Oregon Public Employees Retirement System

2015-17 Governor's Budget

Appendix 1 (Part 4 of 4): PERS By The Numbers

Agency Presentation to the Joint Ways & Means Committee General Government Subcommittee

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> > March 16-18, 2015

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Appendix 1: Strategic Plan And Process Improvements, Supporting Documentation, And Required Reports

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PERS: By The Numbers

March 2015

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Public Employees Retirement System 11410 SW 68th Parkway Tigard, OR 97223

888-320-7377 http://oregon.gov/PERS



System Demographics (as of December 31, 2013 actuarial valuation)

colleges; all school districts; and almost all cities, counties, and other local government units. PERS employers: Approximately 925, including all state agencies, universities, and community

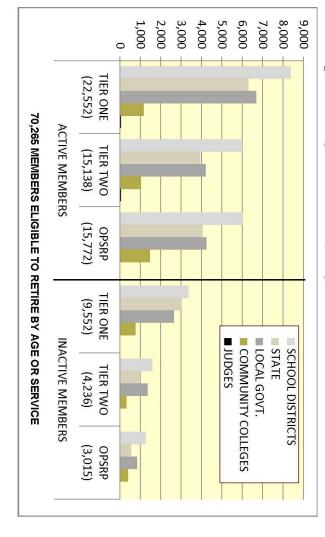
PERS members: approximately 95% of all public employees in Oregon.

Membership by category

TOTAL	Retirees*	Sub-total	Σ	OPSKP)	Tier Two	1	Tier One		
4.5		Inactive	Active	Inactive	Active	Inactive	Active	Inactive	Active	
	30,222	9,520	44,471	2,188	22,437	3,079	11,541	4,253	10,493	State Govt.
	35,337	14,601	54,560	2,837	27,211	5,901	14,920	5,863	12,429	Local Govt.
2	62,558	17,092	63,154	3,169	30,655	7,005	17,839	6,918	14,663	School Districts
331,515	128,117	41,213	162,185	8,194	80,303	15,985	44,297	17,034	37,585	Total

Includes beneficiaries but not members who received total lump-sum retirement or account withdrawal payouts.

Members eligible to retire (as of December 31, 2014)



Retirements by year (Tier One, Tier Two, and OPSRP)

2 0	2011 2012 8,202 6,590	2012 2 6,590
	2	2012 2 6,590

PERS Oregon Public Employer Retireme System

2. System Benefits

PERS benefit component comparisons

The primary components and differences among the PERS Tier One and Tier Two programs, the Oregon Public Service Retirement Plan (OPSRP) Pension Program, and the Individual Account Program (IAP) are shown below. Tier One covers members hired before January 1, 1996; Tier Two covers members hired between January 1, 1996 and August 28, 2003; and OPSRP covers members hired on or after August 29, 2003. The IAP contains all member contributions (6% of covered salary) made on and after January 1, 2004.

Ther One Ther One St. (or. 30 yrs) St. (or. 30 yrs) St. (or. 30 yrs) Ref. age 55 or 50 w25 yrs) Ref. age 55 or 50 w25 yrs) Ref. age 55 or 50 w25 yrs) May retirement St. (50 for P&F) St. (if wested (30 w 5 years of Mernhers retire from community and y retirement armually (currently 7.73%) St. (if wested (30 w 5 years of Mernhers retire from community and y currently 7.73%) Market returns on 100% global guilty portfolio Romalla Amnully (currently 7.73%) Money March, Fall Formula, or Money March, Fall Formula, or Romalla Amnully (if eligible) Romalla (in the Set File Amnull) Romalla (in the Set File Amnull) Romalla (in	3	50 to 100			
It age Tier One Tier Two OPSRP Pension S8 (or 30 yrs) 58 (or 30 yrs) 65 (38 w/30 yrs) P&F age 55 or 50 w/25 yrs 55 (58 w/30 yrs) P&F age 55 or 50 w/25 yrs S5 (50 for P&F) 55 (50 for P&F) Charanteed assumed rate annually (currently 7.75%) 75 (90 for P&F) on Homey March, Full Formula, or formula + Annualty (if eligible) Formula + Annualty (if eligible) mula 1.67% general; 1.67% general; 1.67% general; 1.50% peneral; 1.50% peneral	N/A; no COLA provided	all amounts over \$60,000	mual benefit with 0.15% on	1.25% on the first \$60,000 of an ar	COLA (after retirement)
Tier One Tier Two OPSRP Pension 58 (or 30 yrs) 58 (or 30 yrs) P&F: age 55 or 50 w/25 yrs pR&F: age 55 or 50 w/25 yrs P&F: age 60 or 33 w/25 yrs S5 (50 for P&F) Confinuous service in a P&F position immediately preceding effective retirement date) Noney March, Full Formula, or clumber account Solution Money March or Full Money March or Full Formula + Annutly (if eligible) Solution immediately preceding effective retirement date) Money March or Full Formula + Annutly (if eligible) Solution immediately preceding effective retirement date) Money March or Full Formula 1.67% general; Pomula 1.50% peneral; Pomula Service time Not payable to benefit recipients that do not pay benefit r	Immediate	5 calendar years w/ at least 600 hours qualifying service or normal retirement age	Active member in each of 5 calendar years	Active member in each of 5 calendar years	Vesting
Tier Two OPSRP Pension 58 (or 30 yrs) 58 (or 30 yrs) F&F: age 55 or 50 w/25 yrs P&F: age 60 or 33 w/25 yrs P&F: age 60 or 53 w/25 yrs N/A, no member account annually (currently 7.75%) Market returns on 100% Market returns on 100% Market returns on 100% N/A, no member account P&F: age 60 or or 3 w/25 yrs P&F: age 60 or or 3 w/25 yrs N/A, no member account P&F: age 60 or or 3 w/25 yrs N/A, no member account P&F: age 60 or or 3 w/25 yrs N/A, no member account N	N/A	No	Yes	Yes	6% "pickup" included in FAS
Tier One Tier Two OPSRP Pension 58 (or 30 yrs) 58 (or 30 yrs) 60 (or 30 yrs) 65 (38 w/30 yrs) 65 (45 w/30 yrs) 66 (45 w/30 yrs) 67 (45 w/30 yrs) 6	N/A	No	Yes, if employer participates in the sick leave program	Yes, if employer participates in the sick leave program	Unused sick leave included in FAS
Tier One Tier Two OPSRP Pension 38 (or 30 yrs) 58 (or 30 yrs) 60 (or 30 yrs) 65 (38 w/30 yrs) 65 (30 for P&F) 65 (40 for P&	N/A	No	No	Yes	Included in FAS
Tier One Tier Two OPSRP Pension 58 (or 30 yrs) P&F: age 55 or 50 w/25 yrs Pfriment 55 (50 for P&F) Charanteed assumed rate annually (currently 7.75%) Partitions Formula + Annuity (if eligible) Satate 1.67% general; returns Factor 1.00% general; returns If eligible, higher of 9.89% on state content ax because they do not reside in Oregon uum n payout Tier Two OPSRP Pension O((3 0 yrs) P&F: age 55 or 50 w/25 P&F: age 55 or 50 w/25 P&F: age 60 or 53 w/25 yrs S, if vested (50 w/ 5 years of continuous service in a P&F position immediately preceding effective retirement date) No guarantee; market returns on 100% long effective retirement date) No guarantee; market returns on 100% long effective retirement date) No guarantee; market returns on 100% long effective retirement date) No guarantee; market wind effective retirement date) NA; no member account global equity portfolio Money Match or Full returns NA; no member account Formula 1.50% general; 1.67% general; 2.00% P&F 2.00% P&F 3.50 N/A; no member account NA; no member account NA	Yes for Tier One and Tier Two; no for OPSRP	No	Yes	Yes	Included in covered salary (6%)
Tier Two OPSRP Pension 58 (or 30 yrs) 58 (or 30 yrs) 58 (or 30 yrs) 60 (or 30 yrs) 65 (58 w/30 yrs) 65 (55 for per less) 65 (50 for p&F) 6					Lump-sum vacation payout
Tier Two OPSRP Pension S8 (or 30 yrs) P&F: age 55 or 50 w/25 yrs primement 55 (50 for P&F) Continuous service in a P&F position immediately preceding effective retirement annually (currently 7.75%) Particular sequity portfolio Market returns on 100% global equity portfolio eactor Money Match, Full Formula, or Formula + Annuity (if eligible) factor 1.67% general; pension Tier Two OpSRP Pension 60 (or 30 yrs) P&F: age 55 or 50 w/25 P&F: age 60 or 53 w/25 yrs S5 (50 for P&F) Continuous service in a P&F position immediately preceding effective retirement date) N/A; no member account global equity portfolio Money Match or Full Formula Formula 1.67% general; 1.67% general; 1.67% general; 1.50% p&F 1.80% p&F N/A N/A N/A	No tax remedy provided	No tax remedy provided	No tax remedy provided	If eligible, higher of 9.89% on service time before Oct. 1, 1991 or 4% or less based on total service time. Not payable to benefit recipients that do not pay Oregon state income tax because they do not reside in Oregon	Oregon state income tax remedy
Tier Two OPSRP Pension S8 (or 30 yrs) P&F: age 55 or 50 w/25 yrs primement 55 (50 for P&F) account account Guaranteed assumed rate annually (currently 7.75%) e account Market returns on 100% global equity portfolio muula Money Match, Full Formula, or Formula Formula + Annuity (if eligible) muula 1.67% general; factor Tier Two OPSRP Pension OPSRP Pension 60 (or 30 yrs) 60 (or 30 yrs) 65 (58 w/30 yrs) F&F: age 55 or 50 w/25 P&F: age 60 or 53 w/25 yrs 55 (50 for P&F) continuous service in a P&F position immediately preceding effective retirement date) No guarantee; market returns on 100% Morket returns on 100% Money Match or Full Formula Formula 1.67% general; 1.67% general; 1.60% P&F 1.80% P&F	N/A	N/A	N/A	1.00% general; 1.35% P&F	Formula + Annuity benefit factor
Tier Two OPSRP Pension S8 (or 30 yrs) P&F: age 55 or 50 w/25 yrs priting print age S5 (50 for P&F) S5 (50 for P&F) Guaranteed assumed rate annually (currently 7.75%) e account annually (currently 7.75%) E account annually formula, or equity portfolio S (50 for P&F) Money Match, Full Formula, or Formula	N/A	1.50% general; 1.80% P&F	1.67% general; 2.00% P&F	1.67% general; 2.00% P&F	Full Formula benefit factor
Tier Two OPSRP Pension S8 (or 30 yrs) P&F: age 55 or 50 w/25 yrs priting the ment 55 (50 for P&F) S5 (50 for P&F) G0 (or 30 yrs) P&F: age 55 or 50 w/25 yrs 55 (50 for P&F) 55 (50 for P&F) S5, if vested (50 w/ 5 years of continuous service in a P&F position immediately preceding effective retirement date) annually (currently 7.75%) Rarket returns on 100% global equity portfolio Warket returns on 100% global equity portfolio NA; no member account global equity portfolio	Various account pay-outs or rollover	Formula	Money Match or Full Formula	Money Match, Full Formula, or Formula + Annuity (if eligible)	Retirement calculation methods
Tier One Tier Two OPSRP Pension 58 (or 30 yrs) 60 (or 30 yrs) P&F: age 55 or 50 w/25 yrs P&F: age 55 or 50 w/25 yrs yrs 55 (50 for P&F) 35 (50 for P&F) Continuous service in a P&F position immediately preceding effective retirement date) annually (currently 7.75%) Solution immediately preceding effective retirement date) No guarantee; market returns OPSRP Pension 65 (58 w/30 yrs) P&F: age 60 or 53 w/25 yrs S5, if vested (50 w/ 5 years of continuous service in a P&F position immediately preceding effective retirement date) No guarantee; market returns	N/A	N/A; no member account	Market returns on 100% global equity portfolio	Market returns on 100% global equity portfolio	Variable account earnings
Tier Two OPSRP Pension	No guarantee; market returns	N/A; no member account	No guarantee; market returns	Guaranteed assumed rate annually (currently 7.75%)	Regular account earnings
Tier One Tier Two OPSRP Pension 58 (or 30 yrs) 60 (or 30 yrs) 65 (58 w/30 yrs) 9&F: age 55 or 50 w/25 yrs P&F: age 55 or 50 w/25 P&F: age 60 or 53 w/25 yrs	Members retire from IAP when they retire from Tier One, Tier Two, or OPSRP	55, if vested (50 w/ 5 years of continuous service in a P&F position immediately preceding effective retirement date)	55 (50 for P&F)	55 (50 for P&F)	Early retirement
Tier Two OPSRP Pension	Members retire from IAP when they retire from Tier One, Tier Two, or OPSRP	65 (58 w/30 yrs) P&F: age 60 or 53 w/25 yrs	60 (or 30 yrs) P&F: age 55 or 50 w/25 yrs	58 (or 30 yrs) P&F: age 55 or 50 w/25 yrs	Normal retirement age
	IAP	OPSRP Pension	Tier Two	Tier One	

