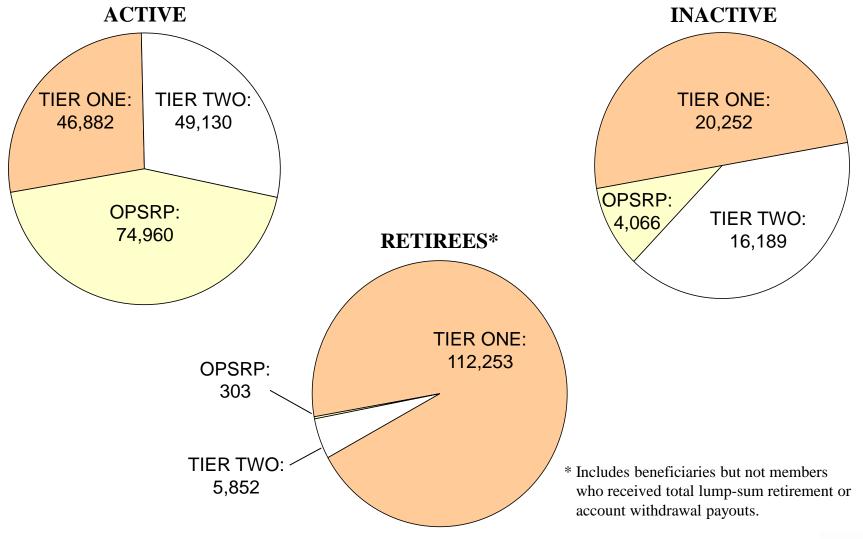
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# PERS Membership by Category (as of December 31, 2011)



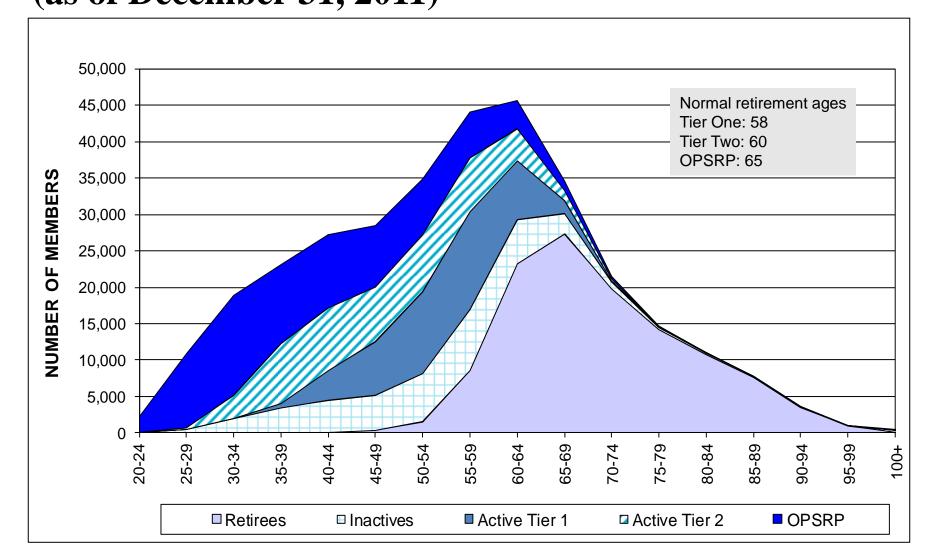
# PERS Membership by Employer Group (as of December 31, 2011)

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

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



# Member Age Distribution (as of December 31, 2011)





### Members Eligible to Retire\* (as of December 2012)

Total Members: 207,293	Tier One		Tier Two		OPSRP		Eligible to Retire by Actuarial Group	% of Members Eligible to Retire
	Actives	Inactives	Actives	Inactives	Actives	Inactives		
State	6,889	3,239	3,825	894	3,228	306	18,381	35.18
School Districts	9,246	3,256	5,473	1,221	5,038	561	24,795	31.00
Local Govt.	7,238	2,771	4,103	1,171	3,593	386	19,262	30.28
Judges	40	9	29	1			79	39.50
Community Colleges	1,327	518	1,009	291	1,206	154	4,505	40.07
Eligible to retire	24,740	9,793	14,439	3,578	13,065	1,407	67,022	32.33%
TOTAL	34,	,533	18,017		14,472		67,022	32.33%

<sup>\*</sup> Reflects the number of members eligible to retire (including those eligible for reduced benefits) based on: age 55 or 30 years of service for general service members; age 50 or 25 years of service for police & firefighters; and age 60 for judge members.



