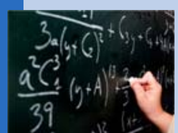
Office of the State Actuary
"Securing tomorrow's pensions today."

State Actuary Update



Matt Smith, FCA, EA, MAAA
State Actuary

Presentation to
Washington State Investment Board

November 15, 2012

Today's Presentation

- New Economic Assumptions
- Latest Actuarial Valuation Results
- GET Update
- GASB's New Pension Accounting Standards
- Moody's Proposed Adjustments To Pension Reporting
- Coordinated OSA/WSIB Projects

New Economic Assumptions Established In 2ESB 6378*

	Prior	2ESB 6378
Investment Return	8.00%	7.90%
Inflation	3.50%	3.00%
General Salary Increase	4.00%	3.75%

- 2ESB 6378 assumption changes effective for contribution rate requirements beginning July 1, 2013
- Assumed ROR becomes 7.8 percent beginning July 1, 2015 and 7.7 percent beginning July 1, 2017

** Chapter 7, Laws of 2012 First Special Session.*

Simulated Future Investment Returns

Simulated Future Returns*		
	Measurement Period	
	15 Years	50 Years
75th percentile	10.65%	9.38%
60th percentile	9.02%	8.44%
55th percentile	8.53%	8.15%
Expected Return	8.03%	7.86%
45th percentile	7.54%	7.57%
40th percentile	7.03%	7.27%
25th percentile	5.29%	6.25%

** Based on WSIB's 2012 capital market assumptions.*

Today's Presentation

- New Economic Assumptions
- Latest Actuarial Valuation Results
- GET Update
- GASB's New Pension Accounting Standards
- Moody's Proposed Adjustments To Pension Reporting
- Coordinated OSA/WSIB Projects

Measuring Plan Health

- Has everything happened as planned?
- Are we on track with our systematic actuarial funding plan?
- Two key measurements
  - Funded status
  - Unfunded Actuarial Accrued Liability (the "UAAL")

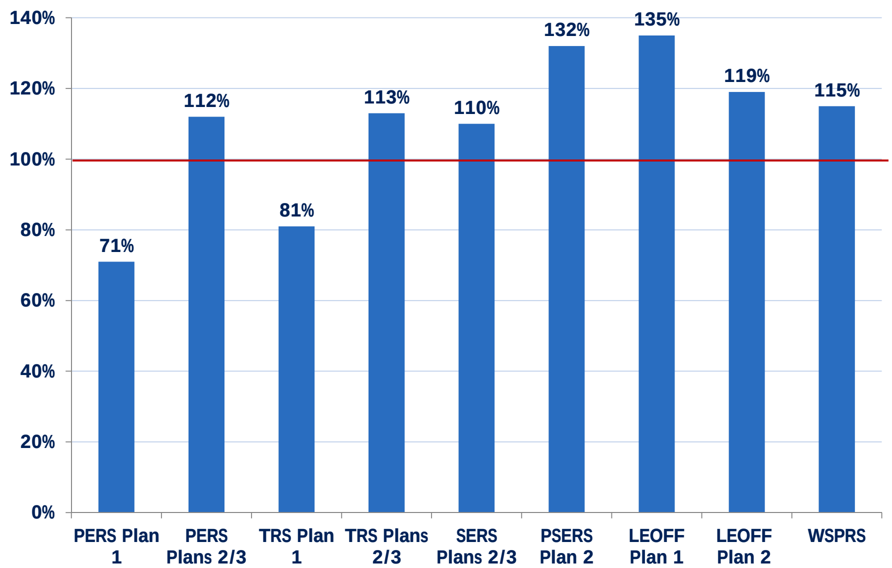
Funded Status

- Comparison of plan assets to today's value of earned pensions
  - Point-in-time measurement
- A funded status of at least 100 percent means a plan has at least $1 in assets for each $1 of earned pension liability
  - On track with systematic actuarial funding plan

Unfunded Actuarial Accrued Liability

- Occurs when a plan does not have sufficient assets to cover earned pension liabilities
  - Funded status less than 100 percent
- Off track with systematic actuarial funding plan
- Requires additional contributions to get back on track
  - Normal cost plus UAAL contributions
- If you don't get back on track, funding plan will ultimately become pay-as-you-go

Funded Status At June 30, 2011



Funded Status And Unfunded Liability At June 30, 2011

Funded Status on an Actuarial Value Basis*

(Dollars in Millions)	PERS		TRS		SERS	PSERS	LEOFF		WSPRS	Total
	Plan 1	Plans 2/3	Plan 1	Plans 2/3	Plans 2/3	Plan 2	Plan 1	Plan 2		
Accrued Liability	$12,567	$18,815	$9,258	$6,299	$2,607	$107	$4,135	$5,576	$829	$60,193
Valuation Assets	$8,883	$20,997	$7,485	$7,141	$2,872	$141	$5,565	$6,621	$949	$60,654
Unfunded Liability	$3,684	($2,182)	$1,773	($842)	($265)	($34)	($1,430)	($1,044)	($120)	($461)
Funded Ratio										
2011	**71%**	**112%**	**81%**	**113%**	**110%**	**132%**	**135%**	**119%**	**115%**	**101%**

Note: Totals may not agree due to rounding.

