

# **Preliminary Results, Actuarial Valuation**



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# **Today's Presentation**

- Brief "Actuarial 101" to start
- Preliminary 2011 Actuarial Valuation results
- Projected budget impacts
- Other considerations
- No action required today



# **Purpose Of Actuarial Valuation**

- Determine contribution requirements for 2013-15
- Based on results of June 30, 2011, valuation date
- Consistent with prescribed funding policy
- Provide information on funding progress and developments over the past valuation year
- Certify the data, assumptions, and methods are reasonable and conform with current actuarial standards of practice



# **Systematic Actuarial Funding**

- Prescribed funding policy
- Regular contributions over time
- Investment returns earned systematically over time
  - WSIB mandate: maximize returns at a prudent level of risk
- Investment risk is spread over time
- Supports intergenerational equity
  - Contributions made over members' careers
  - Today's generation pays for today's generation

#### **How Does It Work?**

- Estimate future pension benefits
  - What will future benefits be?
  - When will they be paid and for how long?
- Estimate returns on future invested contributions?
  - What will future investment returns look like?
- Select an actuarial cost method
  - What are the regular contributions required over time?



#### **Actuarial Cost Method**

- Allocates a pension plan's cost over a member's working career
- Determines annual and on-going cost while member works
  - "Normal cost"
  - The regular contributions over time under systematic actuarial funding
- If everything happens as planned, normal cost will accumulate with investment earnings and completely fund a member's pension at the time of his/her retirement

# **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 actuarial 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
  - Intergenerational equity is weakened
- If you don't get back on track, funding plan will ultimately become pay-asyou-go

# **2011 Actuarial Valuation Results Are Preliminary**

- Concurrent outside actuarial audit underway
- 2011 actuarial valuation finalized following completion of audit and PFC rate adoption in July



#### **Comments On 2011 Results**

- PERS 2/3, TRS 2/3, SERS, PSERS, LEOFF, and WSPRS on track with systematic actuarial funding plan
- PERS 1 and TRS 1 remain off track with systematic funding plan
  - Phasing-in larger Plan 1 UAAL contributions to get back on track
  - Full requirements begin in 2015
  - See Appendix for further details

#### **Recent Efforts To Reduce Pension Costs**

- Repeal of future gain-sharing benefits
- Repeal of Plan 1 Uniform COLA
- Adoption of new economic assumptions
  - Reduces long-term costs
  - Increases short-term costs
- Reduced early retirement benefits for new hires in PERS, TRS, and SERS
  - Lowers long-term costs as new hires replace current members

