

# OREGON PERS

## Preliminary Results of the 2003 Actuarial Valuation

A MILLIMAN GLOBAL FIRM



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*Consultants and Actuaries*

# Draft System-wide Results

- Final Peer Review in Progress
  - At your request, we have provided this DRAFT report prior to completion of our work. Because this is a draft report, Milliman, Inc. does not make any representation or warranty regarding the contents of the report. Milliman, Inc. advises any reader not to take any action in reliance on anything contained in the draft report. All parts of this report are subject to revision or correction prior to the release of the final report, and such changes or corrections may be material.
- In January
  - Final System-wide Report
  - Employer Rates (expected to be completed)



# Valuation Findings

- System-wide Results
  - Normal Cost Rate is stable
  - Significant investment gains, but
    - 75% of 2003 gains deferred
    - 25% more of 2000-02 losses recognized
- Revisions to Assumptions and Methods
  - Significant impact
    - Shortened expectation of time frame for Tier One interest credits to begin again



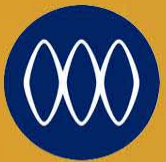
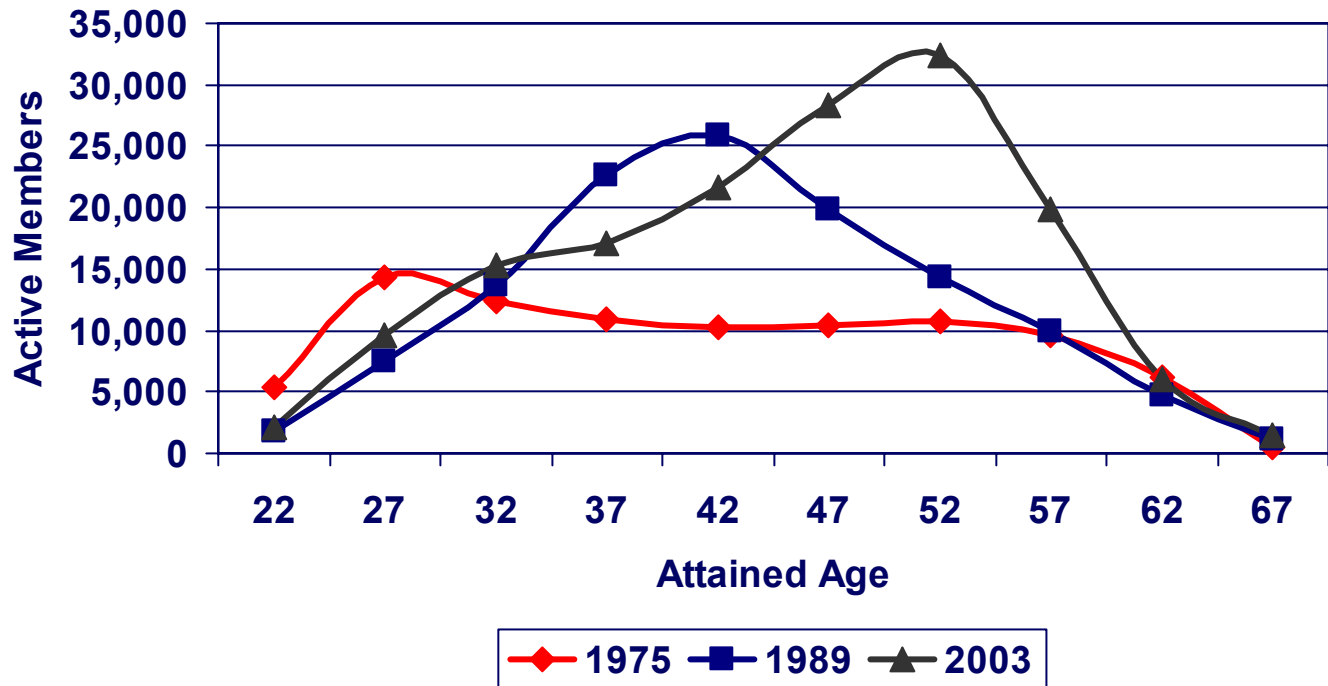
# Membership