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

	E				
Hours	State and Local University Government		School Districts	Total	
< 200	388	1,202	2,913	4,503	
201 - 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	
Total	1,473	3,219	6,364	11,056	



#### **Benefit Program Comparisons**

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.

	Tier One	Tier Two	OPSRP Pension	IAP
Normal retirement	58 (or 30 yrs)	60 (or 30 yrs)	65 (58 w/30 yrs)	55
age	P&F = age 55 or 50 w/25 yrs	P&F = age 55 or 50 w/25 yrs	P&F = age 60 or 53 w/25 yrs	
Early retirement age	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

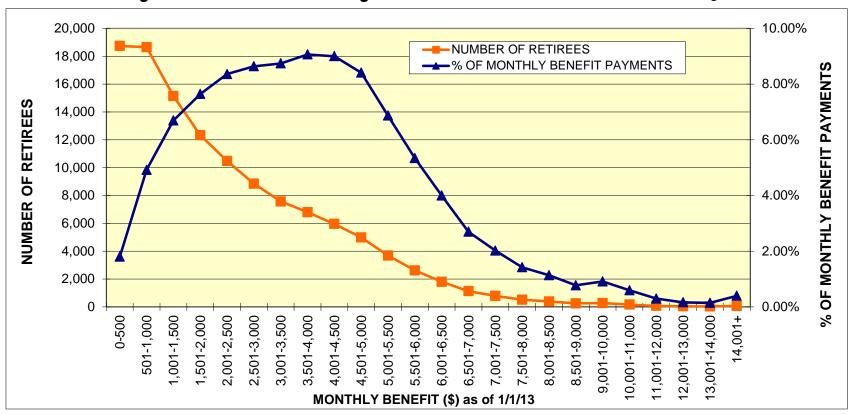


#### **Benefit Program Comparisons (continued)**

	Tier One	Tier Two	OPSRP Pension	IAP
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
6% member contribution included in FAS	Yes	Yes	No	No
Lump-sum vacation payout				
Included in covered salary (6%)	Yes	Yes	No	Yes for Tier One & 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
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		COLA prorated in year of retirement based on retirement date	N/A

P&F = police and firefighters; FAS = final average salary; COLA = cost-of-living adjustment; N/A = not applicable
Note: PERS uses up to 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.

### Monthly Benefit Payments (as of January 1, 2013)



Monthly	# of	% of									
Benefit (\$)	Payments	Benefits									
		Paid			Paid			Paid			Paid
0 - 500	18,734	15.45%	3,001 - 3,500	7,571	6.24%	6,001 - 6,500	1,801	1.49%	9,001-10,000	270	0.22%
501 - 1,000	18,645	15.37%	3,501 - 4,000	6,799	5.61%	6,501 - 7,000	1,125	0.93%	10,001-11,000	160	0.13%
1,001 - 1,500	15,135	12.48%	4,001 - 4,500	5,955	4.91%	7,001 - 7,500	786	0.65%	11,001-12,000	73	0.06%
1,501 - 2,000	12,328	10.17%	4,501 - 5,000	4,986	4.11%	7,501 - 8,000	515	0.42%	12,001-13,000	36	0.03%
2,001 - 2,500	10,478	8.64%	5,001 - 5,500	3,686	3.04%	8,001 - 8,500	387	0.32%	13,001-14,000	30	0.02%
2,501 - 3,000	8,846	7.29%	5,501 - 6,000	2,617	2.16%	8,501 - 9,000	249	0.21%	14,001 and up	64	0.05%
Subtotal	84,166		Subtotal	31,614		Subtotal	4,863		Subtotal	633	
% of total	69.40%	38.04%	% of total	26.07%	47.41%	% of total	4.01%	12.04%	% of total	0.52%	2.50%