 $P\&F = police \ and \ firefighters; \ FAS = final \ average \ salary; \ COLA = cost-of-living \ adjustment; \ N/A = not \ applicable$

Note: PERS uses three methods to calculate Tier One and Tier Two retirement benefits: Full Formula, Formula + Annuity (for members who made contributions before August 21, 1981), and Money Match. PERS uses the method (for which a member is eligible) that produces the highest benefit amount. OPSRP Pension Program benefits are based only on a formula method.





Summary of findings from PERS' Tier One/Tier Two Replacement Ratio Study for 2013

The Replacement Ratio Study population of 85,007 retirements was drawn from 136,636 Tier inactive, lump sum, judge, and legislator retirements are excluded. Ratio Study for 2013 are consistent with the techniques used in previous studies. Benefits related to who selected comparable monthly benefit options. The techniques used in the PERS Replacement One/Tier Two retirements from January 1990 through December 2013, and covers retired members

those periods by several percentage points. retirement calculation adjustments, including the Strunk Eugene benefit adjustments that generally cost-of-living adjustments (COLAs) or federal Social Security benefits that a retiree may be eligible The calculations are based on the benefit at the time of retirement and do not include any subsequent impacted retirements occurring in 2000-2004 and would reduce the reported replacement ratios for for based on the retiree's work history. The calculations also do not include the effects of any post-

Average age at retirement

59 years old for all retirees from 1990-2013; 61 years old for those who retired in 2013

Average years of service at retirement

22 years for all retirees from 1990-2013; 24 years for those who retired in 2013

Average monthly retirement benefit

- \$2,322 per month, or about \$27,868 annually For all retirees from 1990-2013, the average monthly retirement benefit at time of retirement was
- For those retirees in the most recent year (2013), the average monthly retirement benefit was \$2,791 per month, or about \$33,489 annually

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Average public employee salaries at retirement

- For all retirees from 1990-2013, the final salary at retirement averaged \$48,814 annually
- For all 2013 retirees, the final salary at retirement averaged \$65,027 annually
- For 2013 retirees with 30 years of service, final salary at retirement averaged \$71,026 annually

Average salary replacement ratio (see chart on following page)

- at the time of retirement For all retirees from 1990-2013, the average annual retirement benefit equaled 55% of final salary
- For all 2013 retirees, the average annual retirement benefit equaled 50% of final salary
- final salary. The average years of service for this group was 31 years For all retirees from 1990-2013, there were 7.2% who received annual benefits more than 100% of
- For 2013 retirees, there were 5.6% who received annual benefits more than 100% of final salary. The average years of service for this group was 34 years

For members who retire with 30 years of service (see chart on following page)

- and the average monthly benefit was \$3,714 per month From 1990-2013, the average retirement benefit for 30-year members equaled 82% of final salary
- their average monthly benefit was \$4,200 per month The average replacement ratio for 30-year members peaked at 100% of final salary in 2000 and
- the average monthly benefit was \$3,951 per month For 2013 only, the average retirement benefit for 30-year members equaled 69% of final salary and
- 10.9% of retirees from 1990-2013 had 30 years of service
- 6.7% of retirees in 2013 had 30 years of service

