PERS Update

A presentation to
Association of Retired Oregon Public Employees

David Crosley, Communications Officer

July 14, 2009
Changing PERS Headlines

2002
- “Soaring price of PERS bludgeons public agencies” – Oregonian
- “New PERS costs rock public sector” – Oregonian

2006-2007
- “State’s pension reforms have been successful – workers get fair treatment, Oregon gets needed services” – Statesman Journal
- “Time and markets heal PERS - four years after meltdown, Oregon’s pension program is among healthiest in U.S.” – Statesman Journal
- “Oregon currently has the best funded pension system in the country” – Pew Charitable Trusts

2008-2009
- “PERS soaked by Wall Street’s bath” – Oregonian
- “Falling markets hit PERS fund hard” – Oregonian
- “PERS fund in familiar spot: billions short again” – Oregonian
# Membership by Category (as of December 31, 2007)

<table>
<thead>
<tr>
<th></th>
<th>State Agencies</th>
<th>Local Govt.</th>
<th>School Districts</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tier One</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>17,192</td>
<td>20,967</td>
<td>26,405</td>
<td>64,564</td>
</tr>
<tr>
<td>Inactive</td>
<td>10,265</td>
<td>7,546</td>
<td>9,307</td>
<td>27,118</td>
</tr>
<tr>
<td><strong>Tier Two</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>14,948</td>
<td>20,347</td>
<td>23,583</td>
<td>58,878</td>
</tr>
<tr>
<td>Inactive</td>
<td>5,608</td>
<td>8,054</td>
<td>7,474</td>
<td>21,136</td>
</tr>
<tr>
<td><strong>OPSRP</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>10,684</td>
<td>14,239</td>
<td>18,658</td>
<td>43,581</td>
</tr>
<tr>
<td>Inactive</td>
<td>44</td>
<td>61</td>
<td>61</td>
<td>166</td>
</tr>
<tr>
<td><strong>Sub-total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>42,824</td>
<td>55,553</td>
<td>68,646</td>
<td>167,023</td>
</tr>
<tr>
<td>Inactive</td>
<td>15,917</td>
<td>15,561</td>
<td>16,842</td>
<td>48,420</td>
</tr>
<tr>
<td><strong>Retirees</strong>*</td>
<td></td>
<td></td>
<td></td>
<td>105,336</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td>320,779</td>
</tr>
</tbody>
</table>

* Living retirees, beneficiaries, retirement refunds, and those with a lump-sum retirement
Oregon PERS Retirements

- Average 6,000 retirements per year; peaked at 12,500 in 2003
- Average age at retirement: 59
- Average years of service at retirement: 21
- Average annual benefit for FY 2007 retirees: $29,500 (51% of final average salary)
- Average annual benefit for all living retirees: $23,300 (the nationwide average annual public pension benefit is $21,800)
- Approximately 55,000 PERS Tier One and Tier Two members are eligible to retire (35% of those members)
Age Wave for Non-Retired Members

- Tier One: 58
- Tier Two: 60
- OPSRP: 65
Retirement Trends

- The number of projected retirements closely tracks the growth in members who will be eligible to retire. Both are expected to grow about 45% from 2008-2013.
Was 2003 Reform Legislation Effective?

**Pre-reform:** PERS had a liability and asset growth problem

- Double-digit earnings in the 1990s fueled liability increases as account balances ballooned
- Investment markets turned negative, making the growth in liabilities unsustainable

**Reform:** PERS Reform legislation stabilized liability growth by diverting member contributions from Tier One/Tier Two member accounts to IAP accounts effective January 1, 2004

- Members partially bear risk of investment gains or losses
- Tier One earnings crediting limited to the assumed rate
Was 2003 Reform Legislation Effective? (continued)

Post-reform

- Growth in liabilities more stable; reduced to about 3% per year
- Money Match becoming less predominant as a retirement calculation
- Retiree replacement ratios (amount of benefit vs. final average salary) are declining
- All members share in investment risk (Individual Account Program)
- System is larger; better able to handle a larger unfunded actuarial liability (UAL)
System Funding – Stabilized Liabilities

- PERS funded status varied dramatically until 2003 because of uncontrolled liability growth: double-digit earnings crediting in the 1990s fueled liability increases as account balances ballooned; Tier One member account balances continue to grow at 8% (assumed earnings rate) regardless of market performance