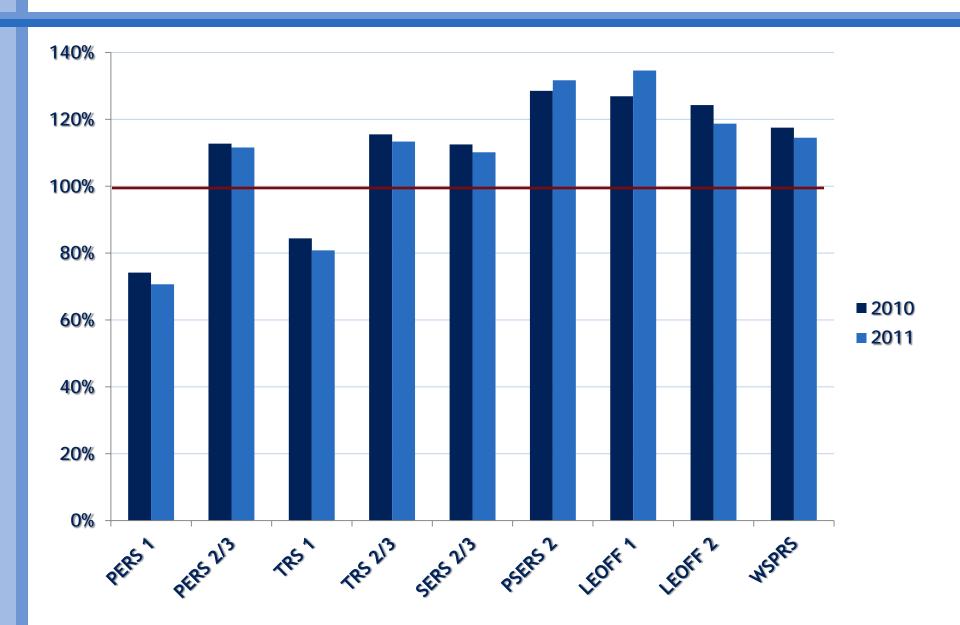


### **Short-Term Cost Increases Remain**

- Continue to recognize asset losses from the Great Recession under asset smoothing method
  - See Appendix for further details
- Phasing in larger Plan 1 UAAL requirements
- Adopted new economic assumptions
  - With phase-in of lower investment return assumption
  - See Appendix for further details
- In general, all put downward pressure on funded status and upward pressure on contribution rates in the short-term
  - Especially the Plan 1 UAAL rates



# Funded Status By Plan – 2010/2011





# Funded Status And Unfunded Liability At June 30, 2011

Funded Status on an Actuarial Value Basis*										
(Dollars in Millions)	PE	RS	Т	RS	SERS	PSERS	LEC	OFF	WSPRS	Total
		Plans		Plans	Plans					
	Plan 1	2/3	Plan 1	2/3	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.

<sup>\*</sup>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).

# **Employer Contribution Rates\***

	Current	2013-15
PERS	6.92%	9.03%
TRS	7.88%	10.21%
SERS	7.42%	9.64%
PSERS	8.58%	10.22%
LEOFF 1	0.00%	0.00%
WSPRS	7.91%	7.63%

- PERS, SERS, and PSERS employers pay for the PERS 1 UAAL and employer normal cost
- TRS employers pay for the TRS 1 UAAL and employer normal cost

\*Excludes administrative expense rate of 0.16%. Current rates based on 2009 AVR plus subsequent legislative changes.



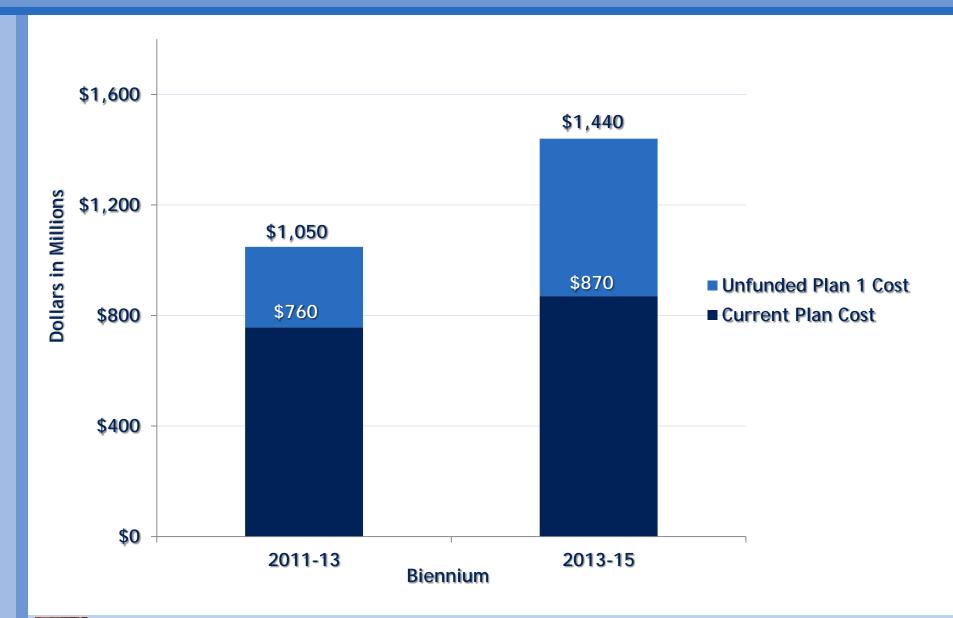
## **Plan 2 Member Contribution Rates**

	Current	2013-15
PERS	4.64%	4.92%
TRS	4.69%	4.96%
SERS	4.09%	4.64%
PSERS	6.36%	6.22%
LEOFF 1	0.00%	0.00%
WSPRS*	6.59%	6.31%

<sup>\*</sup> Rate applies to Plan 1 and Plan 2 members.