TOTAL MONTHLY BENEFIT PAYMENTS: 121,276 (includes alternate payees and survivors;

excludes lump sum and unit payments)
TOTAL DOLLARS: \$281.2 million

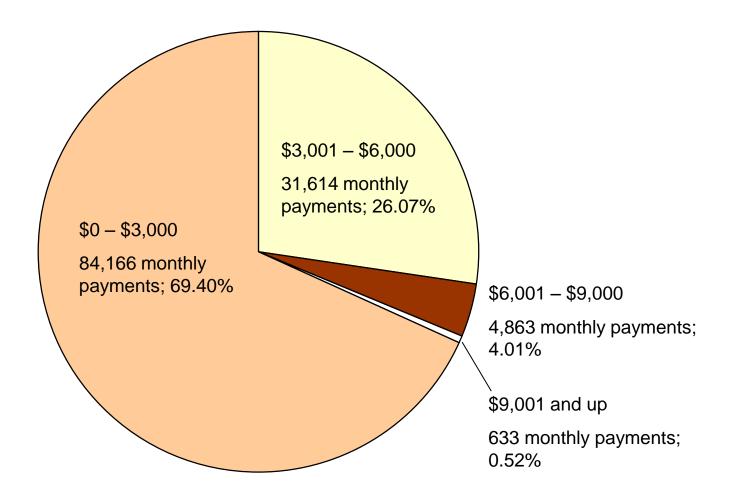
A-8 MEDIAN ANNUAL BENEFIT: \$21,825

AVERAGE ANNUAL BENEFIT: \$27,820



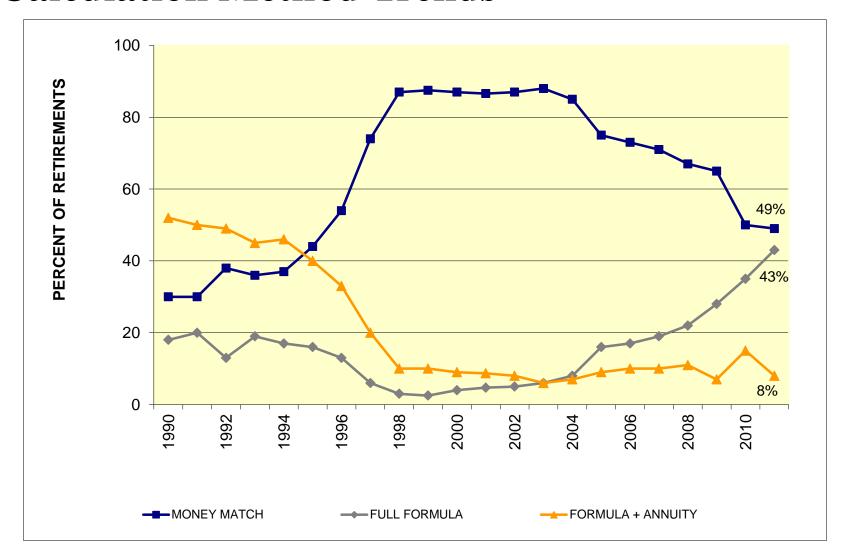
#### **Monthly Benefit Payments Distribution**

(121,276 payments as of January 1, 2013)



