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State Actuary's Recommendations On Long-Term Economic Assumptions



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State Actuary



September 20, 2011

Today's Presentation

- Highlights of two reports
 - Financial Condition
 - Long-Term Economic Assumptions
 - Full reports included in meeting materials
- Discuss next steps
- Informational only - no action required at today's meeting



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Summary Of Financial Condition

- Financial condition improved from last report
- Benefit changes lowered contribution requirements
 - Future contribution increases expected
- Litigation may change financial condition



Financial Condition Improved From Last Report

- Since our last report, investment returns for commingled trust fund
 - 13.2 and 21.1 percent for fiscal years ending June 30, 2010, and June 30, 2011, respectively
- Plans recovered about 20 percent of 30-40 expected drop in funded status reported two years ago
- Further decline in funded status expected as plans recover fully
- Actual decline in funded status will depend on actual investment performance, future contribution levels, and future benefit levels



Benefit Changes Lowered Contribution Requirements

- Removal of automatic UCOLA increases in PERS 1 and TRS 1 lowered Plan 1 UAAL and associated required employer contributions
 - PERS 1 UAAL decreased from \$4.2 to \$2.2 billion (\$2.7 to \$1.0 b in TRS)*
 - PERS 1 UAAL contribution rate decreased by 1.54 percent in 2012 and 2.10 percent in 2013 (4.07 percent in 2012 and 4.41 percent in 2013 in TRS)*
- We still expect contribution increases as plans recover fully from drop in funded status from Great Recession
- We're currently preparing updated contribution rate projections

** Please see our actuarial fiscal note for SHB 2021 for supporting information.*



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Litigation May Change Financial Condition

- Potential reinstatement of gain-sharing benefits or Plan 1 UCOLA would change results of this financial condition report
- Following tables display how current funded status and budget impacts would change should the court reinstate recently repealed benefits*

** As of the date of this presentation, no lawsuit has been filed on the repeal of the UCOLA.*



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Funded Status Impacts

Funded Status on an Actuarial Value Basis				
	2010 Funded Status ¹	Funded Status After Restoration of Gain-Sharing ²	Funded Status After Restoration of UCOLA ³	Funded Status After Restoration of Gain-Sharing and UCOLA ⁴
PERS 1	74%	72%	66%	63%
PERS 2/3	113%	112%	N/A	112%
TRS 1	84%	82%	72%	70%
TRS 2/3	116%	109%	N/A	109%
SERS 2/3	113%	105%	N/A	105%
PSERS 2	129%	N/A	N/A	N/A
LEOFF 1	127%	N/A	N/A	N/A
WSPRS	118%	N/A	N/A	N/A

¹Based on preliminary 2010 Actuarial Valuation results (preliminary AVR).

²Based on preliminary AVR results after restoration of gain-sharing and continuation of replacement benefits.

³Based on preliminary AVR results after restoration of UCOLA.

⁴Based on preliminary AVR results after restoration of gain-sharing and UCOLA.

2013-15 GF-S Budget Impacts

2013-15 Employer Contributions from the State General Fund				
(Dollars in Millions)	Expected Contributions ¹	Increase in Contributions After Restoration of Gain-Sharing ²	Increase in Contributions After Restoration of UCOLA ³	Increase in Contributions After Restoration of Gain-Sharing and UCOLA ⁴
PERS	\$296.7	\$26.1	\$73.7	\$104.1
TRS	583.3	142.1	300.8	459.4
SERS	122.9	36.5	28.5	66.7
PSERS	36.2	1.8	7.4	9.6
Total	\$1,039.2	\$206.5	\$410.5	\$639.7

¹Based on preliminary 2010 Actuarial Valuation results (preliminary AVR).

²Based on preliminary AVR results after restoration of gain-sharing and continuation of replacement benefits.

³Based on preliminary AVR results after restoration of UCOLA.

⁴Based on preliminary AVR results after restoration of gain-sharing and UCOLA.

2013-15 Total Employer Budget Impacts

2013-15 Total Employer Contributions				
(Dollars in Millions)	Expected Contributions ¹	Increase in Contributions After Restoration of Gain-Sharing ²	Increase in Contributions After Restoration of UCOLA ³	Increase in Contributions After Restoration of Gain-Sharing and UCOLA ⁴
PERS	\$1,489.5	\$131.1	\$370.1	\$522.4
TRS	879.8	214.3	453.6	692.9
SERS	275.8	81.8	64.0	149.5
PSERS	51.0	2.5	10.5	13.6
Total	\$2,696.1	\$429.8	\$898.2	\$1,378.4

¹Based on preliminary 2010 Actuarial Valuation results (preliminary AVR).

