

# PERS: By The Numbers

February 2013

<b>Topic</b>	<b>Page(s)</b>
System Demographics.....	2
System Benefits.....	3-9
System Funding Level and Status.....	10-12
System Revenue.....	13-17
Economic Benefit of PERS.....	18-20

**Public Employees Retirement System**  
11410 SW 68<sup>th</sup> Parkway  
Tigard, OR 97223

503-598-7377 or toll free 888-320-7377  
<http://oregon.gov/PERS>

# 1. System Demographics (as of December 31, 2011)

**PERS employers:** Approximately 900, including all state agencies, universities, and community colleges; all school districts; and almost all cities, counties, and other local government units.

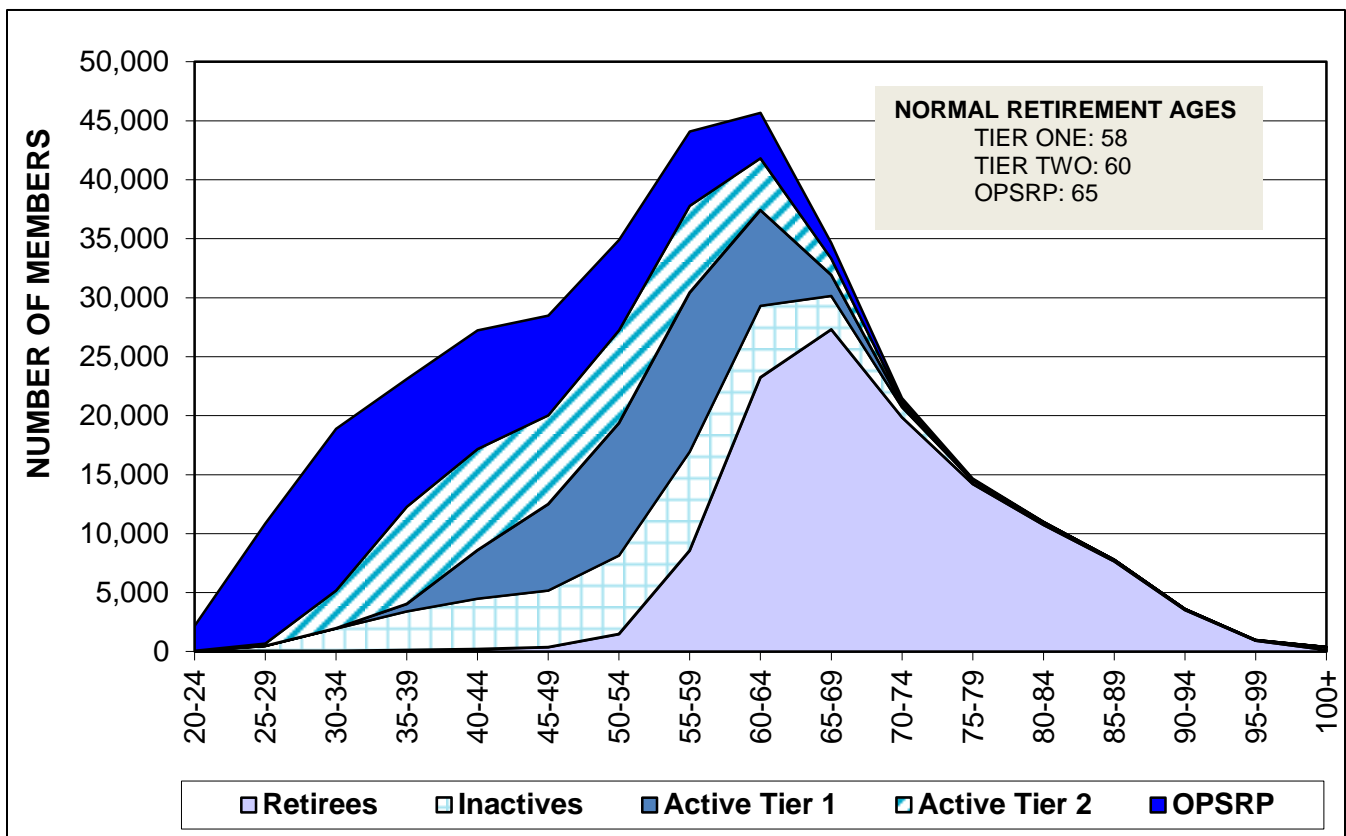
**PERS members:** approximately 95% of all public employees in Oregon.

## Membership by category

		State Govt.	Local Govt.	School Districts	Total
<b>Tier One</b>	Active	12,866	15,368	18,648	46,882
	Inactive	5,222	6,941	8,089	20,252
<b>Tier Two</b>	Active	12,757	16,640	19,733	49,130
	Inactive	3,226	6,049	6,914	16,189
<b>OPSRP</b>	Active	19,751	25,122	30,087	74,960
	Inactive	1,056	1,345	1,665	4,066
<b>Sub-total</b>	Active	45,374	57,130	68,468	<b>170,972</b>
	Inactive	9,504	14,335	16,668	<b>40,507</b>
<b>Retirees*</b>		28,310	31,383	58,715	<b>118,408</b>
<b>TOTAL</b>					<b>329,887</b>

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

## Member age distribution (as of December 31, 2011)



## 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.

	<b>Tier One</b>	<b>Tier Two</b>	<b>OPSRP Pension</b>	<b>IAP</b>
Normal retirement age	58 (or 30 yrs) P&F = age 55 or 50 w/25 yrs	60 (or 30 yrs) P&F = age 55 or 50 w/25 yrs	65 (58 w/30 yrs) P&F = age 60 or 53 w/25 yrs	55
Early retirement	55 (50 for P&F)	55 (50 for P&F)	55, if vested (50 for P&F)	55
Regular account earnings	Guaranteed assumed rate annually (currently 8%)	No guarantee; market returns	N/A; no member account	No guarantee; market returns
Variable account earnings	Market returns on 100% global equity portfolio	Market returns on 100% global equity portfolio	N/A; no member account	N/A
Retirement calculation methods	Money Match, Full Formula, or Formula + Annuity (if eligible)	Money Match or Full Formula	Formula	Six account distribution options
Full Formula benefit factor	1.67% general; 2.00% P&F	1.67% general; 2.00% P&F	1.50% general; 1.80% P&F	N/A
Formula + Annuity benefit factor	1.00% general; 1.35% P&F	N/A	N/A	N/A
Oregon state income tax remedy	If eligible, higher of 9.89% on service time before Oct. 1, 1991 or 4.0% or less based on total service time	No tax remedy provided	No tax remedy provided	No tax remedy provided
Lump-sum vacation payout				
Included in covered salary (6%)	Yes	Yes	No	Yes for Tier One and Tier Two; no for OPSRP
.....				
Included in FAS	Yes	No	No	N/A
Unused sick leave included in FAS	Yes, if the employer participates in the sick leave program	Yes, if the employer participates in the sick leave program	No	N/A
6% "pickup" included in FAS	Yes	Yes	No	N/A
Vesting	Contributions in each of 5 yrs or active member at age 50	Contributions in each of 5 yrs or active member at age 50	5 yrs qualifying service or normal retirement age	Immediate
2% maximum annual COLA after retirement	Can retire through July 1 and receive maximum COLA for the year	Can retire through July 1 and receive maximum COLA for the year	COLA prorated in year of retirement based on retirement date	N/A; no COLA provided

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 benefits are based only on a formula method.