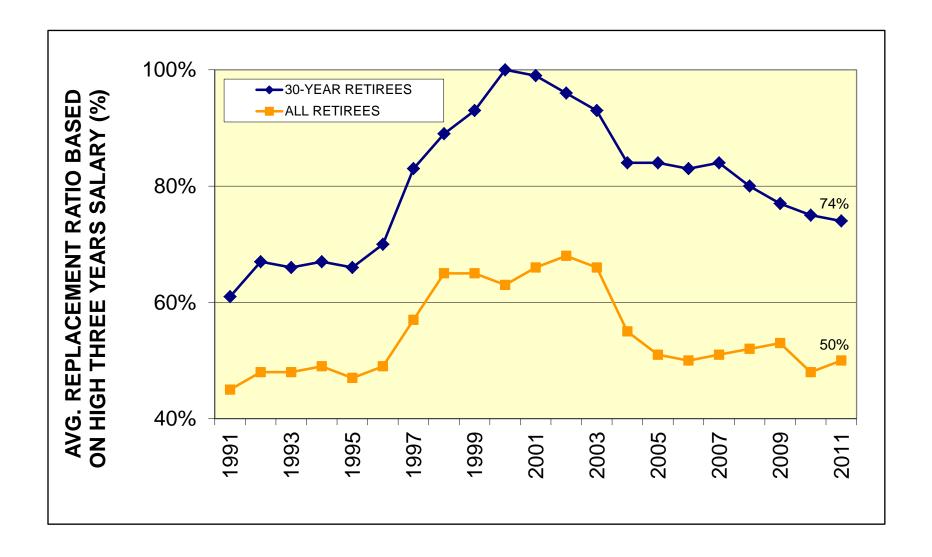


## Tier One/Tier Two Retirement Benefit Calculation Method Trends





#### **Replacement Ratio Trends**



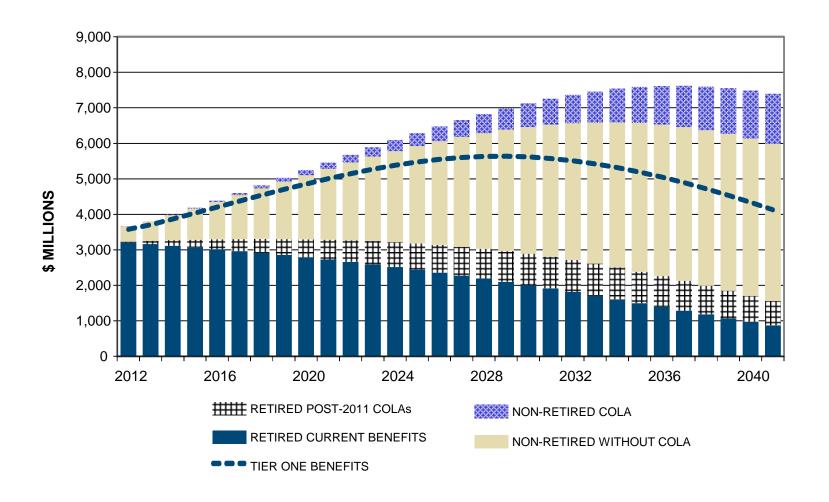


### **History of PERS Benefit Caps and Reductions**

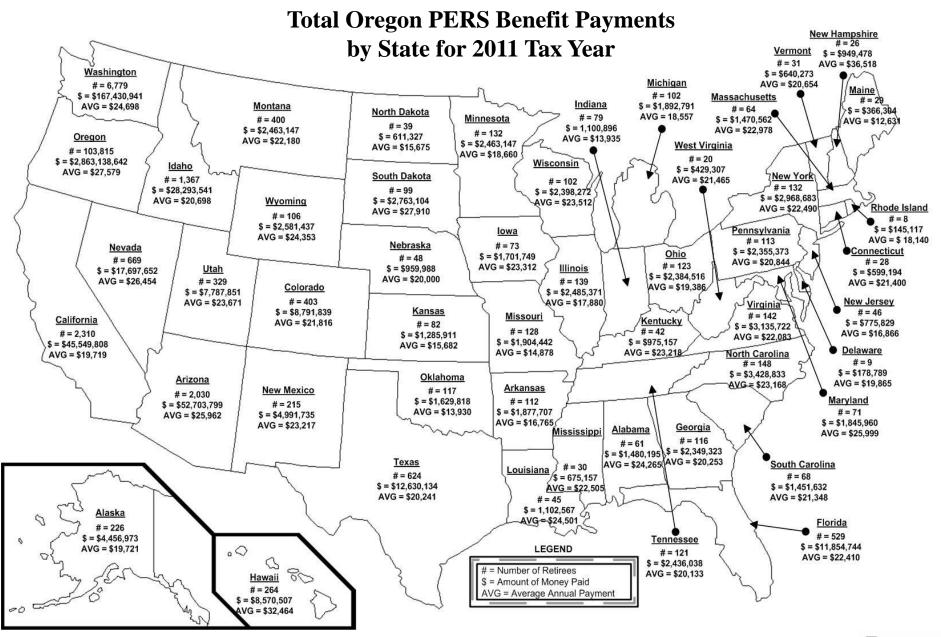
Category	Year	Action	Affected Members
	1996	Increased retirement age for new members from 58 to 60 (General Service)	Tier Two
Retirement Age/Vesting	2003	Increased retirement age from 60 to 65 (General Service) 55 to 60 (Police & Fire)	OPSRP
	2003	Increased vesting from 5 years or age 50 to 5 years or age 65 (General Service) or	OPSRP
	1001	age 60 (Police & Fire)	
	1981	Eliminated Formula Plus Annuity benefit calculation method	Tier One
	1991	Imposed state income tax on PERS benefits	All
	2003	Decreased Full Formula benefit pension factor (General Service: 1.67 to 1.50; Police & Fire 2.00 to 1.80)	OPSRP
Benefit Calc/Formula	2003	Eliminated Money Match benefit calculation method	OPSRP
	2003	Redirected member contributions to freeze Money Match (MM) benefit levels	Prospective MM retirees
	2003	Required regularly updated mortality assumptions and actuarial factors	All
	2005	Adjusted member accounts and benefit payments to recapture 1999 earnings over-crediting	Tier One
	1996	Excluded lump sum vacation payouts from final average salary	Tier Two
	1996	Federal limit on member contributions and benefits	Tier Two/OPSRP