²Based on preliminary AVR results after restoration of gain-sharing and continuation of replacement benefits.

³Based on preliminary AVR results after restoration of UCOLA.

⁴Based on preliminary AVR results after restoration of gain-sharing and UCOLA.

Concluding Remarks On Financial Condition

- Financial condition improved since last report due to
 - Better than expected investment returns
 - Legislative reduction in benefits
- Considerations before future pension action
 - Contribution rates expected to increase before approaching expected long-term levels
 - Court reinstatement of recently repealed benefits would negatively impact financial condition of affected systems
 - Increased volatility in financial markets can weaken/improve system's financial condition over short period of time
 - Continued full funding and maintenance of affordable/sustainable plan designs will help systems weather increased volatility
- Questions on Report on Financial Condition?

Summary Of Report On Long-Term Economic Assumptions

- All current assumptions reasonable, but not representative of my best estimate
- Several changes in long-term economic assumptions recommended
 - Supporting data and analysis in full report
- Adopting recommendation will improve system health and lessen some financial risks, but increase short-term budget impacts
- Phase-in of change in assumed rate of return recommended
- Note: report excludes LEOFF 2



Several Assumption Changes Recommended

Assumption	Current	Recommended
Inflation	3.50%	3.00%
General salary growth	4.00%	3.75%
Annual investment return	8.00%	7.50%
Growth in system membership	0.90% (TRS), 1.25% (Others)	0.80% (TRS), 0.95% (Others)

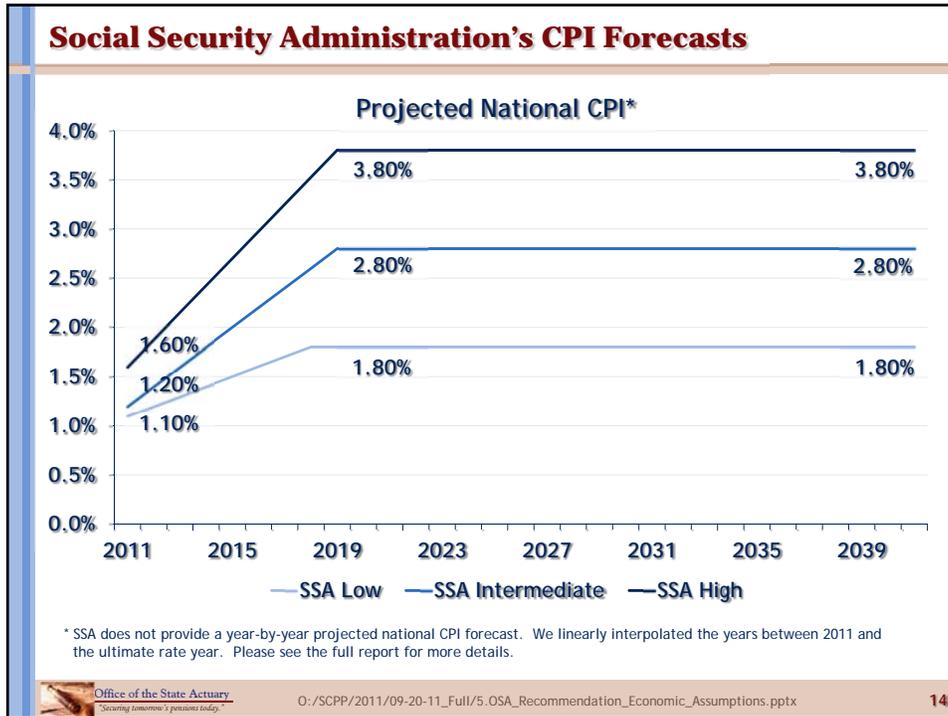


Inflation

- Assumption used to model post-retirement COLAs based on changes in CPI for Seattle, Tacoma, Bremerton
- Also used as a “building block” for general salary growth and nominal rate of return assumption
- Components of total inflation assumption
 - Broad economic inflation
 - Adjustments for national and regional price inflation
- Recommending a decrease in total inflation assumption due to decrease in average total inflation over past 20 years and expectations of lower future inflation