## **2. System Benefits (continued)**

### **Summary of findings from PERS' Replacement Ratio Study for 2011**

The Replacement Ratio Study population of 75,179 retirements was drawn from 92,456 retirements from January 1990 through December 2011, and covers retired members who selected comparable monthly benefit options. The techniques used in the 2011 PERS Replacement Ratio Study are consistent with the techniques used in previous studies.

The calculations do not include any federal Social Security benefits that a retiree may be eligible for based on the retiree's work history. The calculations also do not include the effects of the post-retirement *Strunk/Eugene* benefit adjustments, which generally impacted retirements occurring in 2000-2004 and would reduce the reported replacement ratios for those periods by several percentage points.

**Average age at retirement:** 59 years old

**Average years of service at retirement:** 22 years of service

#### **Average monthly retirement benefit**

- For all retirees from 1990-2011, the average monthly retirement benefit at time of retirement was \$2,160 per month, or about \$25,920 annually
- For those retirees in the most recent year (2011), the average monthly retirement benefit was \$2,672 per month, or about \$32,064 annually

#### **Average public employee salaries at retirement**

- For all retirees from 1990-2011, the final salary at retirement averaged \$45,425 annually
- For 2011 retirees, the final salary at retirement averaged \$62,108 annually

#### **Average salary replacement ratio (see chart on following page)**

- For all retirees from 1990-2011, the average annual retirement benefit equaled 54% of final salary at the time of retirement
- For 2011 retirees, the average annual retirement benefit equaled 50% of final salary
- For all retirees from 1990-2011, there were 7.6% who received annual benefits more than 100% of final salary. The average years of service for this group was 31 years
- For 2011 retirees, there were 5.3% 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)**

- From 1990-2011, the average retirement benefit for 30-year members equaled 80% of final salary and the average monthly benefit was \$3,468 per month
- The average retirement benefit for 30-year members peaked at 100% of final salary in 2000 and their average monthly benefit was \$4,200 per month
- For 2011 only, the average retirement benefit for 30-year members equaled 74% of final salary and the average monthly benefit was \$3,990 per month
- 11.49% of retirees from 1990-2011 had 30 years of service
- 10.35% of retirees in 2011 had 30 years of service

## 2. System Benefits (continued)

### Summary of findings from PERS' Replacement Ratio Study for 2011 (continued)

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

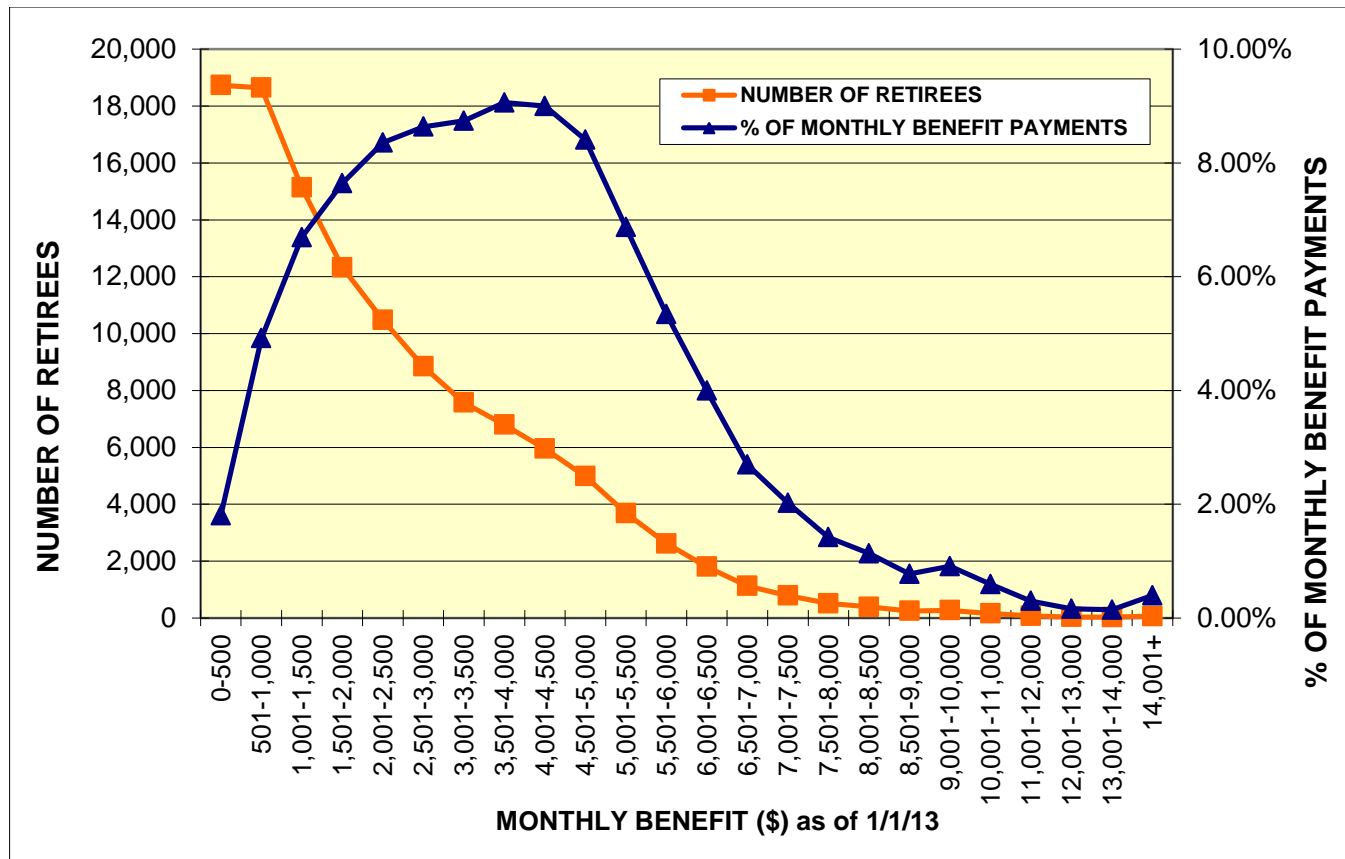
Calendar Year	Retirees with 30 Years of Service		All Retirees in Study		
	# of Retirees in Study*	Average Replacement Ratio Based on FS	# of Retirees in Study*	Average Replacement Ratio Based on FS	% of Retirees Receiving >100% of FS
1990	146	61%	1,866	44%	.0%
1991	217	61%	2,377	45%	.1%
1992	205	67%	2,432	48%	.5%
1993	289	66%	2,744	48%	.5%
1994	302	67%	3,298	49%	.3%
1995	304	66%	2,827	47%	1.0%
1996	281	70%	2,477	49%	1.4%
1997	295	83%	3,107	57%	7.5%
1998	465	89%	4,567	65%	12.0%
1999	548	93%	4,644	65%	14.0%
2000	273	100%	2,112	63%	15.8%
2001	391	99%	3,146	66%	16.5%
2002	670	96%	4,605	68%	17.4%
2003	942	93%	7,631	66%	14.4%
2004	471	84%	3,259	55%	5.5%
2005	393	84%	2,548	51%	4.4%
2006	347	83%	2,952	50%	4.3%
2007	372	84%	3,226	51%	4.9%
2008	417	80%	3,480	52%	5.0%
2009	432	77%	3,881	53%	6.2%
2010	414	75%	3,516	48%	4.3%
2011	464	74%	4,484	50%	5.3%
<b>Total/Avg</b>	<b>8,639</b>	<b>80%</b>	<b>75,179</b>	<b>54%</b>	<b>6.4%</b>