Summary of findings from PERS' Tier One/Tier Two Replacement Ratio Study for 2013

Average salary replacement ratio (RR) based on final salary (FS) at retirement

	Retirees w/30 Years of Service (does not include those w/more than 30 years)	30 Years s not include han 30 years)	A	All Retirees in Study	itudy	# of Retirees
Calendar Year	# of Retirees in Study*	Average RR Based	# of Retirees	Average RR Based	% of Retirees	w/31 or more
		on FS	in Study*	on FS	Receiving >100% of FS	years or service
1990	146	61%	1,866	44%	.0%	236
1991	217	61%	2,377	45%	.1%	261
1992	205	67%	2,432	48%	.5%	289
1993	289	66%	2,744	48%	.5%	319
1994	302	67%	3,298	49%	.3%	452
1995	304	66%	2,827	47%	1.0%	307
1996	281	70%	2,477	49%	1.4%	223
1997	295	83%	3,107	57%	7.5%	284
1998	465	89%	4,567	65%	12.0%	472
1999	548	93%	4,644	65%	14.0%	452
2000	273	100%	2,112	63%	15.8%	148
2001	391	99%	3,146	66%	16.5%	304
2002	670	96%	4,605	68%	17.4%	583
2003	942	93%	7,631	%66	14.4%	937
2004	471	84%	3,259	55%	5.5%	155
2005	393	84%	2,548	51%	4.4%	155
2006	347	83%	2,952	50%	4.3%	254
2007	372	84%	3,226	51%	4.9%	337
2008	417	80%	3,480	52%	5.0%	445
2009	432	77%	3,881	53%	6.2%	586
2010	414	75%	3,516	48%	4.3%	440
2011	464	74%	4,484	50%	5.3%	937
2012	272	70%	4,098	46%	4.3%	585
2013	389	69%	5,800	50%	5.6%	1,108
Total/Avg	9,299	82%	85,077	55%	7.2%	10,269

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for 2013 Tier One/Tier Two retirees with 30 years of service credit** Retirement calculation method and average replacement ratio based on final salary at retirement

69%	389	TOTAL
73%	285	Money Match
60%	34	Formula Plus Annuity
56%	70	Full Formula
Average Replacement Ratio	Number of Retirees	Calculation Method

^{**}Includes Tier One/Tier Two retirees with between 30 years, 0 months and 30 years, 11 months of service credit who retired in 2012. Retirees who took a lump-sum option, retirees with greater than 365 days from their termination date to their retirement date, or retirees other than General Service or Police & Fire are not included.



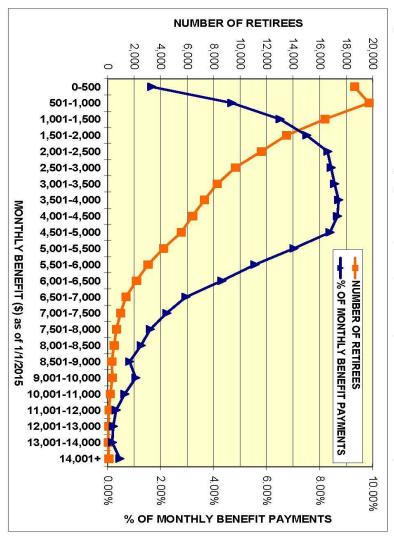
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^{*}Includes monthly benefit payments for Tier One/Tier Two members retiring from active service within the preceding 12 months. Benefits related to inactive, lump sum, judge and legislator retirements are excluded.

compounded annual cost-of-living adjustments (COLAs) and other post-retirement benefit adjustments. payees and survivors; excludes lump sum and unit payments). Benefit payment amounts include Monthly benefit payment amounts as of January 1, 2015

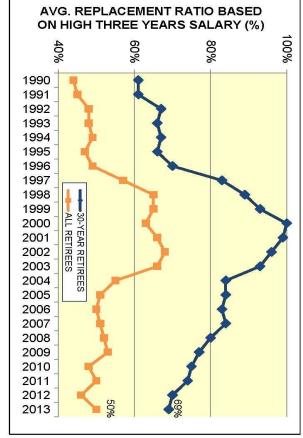
Based on 130,873 monthly benefit payments totaling \$313.2 million for the month (includes alternate



2.85%	0.61%	% of total	13.16%	4.52%	% of total
	800	Subtotal		5,920	Subtotal
0.45%	80	14,001 and up	0.82%	295	8,501 - 9,000
0.17%	40	13,001 - 14,000	1.26%	477	8,001 - 8,500
0.21%	52	12,001 - 13,000	1.60%	650	7,501 - 8,000
0.32%	87	11,001 - 12,000	2.22%	962	7,001 - 7,500
0.64%	191	10,001 - 11,000	2.95%	1,372	6,501 - 7,000
1.06%	350	9,001 - 10,000	4.31%	2,164	6,001 - 6,500
Benefits Paid	Retirees	Benefit (\$)	Benefits Paid	Retirees	Benefit (\$)
Percent of	Number of	Monthly	Percent of	Number of	Monthly
46.91%	26.53%	% of total	37.58%	68.34%	% of total
	34,717	Subtotal		89,435	Subtotal
5.55%	3,032	5,501 - 6,000	8.43%	9,623	2,501 - 3,000
7.02%	4,199	5,001 - 5,500	8.30%	11,583	2,001 - 2,500
8.39%	5,543	4,501 - 5,000	7.51%	13,490	1,501 - 2,000
8.67%	6,396	4,001 - 4,500	6.50%	16,383	1,001 - 1,500
8.71%	7,285	3,501 - 4,000	4.68%	19,726	501 - 1,000
8.56%	8,262	3,001 - 3,500	1.66%	18,631	0 - 500
Benefits Paid	Retirees	(S)	Benefits Paid	Retirees	Benefit (\$)
Percent of	Number of	Monthly Benefit	Percent of	Number of	Monthly

Average annual benefit: \$28,722 Median annual benefit: \$22,695

Tier One/Tier Two replacement ratio trends (data from PERS' Replacement Ratio Study)



Tier One/Tier Two retirement calculation method trends

Retirees with Hours Reported Working in a PERS-Covered Position in 2014 PERCENT OF RETIRMENTS MONEY MATCH: 37% 766 L FULL FORMULA: 60% 866 L FORMULA + ANNUITY: 3%

11,856	6,724	3,341	1,791	Total
706	234	273	199	> 1039
1,691	859	483	349	801 - 1039
1,241	710	346	185	601 - 800
1,655	918	432	305	401 - 600
2,218	1,351	575	292	200 - 400
4,345	2,652	1,232	461	< 200
Total	K-12	Local Govt	State	
	r Group	Retirees Working by Employer Group	Retirees W	Hours

Tier One/Tier Two benefit payment options selected in calendar year 2014

100%	5,567	Total
1.85	103	AS refund
8.86	493	Total Lump Sum
0.18	10	Lump Sum 3A
0.16	9	Lump Sum 3
1.44	80	Lump Sum 2A
0.77	43	Lump Sum 2
1.40	78	Lump Sum 1
5.05	281	3A
2.44	136	3
19.58	1,090	2A
18.97	1,056	2
4.60	256	15-Year Certain
7.58	422	Refund Annuity
27.12	1,510	1
Percent	Quantity	Option (definitions below)

member dies. Option 1 (non-refund): This option is paid for the member's lifetime. No benefit of any kind is paid to anyone after the

receives a lump-sum refund of any amount remaining in the member's account, if any Refund Annuity Option: This option is paid for the member's lifetime. When the member dies, the designated beneficiary

payments (15 years), the beneficiary is entitled to receive the remainder of the 180 monthly payments. Once the member has received at least 180 payments, no benefit is payable to the beneficiary. 15-Year Certain Option: This option is paid for the member's lifetime. If the member dies before receiving 180 monthly

member may name only one beneficiary who must be a living person. The monthly benefit payment is paid to the member member; under Option 3 and 3A, at 1/2 the base amount of the member) until his/her death, and then paid to the beneficiary if then living (under Options 2 and 2A, at the same base amount as the Survivorship Options (Option 2, Option 2A, Option 3, and Option 3A): Under any of the survivorship options, the

monthly pension from the employer's contributions. The lifetime monthly pension options are the same as those for the nonrefund and survivorship options described above. **Lump-Sum Option 3A):** These options provide a lump-sum payment of the member's account balance plus a lifetime Lump-Sum Options (Lump-Sum Option 1, Lump-Sum Option 2, Lump-Sum Option 2A, Lump-Sum Option 3, and

out in total, there is no ongoing monthly benefit. Total Lump-Sum: The balance of the member's account and a matching amount funded by employers' contributions are paid

a one-time payment based on an actuarial calculation if the Option 1 benefit is less than \$200 per month