Final Average Salary	2003	Eliminated lump sum vacation payouts from subject salary	OPSRP
	2003	Eliminated accumulated sick leave from final average salary	OPSRP
	1976	Gain Loss Reserve established to "self-fund" assumed earnings rate crediting	Tier One
	1996	Eliminated guaranteed return on regular accounts for new members	Tier Two
Investment Risk	2000	Eliminated 'Last Known Rate' member account crediting guarantee	Tier One
Allocation	2003	Required members to self-fund guaranteed return on member accounts	Tier One
	2003	Subjected all future member contributions made on or after 01/01/04 to actual earnings and losses with no guarantee	All
Retiree Health Benefits	1989	Capped Medicare premium subsidy at \$60 per month	Tier One/Two
	2003	Eliminated post-retirement health insurance premium subsidies	OPSRP
Cost-of-Living	1973	Capped COLA at actual inflation rate or 2%, whichever is less	All retirees
Adjustment (COLA)	2003	Pro-rated first year COLA	OPSRP
	2003	Eliminated COLA 'bank' carryover	OPSRP
	1995	Eliminated tax remedy for anyone hired after July 14, 1995	All hires after 7-14-95
Tax Remedy	2011	Eliminated HB 3349 tax remedy for prospective retirees who move out of state on or after January 1, 2012	Tier One



## Tier One/Tier Two and OPSRP Expected Benefit Payments (by status as of December 31, 2011)



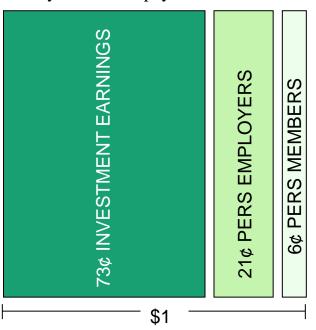




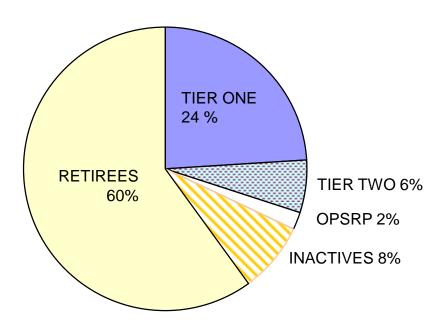
#### **Benefit Funding and Accrued Liabilities**

