	0.779	0.765
32	0.887	0.877	0.867	0.856	0.845	0.834	0.821	0.809	0.796	0.782	0.768
33	0.891	0.881	0.871	0.860	0.849	0.837	0.825	0.812	0.799	0.785	0.771
34	0.895	0.885	0.875	0.864	0.853	0.841	0.829	0.816	0.803	0.789	0.775
35	0.899	0.889	0.879	0.868	0.857	0.845	0.832	0.820	0.806	0.793	0.778
36	0.903	0.893	0.883	0.872	0.861	0.849	0.837	0.824	0.810	0.796	0.782
37	0.908	0.898	0.888	0.877	0.865	0.853	0.841	0.828	0.814	0.801	0.786
38	0.913	0.903	0.892	0.881	0.870	0.858	0.845	0.832	0.819	0.805	0.790
39	0.918	0.908	0.898	0.887	0.875	0.863	0.850	0.837	0.824	0.810	0.795
40	0.924	0.914	0.903	0.892	0.880	0.868	0.855	0.842	0.829	0.814	0.800
41	0.930	0.920	0.909	0.898	0.886	0.874	0.861	0.848	0.834	0.820	0.805
42	0.936	0.926	0.915	0.904	0.892	0.880	0.867	0.853	0.840	0.825	0.810
43	0.943	0.932	0.922	0.910	0.898	0.886	0.873	0.860	0.846	0.831	0.816
44	0.950	0.940	0.929	0.917	0.905	0.893	0.880	0.866	0.852	0.838	0.822
45	0.958	0.947	0.936	0.925	0.913	0.900	0.887	0.873	0.859	0.844	0.829
46	0.966	0.955	0.944	0.932	0.920	0.908	0.894	0.881	0.866	0.851	0.836
47	0.974	0.964	0.953	0.941	0.929	0.916	0.902	0.889	0.874	0.859	0.844
48	0.984	0.973	0.962	0.950	0.937	0.925	0.911	0.897	0.882	0.867	0.852
49	0.994	0.983	0.971	0.959	0.947	0.934	0.920	0.906	0.891	0.876	0.860

*at later of member's death or early retirement age

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 4(a) Page 2 of 6

Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age									
	61	62	63	64	65	66	67	68	69	70
15	0.721	0.706	0.691	0.676	0.661	0.645	0.629	0.613	0.597	0.580
16	0.722	0.707	0.693	0.677	0.662	0.646	0.630	0.614	0.598	0.581
17	0.723	0.708	0.694	0.679	0.663	0.647	0.631	0.615	0.599	0.582
18	0.724	0.710	0.695	0.680	0.664	0.649	0.633	0.616	0.600	0.583
19	0.726	0.711	0.696	0.681	0.666	0.650	0.634	0.617	0.601	0.584
20	0.727	0.713	0.698	0.682	0.667	0.651	0.635	0.619	0.602	0.585
21	0.729	0.714	0.699	0.684	0.668	0.652	0.636	0.620	0.603	0.586
22	0.730	0.716	0.701	0.685	0.670	0.654	0.638	0.621	0.605	0.588
23	0.732	0.717	0.702	0.687	0.671	0.655	0.639	0.623	0.606	0.589
24	0.734	0.719	0.704	0.689	0.673	0.657	0.641	0.624	0.608	0.590
25	0.736	0.721	0.706	0.691	0.675	0.659	0.643	0.626	0.609	0.592
26	0.738	0.723	0.708	0.693	0.677	0.661	0.644	0.628	0.611	0.594
27	0.740	0.725	0.710	0.695	0.679	0.663	0.646	0.630	0.613	0.595
28	0.742	0.728	0.712	0.697	0.681	0.665	0.648	0.632	0.615	0.597
29	0.745	0.730	0.715	0.699	0.683	0.667	0.651	0.634	0.617	0.599
30	0.748	0.733	0.717	0.702	0.686	0.669	0.653	0.636	0.619	0.602
31	0.750	0.735	0.720	0.704	0.688	0.672	0.655	0.638	0.621	0.604
32	0.753	0.738	0.723	0.707	0.691	0.675	0.658	0.641	0.624	0.606
33	0.757	0.742	0.726	0.710	0.694	0.678	0.661	0.644	0.626	0.609
34	0.760	0.745	0.729	0.713	0.697	0.681	0.664	0.647	0.629	0.612
35	0.763	0.748	0.733	0.717	0.700	0.684	0.667	0.650	0.632	0.614
36	0.767	0.752	0.736	0.720	0.704	0.687	0.670	0.653	0.635	0.617
37	0.771	0.756	0.740	0.724	0.707	0.691	0.674	0.656	0.639	0.621
38	0.775	0.760	0.744	0.728	0.711	0.694	0.677	0.660	0.642	0.624
39	0.780	0.764	0.748	0.732	0.715	0.698	0.681	0.664	0.646	0.628
40	0.785	0.769	0.753	0.737	0.720	0.703	0.685	0.668	0.650	0.631
41	0.790	0.774	0.758	0.741	0.724	0.707	0.690	0.672	0.654	0.635
42	0.795	0.779	0.763	0.746	0.729	0.712	0.694	0.676	0.658	0.640
43	0.801	0.785	0.768	0.752	0.735	0.717	0.699	0.681	0.663	0.644
44	0.807	0.791	0.774	0.757	0.740	0.723	0.705	0.687	0.668	0.649
45	0.813	0.797	0.781	0.764	0.746	0.728	0.710	0.692	0.673	0.655
46	0.820	0.804	0.787	0.770	0.752	0.735	0.716	0.698	0.679	0.660
47	0.828	0.811	0.794	0.777	0.759	0.741	0.723	0.704	0.685	0.666
48	0.836	0.819	0.802	0.784	0.767	0.748	0.730	0.711	0.692	0.672
49	0.844	0.827	0.810	0.792	0.774	0.756	0.737	0.718	0.699	0.679

*at later of member's death or early retirement age

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 4(a) Page 3 of 6

Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age									
	71	72	73	74	75	76	77	78	79	80
15	0.563	0.545	0.528	0.510	0.492	0.474	0.456	0.438	0.420	0.402
16	0.564	0.546	0.529	0.511	0.493	0.475	0.457	0.439	0.421	0.403
17	0.565	0.547	0.530	0.512	0.494	0.476	0.458	0.440	0.422	0.404
18	0.566	0.548	0.531	0.513	0.495	0.477	0.459	0.441	0.423	0.404
19	0.567	0.549	0.532	0.514	0.496	0.478	0.460	0.441	0.423	0.405
20	0.568	0.550	0.533	0.515	0.497	0.479	0.461	0.442	0.424	0.406
21	0.569	0.551	0.534	0.516	0.498	0.480	0.462	0.443	0.425	0.407
22	0.570	0.553	0.535	0.517	0.499	0.481	0.463	0.444	0.426	0.408
23	0.572	0.554	0.536	0.518	0.500	0.482	0.464	0.445	0.427	0.409
24	0.573	0.555	0.538	0.520	0.501	0.483	0.465	0.446	0.428	0.410
25	0.575	0.557	0.539	0.521	0.503	0.484	0.466	0.448	0.429	0.411
26	0.576	0.558	0.541	0.522	0.504	0.486	0.467	0.449	0.430	0.412
27	0.578	0.560	0.542	0.524	0.506	0.487	0.469	0.450	0.432	0.413
28	0.580	0.562	0.544	0.526	0.507	0.489	0.470	0.452	0.433	0.415
29	0.582	0.564	0.546	0.527	0.509	0.490	0.472	0.453	0.435	0.416
30	0.584	0.566	0.548	0.529	0.511	0.492	0.474	0.455	0.436	0.417
31	0.586	0.568	0.550	0.531	0.513	0.494	0.475	0.457	0.438	0.419
32	0.588	0.570	0.552	0.533	0.515	0.496	0.477	0.458	0.440	0.421
33	0.591	0.573	0.554	0.536	0.517	0.498	0.479	0.460	0.441	0.422
34	0.593	0.575	0.557	0.538	0.519	0.500	0.481	0.462	0.443	0.424
35	0.596	0.578	0.559	0.541	0.522	0.503	0.484	0.465	0.445	0.426
36	0.599	0.581	0.562	0.543	0.524	0.505	0.486	0.467	0.448	0.428
37	0.602	0.584	0.565	0.546	0.527	0.508	0.489	0.469	0.450	0.431
38	0.606	0.587	0.568	0.549	0.530	0.511	0.491	0.472	0.452	0.433
39	0.609	0.590	0.571	0.552	0.533	0.513	0.494	0.475	0.455	0.436
40	0.613	0.594	0.575	0.556	0.536	0.517	0.497	0.477	0.458	0.438
41	0.617	0.598	0.579	0.559	0.540	0.520	0.500	0.480	0.461	0.441
42	0.621	0.602	0.582	0.563	0.543	0.523	0.504	0.484	0.464	0.444
43	0.625	0.606	0.587	0.567	0.547	0.527	0.507	0.487	0.467	0.447
44	0.630	0.611	0.591	0.571	0.551	0.531	0.511	0.491	0.471	0.451
45	0.635	0.616	0.596	0.576	0.556	0.536	0.515	0.495	0.475	0.454
46	0.641	0.621	0.601	0.581	0.561	0.540	0.520	0.499	0.479	0.458
47	0.646	0.627	0.606	0.586	0.566	0.545	0.524	0.504	0.483	0.462
48	0.653	0.632	0.612	0.592	0.571	0.550	0.529	0.508	0.488	0.467
49	0.659	0.639	0.618	0.598	0.577	0.556	0.535	0.514	0.492	0.471