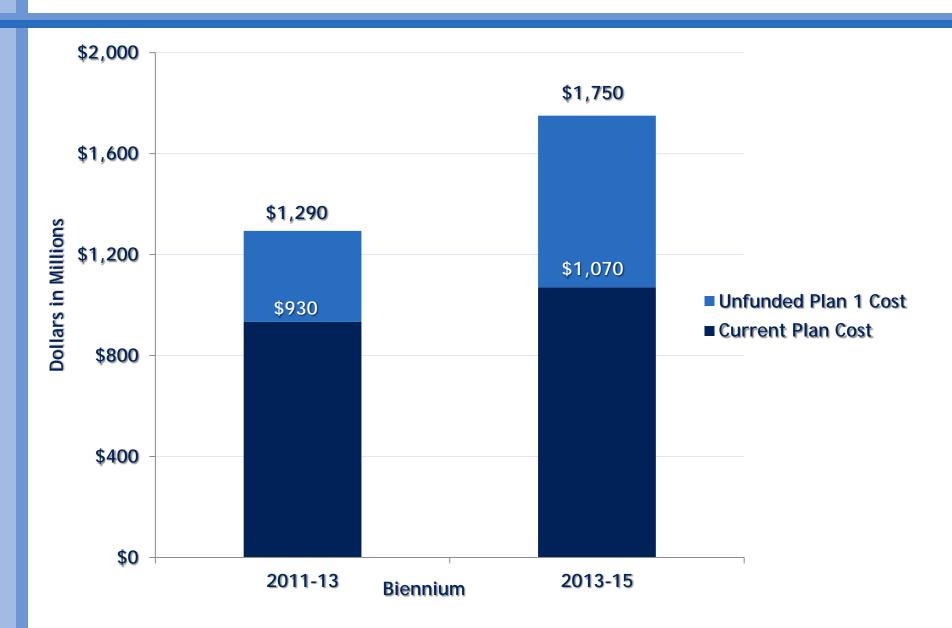
Plan 2 members do not pay for the Plan 1 UAAL (employee normal cost only)

# **Estimated General Fund State (GF-S) Contributions**





## **Estimated Local Government Contributions**



## **Actuarial Certification - Preliminary**

- All data, assumptions, and methods are reasonable and conform with current actuarial standards of practice
- New Plan 1 funding method includes minimum contribution rates beginning 2015
- All contributions under this method are required to fully amortize Plan 1
   UAAL near the previous target date of June 30, 2024
- Failure to make all future required contributions may result in premature pay-go funding in the future

### **Other Considerations**

- The choice: pay now or pay more later
- Investment returns in 2012 below long-term expectations thus far
  - -1.02 percent ROR from July 1, 2011 through May 31, 2012
  - 13.2 and 21.1 percent RORs for previous two fiscal years
  - 8.77 percent average annual ROR over 20 years ending June 30, 2011
- Full funding and adoption of new economic assumptions support the ongoing soundness of the systems and help manage financial risks
- Opportunity to prevent a temporary decrease in normal cost rates for PSERS and WSPRS



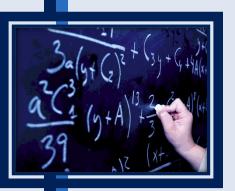
# Recap

- 2011 Actuarial Valuation results are preliminary
- All plans except PERS 1 and TRS 1 currently on track with systematic actuarial funding plan
- Phasing in higher Plan 1 UAAL contribution requirements to get back on track
- Recent efforts to reduce pension costs
- Short-term cost increases remain
- The choice: pay now or pay more later
- Full funding and adoption of new economic assumptions support the ongoing soundness of the systems