Average IAP account balances and distributions to retirees, withdrawals, and deceased

Year	Total IAP Account Balance After Earnings	# of Members	Average IAP Account	# of Distributions to Retirees, Withdrawals,
	Crediting (SM)		Balance (\$)	and Deceased
2004	423.4	162,119	2,611	2
2005	928.9	181,055	5,130	4,131
2006	1,396.8	197,491	7,072	6,557
2007	2,120.5	210,133	10,091	6,705
2008	1,851.2	218,192	8,484	8,624
2009	2,742.8	231,256	11,847	7,727
2010	3,536.9	236,265	14,970	8,695
2011	3,939.7	238,062	16,549	11,479
2012	4,855.1	240,637	20,176	14,728
2013	5,127.3	242,516	21,142	14,994
2014	6,001.1	245,768	24,821	15,118

History of Key PERS Benefit Enhancements, Caps, and Reductions by Year

Tier One/Two All	Added "30 years of service" retirement regardless of age Imposed state income tax on PERS benefits CONTINUED ON FOLLOWING PAGE	Retirement Age/Vesting Benefit Calculation/Formula	1989
	Capped Medicare premium subsidy at \$60 per month	Retiree Health Benefits	6861
nce	Established Medicare and state employee pre-Medicare insurance premium subsidies	Retiree Health Benefits	1989
	Increased assumed earnings rate from 7.5% to 8%	Investment Risk Allocation	1989
	Implemented ad hoc COLA increase (0% to 25% benefit increase)	Cost-of-Living Adjustment	1989
	New retirement benefit payout options added	Benefit Calculation/Formula	1987
	Members allowed to purchase six-month waiting period	Benefit Calculation/Formula	1987
	Added benefit option to allow lump-sum payment of member account	Benefit Calculation/Formula	1985
	Implemented ad hoc COLA increase (3% to 7.28% benefit increase)	Cost-of-Living Adjustment	1985
	Implemented ad hoc COLA increase (4% to 11.4% benefit increase)	Cost-of-Living Adjustment	1981
	Eliminated Formula Plus Annuity benefit calculation method	Benefit Calculation/Formula	1981
Р	Consolidated member contributions from 1% to 7% salary based sliding scale to universal 6%	Benefit Calculation/Formula	1981
	Added Full Formula benefit calculation method	Benefit Calculation/Formula	1981
	Employers allowed to "pick up" member 6% contribution Thorassed assumed assumer state from 7% to 7.5%	Administrative	1979
	Gam Loss Reserve established to "self-fund" assumed earnings rate crediting	Investment Risk Allocation	1976
	Credited member regular accounts with more than the assumed earnings rate*	Investment Risk Allocation	1975
	Increased assumed earnings rate from 5.5% to 7%	Investment Risk Allocation	1975
	Initiated member account assumed rate guarantee	Investment Risk Allocation	1975
	Implemented ad hoc increase (0% to 25% benefit increase)	Cost of Living Adjustment	1974
	Added accrued sick leave to retirement benefit calculation for participating employers	Final Average Salary	1973
	Capped COLA at actual inflation rate or 2%, whichever is less	Cost-of-Living Adjustment	1973
	Annual COLA cap raised from 1.5% to 2%	Cost-of-Living Adjustment	1973
	Increased Formula Plus Annuity pension factors (General Service: 67 to 1.00: Police & Fire: 0.92 to 1.35)	Benefit Calculation/Formula	1973
	Initiated an annual COLA with a 1.5% cap	Cost-of-Living Adjustment	1972
	Implemented ad hoc COLA increase (12% to 23% benefit increase)	Cost-of-Living Adjustment	1972
	Participation in variable account program begins	Investment Risk Allocation	1969
Y f	Legislature passes a bill that allows PERS to invest up to 10% of the retirement fund in common stock, creates the Oregon Investment Council, and establishes a defined benefit formula for employer-funded retirement benefits (formula plus annuity)	Investment Risk Allocation	1967
10.25	By law, the PERS plan is terminated and immediately reopened the next day, allowing public employers to provide Social Security coverage	Administrative	1953
· ·	Requirement for employees to serve a six-month waiting period before becoming PERS members begins	Retirement Age/Vesting	1947
_ d	The Public Employees Retirement System is signed into law and begins business July 1, 1946, as a money match retirement plan	Administrative	1945
	Action	Category	Year
	Antion	Catagory	

*Tier One regular accounts were credited with earnings in excess of the assumed rate in the following years: 1975, 1976, 1979, 1980, 1982, 1983, 1985, 1986, 1988, 1989, 1991, 1993, 1995, 1996, 1997, 1998, and 1999. In all other years subsequent to 1975, these accounts were credited at the effective assumed rate.

Key: Benefit enhancement Benefit

Benefit cap of reduction



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History of Key PERS Benefit Enhancements, Caps, and Reductions by Year (continued)

J. Loseon	Of the	manycincines, cups, and recaucaons of real (contain	aca)
Year	Category	Action	Affected Members
1991	Benefit Calculation/Formula	Established service time based state income tax offset benefit of between 1% to 4% (SB 656)	Tier One
1993	Administrative	Divorced spouses entitled to separate account from member's	All
1995	Benefit Calculation/Formula	Established state income tax offset benefit for pre-1991 service time (HB 3349)	Tier One
1995	Benefit Calculation/Formula	Eliminated tax remedy for anyone hired after July 14, 1995	All new hires
1996	Final Average Salary	Excluded lump-sum vacation payouts from final average salary	Tier Two
1996	Investment Risk Allocation	Eliminated guaranteed return on regular accounts for new members	Tier Two
1996	Retirement Age/Vesting	Increased normal retirement age for new members from 58 to 60 (General Service)	Tier Two
7997	Administrative	Married members must provide proof of spousal consent for retirement option choice	All
1997	Administrative	Reemployed retirees can work up to 1,040 hours for a PERS-covered employer without loss of benefits (up from 600 hours)	All
1997	Benefit Calculation/Formula	Out-of-state teaching service and some military purchases allowed	All
1999	Benefit Calculation/Formula	Locked in existing actuarial equivalency factor tables	Tier One
2000	Investment Risk Allocation	Eliminated 'Last Known Rate' member account crediting guarantee	Tier One
2003	Benefit Calculation/Formula	Decreased Full Formula benefit pension factor (General Service: 1.67 to 1.50; Police & Fire 2.00 to 1.80)	OPSRP
2003	Benefit Calculation/Formula	Eliminated Money Match benefit calculation method	OPSRP
2003	Benefit Calculation/Formula	Redirected member contributions to freeze Money Match benefit levels	Prospective MM retirees
2003	Benefit Calculation/Formula	Required regularly updated mortality assumptions and actuarial factors	All
2003	Cost-of-Living Adjustment	Pro-rated first year COLA	OPSRP
2003	Cost-of-Living Adjustment	Eliminated COLA 'bank' carryover	OPSRP
2003	Final Average Salary Final Average Salary	Eliminated lump-sum vacation payouts from subject salary Eliminated accumulated sick leave from final average salary	OPSRP
2003	Investment Risk Allocation	Required members to self-fund guaranteed return on member accounts	Tier One
2003	Investment Risk Allocation	Subjected all future member contributions made on or after January 1, 2004 to actual earnings and losses with no guarantee	All
2003	Retiree Health Benefits	Eliminated post-retirement health insurance premium subsidies	OPSRP
2003	Retirement Age/Vesting	Increased normal retirement age from 60 to 65 (General Service) 55 to 60 (Police & Fire)	OPSRP
2003	Retirement Age/Vesting	Increased vesting from 5 years or age 50 to 5 years or age 65 (General Service) or age 60 (Police & Fire)	OPSRP
2005	Benefit Calculation/Formula	Adjusted member accounts and benefit payments to recapture 1999 earnings overcrediting	Tier One
2009	Retiree Health Benefits	Allowed OPSRP members to participate in PERS retiree health insurance pools without premium subsidy	OPSRP
2011	Benefit Calculation/Formula	Eliminated HB 3349 tax remedy for prospective retirees who move out of state on or after January 1, 2012	Tier One
2013	Cost-of-Living Adjustment	1.5% in 2013; COLA in 2014 and beyond is 1.25% on the first \$60,000 of an annual benefit; 0.15% on amounts above \$60,000	All
2013	Supplementary Payments	Annual supplementary payments of 0.25% to all benefit recipients (not to exceed \$150) through 2019. Second annual supplementary payment of 0.25% through 2019 if benefit is \$20,000 or less annually	Retirees
2013	Benefit Calculation/Formula	Eliminated any tax remedy for retirees who do not pay income taxes in Oregon because they are not residents of Oregon	Tier One