\* Includes monthly benefit payments for members retiring from active service within the preceding 12 months. Benefits related to inactive, lump sum, judge and legislator retirements are excluded.

## 2. System Benefits (continued)

### Monthly benefit payment amounts as of January 1, 2013

Based on 121,276 monthly benefit payments (includes alternate payees and survivors; excludes lump sum and unit payments) totaling \$281.2 million for the month.



Monthly Benefit (\$)	Number of Retirees	Percent of Benefits Paid	Monthly Benefit (\$)	Number of Retirees	Percent of Benefits Paid
0 - 500	18,734	15.45%	3,001 - 3,500	7,571	6.24%
501 - 1,000	18,645	15.37%	3,501 - 4,000	6,799	5.61%
1,001 - 1,500	15,135	12.48%	4,001 - 4,500	5,955	4.91%
1,501 - 2,000	12,328	10.17%	4,501 - 5,000	4,986	4.11%
2,001 - 2,500	10,478	8.64%	5,001 - 5,500	3,686	3.04%
2,501 - 3,000	8,846	7.29%	5,501 - 6,000	2,617	2.16%
<b>Subtotal</b>	<b>84,166</b>		<b>Subtotal</b>	<b>31,614</b>	
<b>% of total</b>	<b>69.40%</b>	<b>38.04%</b>	<b>% of total</b>	<b>26.07%</b>	<b>47.41%</b>

Monthly Benefit (\$)	Number of Retirees	Percent of Benefits Paid	Monthly Benefit (\$)	Number of Retirees	Percent of Benefits Paid
6,001 - 6,500	1,801	1.49%	9,001 - 10,000	270	0.22%
6,501 - 7,000	1,125	0.93%	10,001 - 11,000	160	0.13%
7,001 - 7,500	786	0.65%	11,001 - 12,000	73	0.06%
7,501 - 8,000	515	0.42%	12,001 - 13,000	36	0.03%
8,001 - 8,500	387	0.32%	13,001 - 14,000	30	0.02%
8,501 - 9,000	249	0.21%	14,001 and up	64	0.05%
<b>Subtotal</b>	<b>4,863</b>		<b>Subtotal</b>	<b>633</b>	
<b>% of total</b>	<b>4.01%</b>	<b>12.04%</b>	<b>% of total</b>	<b>0.52%</b>	<b>2.50%</b>

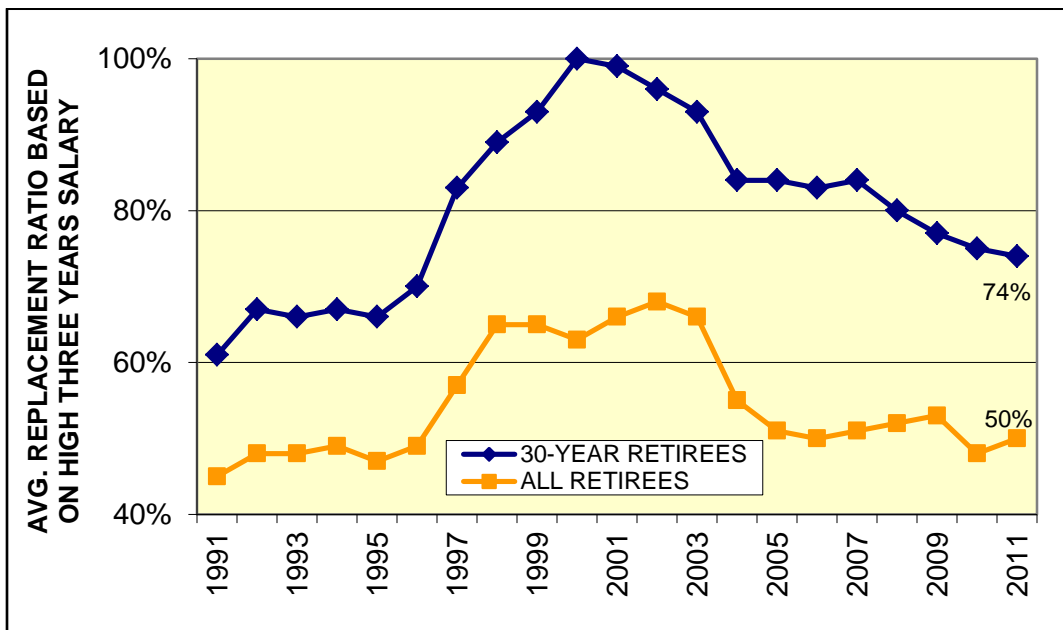
- Average annual benefit: \$27,820
- Median annual benefit: \$21,825