# **Questions?**











# **Appendix**

#### **Amortization of Plan 1 UAAL**

- Phasing in higher Plan 1 UAAL contribution requirements under new method adopted in 2009
- Full requirements begin in 2015
  - Increase from 2.34 (current) to at least 3.50 percent (2015) in PERS
  - Increase from 2.42 (current) to at least 5.75 percent (2015) in TRS
- Paid by employers only
- Expected amortization dates
  - 2025 in PERS 1
  - 2022 in TRS 1
  - Will occur sooner/later under optimistic/pessimistic outcomes

# Actuarial Value Of Assets At June 30, 2011

	Calculation of Actuarial Value of Assets All Plans				
(Dol	(Dollars in Millions)				
a.	Market Value of Assets	Total \$57,350			
b.	Deferred Gains and (Losses)				
	Plan Year Ending				
	6/30/2011	5,547			
	6/30/2010	1,531			
	6/30/2009	(11,090)			
	6/30/2008	(2,724)			
	6/30/2007	2,058			
	9/30/2006	892			
	9/30/2005	482			
	Total Deferral	(\$3,304)			
c.	Market Value less Deferral (a-b)	\$60,654			
d.	70% of Market Value of Assets	\$40,145			
e.	130% of Market Value of Assets	\$74,555			
f.	Actuarial Value of Assets*	\$60,654			

Note: Totals may not agree due to rounding.

<sup>\*</sup>Actuarial Value of Assets can never be less than 70% or greater than 130% of the Market Value of Assets.



# **New Economic Assumptions Established In 2ESB 6378**

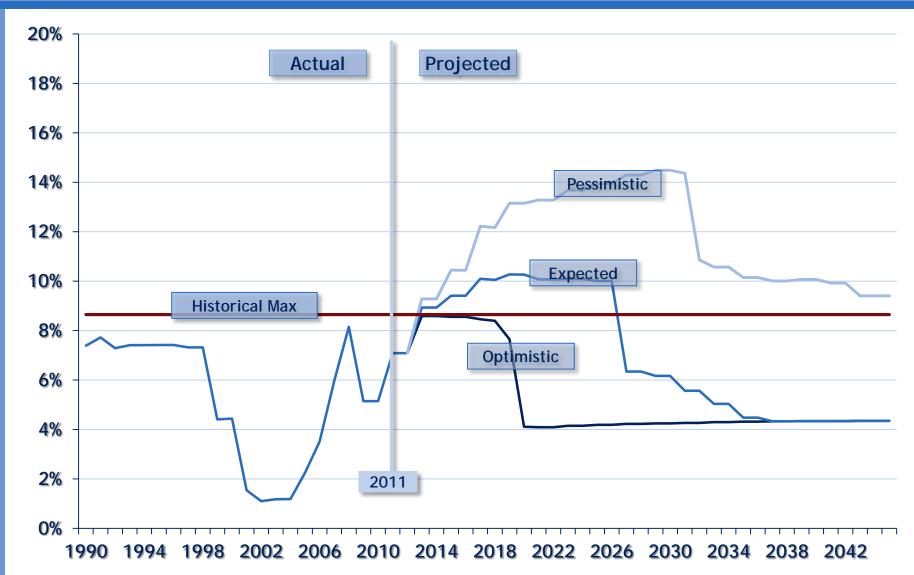
	Prior	2ESB 6378
Investment Return	8.00%	7.90%
Inflation	3.50%	3.00%
General Salary Increase	4.00%	3.75%

- 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
- 2ESB 6378 assumed to not revise the 2011 actions of the Pension Funding Council

## **Projected Contribution Rates**

- The next six slides reflect projected employer contribution rates based on
  - Asset returns through June 30, 2011
  - June 30, 2010, Actuarial Valuation Report
  - Legislative changes through the 2011 Legislative Session
- We plan to update these projections in the fall with our latest data
- Please replace these projections when more recent projections become available
- Please see the 2010 Risk Assessment for further information on projected contribution rates