#### **FUNDING SOURCES (1970-2012)**

Money for benefit payments comes from three sources

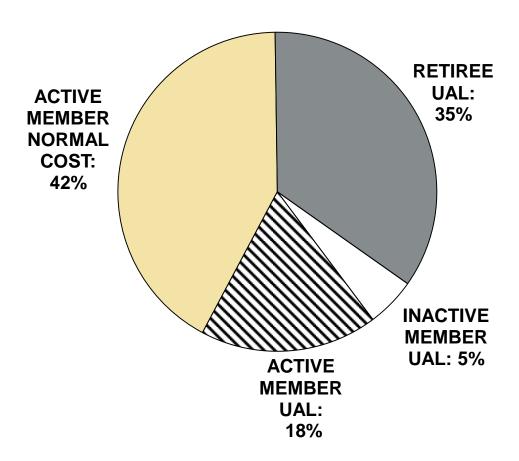


#### **ACCRUED LIABILITIES**





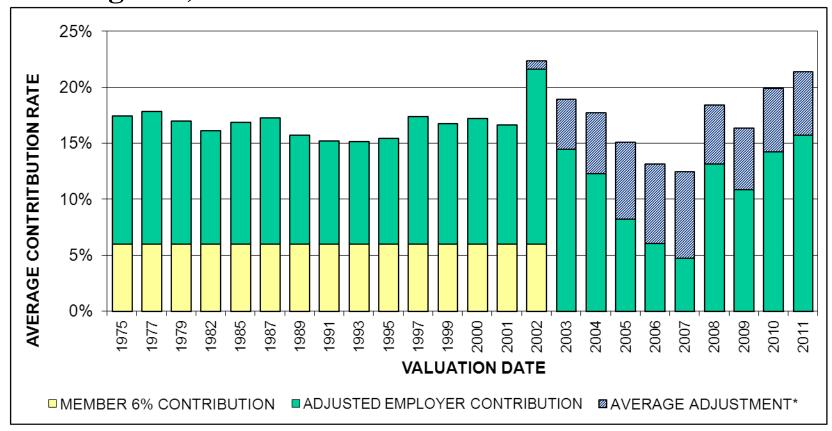
#### PERS 2013-15 Base Employer Rate Allocation



- Normal cost: Cost of benefits earned in the current period
- Unfunded actuarial liability (UAL): Amortized cost of accrued liabilities not covered by actuarial value of assets



### **Historical Perspective on Valuation Rates** (Excluding IAP)



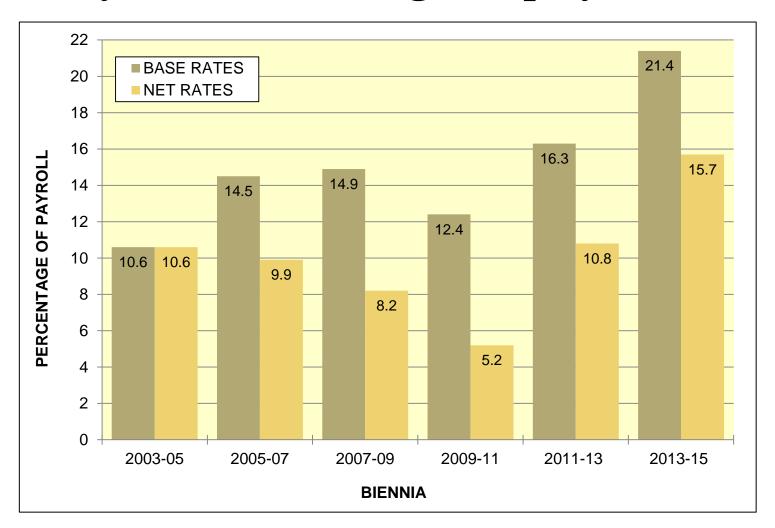
When comparing historical valuation rates, please note a number of changes have occurred including:

- Money Match benefits were not valued until 1997
- A smoothed value of assets was used from 2000 through 2003
- PERS reform was valued beginning in 2001
- The entry age normal cost method was used until 2004 when projected unit credit (PUC) was adopted

<sup>\*</sup> Adjustments to individual employer contribution rates are made for side accounts and pre-SLGRP liabilities or surpluses



#### PERS Systemwide Average Employer Rates



- EXCLUDES 6% MEMBER CONTRIBUTIONS
- INCLUDES TIER ONE/TIER TWO AND OPSRP
- RATES FOR 2005-07 AND BEFORE ARE AS OF VALUATION DATE



### **Average Net Employer Rates and Contributions**

	2007-09	2009-11	2011-13	2013-15*	2015-17**	2013-15 Net Increases	2015-17 Net Increases
State Government Net Employer Rate Contributions (\$M) Projected Payroll (\$M)	6.7% \$273 \$4,069	3.3% \$153 \$4,710	9.6% \$503 \$5,240	13.8% \$727 \$5,253	16.0% \$878 \$5,471	+4.2% +\$224	+2.2% +\$151
School Districts Net Employer Rate Contributions (\$M) Projected Payroll (\$M)	7.9% \$399 \$5,055	5.4% \$308 \$5,750	11.4% \$720 \$6,315	17.2% \$1,050 \$6,122	19.4% \$1,252 \$6,458	+5.8% +\$330	+2.2% +\$202
Independents/All Others Net Employer Rate Contributions (\$M) Projected Payroll (\$M)	9.9% \$542 \$5,503	6.4% \$422 \$6,570	11.2% \$761 \$6,775	15.8% \$1,113 \$7,040	18.2% \$1,438 \$7,893	+4.6% +\$352	+2.4% +\$325
System-Wide Net Employer Rate Contributions (\$M) Projected Payroll (\$M)	8.3% \$1,214 \$14,627	5.2% \$884 \$17,030	10.8% \$1,984 \$18,330	15.7% \$2,890 \$18,415	18.0% \$3,568 \$19,822	+4.9% +\$906	+2.3% +\$678

<sup>&</sup>quot;Net Employer Rate" includes the adjustment for employer side account offsets but not IAP contributions or the costs of debt service on pension obligation bonds. Contributions are total new dollars coming into the system, by biennium. Rates for 2013-15 become effective July 1, 2013, and rates for 2015-17 become effective July 1, 2015.

<sup>\*\*</sup>Payroll is projected based on 2011 valuation payroll, increased by 3.75% per year through 2017. Rate projections are based on 2013-15 rates increased by the amount of the 2013-15 rate collar, assuming that all actuarial assumptions are met.



<sup>\*</sup>Rates and payroll figures are from the 2011 valuation with payroll projected forward at the assumed payroll growth rate of 3.75% per year, and from Milliman's October 2012 blended rate calculation letter.

#### State of Oregon Total PERS Cost History

#### (Percent of Covered Salary)

Biennium	Base* Rate (%)	Side Account Offset (%)	Pension Obligation Bond Cost** (%)	Member Contributions (%)	Total PERS Cost (%)
2001 - 2003	9.49	-	-	6.00	15.49
2003 - 2005	11.31	-6.60	6.45	6.00	17.16
2005 - 2007	16.12	-8.06	6.20	6.00	20.26
2007 - 2009	16.18	-9.47	5.87	6.00	18.58
2009 - 2011	13.00	-9.83	5.95	6.00	15.12
2011 - 2013	16.05	-6.45	5.62	6.00	21.22
2013 - 2015	20.41	-6.57	6.18	6.00	26.02

Estimated state agency and university system payroll for the 2013-2015 biennium is \$5,253 million.