*at later of member's death or early retirement age

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 4(a) Page 4 of 6

Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age										
	50	51	52	53	54	55	56	57	58	59	60
50	1.004	0.993	0.982	0.970	0.957	0.944	0.930	0.916	0.901	0.885	0.870
51	1.016	1.005	0.993	0.981	0.968	0.955	0.941	0.926	0.911	0.896	0.879
52	1.028	1.017	1.005	0.993	0.980	0.966	0.952	0.937	0.922	0.906	0.890
53	1.041	1.030	1.018	1.005	0.992	0.978	0.964	0.949	0.934	0.918	0.901
54	1.055	1.044	1.031	1.019	1.005	0.992	0.977	0.962	0.946	0.930	0.914
55	1.070	1.058	1.046	1.033	1.020	1.006	0.991	0.976	0.960	0.944	0.927
56	1.086	1.075	1.062	1.049	1.035	1.021	1.006	0.991	0.975	0.958	0.941
57	1.104	1.092	1.079	1.066	1.052	1.037	1.022	1.006	0.990	0.973	0.956
58	1.122	1.110	1.097	1.084	1.070	1.055	1.040	1.023	1.007	0.990	0.972
59	1.142	1.130	1.117	1.103	1.089	1.074	1.058	1.042	1.025	1.007	0.989
60	1.164	1.151	1.138	1.124	1.109	1.094	1.078	1.061	1.044	1.026	1.008
61	1.187	1.174	1.160	1.146	1.131	1.115	1.099	1.082	1.065	1.046	1.027
62	1.211	1.198	1.184	1.170	1.154	1.138	1.122	1.105	1.087	1.068	1.049
63	1.238	1.224	1.210	1.195	1.179	1.163	1.146	1.129	1.110	1.091	1.072
64	1.266	1.252	1.237	1.222	1.206	1.190	1.172	1.154	1.135	1.116	1.096
65	1.296	1.282	1.267	1.251	1.235	1.218	1.200	1.182	1.162	1.143	1.122
66	1.328	1.313	1.298	1.282	1.266	1.248	1.230	1.211	1.191	1.171	1.150
67	1.362	1.347	1.332	1.315	1.298	1.280	1.262	1.242	1.222	1.201	1.180
68	1.399	1.384	1.368	1.351	1.333	1.315	1.296	1.276	1.255	1.234	1.211
69	1.439	1.423	1.406	1.389	1.371	1.352	1.332	1.312	1.290	1.268	1.245
70	1.481	1.465	1.448	1.430	1.411	1.392	1.372	1.350	1.328	1.306	1.282
71	1.527	1.510	1.493	1.474	1.455	1.435	1.414	1.392	1.370	1.346	1.322
72	1.576	1.559	1.541	1.522	1.502	1.481	1.460	1.437	1.414	1.390	1.365
73	1.630	1.612	1.593	1.573	1.553	1.531	1.509	1.486	1.462	1.437	1.411
74	1.687	1.669	1.649	1.629	1.608	1.586	1.563	1.538	1.513	1.488	1.461
75	1.750	1.730	1.710	1.689	1.667	1.644	1.620	1.595	1.569	1.542	1.515
76	1.817	1.797	1.776	1.754	1.731	1.708	1.683	1.657	1.630	1.602	1.573
77	1.890	1.869	1.847	1.825	1.801	1.776	1.750	1.723	1.695	1.666	1.636
78	1.969	1.948	1.925	1.901	1.877	1.851	1.824	1.796	1.766	1.736	1.705
79	2.055	2.033	2.009	1.984	1.959	1.932	1.903	1.874	1.844	1.812	1.779
80	2.149	2.126	2.101	2.075	2.048	2.020	1.990	1.960	1.928	1.895	1.861

*at later of member's death or early retirement age

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 4(a) Page 5 of 6

Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age									
	61	62	63	64	65	66	67	68	69	70
50	0.853	0.836	0.819	0.801	0.783	0.764	0.745	0.726	0.706	0.686
51	0.863	0.846	0.828	0.810	0.791	0.773	0.754	0.734	0.714	0.694
52	0.873	0.856	0.838	0.820	0.801	0.782	0.763	0.743	0.723	0.703
53	0.884	0.867	0.849	0.830	0.811	0.792	0.772	0.752	0.732	0.712
54	0.896	0.878	0.860	0.841	0.822	0.803	0.783	0.763	0.742	0.721
55	0.909	0.891	0.872	0.853	0.834	0.814	0.794	0.773	0.753	0.731
56	0.923	0.904	0.886	0.866	0.846	0.826	0.806	0.785	0.764	0.743
57	0.938	0.919	0.900	0.880	0.860	0.840	0.819	0.798	0.776	0.754
58	0.953	0.934	0.915	0.895	0.875	0.854	0.833	0.811	0.789	0.767
59	0.970	0.951	0.931	0.911	0.890	0.869	0.847	0.826	0.803	0.781
60	0.989	0.969	0.949	0.928	0.907	0.885	0.863	0.841	0.818	0.795
61	1.008	0.988	0.967	0.946	0.925	0.903	0.880	0.858	0.835	0.811
62	1.029	1.008	0.987	0.966	0.944	0.921	0.899	0.875	0.852	0.828
63	1.051	1.030	1.009	0.987	0.964	0.941	0.918	0.895	0.870	0.846
64	1.075	1.054	1.032	1.009	0.986	0.963	0.939	0.915	0.890	0.865
65	1.101	1.079	1.056	1.033	1.010	0.986	0.961	0.937	0.911	0.886
66	1.128	1.106	1.082	1.059	1.035	1.010	0.985	0.960	0.934	0.908
67	1.157	1.134	1.110	1.086	1.061	1.036	1.011	0.985	0.958	0.931
68	1.188	1.165	1.140	1.116	1.090	1.064	1.038	1.011	0.984	0.956
69	1.222	1.198	1.173	1.147	1.121	1.094	1.067	1.040	1.012	0.983
70	1.258	1.233	1.207	1.181	1.154	1.127	1.099	1.070	1.042	1.012
71	1.297	1.271	1.245	1.217	1.190	1.161	1.133	1.103	1.074	1.044
72	1.339	1.312	1.285	1.257	1.228	1.199	1.169	1.139	1.109	1.077
73	1.384	1.357	1.328	1.299	1.270	1.240	1.209	1.178	1.146	1.114
74	1.433	1.405	1.375	1.345	1.315	1.283	1.252	1.219	1.187	1.153
75	1.486	1.456	1.426	1.395	1.363	1.331	1.298	1.264	1.230	1.196
76	1.543	1.513	1.481	1.449	1.416	1.382	1.348	1.313	1.278	1.242
77	1.605	1.573	1.540	1.507	1.473	1.438	1.402	1.366	1.329	1.292
78	1.673	1.639	1.605	1.570	1.534	1.498	1.461	1.423	1.385	1.346
79	1.746	1.711	1.675	1.639	1.601	1.563	1.525	1.485	1.445	1.405
80	1.826	1.789	1.752	1.714	1.675	1.635	1.594	1.553	1.511	1.469