*System Benefits (continued)*

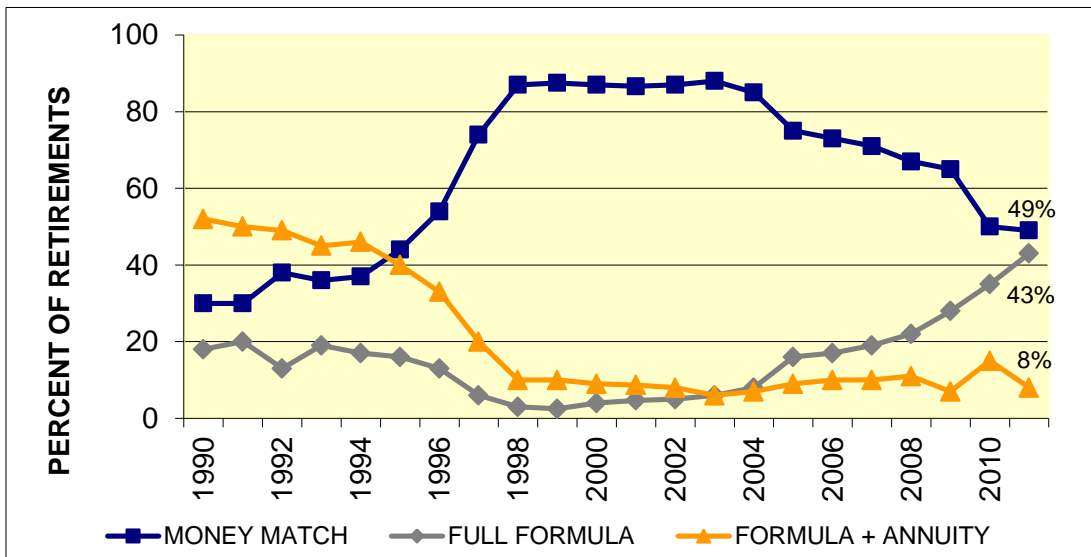
**Retirees with Hours Reported Working in a PERS-Covered Position in 2012**

Hours	Employer Group			Total
	State	Local Govt	K-12	
< 200	388	1,202	2,913	4,503
200 - 400	270	559	1,290	2,119
401 - 600	211	408	830	1,449
601 - 800	169	317	552	1,038
801 - 1039	294	467	576	1,337
> 1039	141	266	203	610
<b>Total</b>	<b>1,473</b>	<b>3,219</b>	<b>6,364</b>	<b>11,056</b>

**Replacement ratio trends**



**Trend in retirement calculation methods**



## 2. System Benefits (continued)

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

Year	Total IAP Account Balance After Earnings Crediting (\$M)	# of Members	Average IAP Account Balance (\$)	# of Distributions to Retirees, Withdrawals, 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

### Tier One/Tier Two benefit payment options selected in calendar year 2011

Option (definitions below)	Quantity	Percent
1	2,026	26.12
Refund Annuity	633	8.16
15-Year Certain	400	5.16
2	1,353	17.44
2A	1,474	19.00
3	226	2.91
3A	466	6.00
Lump Sum 1	166	2.14
Lump Sum 2	83	1.07
Lump Sum 2A	87	1.12
Lump Sum 3	3	0.00
Lump Sum 3A	29	0.40
Total Lump Sum	688	8.90
AS refund	122	1.57
<b>Total</b>	<b>7,756</b>	<b>100%</b>

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

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

**15-Year Certain Option:** This option is paid for the member's lifetime. If the member dies before receiving 180 monthly 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.

**Survivorship Options (Option 2, Option 2A, Option 3, and Option 3A):** Under any of the survivorship options, the member may name only one beneficiary who must be a living person. The monthly benefit payment is paid to 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 member; under Option 3 and 3A, at ½ the base amount of the member).

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

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

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



## 2. System Benefits (continued)

### PERS Retiree Health Insurance Program information

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

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

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

#### Program Enrollment (as of September 2012)

<b>Medical Plans (four plans offered)</b>	<b>Totals</b>	<b>Medicare</b>	<b>Non-Medicare</b>
Covered lives	55,922	53,268	2,654
Retirees (or surviving spouses)	45,158	43,572	1,586
Spouses/Dependents	10,764	9,696	1,068
Average age of enrolled retirees	74	75	57
<b>Dental Plans (two plans offered)</b>	32,893		
<b>Long Term Care Plan</b>	1,968		

#### Statutory Health Insurance Premium Subsidies

Retirees receiving RHIA (trust fund held by PERS*)	41,817
Retirees receiving RHIPA (trust fund held by PERS**)	1,165
RHIA monthly payment total	\$2,509,020
RHIPA monthly payment total	\$ 331,211

Employer rates (effective July 1, 2011):

RHIA: 0.59%

RHIPA (state only): 0.16%

Unfunded actuarial liabilities (as of December 31, 2011): \$222 million (RHIA); \$30 million (RHIPA)

\* 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 \$158.08 (8 years) to \$316.16 (30+ years) per month for Plan Year 2012.