- PERS Reform legislation in 2003 stabilized liability growth because member contributions were diverted to IAP accounts, where members bear the risk of investment gains or losses, and Tier One earnings crediting was limited to the assumed rate
PERS’ Retirement Plan Components

- One major program for 50 years
- Three major programs added since 1996; two in the last six years

<table>
<thead>
<tr>
<th>Hire date</th>
<th>Tier One</th>
<th>Tier Two</th>
<th>OPSRP Pension Program</th>
<th>Individual Account Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before January 1, 1996</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>January 1, 1996 thru August 28, 2003</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>August 29, 2003 or after</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

- All members now participate in two programs, with up to three different accounts (regular, variable, Individual Account Program)
## Benefit Levels

<table>
<thead>
<tr>
<th>Percent of FAS replaced</th>
<th>Money Match (Tier One/Tier Two)</th>
<th>Full Formula (Tier One/Tier Two)</th>
<th>OPSRP</th>
<th>IAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>At one time provided up to or more than 85% (replacement ratios have declined since Reform and will continue to decline to Full Formula level)</td>
<td>~ 50% (will become predominate retirement method for almost all Tier Two members and a growing percentage of Tier One members)</td>
<td>45% (for new employees hired after August 28, 2003)</td>
<td>~ 15-25% (earns market rate; member assumes all investment risk)</td>
<td></td>
</tr>
</tbody>
</table>
Retirement Benefit Salary Replacement Ratios

![Graph showing the average replacement ratio based on final average salary for 30-year retirees and all retirees from 1990 to 2008.](image-url)
Retirement Benefit Calculation Trends for Tier One/Tier Two
Investment Returns and Earnings Crediting to Tier One Regular Accounts

**Average Return: 10.25% (1970-2008)**
Earnings Crediting to Tier Two Regular Accounts and All Variable Accounts

AVG VARIABLE RETURN: 10.4% (1970-2008)
AVG TIER TWO RETURN: 9.0% (1996-2008)
2008 Market Impact on Member Accounts

- Tier One member regular accounts are guaranteed 8% crediting annually

- PERS Board used the Tier One Rate Guarantee Reserve funds (approximately $1.9 billion) to provide the 8% guarantee to Tier One members; an additional $1 billion was required to cover Tier One guarantee, so the Reserve now has a deficit

- Tier Two accounts had losses of -27.18% for 2008

- Tier One and Tier Two Variable accounts had losses of -43.71% for 2008

- Individual Account Program accounts had losses of -26.75% for 2008 (affects Tier One, Tier Two, and OPSRP members)

- OPSRP Pension Program members have a formula-based retirement account with no account balance
2008 Investment Losses and Retirees

- No impact on a PERS retiree’s monthly benefit unless the member remained in the variable account at retirement (approximately 11,000 retirees)
- If the member remained in the variable account at retirement, adjustments of approximately negative 48% were applied to the variable annuity portion of retiree monthly benefits beginning February 1, 2009. On average, affected benefits were reduced about $200 per month
- Study showed that for 1,175 who retired from 2005-2007 and stayed in the variable at retirement, the average percent of the gross benefit attributable to the variable was 11.2%
- Member retirement benefits are protected by the Oregon constitution and backed by state and local government employers
Variable Annuity Adjustment

- If you remain in the Variable Annuity Program at retirement, the variable annuity portion of a monthly retirement benefit is adjusted every February 1 based on the 12-month period gains (or losses) for the variable account investments as of the preceding October 31 (e.g., November 1, 2006 to October 31, 2007).

- The amount of the increase or decrease in the variable portion of a benefit is based on the assumed earnings rate in effect on the retirement date (e.g., 8% for retirements since 1989).
  - If the variable account earns more than 8%, the variable portion of a benefit increases.
  - If the variable account earns less than 8%, the variable portion of a benefit decreases.
Net Plan Assets (Fiscal Year Ending June 30)

FY 09: AS OF 12/31/08

<table>
<thead>
<tr>
<th>Year</th>
<th>1995</th>
<th>1997</th>
<th>1999</th>
<th>2001</th>
<th>2003</th>
<th>2005</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>$M</td>
<td>0</td>
<td>10,000</td>
<td>20,000</td>
<td>30,000</td>
<td>40,000</td>
<td>50,000</td>
<td>60,000</td>
</tr>
</tbody>
</table>