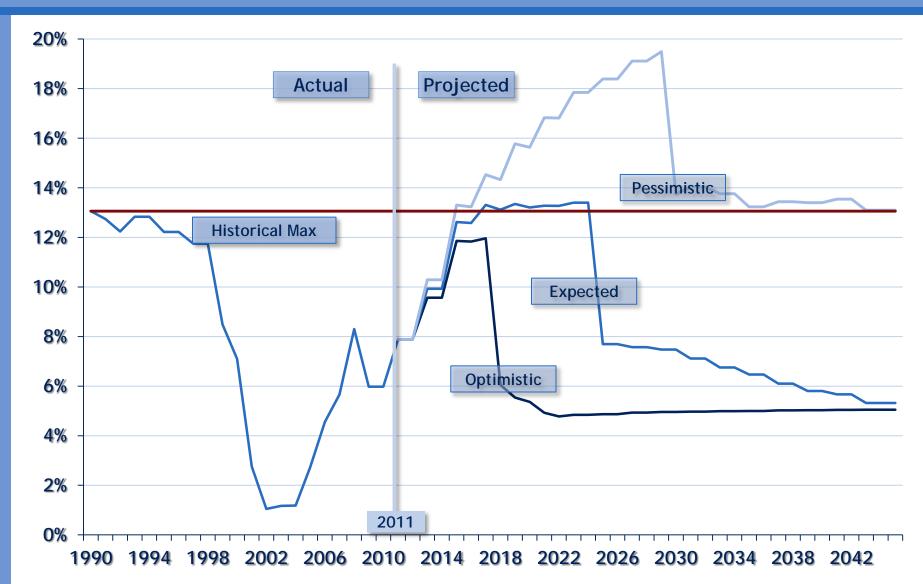
# **Projected Employer Contribution Rates – PERS\***



<sup>\*</sup>Assumes no future benefit improvements and full funding up to assumed system maximums.



# **Projected Employer Contribution Rates – TRS\***



\*Assumes no future benefit improvements and full funding up to assumed system maximums.



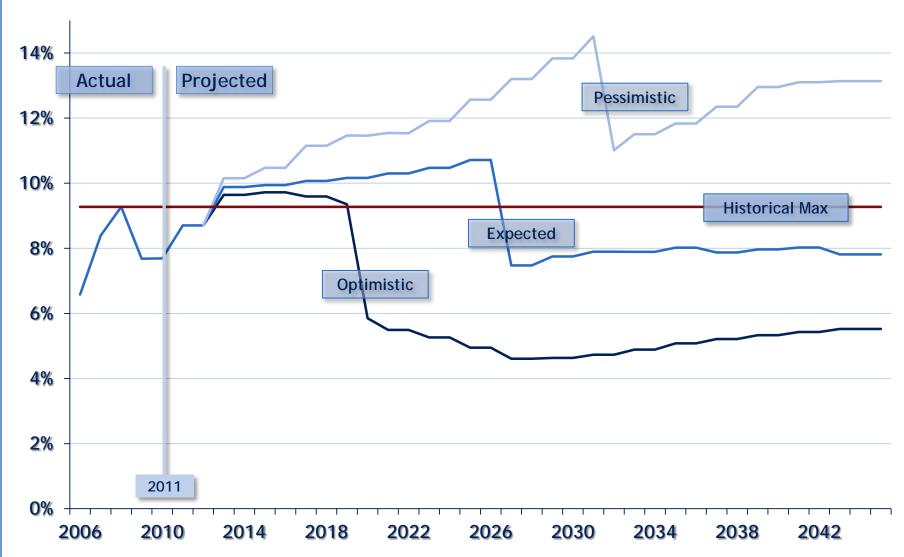
# **Projected Employer Contribution Rates – SERS\***



<sup>\*</sup>Assumes no future benefit improvements and full funding up to assumed system maximums.