*at later of member's death or early retirement age

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 4(a) Page 6 of 6

Conversion to Monthly Spouse Benefit at Later of Member's Death or Earliest Retirement Age
(Factor Multiplied by 50% of Retirement Benefit)

Spouse Age*	Age of Member at Later of Death or Earliest Early Retirement Age									
	71	72	73	74	75	76	77	78	79	80
50	0.666	0.646	0.625	0.604	0.583	0.562	0.540	0.519	0.498	0.476
51	0.674	0.653	0.632	0.611	0.590	0.568	0.547	0.525	0.503	0.482
52	0.682	0.661	0.640	0.618	0.597	0.575	0.553	0.531	0.509	0.488
53	0.691	0.669	0.648	0.626	0.604	0.582	0.560	0.538	0.516	0.494
54	0.700	0.678	0.657	0.635	0.612	0.590	0.568	0.545	0.523	0.500
55	0.710	0.688	0.666	0.644	0.621	0.599	0.576	0.553	0.530	0.508
56	0.721	0.698	0.676	0.653	0.631	0.608	0.585	0.561	0.538	0.515
57	0.732	0.710	0.687	0.664	0.641	0.617	0.594	0.570	0.547	0.524
58	0.745	0.722	0.698	0.675	0.651	0.628	0.604	0.580	0.556	0.532
59	0.758	0.734	0.711	0.687	0.663	0.639	0.615	0.590	0.566	0.542
60	0.772	0.748	0.724	0.700	0.675	0.651	0.626	0.601	0.577	0.552
61	0.787	0.763	0.739	0.714	0.689	0.664	0.639	0.613	0.588	0.563
62	0.804	0.779	0.754	0.729	0.703	0.677	0.652	0.626	0.600	0.575
63	0.821	0.796	0.770	0.744	0.718	0.692	0.666	0.640	0.613	0.587
64	0.840	0.814	0.788	0.761	0.735	0.708	0.681	0.654	0.627	0.600
65	0.860	0.833	0.806	0.779	0.752	0.725	0.697	0.670	0.642	0.615
66	0.881	0.854	0.826	0.799	0.771	0.743	0.715	0.686	0.658	0.630
67	0.904	0.876	0.848	0.819	0.791	0.762	0.733	0.704	0.675	0.646
68	0.928	0.900	0.871	0.841	0.812	0.782	0.753	0.723	0.693	0.664
69	0.954	0.925	0.895	0.865	0.835	0.804	0.774	0.743	0.713	0.682
70	0.982	0.952	0.922	0.891	0.860	0.828	0.797	0.765	0.734	0.702
71	1.013	0.982	0.950	0.918	0.886	0.854	0.822	0.789	0.757	0.724
72	1.046	1.013	0.981	0.948	0.915	0.882	0.848	0.815	0.781	0.748
73	1.081	1.048	1.014	0.980	0.946	0.911	0.877	0.842	0.808	0.773
74	1.119	1.085	1.050	1.015	0.979	0.944	0.908	0.872	0.836	0.800
75	1.161	1.125	1.089	1.052	1.015	0.978	0.941	0.904	0.867	0.830
76	1.205	1.168	1.131	1.093	1.055	1.016	0.978	0.939	0.900	0.862
77	1.254	1.215	1.176	1.137	1.097	1.057	1.017	0.977	0.937	0.896
78	1.306	1.266	1.225	1.184	1.143	1.101	1.060	1.018	0.976	0.934
79	1.363	1.321	1.279	1.236	1.193	1.149	1.106	1.062	1.019	0.975
80	1.426	1.382	1.337	1.293	1.247	1.202	1.156	1.111	1.065	1.019

*at later of member's death or early retirement age

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 4(b) Page 1 of 10

Conversion to Monthly Spouse Benefit at Commencement Date
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
15	1.000	0.924	0.854	0.789	0.729	0.674	0.622	0.575	0.531	0.490	0.452	0.418	0.385	0.356	0.328
16	1.082	1.000	0.924	0.854	0.789	0.729	0.673	0.622	0.574	0.530	0.490	0.452	0.417	0.385	0.355
17	1.171	1.082	1.000	0.924	0.854	0.789	0.729	0.673	0.621	0.574	0.530	0.489	0.451	0.416	0.384
18	1.267	1.171	1.082	1.000	0.924	0.854	0.788	0.728	0.673	0.621	0.573	0.529	0.488	0.451	0.416
19	1.371	1.267	1.171	1.082	1.000	0.924	0.853	0.788	0.728	0.672	0.620	0.573	0.529	0.488	0.450
20	1.484	1.372	1.268	1.172	1.082	1.000	0.924	0.853	0.788	0.727	0.672	0.620	0.572	0.528	0.487
21	1.607	1.485	1.373	1.268	1.172	1.083	1.000	0.924	0.853	0.788	0.727	0.671	0.619	0.572	0.527
22	1.740	1.608	1.486	1.373	1.269	1.172	1.083	1.000	0.923	0.853	0.787	0.727	0.671	0.619	0.571
23	1.884	1.741	1.609	1.487	1.374	1.269	1.172	1.083	1.000	0.923	0.852	0.787	0.726	0.670	0.618
24	2.040	1.886	1.743	1.610	1.488	1.375	1.270	1.173	1.083	1.000	0.923	0.852	0.786	0.726	0.669
25	2.210	2.043	1.888	1.744	1.612	1.489	1.375	1.270	1.173	1.083	1.000	0.923	0.852	0.786	0.725
26	2.394	2.213	2.045	1.890	1.746	1.613	1.490	1.376	1.271	1.173	1.083	1.000	0.923	0.852	0.786
27	2.594	2.398	2.216	2.048	1.892	1.748	1.615	1.491	1.377	1.272	1.174	1.084	1.000	0.923	0.851
28	2.812	2.599	2.402	2.219	2.050	1.894	1.750	1.616	1.492	1.378	1.272	1.174	1.084	1.000	0.923
29	3.048	2.817	2.603	2.406	2.223	2.053	1.897	1.752	1.618	1.494	1.379	1.273	1.175	1.084	1.000
30	3.305	3.054	2.822	2.608	2.410	2.226	2.056	1.899	1.754	1.620	1.495	1.380	1.274	1.175	1.084
31	3.584	3.312	3.061	2.828	2.613	2.414	2.230	2.060	1.902	1.756	1.621	1.497	1.381	1.274	1.176
32	3.887	3.593	3.320	3.068	2.835	2.619	2.419	2.234	2.063	1.905	1.759	1.623	1.498	1.382	1.275
33	4.217	3.898	3.602	3.329	3.075	2.841	2.625	2.424	2.239	2.067	1.908	1.761	1.626	1.500	1.384
34	4.577	4.230	3.909	3.612	3.338	3.084	2.848	2.631	2.429	2.243	2.071	1.912	1.764	1.628	1.502
35	4.969	4.592	4.244	3.922	3.623	3.347	3.092	2.856	2.637	2.435	2.248	2.075	1.915	1.767	1.630
36	5.396	4.987	4.609	4.258	3.935	3.635	3.358	3.101	2.864	2.644	2.441	2.253	2.080	1.919	1.770
37	5.861	5.417	5.006	4.626	4.274	3.948	3.647	3.369	3.111	2.872	2.652	2.448	2.259	2.084	1.923
38	6.369	5.886	5.440	5.026	4.644	4.290	3.963	3.660	3.380	3.121	2.881	2.660	2.455	2.265	2.089
39	6.923	6.398	5.913	5.464	5.048	4.664	4.308	3.979	3.674	3.393	3.132	2.891	2.668	2.462	2.271
40	7.528	6.957	6.429	5.941	5.489	5.071	4.684	4.327	3.996	3.689	3.406	3.144	2.901	2.677	2.470
41	8.189	7.568	6.994	6.463	5.971	5.517	5.096	4.707	4.346	4.013	3.705	3.420	3.156	2.912	2.687
42	8.912	8.237	7.612	7.034	6.499	6.004	5.546	5.122	4.730	4.368	4.032	3.722	3.435	3.169	2.924
43	9.703	8.968	8.288	7.658	7.076	6.537	6.038	5.577	5.150	4.755	4.390	4.052	3.740	3.451	3.184
44	10.570	9.769	9.028	8.342	7.708	7.121	6.578	6.075	5.610	5.180	4.782	4.414	4.074	3.759	3.468
45	11.520	10.647	9.839	9.092	8.401	7.761	7.169	6.621	6.115	5.646	5.212	4.811	4.440	4.097	3.780
46	12.562	11.610	10.730	9.915	9.161	8.463	7.817	7.220	6.668	6.157	5.684	5.246	4.842	4.468	4.122
47	13.707	12.668	11.707	10.818	9.995	9.234	8.530	7.878	7.275	6.718	6.202	5.725	5.283	4.875	4.497
48	14.965	13.831	12.782	11.811	10.913	10.082	9.313	8.601	7.943	7.334	6.771	6.250	5.768	5.322	4.910
49	16.350	15.111	13.965	12.904	11.923	11.015	10.175	9.397	8.678	8.013	7.398	6.828	6.302	5.815	5.364