Key: Benefit enhancement Benefit cap or redu





insurance coverage options for those not yet Medicare eligible. Medicare-eligible (age 65 and over) population, the PERS Health Insurance Program also offers these insurance options become a choice available to all PERS retirees. While primarily serving our insurance plans to eligible Tier One/Tier Two retirees, their spouses, and dependents. Upon retirement, The Oregon PERS Health Insurance Program offers optional medical, dental, and long-term care

individual school districts and local governments). may choose to subsidize the insurance premium for eligible retirees (as provided in varying degrees by employers may charge pre-Medicare retirees the entire monthly premium (as state government does) or Medicare eligible (the rate must be no more than the blended rate for the entire group). Public employee group insurance programs available to their retirees and dependents that are not yet Program. Oregon Revised Statute 243.303 requires Oregon public employers to make their active Active members, their spouses, and dependents are not eligible for the PERS Health Insurance

on an actuarial basis. qualifying state government pre-Medicare retirees. Both trusts are funded from employer contributions Medicare eligible retirees, and the Retiree Health Insurance Premium Account (RHIPA), serving trusts are known as the Retirement Health Insurance Account (RHIA), serving all qualifying PERS provide premium subsidies for eligible Tier One and Tier Two retirees or surviving spouses. These There are two statutory trust funds administered by PERS as part of the Health Insurance Program that

Program Enrollment (as of December 2014)

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Medical Plans (four plans offered)	Totals	Medicare	Non-Medicare
Covered lives	59,076	56,387	2,689
Retirees (or surviving spouses)	47,844	46,208	1,636
Spouses/Dependents		10,179	1,053
Average age of enrolled retirees	74	75	57
Dental Plans (two plans offered) Long-Term Care Plan	35,985 2,096		
Statutory Health Insurance Premium Subsidies	Subsidies		
Retirees receiving RHIA (trust fund held by PERS*)	by PERS*)		44,364
Retirees receiving RHIPA (trust fund held by PERS**)	d by PERS**)		1,278
RHIA monthly payment total			\$2,661,840
RHIPA monthly payment total			\$ 378,507
Employer rates (effective July 1, 2013):			

Unfunded actuarial liabilities (as of December 31, 2013): \$120 million (RHIA); \$55.9 million (RHIPA)

RHIA: 0.59%; RHIPA (state government only): 0.27%



The RHIA subsidy is \$60 per month for Medicare eligible retirees.

^{**} The RHIPA subsidy is for state government pre-Medicare retirees only and varies depending on the employee's years of state service, from \$163.39 (8 years) to \$326.79 (30+ years) per month for Plan Year 2014.

3. System Funding Level and Status

Funded status as of December 31, 2013

Treasury. the Oregon Investment Council with staff support from the Investment Division of Oregon State The Oregon Public Employees Retirement Fund (OPERF) is invested under oversight and direction of

hold deposits of pension obligation bond proceeds and other advance lump-sum payments. As of December 31, 2013, PERS was 96% funded* (including employer side accounts). Side accounts

reserving policies, statutory plan design changes, and litigation outcomes. \$2.6 billion*. The UAL fluctuates based on various factors including investment returns, Board As of December 31, 2013, the unfunded actuarial liability (UAL) (when including side accounts) was

Includes liability reductions from Senate Bills 822 and 861 passed in 2013 and new Board-adopted actuarial assumptions and methods.

\$ BILLIONS

PERS fund value (calendar years ending December 31)

3. System Funding Level and Status (continued)

Unfunded actuarial liability history and funded ratio*

Valuation**	With Sid (starti	With Side Accounts*** (starting in 2002)	Without	Without Side Accounts
Date	UAL (\$M)	Funded Ratio (%)	UAL (SM)	Funded Ratio (%)
2000	1,545	96.4	1,545	96.4
2001	-2,031	105.4	-2,031	105.4
2002	3,204	92.0	3,983	89.9
2003	1,751	96.1	6,227	86.0
2004	2,122	95.6	7,678	84.0
2005	-1,751	104.0	4,919	91.0
2006	-5,019	109.7	2,229	95.7
2007	-6,120	111.5	1,538	97.1
2008	10,998	80.0	16,133	70.4
2009	8,108	86.0	13,598	76.0
2010****	7,700	87.0	13,300	78.0
2011	11,030	82.0	16,255	73.0
2012****	5,600	91.0	11,100	82.0
2013	2,600	96.0	8,500	86.0
2014 (estimated)	2,750	96.0	8,750	86.0
		8		ē i

- * Includes RHIA/RHIPA.

 ** 2000-2003 UALs were
- 2000-2003 UALs were calculated using actuarial value of assets (AVA) based on year-to-year changes in asset values smoothed over four-year periods. All other UALs since 1997 were calculated using an AVA based on fair market value.
- ** and methodologies. These methodologies are subject to review and revision every two years The official PERS valuation UAL and funded ratio are based on accepted actuarial standards

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A negative UAL amount represents a surplus.

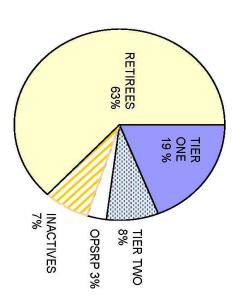
***** 2010 and after includes the OPSRP Pension Program, 2000-2009 reflects only Tier One/Tier Two.

***** Includes liability reductions from Senate Bills 822 & 861 and new Board-adopted actuarial assumptions and methods from the 2012 Experience Study.

Actuarial accrued liabilities

Before PERS reform in 2003, PERS' liabilities were growing by about 12% annually. Reform reduced liability growth to an expected average of 3 to 4% annually over the long-term, which is close to the system's annual inflation rate assumption of 2.75%.

Approximately 70% of PERS' total accrued liability is for members who are no longer working in PERS-covered employment (retirees and inactives). As a result, more than 40% of an employer's total contribution rate is associated with these groups.



liability is for members over age 50. Because the average retirement age is currently 61, a large shift in member liability is for members over age 55, and approximately 80% of the Tier One active member Tier One active members represent 21% of the accrued liabilities. More than 56% of Tier One active liabilities between active and retired is anticipated in the near future.