Historical Inflation Data





- ### General Salary Growth
- Assumption used to project salaries to determine future retirement benefits and contribution rates as a percentage of payroll
 - Components of general salary growth assumption
 - Inflation
 - Productivity growth
 - Service-based salary increases included in plan-specific demographic assumptions
 - Recommending a decrease in general salary growth assumption due to recommended reduction in inflation assumption
 - Economic forecasts we reviewed for inflation, and capital market assumptions from WSIB, suggest lower economic growth over next 15-20 years than what occurred in the past
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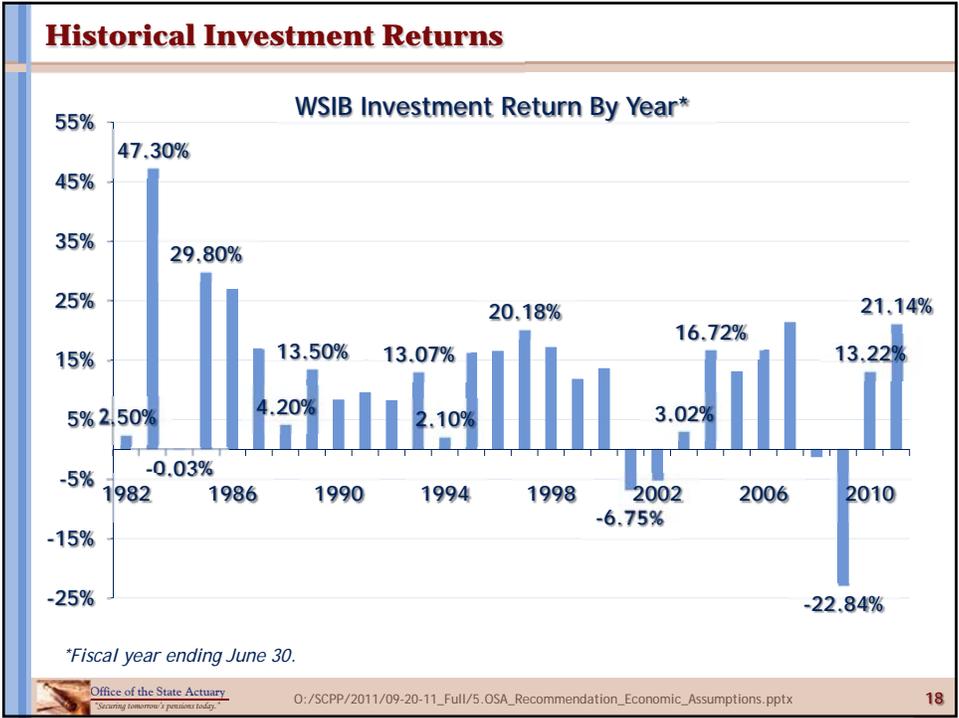
General Salary Growth Experience

General Salary Growth Experience 1984 - 2010			
	Observed Inflation	Observed Productivity	Total General Salary Growth
PERS	3.04%	0.82%	3.86%
TRS	3.04%	0.83%	3.87%
SERS	3.04%	0.37%	3.41%
WSPRS	3.04%	0.74%	3.78%

Note: Insufficient data to study PSERS (new plan).

Annual Investment Return

- Assumption used to determine today's value of future benefit payments and salaries
- Key assumption for determining contribution requirements
- Components of annual investment return assumption
 - Inflation
 - Real rate of return
- Recommending a decrease in annual investment return assumption consistent with WSIB's capital market assumptions
- I don't expect historical conditions that produced strong investment markets of the past to repeat for some time



Simulated Future Investment Returns

Measurement Period	Simulated Future Returns*	
	15 Years	50 Years
75th percentile	10.14%	8.95%
60th percentile	8.50%	8.04%
55th percentile	8.01%	7.76%
Expected Return	7.52%	7.49%
45th percentile	7.04%	7.22%
40th percentile	6.55%	6.94%
25th percentile	4.94%	6.03%

* Based on WSIB's capital market assumptions.