**Accrued liabilities represent the present value of future benefits for current members earned at the valuation date assuming an expected rate of return on assets of 7.9% per year (7.5% for LEOFF 2). All assets have been valued under the actuarial asset method (the "smoothing" method).*

Funded Status And Unfunded Liability At June 30, 2011

Funded Status on an Actuarial Value Basis*										
(Dollars in Millions)	PERS		TRS		SERS	PSERS	LEOFF		WSPRS	Total
	Plan 1	Plans 2/3	Plan 1	Plans 2/3	Plans 2/3	Plan 2	Plan 1	Plan 2		
Accrued Liability	$12,567	$18,815	$9,258	$6,299	$2,607	$107	$4,135	$5,576	$829	$60,193
Valuation Assets	$8,883	$20,997	$7,485	$7,141	$2,872	$141	$5,565	$6,621	$949	$60,654
Unfunded Liability	$3,684	($2,182)	$1,773	($842)	($265)	($34)	($1,430)	($1,044)	($120)	($461)
Funded Ratio										
2011	**71%**	**112%**	**81%**	**113%**	**110%**	**132%**	**135%**	**119%**	**115%**	**101%**

Note: Totals may not agree due to rounding.

**Accrued liabilities represent the present value of future benefits for current members earned at the valuation date assuming an expected rate of return on assets of 7.9% per year (7.5% for LEOFF 2). All assets have been valued under the actuarial asset method (the "smoothing" method).*

Amortization of Plan 1 Unfunded Liability

- Phasing in higher Plan 1 UAAL contribution requirements under new method adopted in 2009
- Full contribution rate requirements begin in 2015
  - Increase from 2.30 (current) to at least 3.50 percent (2015) in PERS
  - Increase from 2.43 (current) to at least 5.75 percent (2015) in TRS
- Paid by employers only
- Expected amortization dates
  - 2027 in PERS 1
  - 2026 in TRS 1
  - Will occur sooner/later under optimistic/pessimistic outcomes

Today's Presentation

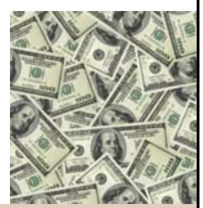
- New Economic Assumptions
- Latest Actuarial Valuation Results
- GET Update
- GASB's New Pension Accounting Standards
- Moody's Proposed Adjustments To Pension Reporting
- Coordinated OSA/WSIB Projects

GET Update

- Current enrollment period November 1, 2012 – May 31, 2013
- $172 unit price
  - The value of 100 units equals cost of one year of resident, undergraduate tuition and state-mandate fees at the highest priced public university at time of redemption
  - One GET unit is worth $117.82 for 2012-13 academic year
- Institutions of higher education given tuition-setting authority in 2011
- Authority to charge differential tuition currently suspended
- Legislative advisory committee to make recommendation to Legislature in December

GET Funded Status At June 30, 2012

- 79 percent funded
- Present value of obligations equals $2.9 billion
- $2.3 billion in market value of assets including contract receivables
- Excludes impacts of differential tuition



Historical GET Funded Status And Tuition Growth

Funded Status History		Tuition Growth History	
Fiscal Year	**Funded Status**	**School Year**	**Tuition Growth**
2012	78.5%	**2012-13**	15.2%
2011	79.1%	**2011-12**	19.0%
2010	86.2%	**2010-11**	13.1%
2009	84.2%	**2009-10**	13.1%
2008	109.5%	**2008-09**	6.8%
2007	117.4%	**2007-08**	6.8%
2006	108.8%	**2006-07**	6.9%
2005	108.1%	**2005-06**	6.8%
2004	104.5%	**2004-05**	6.6%
2003	98.4%	**2003-04**	7.0%
2002	89.6%	**2002-03**	16.0%
2001	104.9%	**2001-02**	7.1%
2000	113.4%	**2000-01**	3.4%
1999	110.1%	**1999-00**	3.7%

GET Recovery Plan

- Funded status declined due primarily to above-expected tuition growth
- GET committee adopted 30-year recovery plan in 2011
- Current unit price includes amortization payment
  - About $20 of current $172 unit price
- Recovery plan on track after one year of experience

Key Assumptions And Asset Allocation For GET

- 5.98 assumed rate of return per year
- Current asset allocation for GET
  - 60 percent global equities
  - 20 percent fixed income
  - 20 percent TIPS
- Assumed tuition growth by school year
  - 12 percent in 2013-14
  - 10 percent in 2014-15
  - 10 percent in 2015-16
  - 8 percent in 2016-17
  - 5.5 percent thereafter

Today’s Presentation

- New Economic Assumptions
- Latest Actuarial Valuation Results
- GET Update
- GASB’s New Pension Accounting Standards
- Moody’s Proposed Adjustments To Pension reporting
- Coordinated OSA/WSIB Projects