4. System Revenue

Member and employer contributions and investment income for calendar years

Year	Member	Employer	Amortization of	Total	Net Investment &
	Contributions	Contributions	Employer Side	Employer	Other Income
	(SM)	(S M)	Accounts (SM)*	(SM)	(\$M)
1995	287	427	N/A	427	4,110
1996	296	463	N/A	463	4,358
1997	291	473	N/A	473	4,582
1998	318	488	N/A	488	3,978
1999	347	577	N/A	577	7,463
2000	359	654	N/A	654	143
2001	385	689	N/A	689	-2,708
2002	398	725	8	733	-3,460
2003	405	582	97	679	8,866
2004	371**	408	278	686	5,933
2005	434	504	357	861	6,179
2006	456	637	474	1,111	8,163
2007	468	633	466	1,099	5,808
2008	484	669	541	1,210	-17,235
2009	515	561	540	1,101	8,053
2010	502	435	558	993	6,444
2011	510	627	509	1,136	1,935
2012	513	915	443	1,358	7,859
2013	561	942	448	1,390	9,458

- deposits of pension obligation bond proceeds and other lump-sum payments. PERS' methodology to track amortization of side accounts began in 2002. Side accounts hold
- * Since January 1, 2004, member contributions have been placed in the Individual Account Program (IAP), instead of the legacy Tier One/Tier Two member accounts
- 50% of their employees. This totals approximately 70% of all employees. contribution is currently assumed and paid or "picked up" by 53% of all employers for more than Member contributions equal 6% of covered salary and now go to the IAP. The member
- subsequent "new dollar" annual contributions for the employers that make such deposits. 2002, employers were given the option to deposit lump-sum payments into side accounts, reducing PERS Reform legislation led to a reduction in employer rates beginning in 2003. Also, starting in
- Two, and post- retirement health care (RHIA, RHIPA). 2004 and beyond includes employer contributions for OPSRP Pension Program, Tier One/Tier Employer contribution amounts are from the calendar year-end records. Data for calendar year



Regular account earnings available for crediting and actual distributions to Tier One and Tier Two member regular, variable, and Individual Account Program (IAP) accounts

*	Regular	i D	Distributions (%)	ons (%)	
Year	Account Earnings (%)	Tier One	Two	Variable Account	IAP
1970	5.09	5.09		7.47	
1971	6.27	6.27		9.47	
1972	7.46	7.46		13.87	
1973	0.00	0.00		-16.39	
1974	0.00	5.50		-18.16	
1975	9.19	7.50		18.94	
1976	10.38	7.75		18.58	
1977	4.79	7.00		-2.62	
1978	7.37	7.00		7.03	
1979	12.32	11.09		20.40	
1980	16.92	13.00		29.94	
1981	4.37	7.50		-2.25	
1982	15.31	11.50		22.39	
1983	18.37	13.00		23.12	
1984	7.33	7.50		4.00	
1985	21.38	15.00		27.99	
1986	22.70	18.37		18.98	
1987	9.00	7.50		4.54	
1988	16.86	13.50		18.62	
1989	19.74	14.50		26.84	
1990	-1.53	8.00		-7.84	
1991	22.45	15.00		35.05	
1992	6.94	8.00		10.54	
1993	15.04	12.00		12.65	
1994	2.16	8.00		-1.76	
1995	20.78	12.50		29.92	
1996	24.42	21.00	24.42	21.06	
1997	20.42	18.70	20.42	28.87	
1998	15.43	14.10	13.63	21.45	
1999	24.89	11.33*	21.97	28.83	
2000	0.63	8.00	0.54	-3.24	
2001	-7.17	8.00	-6.66	-11.19	
2002	-8.93	8.00	-8.93	-21.51	
2003	23.79	8.00	22.00	34.68	
2004	13.80	8.00	13.27	13.00	12.77
2005	13.04	8.00	18.31*	8.29	12.80
2006	15.57	8.00	15.45	15.61	14.98
2007	10.22	7.97***	9.47	1.75	9.46
2008	-27.18	8.00	-27.18	-43.71	-26.75
2009	19.12	8.00	19.12	35.57	18.47
2010	12.44	8.00	12.44	15.17	12.13
2011	2.21	8.00	2.21	-7.80	2.15
2012	14.29	8.00	14.68	18.43	14.09
2013	15.76	8.00	15.62	25.74	15.59
2014****	7.29	7.75	7.25	4.30	7.09

^{*} The PERS Board originally credited these accounts at 20%. That allocation was later reduced to 11.33% to comply with subsequent court decisions and legislative findings.

In determining plan funding, the actuary must project future earnings of the PERS Fund. This is called the "assumed earnings rate." Historical assumed earnings rates are:

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- 5.0% for 1971 1974
- 7.0% for 1975 1978
- 7.5% for 1979 1988
- 8.0% for 1989 2013
- 7.75% beginning January 1, 2014.
- Average earnings credited to IAP accounts since 2004: 8.6%
- Average earnings credited to Tier Two accounts since 1996: 10%
- 44-year averages (1970-2013)
- Regular account earnings available for crediting: 10.5%.
- Earnings credited to Tier One regular accounts: 9.6%.
- Earnings credited to variable accounts: 11 7%

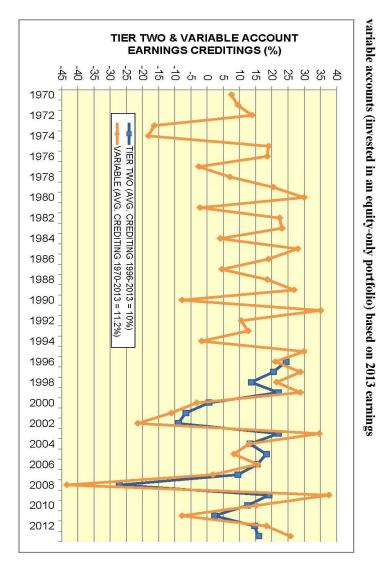


^{**} Tier Two regular account crediting, based solely on earnings, was 13.74%. However, the PERS Board deployed \$9 million from the Capital Preservation Reserve and \$17 million from the Contingency Reserve that was added to Tier Two earnings. As a result, Tier Two was credited with a total of 18.31%. The dollars allocated from the reserves were originally withheld from Tier Two regular account earnings.

^{***} After crediting Tier One accounts with the assumed rate of 8%, member attorney fees in the <u>Strunk</u> case were deducted by order of the Oregon Supreme Court resulting in an effective crediting rate of 7.97%.

^{****} Preliminary earnings crediting; final crediting set for March 2015

regular accounts based on 2013 earnings Regular account earnings available for crediting and actual distributions to Tier One member



INVESTMENT RETURNS & TIER ONE EARNINGS CREDITING (%) -20 -10 -TIER ONE CREDITING (AVG. CREDITING 1970-2013 = 9.6%) RETURNS (AVG. RETURN 1970-2013 = 10.5%)

Actual distributions to Tier Two member regular accounts and to Tier One/Tier Two member

PERS Oregon Public Employees Retirement System

2014 preliminary earnings crediting (\$ millions)

1.07/0	0,020.1	122.0	0,100.0	TAIL VICEOUTING
7 00%	6 526 1	422.8	6 103 3	IAP Accounts**
Various	5,8/6./	424.6	3,432.1	UAL Lump-Sum Payment Side Accts*
	1010	1011	2 120 1	4 1 1 1 2 2 2 1 1 1 1 1 1
7.10%	2,020.7	134.1	1,886.6	OPSRP Pension Program
7.25%	23,155.5	1,566.1	21,589.4	Employer Reserves
7.25%	874.3	59.1	815.2	Tier Two Member Regular Accts
7.25%	23,766.6	1,607.4	22,159.2	Benefits-In-Force (BIF) Reserve
1.29%	439.8	5.6	434.2	Tier One Rate Guarantee Reserve
7.75%	5,618.1	404.1	5,214.0	Tier One Member Regular Accts
N/A	\$651.1	***************************************	\$651.1	Contingency Reserve
2013 Rates	Balance After Crediting	2013 Crediting	Balance Before Crediting	Reserve/Account
W. St. 100 100 100 100 100	10.00			

and are not affected by Board reserving or crediting decisions. Side account earnings rates for lump sums on deposit vary depending on when the deposit was made within the calendar year

Contingency Reserve: This reserve can be used for any purpose the Board determines is appropriate so long as the use of the funds furthers the trust's purpose. It is funded in years that investment income exceeds the assumed rate (currently 7.75)

than the assumed rate (currently 7.75% percent). in years when the fund earns below the assumed rate, and to hold excess earnings from the years when the fund earns more Tier One Rate Guarantee Reserve: This reserve is used to credit the assumed rate on Tier One member regular accounts

and fund transfers from member accounts and employer reserves associated with retirements processed during a calendar Benefits-In-Force Reserve: This reserve is used to pay retired member's benefits and annuities. It is funded by earnings

System-wide average employer contribution rates excluding retiree health insurance (RHIA/RHIPA)