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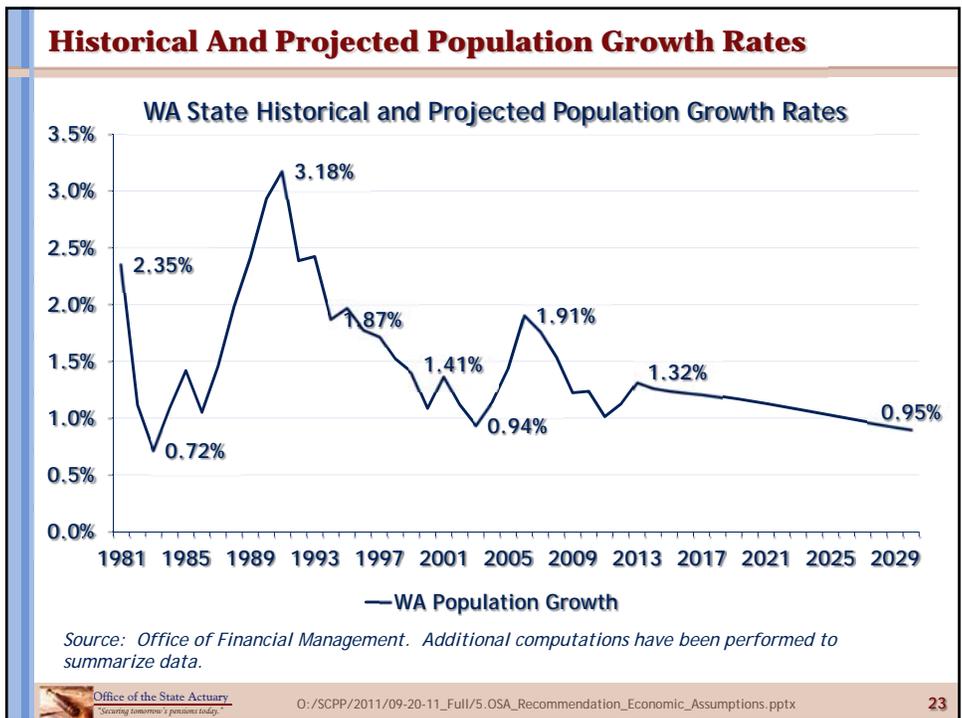
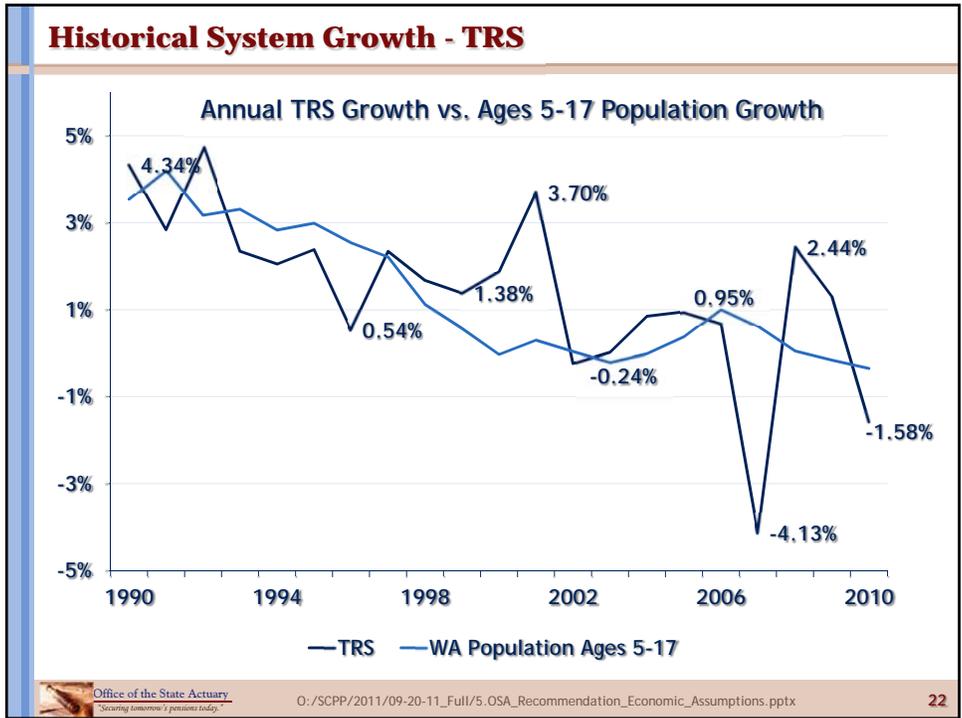
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Growth In System Membership

- Assumption used to determine amortization payments for Plan 1 UAAL
 - Under current law, Plan 1 UAAL amortized over a rolling ten-year period as a percentage of system payrolls
- Short-term forces materially impact this assumption since we're projecting membership growth over ten years
- Recommending a decrease in growth in system membership assumption due to a decrease in system growth and state population growth over past 20 years
- OFM expects both general state population and school age population (ages 5-17) growth to decrease
 - Retirement system growth correlated with state population growth
- Expect short-term reduction in system growth due to state and local government budget cuts in response to recent recession