### 3. System Funding Level and Status

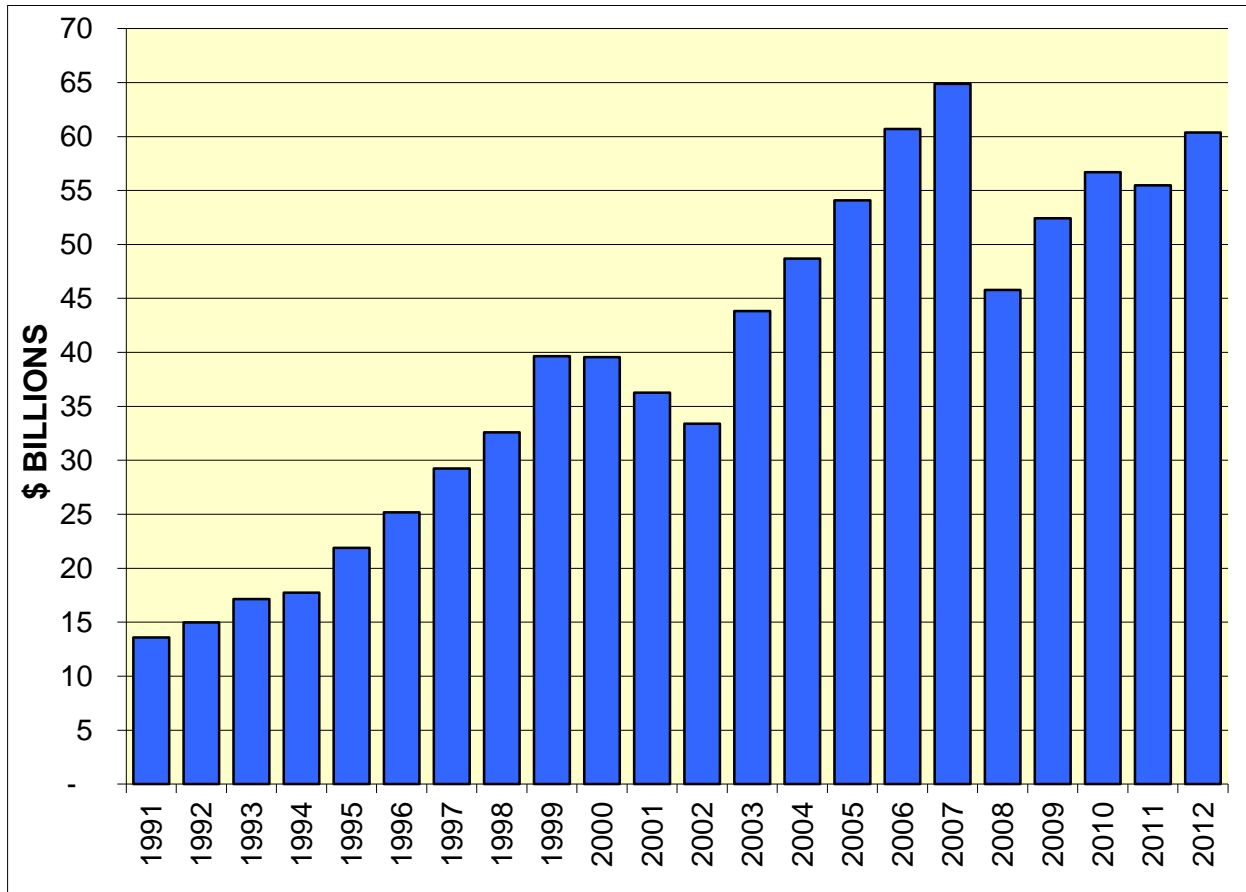
#### Funded status as of December 31, 2012

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

As of December 31, 2012, PERS was estimated to be 87% funded (including employer side accounts). Side accounts hold deposits of pension obligation bond proceeds and other advance lump-sum payments.

As of December 31, 2012, the unfunded actuarial liability (UAL) (when including side accounts) was estimated to be \$8.5 billion. The UAL fluctuates based on various factors including investment returns, Board reserving policies, statutory plan design changes, and litigation outcomes.

#### PERS fund value (calendar year ending December 31, 2012)



### 3. System Funding Level and Status (continued)

#### Unfunded actuarial liability history and funded ratio for Tier One/Tier Two\*

Valuation** Date	With Side Accounts*** (starting in 2002)		Without Side Accounts	
	UAL (\$M)	Funded Ratio (%)	UAL (\$M)	Funded Ratio (%)
1993	1,449	92.4	1,449	92.4
1995	2,291	90.2	2,291	90.2
1997	2,556	91.9	2,556	91.9
1999	943	97.7	943	97.7
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 (estimated)	8,500	87.0	14,000	78.0

\* Includes RHIA/RHIPA.

\*\* 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.

\*\*\* The official PERS valuation UAL and funded ratio are based on accepted actuarial standards and methodologies. These methodologies are subject to review and revision every two years. A negative UAL amount represents a surplus.

\*\*\*\* 2010 and after includes the OPSRP Pension Program.

#### Unfunded actuarial liability history and funded ratio for the OPSRP Pension Program\*

Valuation Date	UAL (\$M)	Funded Ratio (%)
2005	-1.2	102.3
2006	-36.0	131.3
2007	-72.1	135.5
2008	66.3	80.3
2009	90.0	83.2

\* The official PERS valuation UAL and funded ratio are based on accepted actuarial standards and methodologies. These methodologies are subject to review and revision every two years. A negative UAL amount represents a surplus. The OPSRP Pension Program UAL for 2010 and after is reported with Tier One/Tier Two.

### 3. System Funding Level and Status (continued)

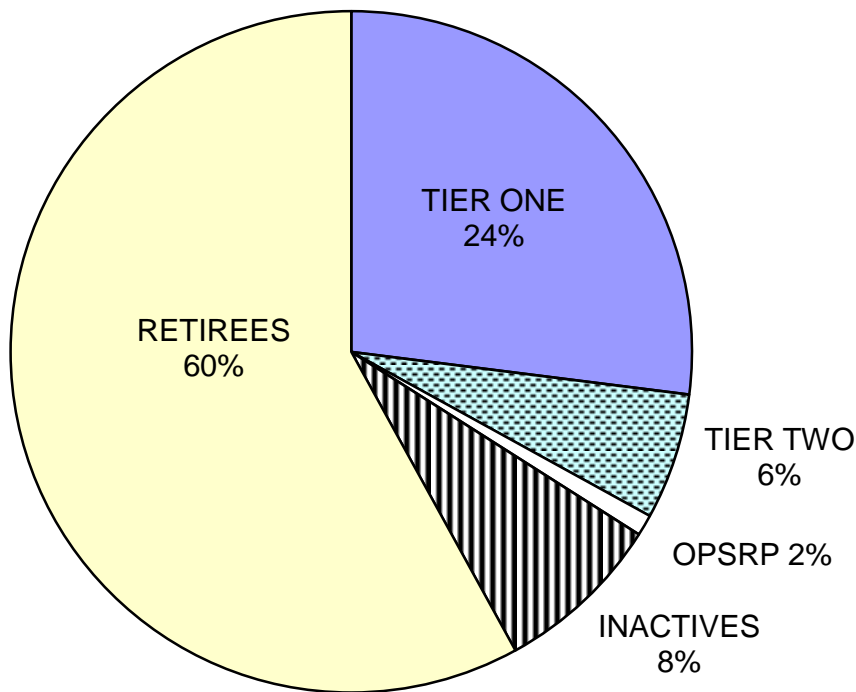
#### Actuarial accrued liabilities

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%. Liabilities grew about 3.4% per year in 2010 and 2011.

Approximately 68% of PERS' total accrued liability is for members who are no longer working in PERS-covered employment (retirees and inactives). As a result, approximately 40% of an employer's contribution rate is associated with these groups.

Tier One active members represent 24% of the accrued liabilities. More than 56% of Tier One active member liability is for members over age 55, and approximately 80% of the Tier One active member liability is for members over age 50. Because the average retirement age is 59, a large shift in liabilities between active and retired is anticipated in the near future.