Valuation Year	Rate Effective	Average Rate With	Average Rate Without	Annualized
1975	Various	11.21	11.21	1,014.5
1977	Various	11.87	11.87	1,226.8
1979	Various	10.97	10.97	1,488.0
1982	Various	10.13	10.13	2,062.1
1985	Various	10.87	10.87	2,428.3
1987	Various	11.30	11.30	2,764.7
1989	Various	9.74	9.74	3,199.4
1991	Various	9.19	9.19	3,887.5
1993	Various	9.15	9.15	4,466.8
1995	Various	9.42	9.42	4,848.1
1997	Various	11.40	11.40	5,161.6
1999	7/1/01 - 6/30/03	10.74	10.74	5,676.6
2001	7/1/03 - 6/30/05	10.64	10.64	6,256.5
2003*	7/1/05 - 6/30/07	14.47*	18.89*	6,248.5
2005**	7/1/07 - 6/30/09	8.22	15.01	6,792.0
2007	7/1/09 - 6/30/11	4.73	12.42	7,721.8
2009	7/1/11 - 6/30/13	10.8	16.3	8,512.0
2011***	7/1/13 - 6/30/15	10.8	16.5	8,600.0
2013	7/1/15 - 6/30/17	10.6	17.5	8,699.0

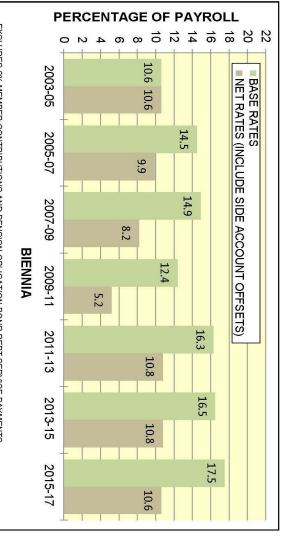
without employer side accounts. December 31, 2003 rates were phased-in. Actual rate paid averaged 10.58% with employer side accounts and 15.10%



Informational only; not affected by Board reserving or crediting decisions

^{**} Includes weighted average rate for Tier One/Tier Two and OPSRP beginning in 2005
*** Includes liability reduction and rate deferral from Senate Bill 822.

include side account offsets). System-wide average employer contribution rates as a percent of covered salary (net rates

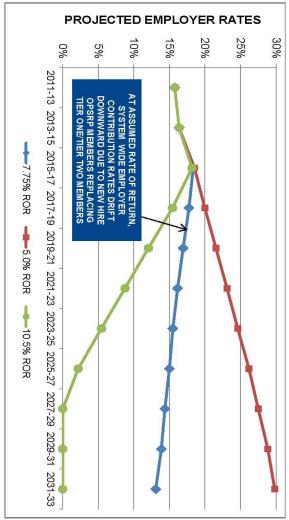


- EXCLUDES 6% MEMBER CONTRIBUTIONS AND PENSION OBLIGATION BOND DEBT SERVICE PAYMENTS INCLUDES TIER ONE, TIER TWO, AND OPSRP RATES FOR 2005-07 AND BEFORE ARE AS OF VALUATION DATE 2013-15 RATES REFLECT SENATE BILL 822 LIABILITY REDUCTIONS AND RATE DEFERRAL 2015-17 RATES REFLECT SENATE BILLS 822 AND 861 AND BOARD-ADOPTED CHANGES IN ACTUARIAL METHODS AND ACCUMENTATION.
- AND ASSUMPTIONS
 EXCLUDES RHIA/RHIPA COSTS

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Achieving the 7.75% assumed rate: effect on projected employer contribution rates

actual investment results through October 2013 plus or minus 2.75% of that rate is shown below; includes effects of Senate Bills 822 and 861 and The projected effect of consistently achieving the 7.75% assumed rate of return (ROR) compared to





Employer side accounts

attributed solely to the employer making the payment and is held separate from other employer liability (UAL), the money is placed in a special account called a "side account." This account is When an employer makes a lump-sum payment to prepay part or all of its pension unfunded actuarial

proceeds to PERS as a UAL lump-sum payment. A few employers funded their UAL lump-sum payments from other sources, such as savings from internal operations. Most employers with side accounts issued pension obligation bonds (POBs) and provided the bond

employer's side account exceeds the POB debt-service cost. However, if side account earnings are less costs than it receives in rate relief from its side account. than the interest rate being paid on the POBs, the employer may end up paying more in POB service accruing at a higher rate. This strategy can benefit the employer when the rate relief from the advantage is that the employer can borrow at a low interest rate and offset a UAL obligation that is There are potential advantages to side accounts, but there are also potential risks. The primary

the first year and \$1,000 annually thereafter, regardless of the size of the side account. Administrative costs for side accounts are limited by statute. PERS assesses \$2,500 per side account in

multiple side accounts: one city, one special district, two community colleges, and 30 school districts. As of December 31, 2013, 143 PERS employers had side accounts. Of these, 34 employers had

Employer Type	Number with Side Accounts
Independent Locals (not a member of a pool)	4
State Agencies (all, including OUS)	1.
Pooled Counties	8
Pooled Cities	9
Pooled Special Districts	8
Community Colleges	17
School Districts	96

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As of December 31, 2013, side account assets totaled \$5.9 billion.

\$435.2 \$3,095.4	Community Colleges School Districts
\$67.0 \$53.1	Pooled Counties Pooled Cities
\$93.7 \$2,089.6	Independent Locals (not a member of a pool) State Agencies
Balance (\$ millions)	Employer Type
ecember 31, 2013	Side Accounts by Employer Type as of December 31, 2013

every two years, taking into consideration how much of the side account has been used and what provide rate relief to the employer until the associated UAL is paid off. Side accounts are re-amortized earnings have been credited. The rate offset is then adjusted based on the re-amortization. providing the employer with a reduction of its employer rate. The goal is for the side account to Side accounts are generally amortized over the same time period as the employer's associated UAL,



Employer side accounts (continued)

2015 - 2017	2013 - 2015	2011 - 2013	2009 - 2011	2007 - 2009	2005 - 2007	Rate Period	Average Side Acc	
-6.38%	-5.26%	-5.11%	-7.20%	-6.71%	-4.54%	Average Rate Offset (% of Payroll)	Average Side Account Rate Offset 2005 -2015	

The State of Oregon issued \$2.1 billion in POBs in 2003 to fund a side account. As of December 31, 2013, the State's side account balance was \$2.1 billion and the principal balance on the State's POBs was \$1.9 billion.

Calendar Year	Side Accts (\$ millions)	Outstanding POBs (\$ millions)
2004	\$5,556	\$5,516
2005	\$6,667	\$6,202
2006	\$7,248	\$6,164
2007	\$7,658	\$6,249
2008	\$5,135	\$6,187
2009	\$5,490	\$6,109
2010	\$5,579	\$5,999
2011	\$5,225	\$5,896
2012	\$5,518	\$5,814
2013	\$5,924	\$5,520

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Side accounts are invested in the PERS Fund and receive the Fund's actual earnings or losses. These earnings or losses are posted to side accounts at the end of each year.

Average Side Acc	Average Side Account Earnings 2004 to 2013
Calendar Year	Average Earnings/Loss
2004	13.68%
2005	12.80%
2006	14.98%
2007	9.46%
2008	-26.75%
2009	18.47%
2010	12.13%
2011	2.15%
2012	14.09%
2013	15.59%



5. Economic Impact of PERS Monthly Benefit Payments in 2013

Oregon PERS monthly benefits contribute to Oregon's economy

supporting Oregon's workforce and economy. spent a significant portion of this money on goods and services in Oregon, which helped support local Oregon PERS paid approximately \$3.6 billion in total monthly benefits in 2013, with \$3.2 billion to earnings on contributions previously paid by members and public employers. These benefit recipients PERS benefit recipients living in Oregon. Funding of these benefits came primarily from investment businesses. These businesses then purchased goods, in part, from other local vendors, further

Annual PERS monthly benefits generate \$3.8 billion in total economic value to Oregon

economic multipliers provided by the U.S. Department of Commerce's Bureau of Economic Analysis). when the full financial impact of these dollars spent in local communities is considered (based upon \$3.2 billion in annual benefit payments multiply to \$3.8 billion in total economic value to Oregon PERS monthly benefits paid to Oregon residents have a significant impact on Oregon's economy. The