<i>Active Members</i>	<b>2003 <u>Census</u></b>	<b>2002 <u>Census</u></b>
State Agencies	47,085	48,800
School Districts	60,897	63,604
Local Agencies	45,559	46,707
Judiciary	182	176
<b>Total Active Members</b>	<b>153,723</b>	<b>159,287</b>
<b>Percent Tier Two</b>	<b>47%</b>	<b>43%</b>



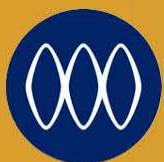
# Age Wave

## Active Membership



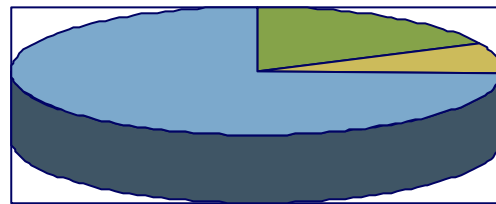
# Membership

	<b>2003</b>	<b>2002</b>
	<b><u>Census</u></b>	<b><u>Census</u></b>
Service Retirement	85,123	77,460
Beneficiaries	8,535	8,046
Duty Disabilities	638	609
Ordinary Disabilities	<u>3,481</u>	<u>3,367</u>
<b>Total Retirees</b>	<b>97,777</b>	<b>89,482</b>
Inactive Members	52,854	53,328
Active Members	<u>153,723</u>	<u>159,287</u>
<b>Total Membership</b>	<b>304,354</b>	<b>302,097</b>



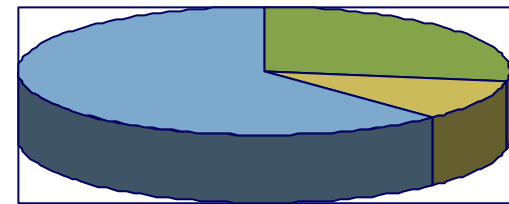
# Shift in Membership

Members in 1975



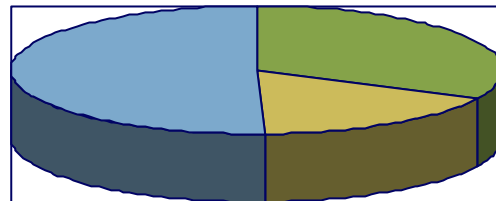
■ Retired ■ Inactive ■ Active

Members in 1989



■ Retired ■ Inactive ■ Active

Members in 2003



■ Retired ■ Inactive ■ Active

**Increasing Percentage  
of Retired and Inactive  
Members over Time**



# Normal Cost Rate

<b><i>System Results</i></b>	<b>2003</b>	<b>2002</b>	<b>2001</b>
Retirement	11.69%	11.66%	11.63%
Disability	<u>0.72</u>	<u>0.72</u>	<u>0.71</u>
Total Pension	12.41%	12.38%	12.34%
Total Healthcare	<u>0.19</u>	<u>0.23</u>	<u>0.23</u>
<b>All Benefits</b>	<b>12.60%</b>	<b>12.61%</b>	<b>12.57%</b>
<b>Change in NCR</b>	<b>(0.01%)</b>	<b>0.04%</b>	

*Note: Revisions in assumptions were adopted by the Board for the 2003 Actuarial Valuation. These revisions had a minor impact on the Normal Cost Rates.*





# Pension Asset Gain (Loss)

<i>(\$millions)</i> <b>System Results</b>	<b>Expected Fair Value</b>	<b>Actual Fair Value</b>
January 1, 2003	\$ 32,224.4	\$ 32,224.4
Contributions	966.4	966.4
LS Account Amortization	97.2	97.2
Benefits	(2,371.8)	(2,371.8)
Net Investment Return	<u>2,521.7</u>	<u>8,212.4</u>
December 31, 2003	\$ 33,437.9	\$ 39,128.6
<b>2003 Net Investment Gain (Loss)</b>		<b>\$ 5,690.7</b>

