

Actuarial Gains/Losses

The next three tables display actuarial gains and losses, expressed as contribution rate changes. Actuaries use gain/loss analysis to compare actual changes to assumed changes in assets, liabilities, and salaries from various sources. We also use this analysis to determine:

- ❖ The accuracy of our valuation model and annual processing.
- ❖ Why contribution rates changed.
- ❖ To determine the reasonableness of the actuarial assumptions.

Actuarial gains will reduce contribution rates; actuarial losses will increase contribution rates. Under a reasonable set of actuarial assumptions, actuarial gains and losses will offset over long-term experience periods.

Change in Employer and State Contribution Rate by Source						
Change in Employer Rate	PERS	TRS	SERS*	PSERS*	LEOFF**	WSPRS
2010 Contribution Rate Before Laws of 2011	8.23%	9.04%	8.62%	9.58%	(5.02%)	7.71%
Remove Rate Floor / Ceiling	0.00%	0.00%	0.00%	0.00%	(0.77%)	(4.93%)
Remove Plan 1 Benefit Improvements After 2009	0.00%	0.00%	0.00%	0.00%	N/A	N/A
Prior Employer Liability	(0.11%)	(0.77%)	(1.00%)	0.00%	0.00%	(1.32%)
2010 Update Adjustment***	N/A	N/A	N/A	N/A	0.18%	N/A
2010 Adjusted Contribution Rate	8.12%	8.27%	7.62%	9.58%	(5.61%)	1.46%
Liability Gains/Losses	(0.11%)	0.34%	0.02%	0.07%	(0.67%)	(0.02%)
Asset Gains/Losses	0.76%	1.06%	0.52%	(0.01%)	0.56%	0.54%
Present Value of Future Salaries Gains/Losses	(0.15%)	(0.54%)	(0.26%)	(0.13%)	(0.23%)	0.00%
Incremental Changes	0.19%	0.22%	0.10%	(0.02%)	(1.11%)	0.26%
Other Gains/Losses	(0.03%)	(0.06%)	0.50%	0.59%	0.05%	(0.05%)
Total Change	0.66%	1.02%	0.88%	0.50%	(1.40%)	0.73%
2011 Preliminary Contribution Rate	8.78%	9.29%	8.50%	10.08%	(7.01%)	2.19%
Increase from Applied Rate Floor	0.00%	0.00%	0.00%	0.00%	0.55%	4.12%
Decrease from Applied Rate Ceiling	0.00%	0.00%	0.00%	0.00%	0.00%	N/A
Increase from Plan 1 Benefit Improvements After 2009	0.14%	0.15%	0.14%	0.14%	N/A	N/A
Rate to Amortize Prior Liability	0.11%	0.77%	1.00%	0.00%	0.00%	1.32%
Excess Member Rate	N/A	0.00%	N/A	N/A	N/A	0.00%
Laws of 2012	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011 Adjusted Contribution Rate	9.03%	10.21%	9.64%	10.22%	(6.46%)	7.63%

*The SERS and PSERS rates include the UAAL rate for PERS Plan 1. The "Other Gains/Losses" category includes the "Total Change" for the PERS 1 UAAL rate in those systems.

**The LEOFF contribution rate is the state's portion for Plan 2 (20% of the Normal Cost) plus the UAAL rate for Plan 1.

***LEOFF values for 2010 were updated after the 2010 Actuarial Valuation Report (AVR) was published.

Change in Employer and State Plan 2/3 Normal Cost Rate by Source						
Change in Normal Costs	PERS	TRS	SERS	PSERS	LEOFF*	WSPRS**
2010 Normal Cost Before Laws of 2011	4.97%	5.56%	5.36%	6.32%	2.94%	7.71%
Remove Rate Floor / Ceiling	0.00%	0.00%	0.00%	0.00%	(0.77%)	(4.93%)
Remove Prior Employer Liability	(0.11%)	(0.77%)	(1.00%)	0.00%	0.00%	(1.32%)
2010 Update Adjustment***	N/A	N/A	N/A	N/A	0.38%	N/A
2010 Adjusted Normal Cost Rate	4.86%	4.79%	4.36%	6.32%	2.55%	1.46%
Liabilities						
Salaries	(0.57%)	(0.55%)	(0.49%)	(0.30%)	(0.20%)	(1.20%)
Termination	(0.09%)	(0.18%)	(0.05%)	(0.08%)	0.00%	0.00%
Retirement	0.02%	0.05%	0.03%	0.00%	(0.01%)	(0.20%)
Growth / Return to Work	0.33%	0.71%	0.47%	0.47%	0.14%	0.41%
Other Liabilities	0.09%	0.06%	0.06%	(0.02%)	0.03%	0.97%
Total Liability Gains/Losses	(0.22%)	0.09%	0.02%	0.07%	(0.04%)	(0.02%)
Asset Gains/Losses	0.32%	0.39%	0.52%	(0.01%)	0.00%	0.54%
Present Value of Future Salaries Gains/Losses	(0.04%)	(0.28%)	(0.26%)	(0.13%)	(0.04%)	0.00%
Incremental Changes						
Plan Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Method Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Assumption Change	0.04%	0.03%	0.09%	(0.02%)	0.00%	0.25%
Correction Change	0.00%	0.00%	0.01%	0.00%	0.00%	0.01%
Total Incremental Changes Gains/Losses	0.04%	0.03%	0.10%	(0.02%)	0.00%	0.26%
Other Gains/Losses	(0.04%)	(0.06%)	(0.10%)	(0.01%)	0.01%	(0.05%)
Total Change	0.06%	0.17%	0.28%	(0.10%)	(0.07%)	0.73%
2011 Preliminary Normal Cost	4.92%	4.96%	4.64%	6.22%	2.48%	2.19%
Increase from Applied Rate Floor	0.00%	0.00%	0.00%	0.00%	0.55%	4.12%
Rate to Amortize Prior Employer Liability	0.11%	0.77%	1.00%	0.00%	0.00%	1.32%
Excess Member Rate	N/A	0.00%	N/A	N/A	N/A	0.00%
Laws of 2012	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011 Adjusted Normal Cost	5.03%	5.73%	5.64%	6.22%	3.03%	7.63%