*age of spouse at date of benefit commencement

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 4(b) Page 2 of 10

Conversion to Monthly Spouse Benefit at Commencement Date
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
15	0.303	0.279	0.257	0.237	0.218	0.201	0.185	0.171	0.157	0.144	0.133	0.122	0.112	0.103	0.095
16	0.327	0.302	0.278	0.257	0.236	0.218	0.201	0.185	0.170	0.156	0.144	0.132	0.121	0.112	0.102
17	0.354	0.327	0.301	0.278	0.256	0.236	0.217	0.200	0.184	0.169	0.156	0.143	0.131	0.121	0.111
18	0.383	0.354	0.326	0.300	0.277	0.255	0.235	0.216	0.199	0.183	0.168	0.155	0.142	0.131	0.120
19	0.415	0.383	0.353	0.325	0.300	0.276	0.254	0.234	0.215	0.198	0.182	0.167	0.154	0.141	0.130
20	0.449	0.414	0.382	0.352	0.324	0.299	0.275	0.253	0.233	0.214	0.197	0.181	0.167	0.153	0.140
21	0.486	0.448	0.413	0.381	0.351	0.323	0.298	0.274	0.252	0.232	0.213	0.196	0.180	0.166	0.152
22	0.527	0.486	0.448	0.413	0.380	0.350	0.322	0.297	0.273	0.251	0.231	0.212	0.195	0.179	0.165
23	0.570	0.526	0.485	0.447	0.412	0.379	0.349	0.321	0.296	0.272	0.250	0.230	0.211	0.194	0.178
24	0.617	0.569	0.525	0.484	0.446	0.411	0.378	0.348	0.320	0.295	0.271	0.249	0.229	0.210	0.193
25	0.669	0.617	0.569	0.524	0.483	0.445	0.410	0.377	0.347	0.319	0.294	0.270	0.248	0.228	0.209
26	0.725	0.668	0.616	0.568	0.523	0.482	0.444	0.409	0.376	0.346	0.318	0.292	0.269	0.247	0.227
27	0.785	0.724	0.667	0.615	0.567	0.522	0.481	0.443	0.407	0.375	0.345	0.317	0.291	0.267	0.245
28	0.851	0.785	0.723	0.667	0.614	0.566	0.521	0.480	0.442	0.406	0.374	0.343	0.316	0.290	0.266
29	0.922	0.851	0.784	0.723	0.666	0.613	0.565	0.520	0.479	0.440	0.405	0.372	0.342	0.314	0.288
30	1.000	0.922	0.850	0.784	0.722	0.665	0.612	0.564	0.519	0.477	0.439	0.404	0.371	0.341	0.313
31	1.084	1.000	0.922	0.850	0.783	0.721	0.664	0.611	0.563	0.518	0.476	0.438	0.402	0.369	0.339
32	1.176	1.085	1.000	0.922	0.849	0.782	0.720	0.663	0.610	0.562	0.516	0.475	0.436	0.401	0.368
33	1.276	1.177	1.085	1.000	0.921	0.849	0.782	0.720	0.662	0.609	0.560	0.515	0.473	0.435	0.399
34	1.385	1.277	1.177	1.085	1.000	0.921	0.848	0.781	0.719	0.661	0.608	0.559	0.514	0.472	0.433
35	1.504	1.387	1.278	1.178	1.086	1.000	0.921	0.848	0.780	0.718	0.660	0.607	0.558	0.512	0.470
36	1.633	1.506	1.388	1.279	1.179	1.086	1.000	0.921	0.847	0.779	0.717	0.659	0.605	0.556	0.510
37	1.774	1.635	1.508	1.390	1.280	1.180	1.086	1.000	0.920	0.847	0.779	0.716	0.658	0.604	0.554
38	1.927	1.777	1.638	1.510	1.391	1.282	1.180	1.087	1.000	0.920	0.846	0.778	0.715	0.656	0.603
39	2.095	1.932	1.781	1.641	1.512	1.393	1.283	1.181	1.087	1.000	0.920	0.845	0.777	0.713	0.655
40	2.278	2.101	1.937	1.785	1.645	1.515	1.395	1.284	1.182	1.087	1.000	0.919	0.845	0.776	0.712
41	2.478	2.285	2.107	1.942	1.789	1.648	1.518	1.397	1.286	1.183	1.088	1.000	0.919	0.844	0.775
42	2.697	2.487	2.293	2.113	1.947	1.794	1.652	1.521	1.399	1.287	1.184	1.088	1.000	0.918	0.843
43	2.936	2.708	2.496	2.301	2.120	1.953	1.798	1.656	1.524	1.402	1.289	1.185	1.089	1.000	0.918
44	3.199	2.950	2.719	2.506	2.309	2.127	1.959	1.803	1.660	1.527	1.404	1.291	1.186	1.089	1.000
45	3.486	3.215	2.964	2.731	2.517	2.318	2.135	1.966	1.809	1.664	1.530	1.407	1.293	1.187	1.090
46	3.802	3.505	3.232	2.979	2.745	2.528	2.328	2.143	1.973	1.815	1.669	1.534	1.410	1.295	1.188
47	4.148	3.825	3.526	3.250	2.995	2.759	2.540	2.339	2.152	1.980	1.821	1.674	1.538	1.413	1.297
48	4.529	4.176	3.850	3.548	3.270	3.012	2.774	2.553	2.350	2.162	1.988	1.828	1.679	1.542	1.416
49	4.948	4.562	4.206	3.877	3.572	3.291	3.030	2.790	2.567	2.362	2.172	1.997	1.835	1.685	1.547