*Excludes impact of Unamortized Lump Sum Accounts*



# Asset Smoothing Reserve

## *System Results - Pension Benefits*

*(\$millions)*

	<b>Investment Gain (Loss)</b>	<b>Reserve Factor</b>	<b>Smoothing Reserve</b>
2001	\$ (5,858.4)	25%	\$ (1,464.6)
2002	(6,347.3)	50%	(3,173.7)
2003	5,690.7	75%	<u>4,268.1</u>
<b>Preliminary Smoothing Reserve</b>			<b>\$ (370.2)</b>

*Subject to the 90%/110% corridor limitation around FMV, the investment gains and losses in the Asset Smoothing Reserve will be deferred now, but recognized in future actuarial valuations.*



# Actuarial Value of Assets

<i>System Results - Pension Benefits</i>	<i>(\$millions)</i>
<b>Fair Market Value December 31, 2003</b>	<b>\$ 43,604.0</b>
Unamortized Lump Sum Accounts	(4,475.4)
Asset Smoothing Reserve	<u>370.2</u>
<b>Actuarial Value December 31, 2003</b>	<b>\$ 39,498.8</b>
Contingency Reserves	(787.9)
Capital Preservation Reserve	<u>(432.9)</u>
Total Excluded Reserves	(1,220.8)
<b>Actuarial Value of Pension Assets</b>	<b>\$ 38,278.0</b>
<b><i>Actuarial Value as a Percentage of Fair Value</i></b>	<b><i>101.0%</i></b>



# Actuarial Liabilities Pension Benefits

*(\$billions)*

<b><i>System Results</i></b>	<b>2003</b>	<b>2002</b>	<b>2001</b>
Projected Benefits			
Retirees	\$ 23.6	\$ 19.3	\$ 17.0
Inactive	3.8	3.7	3.4
Actives	<u>23.0</u>	<u>22.4</u>	<u>23.2</u>
Total PVPB	\$ 50.4	\$ 45.4	\$ 43.6
Less Future Normal Costs	<u>(6.3)</u>	<u>(6.5)</u>	<u>(6.3)</u>
<b>Actuarial Liability</b>	<b>\$ 44.1</b>	<b>\$ 38.9</b>	<b>\$ 37.3</b>



# Funded Status Pension Benefits

*(\$billions)*

## *System Results*

**2003**

**2002**

**2001**

Actuarial Liability

\$ 44.1

\$ 38.9

\$ 37.3

Actuarial Value of Assets

38.3

35.4

39.8

**Unfunded AL**

**\$ 5.8**

**\$ 3.5**

**\$ (2.5)**

*Funded Ratio*

**86.8%**

**91.0%**

**106.7%**



# Funded Status Healthcare Subsidies

*(\$billions)*

<i><b>System Results</b></i>	<b>2003</b>	<b>2002</b>	<b>2001</b>
Actuarial Liability	\$ 0.5	\$ 0.6	\$ 0.6
Actuarial Value of Assets	<u>0.1</u>	<u>0.1</u>	<u>0.1</u>
<b>Unfunded AL</b>	<b>\$ 0.4</b>	<b>\$ 0.5</b>	<b>\$ 0.5</b>
<i><b>Funded Ratio</b></i>	<b>22.1%</b>	<b>15.7%</b>	<b>14.1%</b>



# Funded Status All Benefits

*(\$billions)*

<i><b>System Results</b></i>	<b>2003</b>	<b>2002</b>	<b>2001</b>
Actuarial Liability	\$44.6	\$39.5	\$37.9
Actuarial Value of Assets	<u>38.4</u>	<u>35.5</u>	<u>39.9</u>
<b>Unfunded AL</b>	<b>\$ 6.2</b>	<b>\$ 4.0</b>	<b>\$ (2.0)</b>
<i><b>Funded Ratio</b></i>	<b>86.0%</b>	<b>89.9%</b>	<b>105.4%</b>