Historical System Growth - PERS





Concluding Remarks On Economic Assumptions

- All current assumptions reasonable, but not representative of my best estimate
- Several changes in long-term economic assumptions recommended
- Adopting recommendation will improve system health and lessen some financial risks, but increase short-term budget impacts
- Phase-in of change in assumed rate of return recommended



Budget Impact Of Full Recommendation (No Phase-In)

Increase in Contributions from Adopting Full Recommendation						
(Dollars in Millions)	PERS	TRS	SERS	PSERS	WSPRS	Total
2013-2015						
General Fund	\$69.7	\$157.8	\$28.7	\$4.8	\$0.1	\$261.1
Non-General Fund	99.4	0.0	0.0	0.5	1.2	101.1
Total State	\$169.1	\$157.8	\$28.7	\$5.3	\$1.3	\$362.1
Local Government	180.8	80.2	35.7	1.5	0.0	298.1
Total Employer	\$349.9	\$238.0	\$64.4	\$6.8	\$1.3	\$660.3
Total Employee	\$193.3	\$25.6	\$18.4	\$3.9	\$1.3	\$242.4

Note: Revised from August 31, 2011 report.

Totals may not agree due to rounding.

Contribution Rate Impact Of Full Recommendation

Increase in Contribution Rates from Adopting Full Recommendation (Effective 7/1/2013)					
2013-2015 State Budget	PERS	TRS	SERS	PSERS	WSPRS*
Employee (Plan 2)	1.39%	1.52%	1.52%	0.71%	0.63%
Employer					
Current Annual Cost	1.39%	1.52%	1.52%	0.71%	0.63%
Plan 1 Past Cost	0.51%	0.89%	0.51%	0.51%	N/A
Total Employer	1.90%	2.41%	2.03%	1.21%	0.63%

* Represents change in minimum contribution rate.

Recommended Investment Return Phase-In

Biennium	Recommended Phase-In Investment Return Assumption
2011-13	8.00%
2013-15	7.90%
2015-17	7.80%
2017-19	7.70%
2019-21	7.60%
2021-23	7.50%

Budget Impact Of Phase-In

Increase in Contributions from Adopting Phase-In						
(Dollars in Millions)	PERS	TRS	SERS	PSERS	WSPRS	Total
2013-2015						
General Fund	\$7.5	\$15.8	\$3.4	\$0.6	\$0.0	\$27.4
Non-General Fund	10.7	0.0	0.0	0.1	(0.1)	10.7
Total State	\$18.3	\$15.8	\$3.4	\$0.6	(\$0.1)	\$38.0
Local Government	19.5	8.1	4.3	0.2	0.0	32.0
Total Employer	\$37.8	\$23.9	\$7.7	\$0.8	(\$0.1)	\$70.0
Total Employee	\$3.7	(\$0.4)	\$0.7	(\$0.2)	(\$0.1)	\$3.8

Note: Revised from August 31, 2011 report.
Totals may not agree due to rounding.

Contribution Rate Impact Of Phase-In

Increase in Contribution Rates from Adopting Phase-In					
(Effective 7/1/2013)					
2013-2015 State Budget	PERS	TRS	SERS	PSERS	WSPRS*
Employee (Plan 2)	0.04%	0.02%	0.08%	(0.02%)	(0.06%)
Employer					
Current Annual Cost	0.04%	0.02%	0.08%	(0.02%)	(0.06%)
Plan 1 Past Cost	0.16%	0.21%	0.16%	0.16%	N/A
Total Employer	0.20%	0.23%	0.23%	0.13%	(0.06%)

* Represents change in minimum contribution rate.

Recap

- Financial condition improved from last report
- Benefit changes lowered contribution requirements
 - Future contribution increases expected
- Litigation may change financial condition
- All current economic assumptions reasonable, but not representative of my best estimate
- Several changes in long-term economic assumptions recommended
- Adopting recommendation will improve system health and lessen some financial risks, but increase short-term budget impacts
- Phase-in of change in assumed rate of return recommended

Next Steps

- Opportunity to make recommendation to the PFC at next SCPP meeting
- PFC scheduled to meet and receive recommendation on October 12
 - Second meeting in October not yet scheduled
- PFC may adopt changes to economic assumptions by October 31
 - Any changes subject to revision by Legislature