*age of spouse at date of benefit commencement

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 4(b) Page 3 of 10

Conversion to Monthly Spouse Benefit at Commencement Date
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
15	0.087	0.080	0.073	0.067	0.061	0.056	0.051	0.047	0.043	0.039	0.035	0.032	0.029	0.027	0.024
16	0.094	0.086	0.079	0.072	0.066	0.061	0.055	0.051	0.046	0.042	0.038	0.035	0.032	0.029	0.026
17	0.102	0.093	0.085	0.078	0.072	0.065	0.060	0.055	0.050	0.045	0.041	0.038	0.034	0.031	0.028
18	0.110	0.101	0.092	0.085	0.077	0.071	0.065	0.059	0.054	0.049	0.045	0.041	0.037	0.034	0.030
19	0.119	0.109	0.100	0.092	0.084	0.077	0.070	0.064	0.058	0.053	0.048	0.044	0.040	0.036	0.033
20	0.129	0.118	0.108	0.099	0.091	0.083	0.076	0.069	0.063	0.058	0.052	0.048	0.043	0.039	0.036
21	0.139	0.128	0.117	0.107	0.098	0.090	0.082	0.075	0.068	0.062	0.057	0.052	0.047	0.043	0.039
22	0.151	0.138	0.127	0.116	0.106	0.097	0.089	0.081	0.074	0.068	0.062	0.056	0.051	0.046	0.042
23	0.164	0.150	0.137	0.126	0.115	0.105	0.096	0.088	0.080	0.073	0.067	0.061	0.055	0.050	0.045
24	0.177	0.162	0.149	0.136	0.125	0.114	0.104	0.095	0.087	0.079	0.072	0.066	0.060	0.054	0.049
25	0.192	0.176	0.161	0.148	0.135	0.124	0.113	0.103	0.094	0.086	0.078	0.071	0.065	0.059	0.053
26	0.208	0.191	0.175	0.160	0.146	0.134	0.122	0.112	0.102	0.093	0.085	0.077	0.070	0.064	0.058
27	0.225	0.207	0.189	0.173	0.159	0.145	0.133	0.121	0.111	0.101	0.092	0.083	0.076	0.069	0.062
28	0.244	0.224	0.205	0.188	0.172	0.157	0.144	0.131	0.120	0.109	0.099	0.090	0.082	0.075	0.068
29	0.265	0.243	0.222	0.204	0.186	0.171	0.156	0.142	0.130	0.118	0.108	0.098	0.089	0.081	0.073
30	0.287	0.263	0.241	0.221	0.202	0.185	0.169	0.154	0.141	0.128	0.117	0.106	0.097	0.088	0.079
31	0.311	0.285	0.261	0.239	0.219	0.200	0.183	0.167	0.153	0.139	0.127	0.115	0.105	0.095	0.086
32	0.337	0.309	0.284	0.260	0.238	0.217	0.199	0.181	0.166	0.151	0.137	0.125	0.114	0.103	0.093
33	0.366	0.336	0.308	0.282	0.258	0.236	0.216	0.197	0.180	0.164	0.149	0.136	0.123	0.112	0.101
34	0.397	0.364	0.334	0.306	0.280	0.256	0.234	0.214	0.195	0.178	0.162	0.147	0.134	0.121	0.110
35	0.431	0.396	0.363	0.332	0.304	0.278	0.254	0.232	0.212	0.193	0.176	0.160	0.145	0.132	0.119
36	0.468	0.430	0.394	0.361	0.330	0.302	0.276	0.252	0.230	0.210	0.191	0.174	0.158	0.143	0.130
37	0.509	0.467	0.428	0.392	0.358	0.328	0.300	0.274	0.250	0.228	0.207	0.189	0.171	0.155	0.141
38	0.553	0.507	0.465	0.426	0.390	0.356	0.326	0.297	0.271	0.247	0.225	0.205	0.186	0.169	0.153
39	0.601	0.551	0.505	0.463	0.423	0.387	0.354	0.323	0.295	0.269	0.245	0.223	0.202	0.184	0.166
40	0.653	0.599	0.549	0.503	0.460	0.421	0.385	0.351	0.321	0.292	0.266	0.242	0.220	0.200	0.181
41	0.711	0.652	0.597	0.547	0.501	0.458	0.419	0.382	0.349	0.318	0.290	0.263	0.239	0.217	0.197
42	0.774	0.709	0.650	0.596	0.545	0.499	0.456	0.416	0.380	0.346	0.315	0.287	0.260	0.236	0.214
43	0.842	0.772	0.708	0.648	0.593	0.543	0.496	0.453	0.413	0.377	0.343	0.312	0.284	0.257	0.233
44	0.918	0.841	0.771	0.706	0.646	0.591	0.540	0.494	0.450	0.410	0.374	0.340	0.309	0.280	0.254
45	1.000	0.917	0.840	0.770	0.705	0.644	0.589	0.538	0.491	0.447	0.407	0.371	0.337	0.306	0.277
46	1.090	1.000	0.916	0.839	0.768	0.703	0.642	0.587	0.535	0.488	0.444	0.404	0.367	0.333	0.302
47	1.190	1.091	1.000	0.916	0.838	0.767	0.701	0.640	0.584	0.532	0.485	0.441	0.401	0.364	0.329
48	1.299	1.191	1.092	1.000	0.915	0.837	0.765	0.699	0.638	0.581	0.529	0.481	0.437	0.397	0.360
49	1.419	1.302	1.193	1.093	1.000	0.915	0.836	0.763	0.697	0.635	0.578	0.526	0.478	0.434	0.393

*age of spouse at date of benefit commencement

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 4(b) Page 4 of 10

Conversion to Monthly Spouse Benefit at Commencement Date
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
15	0.022	0.020	0.018	0.016	0.014	0.013	0.012	0.010	0.009	0.008	0.007	0.006	0.006	0.005	0.004
16	0.024	0.021	0.019	0.017	0.016	0.014	0.012	0.011	0.010	0.009	0.008	0.007	0.006	0.005	0.005
17	0.025	0.023	0.021	0.019	0.017	0.015	0.013	0.012	0.011	0.010	0.008	0.007	0.007	0.006	0.005
18	0.028	0.025	0.022	0.020	0.018	0.016	0.015	0.013	0.012	0.010	0.009	0.008	0.007	0.006	0.005
19	0.030	0.027	0.024	0.022	0.020	0.018	0.016	0.014	0.013	0.011	0.010	0.009	0.008	0.007	0.006
20	0.032	0.029	0.026	0.024	0.021	0.019	0.017	0.015	0.014	0.012	0.011	0.009	0.008	0.007	0.006
21	0.035	0.032	0.028	0.026	0.023	0.021	0.019	0.017	0.015	0.013	0.012	0.010	0.009	0.008	0.007
22	0.038	0.034	0.031	0.028	0.025	0.022	0.020	0.018	0.016	0.014	0.013	0.011	0.010	0.009	0.007
23	0.041	0.037	0.033	0.030	0.027	0.024	0.022	0.019	0.017	0.015	0.014	0.012	0.011	0.009	0.008
24	0.044	0.040	0.036	0.033	0.029	0.026	0.023	0.021	0.019	0.017	0.015	0.013	0.011	0.010	0.009
25	0.048	0.043	0.039	0.035	0.032	0.028	0.025	0.023	0.020	0.018	0.016	0.014	0.012	0.011	0.009
26	0.052	0.047	0.042	0.038	0.034	0.031	0.028	0.025	0.022	0.019	0.017	0.015	0.013	0.012	0.010
27	0.056	0.051	0.046	0.041	0.037	0.033	0.030	0.027	0.024	0.021	0.019	0.017	0.015	0.013	0.011
28	0.061	0.055	0.050	0.045	0.040	0.036	0.032	0.029	0.026	0.023	0.020	0.018	0.016	0.014	0.012
29	0.066	0.060	0.054	0.049	0.044	0.039	0.035	0.031	0.028	0.025	0.022	0.019	0.017	0.015	0.013
30	0.072	0.065	0.059	0.053	0.047	0.043	0.038	0.034	0.030	0.027	0.024	0.021	0.019	0.016	0.014
31	0.078	0.070	0.064	0.057	0.051	0.046	0.041	0.037	0.033	0.029	0.026	0.023	0.020	0.018	0.015
32	0.085	0.076	0.069	0.062	0.056	0.050	0.045	0.040	0.036	0.032	0.028	0.025	0.022	0.019	0.017
33	0.092	0.083	0.075	0.067	0.061	0.054	0.049	0.043	0.039	0.034	0.030	0.027	0.024	0.021	0.018
34	0.100	0.090	0.081	0.073	0.066	0.059	0.053	0.047	0.042	0.037	0.033	0.029	0.026	0.023	0.020
35	0.108	0.098	0.088	0.079	0.071	0.064	0.057	0.051	0.046	0.040	0.036	0.032	0.028	0.024	0.021
36	0.117	0.106	0.096	0.086	0.077	0.069	0.062	0.055	0.049	0.044	0.039	0.034	0.030	0.027	0.023
37	0.127	0.115	0.104	0.094	0.084	0.075	0.067	0.060	0.054	0.048	0.042	0.037	0.033	0.029	0.025
38	0.139	0.125	0.113	0.102	0.091	0.082	0.073	0.065	0.058	0.052	0.046	0.041	0.036	0.031	0.027
39	0.151	0.136	0.123	0.110	0.099	0.089	0.080	0.071	0.063	0.056	0.050	0.044	0.039	0.034	0.030
40	0.164	0.148	0.133	0.120	0.108	0.097	0.087	0.077	0.069	0.061	0.054	0.048	0.042	0.037	0.032
41	0.178	0.161	0.145	0.131	0.117	0.105	0.094	0.084	0.075	0.067	0.059	0.052	0.046	0.040	0.035
42	0.194	0.175	0.158	0.142	0.128	0.115	0.103	0.092	0.082	0.073	0.064	0.057	0.050	0.044	0.038
43	0.211	0.191	0.172	0.155	0.139	0.125	0.112	0.100	0.089	0.079	0.070	0.062	0.054	0.048	0.042
44	0.230	0.208	0.187	0.169	0.152	0.136	0.122	0.109	0.097	0.086	0.076	0.067	0.059	0.052	0.045
45	0.251	0.226	0.204	0.184	0.165	0.148	0.133	0.118	0.106	0.094	0.083	0.073	0.065	0.057	0.049
46	0.273	0.247	0.223	0.201	0.180	0.162	0.145	0.129	0.115	0.102	0.091	0.080	0.070	0.062	0.054
47	0.298	0.269	0.243	0.219	0.197	0.176	0.158	0.141	0.126	0.112	0.099	0.087	0.077	0.067	0.059
48	0.325	0.294	0.265	0.239	0.215	0.193	0.172	0.154	0.137	0.122	0.108	0.095	0.084	0.074	0.064
49	0.356	0.321	0.290	0.261	0.235	0.210	0.188	0.168	0.150	0.133	0.118	0.104	0.092	0.080	0.070