# Impact of LS Accounts

- Lump Sum deposits to PERS
  - Lowers the UAL for individual employers
- Direct Reduction to UAL
  - Offset to Transition Liability (TL) in a rate pool
  - Offset to UAL for independently rated employers
- LS Accounts = Additional Employer Asset
  - Treated as an advance to future contributions
  - Not allocated to other employers
  - In excess of TL for pooled employers





# Value of LS Accounts

<i>(\$millions)</i>	<u>Deposits</u>	<u>Value on 12/31/03</u>
<b><u>LS Deposits in 2003</u></b>		
State Agencies	\$ 2,000.0	\$ 2,140.8
Community Colleges	270.2	312.6
School Districts	<u>916.4</u>	<u>1,082.3</u>
Total Side Funds	\$ 3,186.6	\$ 3,535.7
<b><u>LS Deposits in 2002</u></b>		
School Districts	\$ 765.3	\$ 920.7
Other Employers	<u>18.7</u>	<u>19.0</u>
Total Side Funds	\$ 784.0	\$ 939.7



# Funded Status

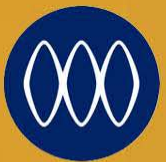
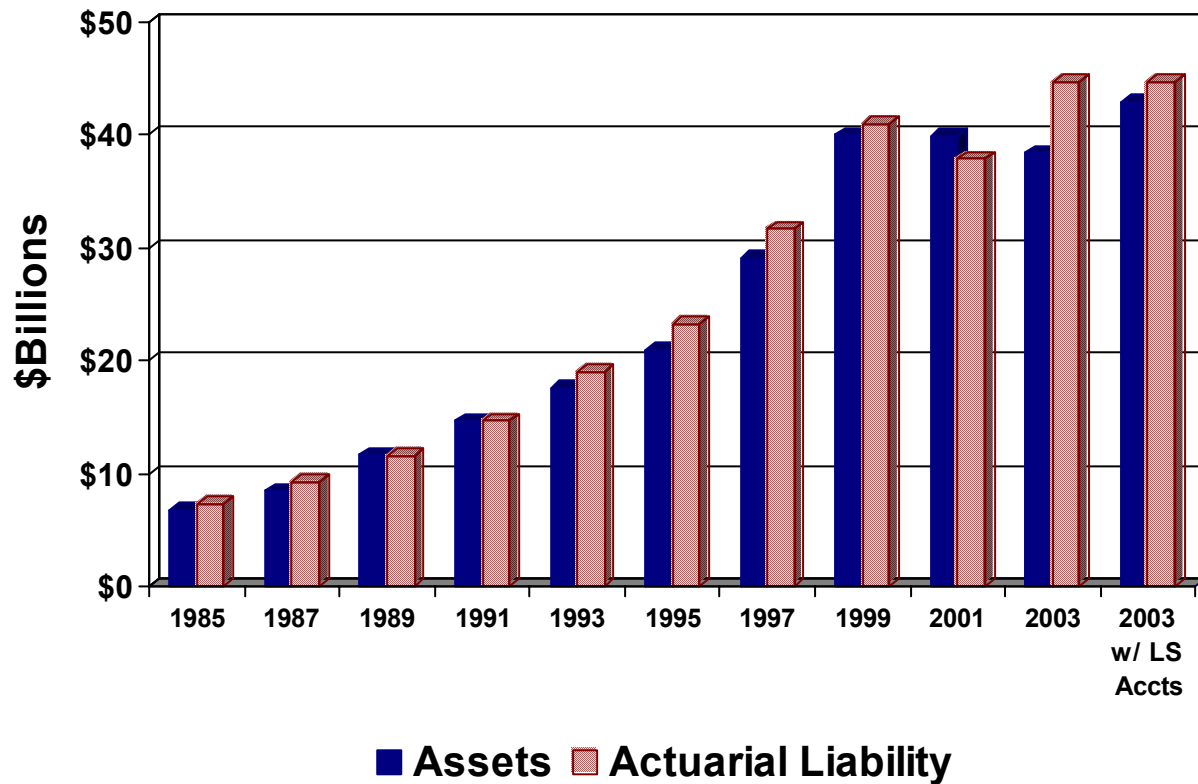
## All Benefits with LS Accounts