More than 67,000 PERS members are currently eligible to retire based on age or service.



## 4. System Revenue

### Member and employer contributions and investment income for calendar years

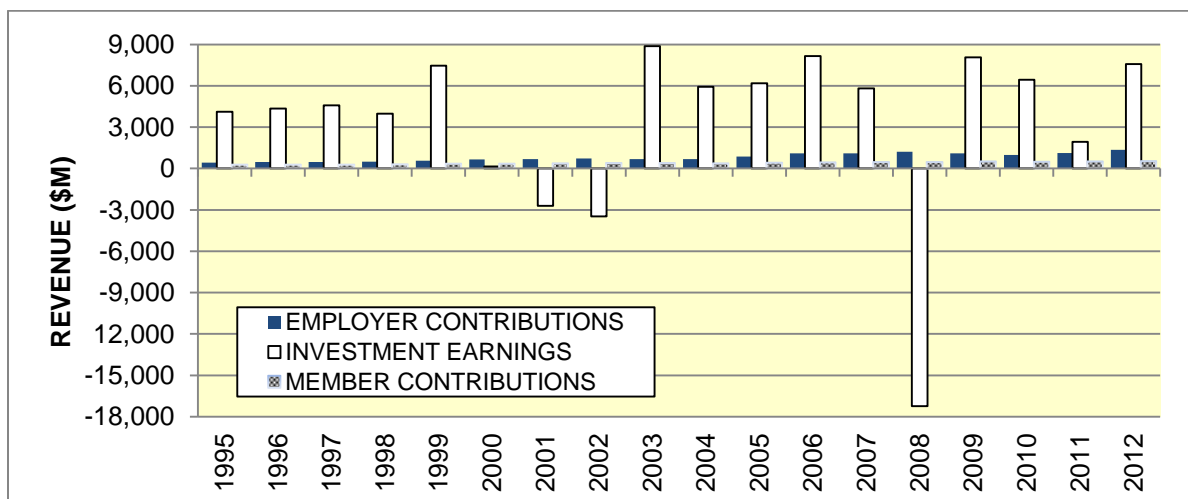
Year	Member Contributions (\$M)	Employer Contributions (\$M)	Amortization of Employer Side Accounts (\$M)*	Total Employer (\$M)	Net Investment & Other Income (\$M)
1995	287	427	N/A	427	4,110
1996	296	463	N/A	463	4,358
1997	291	473	N/A	473	4,582
1998	318	488	N/A	488	3,978
1999	347	577	N/A	577	7,463
2000	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***	533	923	443	1,366	7,573

\* PERS' methodology to track amortization of side accounts began in 2002. Side accounts hold deposits of pension obligation bond proceeds and other lump-sum payments.

\*\* 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.

\*\*\* 2012 is estimated.

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



#### 4. System Revenue (continued)

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

Year	Earnings	Distributions (%)			
	Regular Account (%)	Tier One	Tier 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	12.7
2005	13.04	8.00	18.31**	8.29	12.8
2006	15.57	8.00	15.45	15.61	14.9
2007	10.22	7.97***	9.47	1.75	9.46
2008	-27.18	8.00	-27.18	-43.71	-
2009	19.12	8.00	19.12	35.57	18.4
2010	12.44	8.00	12.44	15.17	12.1
2011	2.21	8.00	2.21	-7.80	2.15
2012****	14.29	8.00	14.75	18.34	14.1

\* 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.

\*\* 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 *Strunk* case were deducted by order of the Oregon Supreme Court resulting in an effective crediting rate of 7.97%.

\*\*\*\* 2012 data is preliminary.

■ 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:

- 5.0% for 1971 - 1974
- 7.0% for 1975 - 1978
- 7.5% for 1979 – 1988
- 8.0% for 1989 – current.

■ Earnings credited to IAP accounts since 2004: 7.8%.

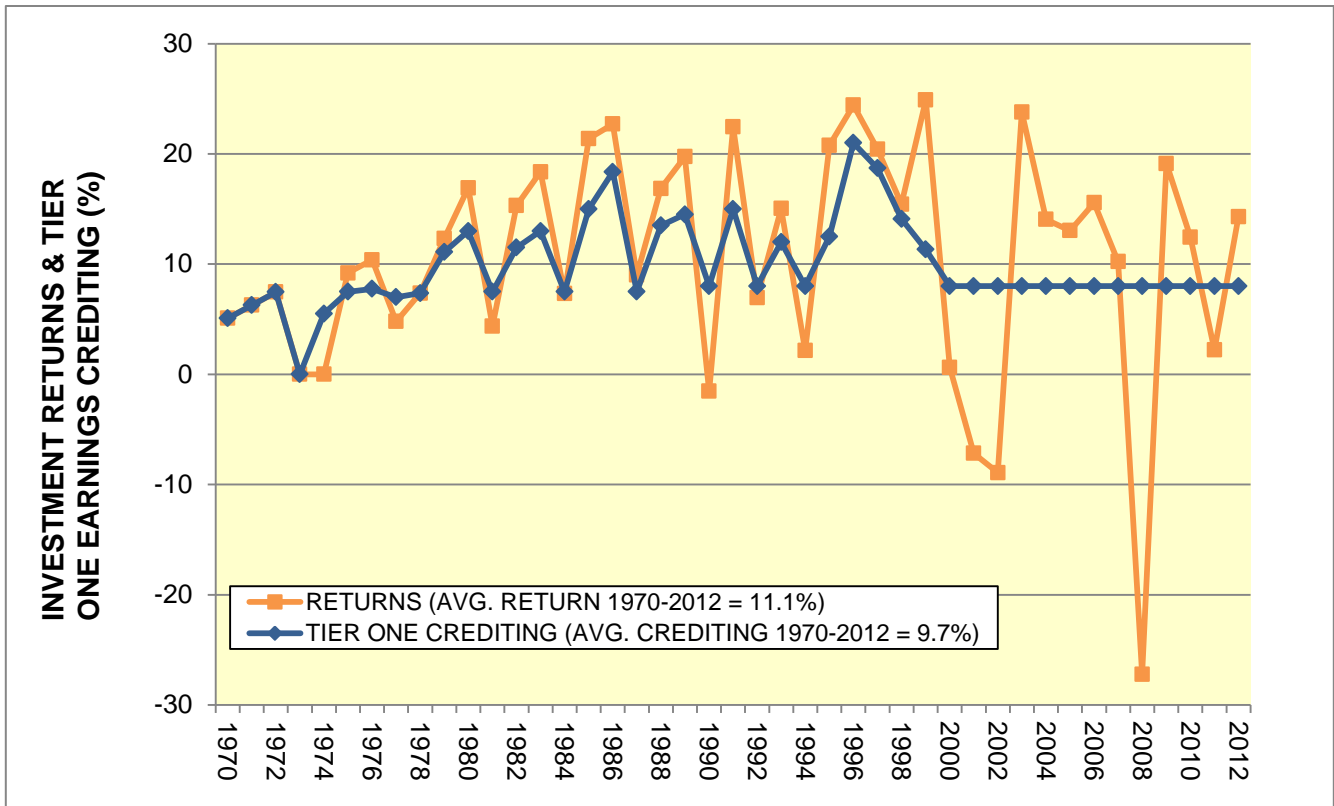
■ Earnings credited to Tier Two accounts since 1996: 9.7%.