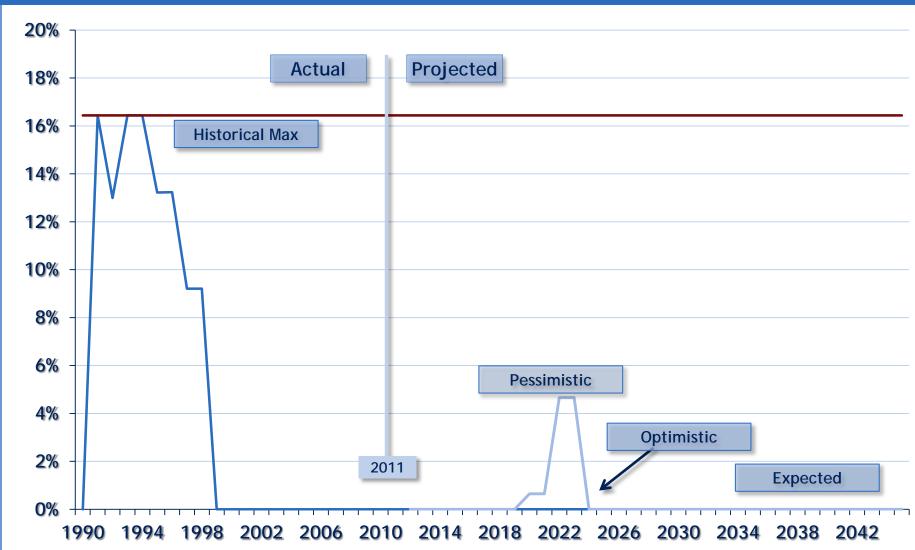
# **Projected Employer Contribution Rates – PSERS\***



<sup>\*</sup>Assumes no future benefit improvements and full funding up to assumed system maximums.



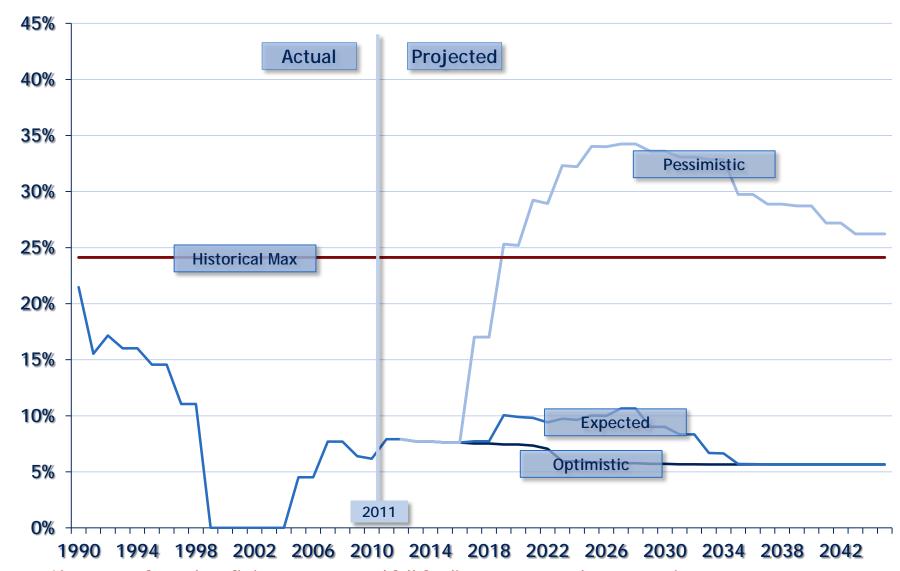
## **Projected UAAL Contribution Rates – LEOFF 1\***



\*Assumes no future benefit improvements and full funding up to assumed system maximums. Also assumes reinstatement of previous state funding policy should a UAAL re-emerge.



## **Projected Employer Contribution Rates – WSPRS\***



\*Assumes no future benefit improvements and full funding up to assumed system maximums.