*(\$billions)*

<i><b>System Results</b></i>	<b>2003</b>	<b>2002</b>	<b>2001</b>
Actuarial Liability	\$44.6	\$39.5	\$37.9
Actuarial Value of Assets	<u>42.9</u>	<u>36.3</u>	<u>39.9</u>
<b>Unfunded AL</b>	<b>\$ 1.7</b>	<b>\$ 3.2</b>	<b>\$ (2.0)</b>
<b>Value of LS Accounts</b>	<b>\$ 4.5</b>	<b>\$ 0.8</b>	<b>\$ 0.0</b>
<i><b>Funded Ratio</b></i>			
<i><b>without LS Accounts</b></i>	<b>86.0%</b>	<b>89.9%</b>	<b>105.4%</b>
<i><b>with LS Accounts</b></i>	<b>96.1%</b>	<b>91.9%</b>	<b>105.4%</b>



# System Funded Status



# Valuation Rates

- Employer Contribution Rates
  - Normal Cost plus Amortization
  - No individual calculations yet
- Amortization of Unfunded Actuarial Liability
  - 24 years from valuation date
  - Continues path from 30 to 20 years by 2007



# Average Employer Rate without UAL Lump Sum Accounts

<i>System Results</i>	<b>2003</b>	<b>2002</b>	<b>2001</b>
<b>Pension</b>			
Normal Cost	12.39%	12.36%	12.32%
Amortization	<u>5.88</u>	<u>3.30</u>	<u>(2.36)</u>
Total	18.27%	15.66%	9.96%
<b>Healthcare</b>			
Normal Cost	0.19%	0.23%	0.23%
Amortization	<u>0.43</u>	<u>0.46</u>	<u>0.45</u>
Total	0.62%	0.69%	0.68%
<b>Total Average Rate</b>	<b>18.89%</b>	<b>16.35%</b>	<b>10.64%</b>



# Change in Rate

<b>2001 Average Employer Rate</b>	<b>16.48%</b>
2003 PERS Reform	<u>(5.84)</u>
<b>2001 Average Employer Rate after Leg.</b>	<b>10.64%</b>
(Gains) Losses during 2002	5.71
(Gains) Losses during 2003	<u>2.54</u>
<b>2003 Average Employer Rate</b>	<b>18.89%</b>
LS Accounts <i>(deposited in 2002 and 2003)</i>	<u>(4.54)</u>
<b>Including Impact of UAL Accounts</b>	<b>14.35%</b>