*age of spouse at date of benefit commencement

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 4(b) Page 5 of 10

Conversion to Monthly Spouse Benefit at Commencement Date
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age					
	75	76	77	78	79	80
15	0.004	0.003	0.003	0.002	0.002	0.002
16	0.004	0.004	0.003	0.003	0.002	0.002
17	0.004	0.004	0.003	0.003	0.002	0.002
18	0.005	0.004	0.004	0.003	0.003	0.002
19	0.005	0.004	0.004	0.003	0.003	0.002
20	0.006	0.005	0.004	0.004	0.003	0.003
21	0.006	0.005	0.004	0.004	0.003	0.003
22	0.007	0.006	0.005	0.004	0.004	0.003
23	0.007	0.006	0.005	0.005	0.004	0.003
24	0.008	0.007	0.006	0.005	0.004	0.004
25	0.008	0.007	0.006	0.005	0.005	0.004
26	0.009	0.008	0.007	0.006	0.005	0.004
27	0.010	0.008	0.007	0.006	0.005	0.004
28	0.011	0.009	0.008	0.007	0.006	0.005
29	0.011	0.010	0.009	0.007	0.006	0.005
30	0.012	0.011	0.009	0.008	0.007	0.006
31	0.013	0.012	0.010	0.009	0.007	0.006
32	0.015	0.013	0.011	0.009	0.008	0.007
33	0.016	0.014	0.012	0.010	0.009	0.007
34	0.017	0.015	0.013	0.011	0.009	0.008
35	0.019	0.016	0.014	0.012	0.010	0.009
36	0.020	0.017	0.015	0.013	0.011	0.009
37	0.022	0.019	0.016	0.014	0.012	0.010
38	0.024	0.021	0.018	0.015	0.013	0.011
39	0.026	0.022	0.019	0.017	0.014	0.012
40	0.028	0.024	0.021	0.018	0.015	0.013
41	0.031	0.027	0.023	0.020	0.017	0.014
42	0.033	0.029	0.025	0.021	0.018	0.015
43	0.036	0.031	0.027	0.023	0.020	0.017
44	0.040	0.034	0.030	0.025	0.022	0.018
45	0.043	0.037	0.032	0.028	0.024	0.020
46	0.047	0.041	0.035	0.030	0.026	0.022
47	0.051	0.044	0.038	0.033	0.028	0.024
48	0.056	0.048	0.042	0.036	0.031	0.026
49	0.061	0.053	0.046	0.039	0.033	0.028

*age of spouse at date of benefit commencement

**Oregon Public Service Retirement Plan
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Conversion to Monthly Spouse Benefit at Commencement Date
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29
50	17.875	16.521	15.268	14.108	13.035	12.042	11.124	10.274	9.488	8.761	8.088	7.465	6.890	6.357	5.865
51	19.558	18.076	16.705	15.436	14.262	13.176	12.171	11.241	10.381	9.585	8.849	8.168	7.538	6.956	6.417
52	21.417	19.794	18.293	16.903	15.618	14.428	13.328	12.310	11.368	10.496	9.690	8.945	8.255	7.617	7.027
53	23.473	21.695	20.049	18.526	17.117	15.814	14.608	13.492	12.459	11.504	10.621	9.803	9.047	8.348	7.701
54	25.751	23.800	21.995	20.324	18.778	17.348	16.025	14.801	13.668	12.621	11.651	10.755	9.925	9.158	8.449
55	28.278	26.136	24.153	22.319	20.621	19.051	17.598	16.254	15.010	13.859	12.795	11.810	10.900	10.057	9.278
56	31.088	28.732	26.553	24.536	22.670	20.944	19.346	17.868	16.501	15.236	14.066	12.984	11.982	11.056	10.200
57	34.216	31.624	29.225	27.005	24.951	23.051	21.293	19.666	18.161	16.769	15.481	14.290	13.188	12.169	11.226
58	37.706	34.849	32.206	29.760	27.496	25.402	23.465	21.672	20.014	18.480	17.060	15.748	14.533	13.410	12.371
59	41.608	38.455	35.538	32.839	30.342	28.031	25.893	23.915	22.085	20.392	18.826	17.377	16.037	14.798	13.651
60	45.979	42.496	39.272	36.289	33.529	30.976	28.613	26.427	24.405	22.534	20.804	19.203	17.722	16.352	15.086
61	50.888	47.033	43.465	40.164	37.109	34.283	31.668	29.249	27.011	24.940	23.025	21.253	19.614	18.098	16.696
62	56.414	52.140	48.185	44.525	41.139	38.006	35.107	32.425	29.944	27.648	25.525	23.561	21.744	20.064	18.509
63	62.651	57.904	53.511	49.447	45.687	42.207	38.988	36.009	33.254	30.705	28.347	26.165	24.148	22.282	20.555
64	69.708	64.427	59.539	55.017	50.833	46.962	43.380	40.066	37.000	34.164	31.540	29.113	26.868	24.792	22.871
65	77.717	71.829	66.380	61.339	56.674	52.357	48.364	44.669	41.251	38.089	35.164	32.458	29.955	27.640	25.499
66	86.833	80.254	74.166	68.533	63.321	58.499	54.037	49.909	46.090	42.557	39.288	36.265	33.469	30.882	28.490
67	97.242	89.874	83.057	76.749	70.912	65.511	60.514	55.891	51.615	47.658	43.998	40.612	37.481	34.584	31.905
68	109.167	100.896	93.242	86.161	79.608	73.545	67.935	62.746	57.944	53.503	49.394	45.593	42.077	38.825	35.817
69	122.878	113.568	104.954	96.982	89.606	82.782	76.468	70.626	65.222	60.222	55.597	51.319	47.362	43.701	40.316
70	138.705	128.196	118.471	109.473	101.147	93.444	86.317	79.723	73.622	67.979	62.758	57.929	53.462	49.330	45.509
71	157.049	145.150	134.139	123.951	114.524	105.802	97.732	90.266	83.359	76.969	71.058	65.590	60.532	55.854	51.527
72	178.407	164.890	152.382	140.808	130.099	120.191	111.024	102.542	94.696	87.437	80.722	74.510	68.764	63.450	58.535
73	203.391	187.981	173.721	160.527	148.318	137.022	126.571	116.902	107.957	99.681	92.026	84.945	78.394	72.336	66.732
74	232.765	215.130	198.811	183.711	169.739	156.812	144.851	133.786	123.548	114.078	105.317	97.212	89.716	82.782	76.370
75	267.490	247.223	228.470	211.117	195.061	180.205	166.460	153.744	141.979	131.096	121.028	111.715	103.100	95.132	87.762
76	308.777	285.382	263.734	243.703	225.169	208.020	192.154	177.474	163.894	151.331	139.709	128.958	119.014	109.816	101.309
77	358.171	331.034	305.923	282.688	261.189	241.297	222.892	205.865	190.112	175.539	162.058	149.587	138.052	127.383	117.515
78	417.659	386.015	356.733	329.639	304.569	281.373	259.912	240.056	221.687	204.694	188.974	174.432	160.981	148.540	137.033
79	489.819	452.707	418.367	386.591	357.190	329.986	304.817	281.531	259.988	240.059	221.623	204.569	188.794	174.203	160.708
80	578.030	534.236	493.711	456.213	421.516	389.414	359.712	332.232	306.810	283.291	261.535	241.410	222.794	205.575	189.650