0 10,000 20,000 30,000 40,000 50,000 60,000 70,000

$M
## Oregon Public Employees Retirement Fund

### Returns for periods ending 5/31/09

<table>
<thead>
<tr>
<th>OPERF</th>
<th>Policy</th>
<th>Target</th>
<th>$ Thousands</th>
<th>Year-</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Actual</td>
<td>To-Date</td>
<td></td>
<td>1 YEAR</td>
<td>YEARS</td>
<td>YEARS</td>
<td>YEARS</td>
<td>YEARS</td>
<td>YEARS</td>
</tr>
<tr>
<td>Public Equity</td>
<td>41-51%</td>
<td>46%</td>
<td>$ 19,072,243</td>
<td>10.71</td>
<td>(34.95)</td>
<td>(20.69)</td>
<td>(7.99)</td>
<td>(1.74)</td>
<td>0.94</td>
</tr>
<tr>
<td>Private Equity</td>
<td>12-20%</td>
<td>16%</td>
<td>8,793,938</td>
<td>19.4%</td>
<td>(15.72)</td>
<td>(24.09)</td>
<td>(6.37)</td>
<td>3.05</td>
<td>8.56</td>
</tr>
<tr>
<td>Total Equity</td>
<td>57.67%</td>
<td>62%</td>
<td>27,866,181</td>
<td>61.5%</td>
<td>(15.49)</td>
<td>(29.07)</td>
<td>(14.46)</td>
<td>(2.66)</td>
<td>5.79</td>
</tr>
<tr>
<td>Opportunity Portfolio</td>
<td>864,707</td>
<td>27%</td>
<td>11,674,793</td>
<td>25.8%</td>
<td>10.02</td>
<td>(0.82)</td>
<td>1.10</td>
<td>3.30</td>
<td>2.85</td>
</tr>
<tr>
<td>Total Fixed</td>
<td>8.14%</td>
<td>11%</td>
<td>4,879,710</td>
<td>10.8%</td>
<td>(15.49)</td>
<td>(29.07)</td>
<td>(14.46)</td>
<td>(2.66)</td>
<td>5.79</td>
</tr>
<tr>
<td>Real Estate</td>
<td>0.3%</td>
<td>0%</td>
<td>8,812</td>
<td>0.0%</td>
<td>1.31</td>
<td>1.16</td>
<td>2.86</td>
<td>3.71</td>
<td>3.76</td>
</tr>
</tbody>
</table>

**TOTAL OPERF Regular Account:**

100% | $ 45,294,203 | 100.0% | 1.57 | (25.25) | (13.11) | (3.37) | 1.11 | 3.50 |

**OPERF Policy Benchmark:**

1.35 | (21.07) | (10.27) | (1.51) | 1.73 | 3.68 |

**Value Added:**

0.22 | (4.10) | (2.84) | (1.86) | (0.62) | (0.18) |

**TOTAL OPERF Variable Account:**

$ 825,173 | 9.97 | (34.42) | (22.59) | (10.24) | (5.19) | (2.24) |

**Asset Class Benchmarks:**

- Russell 3000 Index: 3.64 | (32.85) | (20.81) | (8.40) | (4.08) | (1.52) |
- MSCI ACWI Ex US IMI Net: 16.42 | (35.66) | (18.70) | (5.10) | 2.85 | 5.59 |
- Russell 3000 Index + 300 bps–Quarter Lagged: (20.34) | (33.09) | (14.87) | (4.85) | (1.47) | 1.99 |
- BCI Universal–Custom FI Benchmark: 2.23 | 4.17 | 5.94 | 5.68 | 4.32 | 4.84 |
- NCREIF Property Index–Quarter Lagged: (8.29) | (6.49) | 4.69 | 8.10 | 10.98 | 11.87 |
- 91 Day T-Bill: 0.09 | 1.12 | 2.47 | 3.37 | 3.49 | 3.19 |

**TOTAL OPERF NAV**

(includes variable fund assets)

One year ending May 2009

($) in Millions)
PERS’ Funded Status

- At the end of 2007, PERS was 112% funded. For comparison, PERS was 65% funded before the last market recovery that began in early 2003.

- With a 27% investment loss for 2008, PERS’ funded status was estimated to be about 80% as of December 31, 2008. The system would have approximately 80 cents on hand for every dollar of benefits promised. The remainder would come from “excess” future investment earnings (greater than 8%) and additional employer contributions over the next 20 years.

- U.S. public retirement systems averaged 86% funding in 2007; average system funded status dropped below 65% at the end of 2008.
2008 Public Retirement Systems’ Funded Status

Figures based on Boston College’s Center for Retirement Research data for 2006–07; Forbes reduced assets by 25% to account for market declines; NJ and FL calculated from recent state reports. Sources: Center for Retirement Research, data from annual reports and actuarial valuations; Forbes.