43-year averages (1970-2012)

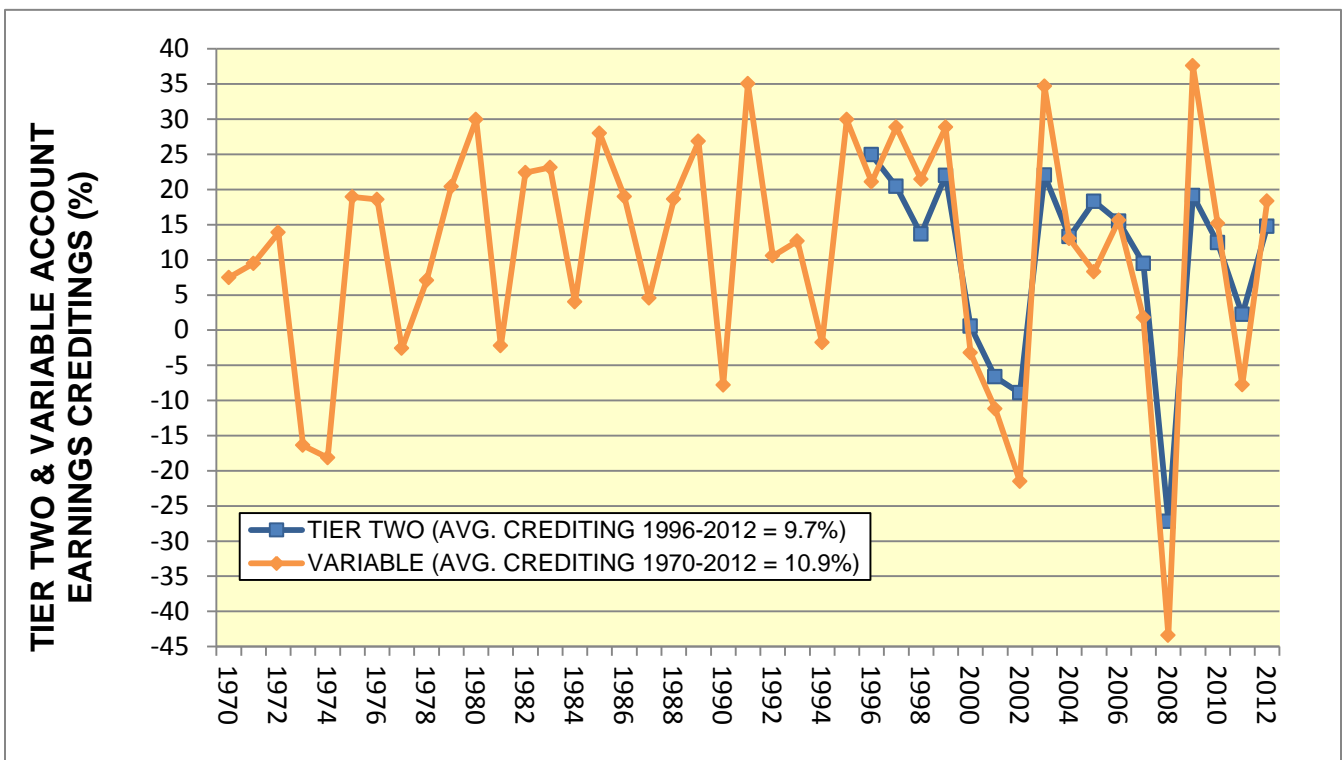
- Regular account earnings available for crediting: 10.4%.
- Earnings credited to Tier One regular accounts: 9.7%.
- Earnings credited to variable accounts: 10.9%.

#### 4. System Revenue (continued)

Regular account earnings available for crediting and actual distributions to Tier One member regular accounts (2012 is preliminary)



Actual distributions to Tier Two member regular accounts and to Tier One and Tier Two member variable accounts (invested in an equity only portfolio) (2012 is preliminary)



#### 4. System Revenue (continued)

##### Preliminary 2012 earnings crediting (\$ millions)

Reserve/Account	Balance Before Crediting	2012 Crediting	Balance After Crediting	2012 Rates
Contingency Reserve	\$533.3	\$70.4	\$603.7	N/A
Tier One Member Regular Accts	5,961.8	476.9	6,438.7	8.00%
Tier One Rate Guarantee Reserve	(345.3)	325.5	(19.8)	N/A
Benefits-In-Force (BIF) Reserve	19,160.7	2,739.4	21,900.1	14.30%
Tier Two Member Regular Accts	666.2	97.2	763.4	14.59%
Employer Reserves	16,744.9	2,391.9	19,136.8	14.28%
OPSRP Pension Program	1,040.0	144.3	1,184.9	13.87%
UAL Lump-Sum Payment Side Accts*	4,782.3	731.3	5,513.6	Various
IAP Accounts**	4,250.8	595.7	4,846.5	14.19%
<b>Regular Account Total</b>	<b>\$52,795.3</b>	<b>\$7,572.6</b>	<b>\$60,367.9</b>	