# (Gain) or Loss in Rates Estimated by Cause

## Close to Predictions

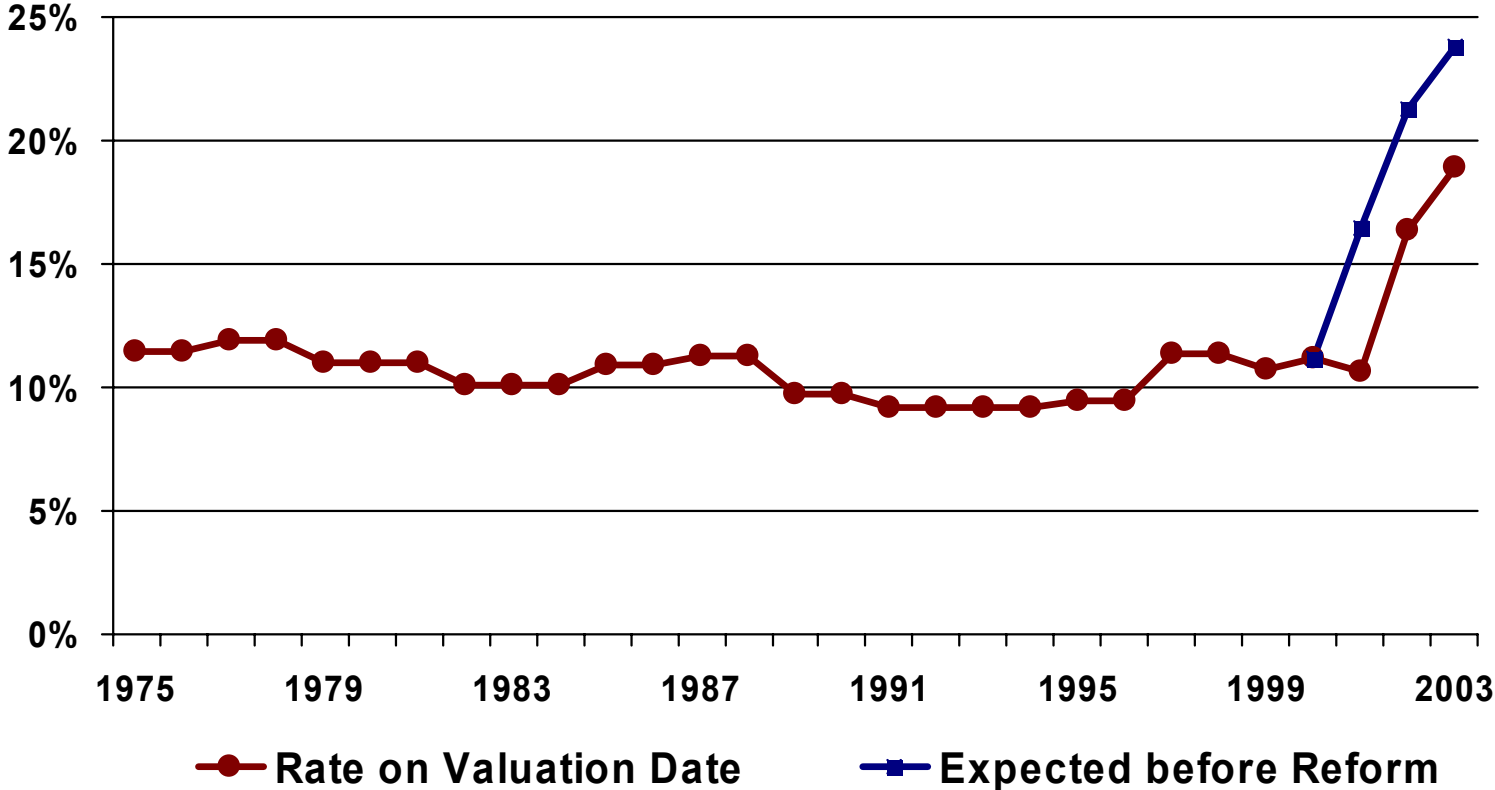
– 2002 Valuation Net Loss	5.71%
– 2003 Valuation Investment Gain	(2.55)
– Contingency Reserves	<u>1.21</u>
	<b>4.37%</b>

## Other Changes

– 2003 Demographic Loss	1.01%
– Lipscomb Benefit Changes	(0.04)
– Shortened Tier 1 Regular Interest Deferral	2.44
– Variable Account Data and Assumptions	0.98
– All Other Assumption Changes	<u>(0.51)</u>
	<b>3.88%</b>



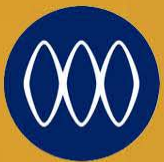
# History of Employer Rates without LS Accounts





# Employer Rate Options

- Authority for Setting Rates
  - Rests with Board
- Board Options
  - Adopt entire increase as of July 1, 2005
  - Look at alternative implementation schedules
    - Increase more than expected
    - Asset returns smoothed but impact of asset returns on liabilities is not smoothed
    - For example:  $2/3^{\text{rd}}$  on July 1, 2005  
 $1/3^{\text{rd}}$  on July 1, 2007



# Remaining Assignments

- Employer Details
  - PERS Employer Contribution Rates
    - Normal Cost Rates
    - Amortization Schedule (dollars)
  - OPSRP Contribution Rates
  - GASB disclosures
- Final Valuation Reports
  - System Wide Report
  - Employer Rates Supplemental Report

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