Forbes magazine, online edition February 6, 2009
Loss Contingencies

- PERS operates on a long-term investment strategy, with earnings funding 67% of benefit costs from 1970-2008.

- Unfunded liabilities are amortized over 20 years, allowing long-term investments to recover from periodic losses and to moderate employer contribution rates.

- Employer rate changes are limited by a rate collar, which generally limits biennial rate increases and decreases to no more than 3% of payroll, but allowing swings of up to 6% based on funding status.

- Employer contribution rates take into account the compounding benefit of having those funds in the system over the member’s career, generating investment returns over time to pay benefits.
PERS Average Employer Rates

* 2007 rate shown was effective July 1, 2009
PERS Employer Contribution Rates

- 2009-11 biennial employer rates are based on the System’s December 31, 2007 valuation
  - 2009-11 rates not affected by the 2008 market downturn
  - Rate increases in the 2011-13 biennium will either be 3% or 6% of payroll

- Employer contribution rates in 2009-11 (effective July 1, 2009) average approximately 12.42% (about 3% of payroll less than the 2007-09 biennium) before applying employer side accounts (pre-payments made by employers)
Historic City of Corvallis Tier One/Tier Two Contribution Rate vs. System Average

![Graph showing contribution rate vs. system average for the Historic City of Corvallis Tier One/Tier Two.]
PERS Employer Rates:
Pre-Reform Projected vs. Post-Reform Actual

PROJECTED 2011-13 AND 2013-15 RATES ARE DISPLAYED BASED ON 6% (MAXIMUM) RATE COLLAR
Funding for Retirees and Inactives

- Approximately 62 percent of all pension liabilities are related to retirees or inactive members.
- Over the next six years, approximately 38 percent of total employer contributions are projected to be used to cover unfunded liabilities for this group, so the employer rate charged on today’s workers is also covering liabilities associated with their predecessors.
Purchasing Power Study

- Study shows how monthly benefits have kept up with inflation since retirement
- Change in purchasing power of a retirement benefit from 2008 to 2009

<table>
<thead>
<tr>
<th>Year Retired</th>
<th>Purchasing Power (%)</th>
<th>Year Retired</th>
<th>Purchasing Power (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980 &amp; before</td>
<td>76.1 75.2</td>
<td>2003</td>
<td>96.7 95.5</td>
</tr>
<tr>
<td>1985</td>
<td>77.7 76.8</td>
<td>2004</td>
<td>96.7 95.5</td>
</tr>
<tr>
<td>1990</td>
<td>82.6 81.4</td>
<td>2005</td>
<td>97.2 96.0</td>
</tr>
<tr>
<td>1995</td>
<td>92.4 91.2</td>
<td>2006</td>
<td>97.8 96.6</td>
</tr>
<tr>
<td>2000</td>
<td>96.7 95.5</td>
<td>2007</td>
<td>98.4 97.1</td>
</tr>
<tr>
<td>2001</td>
<td>96.7 95.5</td>
<td>2008</td>
<td>100 98.8</td>
</tr>
<tr>
<td>2002</td>
<td>96.7 95.5</td>
<td>2009</td>
<td>100</td>
</tr>
</tbody>
</table>
2009 Cost-of-Living Adjustment (COLA)

- 2009 cost-of-living adjustment (COLA) for PERS retirees and beneficiaries receiving a monthly benefit is 2 percent

- Increase is effective July 1, 2009, and payable with the August 1, 2009 benefit payment

- Tier One and Tier Two members who retired on or before July 1, 2009, will receive a 2 percent COLA

- For OPSRP Pension Program retirees who have been retired for less than 12 months, the COLA is pro rated based on the number of months the benefit was received before July 1, 2009

- COLAs are based on the annual Consumer Price Index for the Portland-Salem area and are capped at 2 percent
2008 Economic Impact Study*

- PERS benefits paid to Oregonians in 2008: $2.5 billion
- Total increase in Oregon economic output: $3.3 billion
- Oregon jobs supported: 30,678
- Wages of Oregon jobs supported: $900 million
- Estimated income taxes paid by PERS retirees in Oregon: $110 million

* Based upon economic multipliers provided by the U.S. Department of Commerce’s Bureau of Economic Analysis (BEA)
Public Employees Retirement System
11410 SW 68th Parkway
Tigard, OR 97223

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