*age of spouse at date of benefit commencement

**Oregon Public Service Retirement Plan
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Conversion to Monthly Spouse Benefit at Commencement Date
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
50	5.409	4.988	4.599	4.238	3.905	3.598	3.313	3.050	2.807	2.582	2.375	2.183	2.006	1.842	1.691
51	5.919	5.458	5.032	4.637	4.273	3.936	3.625	3.337	3.071	2.825	2.598	2.388	2.195	2.016	1.850
52	6.481	5.976	5.510	5.078	4.679	4.310	3.969	3.654	3.363	3.094	2.845	2.615	2.403	2.207	2.026
53	7.103	6.550	6.039	5.566	5.128	4.724	4.350	4.005	3.686	3.391	3.118	2.867	2.634	2.419	2.221
54	7.793	7.186	6.625	6.106	5.626	5.183	4.773	4.394	4.044	3.720	3.421	3.145	2.890	2.654	2.436
55	8.558	7.891	7.275	6.705	6.178	5.691	5.241	4.825	4.440	4.085	3.757	3.453	3.173	2.914	2.675
56	9.408	8.675	7.998	7.371	6.792	6.257	5.762	5.304	4.881	4.491	4.130	3.796	3.488	3.204	2.941
57	10.354	9.548	8.802	8.113	7.476	6.886	6.341	5.838	5.373	4.943	4.545	4.178	3.839	3.526	3.237
58	11.410	10.522	9.700	8.941	8.238	7.589	6.988	6.433	5.921	5.447	5.009	4.605	4.231	3.886	3.567
59	12.591	11.611	10.704	9.866	9.091	8.374	7.711	7.099	6.533	6.011	5.527	5.081	4.669	4.288	3.936
60	13.914	12.831	11.829	10.902	10.046	9.254	8.522	7.845	7.220	6.642	6.108	5.615	5.159	4.739	4.350
61	15.400	14.200	13.091	12.066	11.118	10.242	9.431	8.683	7.991	7.351	6.760	6.214	5.710	5.245	4.814
62	17.072	15.742	14.513	13.376	12.325	11.354	10.456	9.625	8.858	8.149	7.494	6.889	6.330	5.814	5.337
63	18.959	17.483	16.117	14.855	13.688	12.609	11.611	10.690	9.838	9.050	8.323	7.651	7.030	6.457	5.927
64	21.095	19.452	17.933	16.529	15.230	14.029	12.919	11.894	10.946	10.070	9.260	8.513	7.822	7.184	6.595
65	23.518	21.687	19.993	18.428	16.980	15.641	14.404	13.260	12.203	11.227	10.324	9.491	8.721	8.009	7.353
66	26.277	24.231	22.339	20.589	18.971	17.476	16.093	14.816	13.635	12.544	11.535	10.604	9.744	8.949	8.215
67	29.427	27.135	25.016	23.057	21.245	19.571	18.023	16.592	15.269	14.047	12.918	11.875	10.912	10.022	9.200
68	33.036	30.463	28.084	25.885	23.851	21.971	20.233	18.626	17.142	15.770	14.502	13.331	12.250	11.251	10.328
69	37.185	34.289	31.612	29.136	26.847	24.730	22.774	20.966	19.295	17.751	16.324	15.006	13.788	12.664	11.625
70	41.974	38.706	35.683	32.888	30.304	27.915	25.707	23.666	21.780	20.037	18.426	16.938	15.564	14.295	13.123
71	47.525	43.825	40.402	37.238	34.312	31.607	29.107	26.796	24.660	22.687	20.863	19.179	17.623	16.185	14.858
72	53.989	49.785	45.897	42.302	38.978	35.906	33.065	30.440	28.014	25.772	23.701	21.787	20.019	18.387	16.879
73	61.549	56.756	52.324	48.226	44.437	40.934	37.696	34.703	31.937	29.381	27.020	24.838	22.823	20.961	19.243
74	70.438	64.953	59.881	55.191	50.855	46.846	43.140	39.715	36.549	33.624	30.922	28.425	26.119	23.989	22.022
75	80.947	74.643	68.814	63.425	58.441	53.834	49.576	45.640	42.002	38.641	35.535	32.666	30.015	27.567	25.307
76	93.441	86.164	79.436	73.214	67.462	62.144	57.228	52.684	48.485	44.605	41.020	37.707	34.648	31.822	29.213
77	108.388	99.948	92.143	84.926	78.253	72.085	66.382	61.112	56.241	51.740	47.581	43.739	40.191	36.913	33.886
78	126.390	116.548	107.447	99.031	91.250	84.057	77.408	71.262	65.582	60.333	55.484	51.004	46.866	43.044	39.514
79	148.227	136.684	126.011	116.141	107.016	98.580	90.782	83.574	76.913	70.757	65.070	59.816	54.963	50.481	46.341
80	174.921	161.300	148.704	137.057	126.288	116.333	107.130	98.625	90.764	83.500	76.789	70.588	64.861	59.572	54.687

*age of spouse at date of benefit commencement

**Oregon Public Service Retirement Plan
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Conversion to Monthly Spouse Benefit at Commencement Date
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59
50	1.552	1.423	1.304	1.194	1.093	1.000	0.914	0.835	0.762	0.694	0.632	0.575	0.522	0.474	0.430
51	1.698	1.557	1.427	1.307	1.196	1.094	1.000	0.913	0.833	0.760	0.692	0.629	0.572	0.519	0.470
52	1.859	1.705	1.563	1.431	1.310	1.198	1.095	1.000	0.912	0.832	0.757	0.689	0.626	0.568	0.515
53	2.038	1.869	1.713	1.569	1.436	1.313	1.200	1.096	1.000	0.912	0.830	0.755	0.686	0.623	0.564
54	2.235	2.050	1.879	1.721	1.575	1.441	1.317	1.202	1.097	1.000	0.911	0.828	0.753	0.683	0.619
55	2.455	2.251	2.063	1.890	1.730	1.582	1.446	1.320	1.205	1.098	1.000	0.910	0.826	0.750	0.680
56	2.699	2.475	2.268	2.077	1.901	1.739	1.590	1.452	1.324	1.207	1.099	1.000	0.909	0.824	0.747
57	2.970	2.724	2.496	2.286	2.093	1.914	1.749	1.598	1.458	1.329	1.210	1.101	1.000	0.907	0.822
58	3.273	3.002	2.751	2.520	2.306	2.109	1.928	1.761	1.606	1.464	1.333	1.213	1.102	1.000	0.906
59	3.612	3.312	3.036	2.780	2.545	2.328	2.127	1.943	1.773	1.616	1.471	1.338	1.216	1.103	1.000
60	3.991	3.660	3.354	3.072	2.812	2.572	2.351	2.147	1.959	1.786	1.626	1.479	1.344	1.219	1.105
61	4.417	4.051	3.713	3.400	3.112	2.847	2.602	2.376	2.168	1.976	1.800	1.637	1.487	1.350	1.223
62	4.897	4.491	4.116	3.770	3.450	3.156	2.884	2.634	2.403	2.191	1.995	1.815	1.649	1.496	1.356
63	5.438	4.987	4.571	4.186	3.832	3.505	3.203	2.925	2.669	2.433	2.215	2.015	1.831	1.662	1.506
64	6.051	5.549	5.086	4.658	4.264	3.900	3.564	3.255	2.970	2.707	2.465	2.242	2.037	1.849	1.675
65	6.746	6.187	5.670	5.193	4.753	4.348	3.974	3.629	3.311	3.018	2.748	2.500	2.271	2.061	1.868
66	7.538	6.912	6.335	5.802	5.311	4.858	4.440	4.054	3.699	3.372	3.071	2.793	2.538	2.303	2.087
67	8.441	7.741	7.094	6.498	5.948	5.440	4.972	4.540	4.143	3.776	3.439	3.128	2.842	2.579	2.337
68	9.476	8.690	7.964	7.295	6.677	6.107	5.582	5.097	4.651	4.239	3.860	3.512	3.191	2.895	2.624
69	10.667	9.782	8.965	8.211	7.516	6.874	6.283	5.737	5.235	4.772	4.345	3.953	3.591	3.259	2.953
70	12.041	11.041	10.119	9.269	8.484	7.760	7.092	6.476	5.909	5.386	4.905	4.462	4.054	3.679	3.334
71	13.633	12.502	11.458	10.494	9.606	8.786	8.030	7.333	6.691	6.099	5.554	5.052	4.590	4.165	3.774
72	15.487	14.202	13.016	11.922	10.912	9.981	9.122	8.330	7.600	6.928	6.309	5.739	5.214	4.732	4.288
73	17.656	16.191	14.839	13.591	12.440	11.378	10.399	9.497	8.665	7.898	7.192	6.542	5.944	5.394	4.888
74	20.206	18.529	16.982	15.554	14.237	13.022	11.901	10.868	9.916	9.039	8.231	7.487	6.803	6.173	5.594
75	23.220	21.293	19.515	17.874	16.360	14.964	13.677	12.490	11.396	10.388	9.459	8.604	7.818	7.094	6.429
76	26.804	24.580	22.527	20.633	18.886	17.274	15.788	14.417	13.154	11.991	10.919	9.932	9.024	8.189	7.421
77	31.092	28.512	26.131	23.934	21.907	20.037	18.313	16.724	15.259	13.909	12.666	11.521	10.468	9.499	8.608
78	36.256	33.247	30.471	27.909	25.545	23.365	21.355	19.501	17.793	16.219	14.769	13.435	12.207	11.077	10.038
79	42.520	38.992	35.736	32.731	29.959	27.402	25.044	22.871	20.867	19.021	17.321	15.756	14.315	12.990	11.772
80	50.177	46.014	42.171	38.625	35.354	32.337	29.554	26.989	24.625	22.447	20.441	18.594	16.894	15.330	13.892