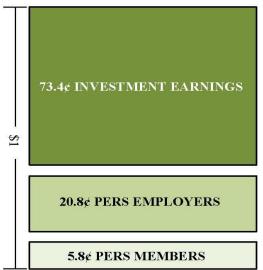
Oregon jobs, and add approximately \$1.07 billion in wages to Oregon's economy. The economic activity generated by PERS monthly benefit payments sustain an estimated 34,712

monthly benefits during 2013. Additionally, the state of Oregon collected an estimated \$159 million in income taxes on PERS retiree

contributions providing 5.8% and employer contributions providing 20.8%. Investment income provided 73.4% of total PERS' revenues from 1970-2013, with member

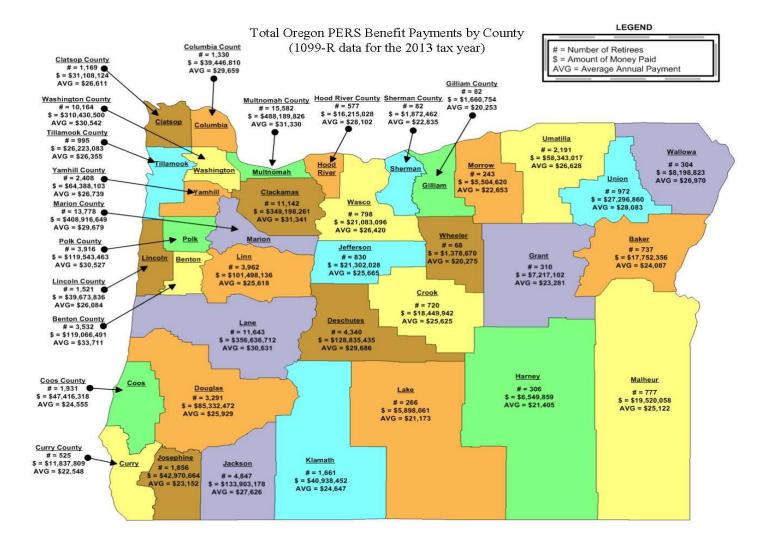
Money for PERS benefit payments comes from three sources (1970-2013)

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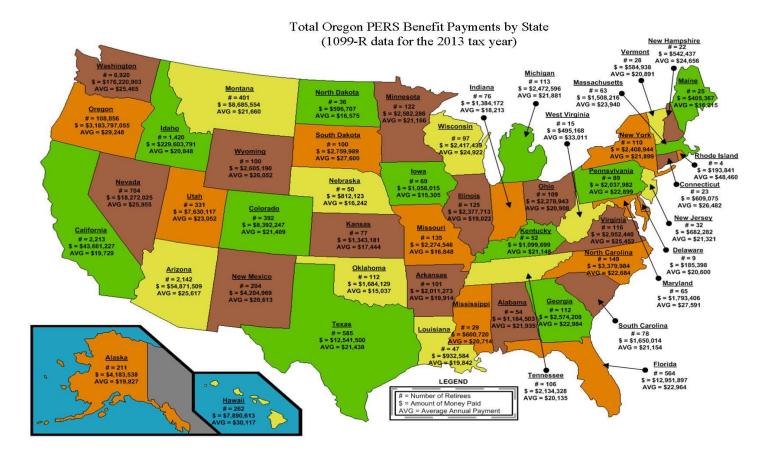














Pension System Terms

in accordance with the actuarial cost method Accrued liability: The net present value of projected future benefits allocated to service already completed

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

as: mortality, withdrawal, disablement, and retirement; rates of investment earnings and other relevant Actuarial assumptions: Assumptions as to the occurrence of future events affecting pension costs, such items. Actual experience will vary from assumption, and at times the variance will be substantial.

Ordinarily, the annual contribution to the plan comprises the normal cost and an amount for amortization of Actuarial cost method: A technique used by actuaries to allocate the amount and incidence of the annual the unfunded actuarial accrued liability. actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial liability (UAL).

side account rate offsets. combination of employer contributions and side account transfers. Base rates do not reflect the effects of Base employer contribution rates: Consists of the normal cost rate plus the UAL rate. This is paid by a

One, Tier Two, and OPSRP active members. This payroll is used to calculate UAL rates Combined valuation payroll: Projected payroll for the calendar year following the valuation date for Tier

Funded ratio or funded status: The actuarial value of assets expressed as a percentage of the accrued

contributions (6% of covered payroll) made on or after January 1, 2004. Individual Account Program (IAP): A defined contribution-like program that contains all member

Net employer contribution rates: The rate funded by employer contributions, consisting of the base employer contribution rate minus the effect of side account rate offsets.

normal cost divided by the applicable payroll is the normal cost rate. Normal cost: The annual cost assigned to the current year, under the actuarial cost method in use. The

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hired on or after August 29, 2003. Oregon Public Service Retirement Plan (OPSRP) Pension Program: The program covering members

contribution rates. The width of the rate collar is determined by the current contribution rate and funded Rate collar: A methodology that limits the maximum allowable period-to-period change in employer

any, with the remainder going into a side account. Side accounts are treated as pre-paid contributions. Side accounts: Side accounts are established for employers who make supplemental payments (a lumpaccounts are included in valuation assets for financial reporting purposes such as the reporting of funded excluded from valuation assets in determining contribution rates for pools and non-pooled employers, side individual employer that has a side account (net employer contribution rate). While side accounts are Then, an amortized portion of the side account is used to offset the contribution otherwise required for each Employer contribution rates are first determined excluding side accounts (base employer contribution rate). (SLGRP) employers, this supplemental payment is first applied toward the employer's transition liability, if sum payment in excess of the required employer contribution). For State and Local Government Rate Pool

(past and future) for current active and inactive members. Total liability: The net present value of all projected future benefits attributable to all anticipated service

Tier One: The pension program covering members hired before January 1, 1996.

employer contribution rates of assets. The UAL is amortized over a fixed period of time to determine the UAL rate component of Unfunded actuarial liability (UAL): The excess of the actuarial accrued liability over the actuarial value Tier Two: The pension program covering members hired from January 1, 1996 through August 28, 2003.

Resources

Customer Service (Monday-Friday, 8:30 a.m. to 5 p.m.): 888-320-7377

PERS website: www.Oregon.gov/pers

PERS Facts: http://www.oregon.gov/PERS/docs/general_information/pers_facts.pdf

Online Member Services (secure site for benefit estimates and more):

https://orion.pers.state.or.us/SelfService/viewPage?component=/mhome.jsp&dialog_id=DState_44&m

Actuarial/Financial information:

http://www.oregon.gov/pers/Pages/section/financial_reports/financials.aspx

PERS Board:

http://www.oregon.gov/pers/Pages/section/board information/board information index.aspx

Tier One/Tier Two

Ready to retire: http://www.oregon.gov/pers/mem/pages/section/form/tier_retire.aspx

A-Z Quick Answers: http://apps.pers.state.or.us/pers238/a-z_project_chapter_238.htm

Education sessions:

http://www.oregon.gov/pers/mem/pages/section/education_sessions/2014index.aspx

OPSRP

Ready to retire: http://www.oregon.gov/pers/mem/pages/section/form/OPSRP_retire.aspx

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A-Z Quick Answers: http://apps.pers.state.or.us/opsrp/a-z_project_chapter_238a.htm

Education sessions:

http://www.oregon.gov/pers/mem/pages/section/education_sessions/early_career/2014_opsrp_ec_sessi

Retired members

view/request 1099Rs): Online Member Services (secure site to change your address, see benefit payment information, and

https://orion.pers.state.or.us/SelfService/viewPage?component=/mhome.jsp&dialog_id=DState_44&m

A-Z Quick Answers (Tier One/Tier Two retirees): http://apps.pers.state.or.us/238retirees/Default.htm

A-Z Quick Answers (OPSRP retirees):

http://apps.pers.state.or.us/opsrpretirees/a-z project chapter 238a retirees.htm

Working after retirement for a PERS-covered employer:

http://www.oregon.gov/pers/RET/pages/section/work after retirement/work after.aspx

PERS Health Insurance Program:

http://www.oregon.gov/pers/RET/Pages/section/health_insurance_program/hip_info.aspx