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

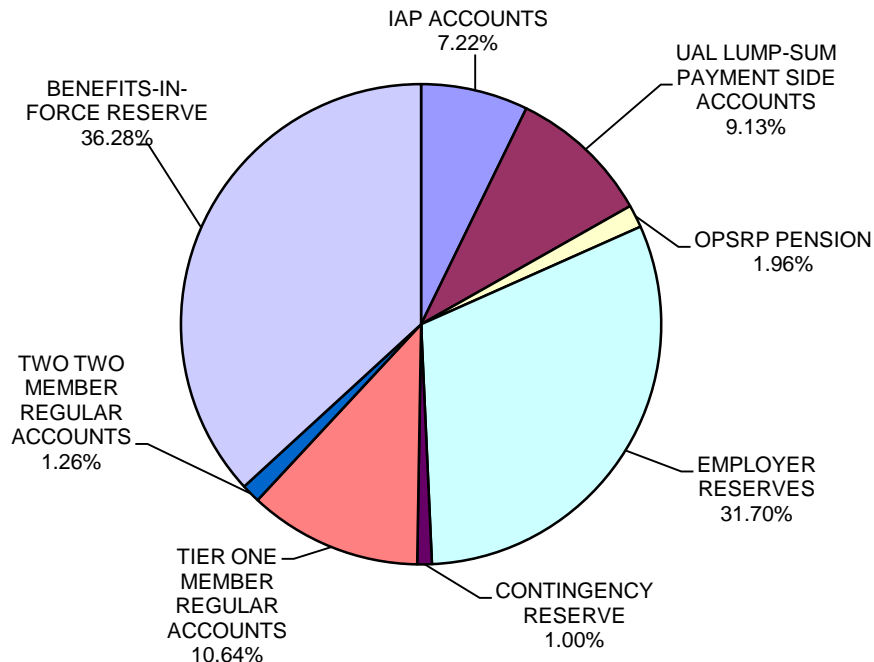
\*\* Informational only; not affected by Board reserving or crediting decisions.

**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 8 percent).

**Tier One Rate Guarantee Reserve:** This reserve is used to credit the assumed rate on Tier One member regular accounts in years when the fund earns below 8 percent, and to hold excess earnings from the years when the fund earns more than 8 percent.

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

##### Percent of total Regular Account after 2012 earnings crediting (preliminary)





#### 4. System Revenue (continued)

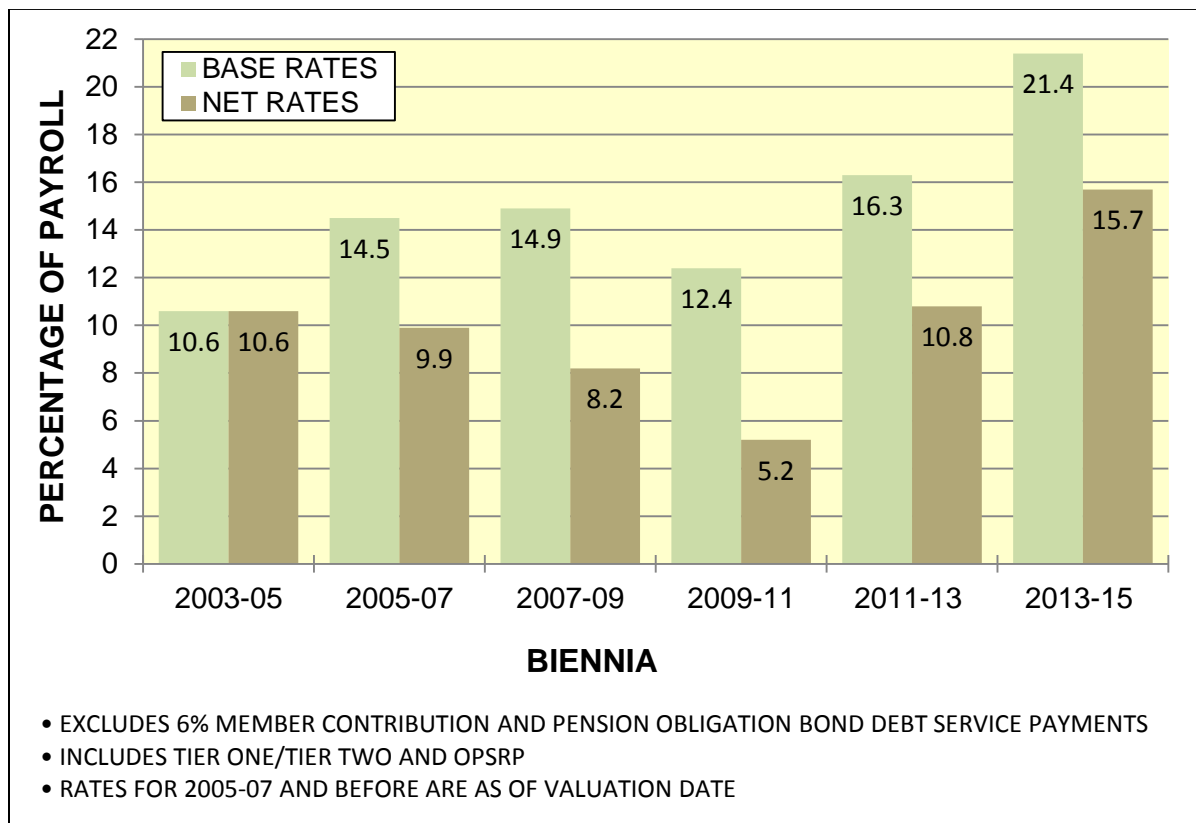
##### System-wide average employer contribution rates excluding retiree health insurance (RHIA/RHIPA)

Valuation Year	Rate Effective Dates	Average Rate With Side Accounts (%)	Average Rate Without Side Accounts (%)	Annualized Salary (\$M)
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	15.7	21.4	8,600.0

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

\*\* Includes weighted average rate for Tier One/Tier Two and OPSRP beginning in 2005.

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



## ***5. Economic Impact of PERS Benefit Payments***

### **PERS benefits contribute to Oregon's economy**

Oregon PERS paid approximately \$3.2 billion in total monthly benefits in 2011, with \$2.8 billion to PERS benefit recipients living in Oregon. Funding of these benefits came primarily from investment earnings on contributions previously paid by members and public employers. These benefit recipients spent a significant portion of this money on goods and services in Oregon, which helped support local businesses. These businesses then purchased goods, in part, from other local vendors, further supporting Oregon's workforce and economy.

### **Annual PERS benefits generate \$3.3 billion in total economic value to Oregon**

PERS benefits paid to Oregon residents have a significant impact on Oregon's economy. The \$2.8 billion in annual benefit payments multiply to \$3.3 billion in total economic value to Oregon when the full financial impact of these dollars spent in local communities is considered (based upon economic multipliers provided by the U.S. Department of Commerce's Bureau of Economic Analysis).

The economic activity generated by PERS benefit payments sustain an estimated 29,725 Oregon jobs, and add approximately \$906 million in wages to Oregon's economy.

Additionally, the state of Oregon collected an estimated \$136 million in income taxes on PERS retiree benefits during 2011.

Investment income provided 73% of total PERS' revenues from 1970-2012, with member contributions providing 6% and employer contributions providing 21%.



## 5. Economic Benefit of PERS (continued)

### PERS benefit payments by state (2011 calendar year)