*The LEOFF contribution rate is the state's portion only (20% of the Plan 2 Normal Cost).

**The WSPRS normal cost contribution rate applies to Plans 1 and 2.

***LEOFF values for 2010 were updated after the 2010 Actuarial Valuation Report (AVR) was published.

Change in Employer and State Plan 1 UAAL Rate by Source						
Change in UAAL Rate	PERS	TRS	SERS*	PSERS*	LEOFF**	WSPRS
2010 UAAL Rate Before Laws of 2011	3.26%	3.48%	3.26%	3.26%	(7.96%)	N/A
Remove Rate Floor / Ceiling	0.00%	0.00%	0.00%	0.00%	0.00%	N/A
Remove Plan 1 Benefit Improvements After 2009	0.00%	0.00%	0.00%	0.00%	N/A	N/A
2010 Update Adjustment***	N/A	N/A	N/A	N/A	(0.20%)	N/A
2010 Adjusted UAAL Rate	3.26%	3.48%	3.26%	3.26%	(8.16%)	N/A
Liabilities						
Salaries	(0.07%)	(0.10%)	N/A	N/A	(0.04%)	N/A
Termination	0.00%	0.00%	N/A	N/A	0.00%	N/A
Retirement	(0.02%)	(0.04%)	N/A	N/A	(0.03%)	N/A
Return to Work	0.01%	0.01%	N/A	N/A	0.00%	N/A
Inflation (CPI)	0.00%	0.00%	N/A	N/A	(0.74%)	N/A
Other Liabilities	0.19%	0.38%	N/A	N/A	0.18%	N/A
Total Liability Gains/Losses	0.11%	0.25%	N/A	N/A	(0.63%)	N/A
Asset Gains/Losses	0.44%	0.67%	N/A	N/A	0.56%	N/A
Present Value of Future Salaries Gains/Losses	(0.11%)	(0.26%)	N/A	N/A	(0.19%)	N/A
Incremental Changes						
Plan Change	(0.01%)	(0.02%)	N/A	N/A	0.00%	N/A
Method Change	0.00%	0.00%	N/A	N/A	0.00%	N/A
Assumption Change	0.16%	0.21%	N/A	N/A	(1.11%)	N/A
Correction Change	0.00%	0.00%	N/A	N/A	0.00%	N/A
Total Incremental Changes Gains/Losses	0.15%	0.19%	N/A	N/A	(1.11%)	N/A
Other Gains/Losses	0.01%	0.00%	N/A	N/A	0.04%	N/A
Total Change	0.60%	0.85%	0.60%	0.60%	(1.33%)	N/A
2011 Preliminary UAAL Rate	3.86%	4.33%	3.86%	3.86%	(9.49%)	N/A
Increase from Applied Rate Floor	0.00%	0.00%	0.00%	0.00%	N/A	N/A
Decrease from Applied Rate Ceiling	0.00%	0.00%	0.00%	0.00%	0.00%	N/A
Increase from Plan 1 Benefit Improvements After 2009	0.14%	0.15%	0.14%	0.14%	N/A	N/A
Laws of 2012	0.00%	0.00%	0.00%	0.00%	0.00%	N/A
2011 Adjusted UAAL Rate	4.00%	4.48%	4.00%	4.00%	(9.49%)	N/A

*The SERS and PSERS rates are to fund the PERS Plan 1 UAAL.

**The LEOFF contribution rate is the UAAL rate for plan 1. The plan has a surplus of assets over liabilities, so no rate is currently payable.

***LEOFF values for 2010 were updated after the 2010 Actuarial Valuation Report (AVR) was published.