*age of spouse at date of benefit commencement

**Oregon Public Service Retirement Plan
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Conversion to Monthly Spouse Benefit at Commencement Date
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age														
	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74
50	0.389	0.351	0.317	0.285	0.256	0.230	0.206	0.184	0.164	0.145	0.129	0.114	0.100	0.088	0.077
51	0.425	0.384	0.347	0.312	0.281	0.252	0.225	0.201	0.179	0.159	0.141	0.125	0.110	0.096	0.084
52	0.466	0.421	0.380	0.342	0.307	0.276	0.247	0.220	0.196	0.174	0.154	0.136	0.120	0.105	0.092
53	0.511	0.461	0.416	0.375	0.337	0.302	0.270	0.241	0.215	0.191	0.169	0.149	0.132	0.115	0.101
54	0.560	0.506	0.456	0.411	0.369	0.331	0.297	0.265	0.236	0.210	0.186	0.164	0.144	0.127	0.111
55	0.615	0.556	0.501	0.451	0.406	0.364	0.326	0.291	0.259	0.230	0.204	0.180	0.159	0.139	0.121
56	0.676	0.611	0.551	0.496	0.446	0.400	0.358	0.320	0.285	0.253	0.224	0.198	0.174	0.153	0.134
57	0.744	0.672	0.607	0.546	0.491	0.440	0.394	0.352	0.313	0.278	0.247	0.218	0.192	0.168	0.147
58	0.820	0.741	0.668	0.602	0.541	0.485	0.434	0.388	0.345	0.307	0.272	0.240	0.211	0.185	0.162
59	0.905	0.818	0.738	0.664	0.597	0.535	0.479	0.428	0.381	0.339	0.300	0.265	0.233	0.205	0.179
60	1.000	0.904	0.815	0.734	0.660	0.592	0.530	0.473	0.421	0.374	0.331	0.293	0.258	0.226	0.198
61	1.107	1.000	0.902	0.812	0.730	0.655	0.586	0.523	0.466	0.414	0.367	0.324	0.285	0.250	0.219
62	1.227	1.109	1.000	0.900	0.809	0.726	0.650	0.580	0.517	0.459	0.407	0.359	0.316	0.277	0.242
63	1.363	1.231	1.111	1.000	0.899	0.806	0.722	0.644	0.574	0.510	0.452	0.399	0.351	0.308	0.269
64	1.516	1.370	1.236	1.113	1.000	0.897	0.803	0.717	0.639	0.567	0.503	0.444	0.391	0.343	0.299
65	1.690	1.527	1.378	1.240	1.115	1.000	0.895	0.799	0.712	0.632	0.560	0.495	0.436	0.382	0.334
66	1.889	1.706	1.539	1.386	1.246	1.117	1.000	0.893	0.795	0.707	0.626	0.553	0.487	0.427	0.373
67	2.115	1.911	1.724	1.552	1.395	1.251	1.120	1.000	0.891	0.791	0.701	0.619	0.545	0.478	0.418
68	2.374	2.145	1.935	1.742	1.566	1.405	1.257	1.123	1.000	0.888	0.787	0.695	0.612	0.537	0.469
69	2.672	2.415	2.178	1.961	1.763	1.581	1.415	1.264	1.126	1.000	0.886	0.782	0.689	0.604	0.528
70	3.017	2.726	2.459	2.214	1.990	1.785	1.597	1.426	1.271	1.129	1.000	0.883	0.777	0.682	0.596
71	3.416	3.086	2.784	2.507	2.253	2.021	1.809	1.615	1.439	1.278	1.132	1.000	0.880	0.772	0.675
72	3.880	3.506	3.162	2.848	2.559	2.296	2.055	1.835	1.634	1.452	1.286	1.136	1.000	0.877	0.766
73	4.424	3.997	3.605	3.246	2.918	2.617	2.342	2.092	1.863	1.655	1.466	1.295	1.140	1.000	0.874
74	5.062	4.574	4.126	3.715	3.339	2.995	2.681	2.394	2.132	1.894	1.678	1.482	1.305	1.144	1.000
75	5.818	5.256	4.742	4.270	3.837	3.442	3.081	2.751	2.450	2.177	1.928	1.703	1.499	1.315	1.149
76	6.716	6.068	5.473	4.929	4.430	3.973	3.556	3.175	2.828	2.513	2.226	1.966	1.731	1.518	1.327
77	7.790	7.038	6.349	5.717	5.138	4.609	4.125	3.683	3.281	2.915	2.582	2.281	2.008	1.761	1.539
78	9.084	8.207	7.403	6.666	5.992	5.374	4.810	4.295	3.826	3.399	3.011	2.659	2.341	2.053	1.794
79	10.653	9.625	8.683	7.818	7.027	6.303	5.641	5.037	4.487	3.986	3.531	3.119	2.746	2.408	2.104
80	12.572	11.359	10.246	9.226	8.292	7.438	6.657	5.944	5.295	4.704	4.167	3.681	3.240	2.842	2.483

*age of spouse at date of benefit commencement

**Oregon Public Service Retirement Plan
2004 OPSRP Actuarial Equivalent Factors**

Table 4(b) Page 10 of 10

Conversion to Monthly Spouse Benefit at Commencement Date
(Factor Multiplied by Benefit to Spouse at Later of Death or Early Retirement Age)

Spouse Age*	Age of Spouse at Later of Member's Date of Death or Earliest Early Retirement Age					
	75	76	77	78	79	80
50	0.067	0.058	0.050	0.043	0.036	0.031
51	0.073	0.063	0.055	0.047	0.040	0.034
52	0.080	0.069	0.060	0.051	0.044	0.037
53	0.088	0.076	0.066	0.056	0.048	0.041
54	0.096	0.083	0.072	0.062	0.053	0.045
55	0.106	0.092	0.079	0.068	0.058	0.049
56	0.116	0.101	0.087	0.074	0.063	0.054
57	0.128	0.111	0.096	0.082	0.070	0.059
58	0.141	0.122	0.105	0.090	0.077	0.065
59	0.156	0.135	0.116	0.100	0.085	0.072
60	0.172	0.149	0.128	0.110	0.094	0.080
61	0.190	0.165	0.142	0.122	0.104	0.088
62	0.211	0.183	0.158	0.135	0.115	0.098
63	0.234	0.203	0.175	0.150	0.128	0.108
64	0.261	0.226	0.195	0.167	0.142	0.121
65	0.291	0.252	0.217	0.186	0.159	0.134
66	0.325	0.281	0.242	0.208	0.177	0.150
67	0.364	0.315	0.271	0.233	0.199	0.168
68	0.408	0.354	0.305	0.261	0.223	0.189
69	0.459	0.398	0.343	0.294	0.251	0.213
70	0.519	0.449	0.387	0.332	0.283	0.240
71	0.587	0.509	0.438	0.376	0.321	0.272
72	0.667	0.578	0.498	0.427	0.364	0.309
73	0.760	0.659	0.568	0.487	0.415	0.352
74	0.870	0.754	0.650	0.557	0.475	0.403
75	1.000	0.866	0.747	0.640	0.546	0.463
76	1.154	1.000	0.862	0.739	0.630	0.534
77	1.339	1.160	1.000	0.858	0.731	0.620
78	1.561	1.353	1.166	1.000	0.853	0.723
79	1.831	1.586	1.368	1.173	1.000	0.847
80	2.161	1.872	1.614	1.384	1.180	1.000

*age of spouse at date of benefit commencement

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