When comparing historical valuation rates, note that there have been a number of changes including:
Money Match benefits were not valued until 1997

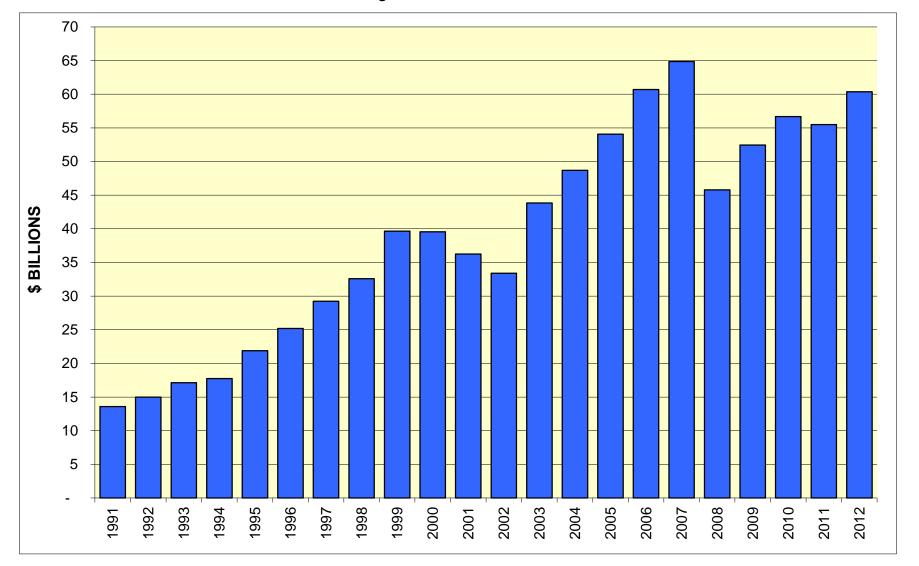
- A smoothed value of assets was used from 2000 through 2003
- PERS Reform was valued beginning 2001
- The entry age normal cost method was used until 2004 when projected unit credit (PUC) was adopted
- Beginning January 1, 2004, member contributions were placed in the IAP



<sup>\*</sup> Source: Milliman blended PERS/OPSRP rate reports.

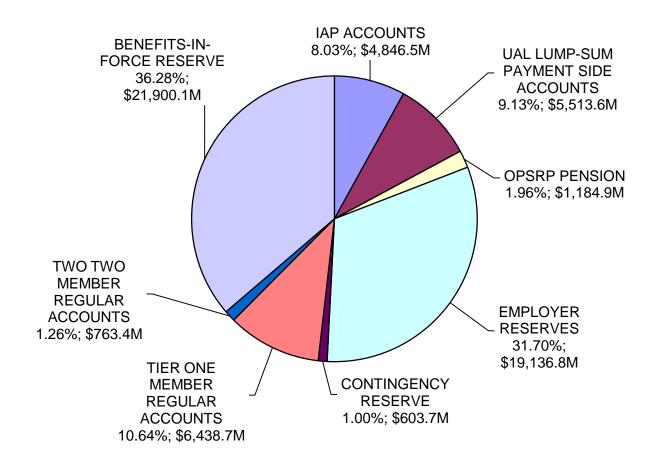
<sup>\*\*</sup>DAS pension obligation bond cost charges per PERS Budget section.

#### PERS Fund Value by Calendar Year-End





### Regular Account with 2012 Preliminary Earnings Crediting



Note: Total Regular Account after 2012 preliminary earnings equaled \$60.4 billion.



#### 2007-2012 Funded Status and UAL

	Calendar Year						
	2007	2008	2009	2010	2011	2012*	
Funded Status Including side accounts (%) Excluding side accounts (%)	112%	80%	86%	87%	82%	87%	
	98%	71%	76%	78%	73%	78%	
Unfunded Actuarial Liability (UAL) Including side accounts (\$ billion) Excluding side accounts (\$ billion)	\$ -6.1**	\$11.0	\$8.1	\$7.7	\$11.0	\$8.5	
	\$1.5	\$16.1	\$13.6	\$13.3	\$16.3	\$14.0	



<sup>\*</sup> Estimated based on December 31, 2012 Fund value.

<sup>\*\*</sup> This is a surplus.