New Pension Accounting Standards

- Adopted by GASB on June 25, 2012
- GASB statement no. 67 (plans)
  - *Financial Reporting for Pension Plans*
  - Takes effect in two years
- GASB statement no. 68 (employers)
  - *Accounting and Financial Reporting for Pensions*
  - Takes effect in three years
- New standards divorce accounting rules from funding

Key Changes Under New Accounting Standards

- Under current rules
  - Only "sole and agent employers" report pension costs
  - "Net pension obligation/(asset)" equals cumulative difference between
    - Actuarially required contributions under plan's funding policy; and
    - Actual contributions made
    - Discount rate based on long-term expected return
  - Most reporting occurs in footnotes to financial statements
- Under new rules
  - Both sole and agent and "cost-sharing employers" will report pension costs
  - "Net plan position" equals difference between
    - Present value of accrued liabilities under single actuarial cost method; and
    - Market value of assets
    - Discount rate based on long-term expected return only for the period the plan projected to remain solvent; 20-year high-grade municipal bond rate otherwise
  - Reporting moves to balance sheet

Office of the State Actuary "Securing tomorrow's pensions today." O:\Presentations\2012\WSIB_Actuary_Update.pptx 21

Impacts And Next Steps

- Will introduce significant volatility to balance sheets
- Cost-sharing employers will recognize pension costs for first time
  - Based on proportionate share of total plan projected contribution requirements
- Poorly funded pension plans will see large increases in reported unfunded liability
  - Leading to further funding and benefit reforms?
- Interagency project team formed to field test new standards, develop new accounting exhibits, and prepare communications strategy
  - OST, OFM, OSA, and DRS
- Potential statewide coordination to assist local government employers with new reporting requirements

Office of the State Actuary "Securing tomorrow's pensions today." O:\Presentations\2012\WSIB_Actuary_Update.pptx 22

Today's Presentation

- New Economic Assumptions
- Latest Actuarial Valuation Results
- GET Update
- GASB's New Pension Accounting Standards
- Moody's Proposed Adjustments To Pension Reporting
- Coordinated OSA/WSIB Projects

Moody's Proposes Adjustments to Pension Reporting

- Actuarial accrued liabilities adjusted
  - Based on a high-grade corporate bond index discount rate
  - 5.5 percent proposed
- Where possible, asset smoothing replaced with market value
- Annual pension contribution requirements adjusted
  - In consistent manner as above
  - Including a common amortization period
- Purpose of adjustments according to Moody's
  - "Our proposed adjustments will improve the comparability and transparency of pension information across governments, enhancing our approach to rating state and local government debt"
- Expected outcome according to Moody's
  - Adjustments to result in rating actions for local governments where the effect is outsized relative to their rating category
  - No state rating changes expected solely as a result of pursing the adjustments

Next Steps

- Moody's reviewing requested comments from stakeholders
- Reporting with adjustments expected in late 2012 or early 2013 if adopted
- Significant communication challenges ahead
  - Potential for misuse/misinterpretation of "competing" measures
- Who will take responsibility for explaining the purpose and intended use of all these measurements?
- Actuarial valuation results
  - Determine the expected financing costs based on long-term assumptions
- GASB accounting results
  - Intended to supplement actuarial valuation results to help users of financial statements evaluate pension financing strategies and increase comparability of results across plans
- Moody's adjusted results
  - Assist in their proprietary rating analysis

Today's Presentation

- New Economic Assumptions
- Latest Actuarial Valuation Results
- GET Update
- GASB's New Pension Accounting Standards
- Moody's Proposed Adjustments To Pension Reporting
- Coordinated OSA/WSIB Projects

Coordinated WSIB/OSA Projects

- Pay-go analysis
- Supplemental retirement plans in higher education

Pay-Go Analysis

- Follow-up item from last WSIB off-site
- Pay-go means paying for contractual benefit payments when they become due as a result of premature trust fund exhaustion
  - AKA "pay-as-you-go"
- OSA staff working with WSIB staff to identify key sources of Plan 1 pay-go risk and how changes in asset allocation affect pay-go risk
- Using OSA's risk assessment model, we will capture chance and amount of pay-go under multiple scenarios
- Analysis presented at February Board meeting

Supplemental Retirement Plans In Higher Educations

- Institutions of higher education authorized to offer retirement plans separate from the state's pension systems
  - Defined contribution plans with a supplemental defined benefit
- Supplemental retirement plans
  - Provide a "floor" defined benefit to ensure eligible retirees achieve at least a certain level of retirement income from their defined contribution plan
- Pay-as-you-go funding policy adopted at institutions
- Relevant changes under ESHB 1981 (2011)
  - Eliminated supplemental retirement benefits for new hires
  - OSA to prepare on-going actuarial valuations on supplemental retirement plans
  - Fund created to pre-fund supplemental benefits; invested by WSIB
  - Temporary employer contribution rate established

Next Steps

- Institutions of higher education must contract with OSA, via interagency agreement, no later than June 30, 2013, to provide new actuarial services
- First OSA actuarial valuation expected in 2013/2014
- Actuarial analysis expected to determine on-going employer contribution rate and inform investment policy for new fund
  - Projected benefit payments
  - Cash-flow analysis

Questions