

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 |
| 2011 Contribution Rate Before Laws of 2012 | 9.03% | 10.21% | 9.64% | 10.22% | (6.46%) | 7.63% |
| Remove Rate Floor / Ceiling | 0.00% | 0.00% | 0.00% | 0.00% | (0.55%) | (4.12%) |
| Remove Plan 1 Benefit Improvements After 2009 | (0.14%) | (0.15%) | (0.14%) | (0.14%) | N/A | N/A |
| Remove Prior Liability and LEOFF 1 Funding Method Changes | (0.11%) | (0.77%) | (1.00%) | 0.00% | (2.12%) | (1.32%) |
| 2011 Adjusted Contribution Rate | 8.78% | 9.29% | 8.50% | 10.08% | (9.13%) | 2.19% |
| Liability Gains/Losses | (0.22%) | (0.59%) | (0.23%) | 0.00% | 0.07% | (0.63%) |
| Asset Gains/Losses | 0.63% | 1.01% | 0.46% | 0.01% | 0.69% | 0.45% |
| Present Value of Future Salaries Gains/Losses | (0.32%) | (0.25%) | (0.17%) | (0.11%) | (0.45%) | (0.04%) |
| Incremental Changes | 0.07% | 0.15% | 0.00% | 0.00% | (0.39%) | (0.16%) |
| Other Gains/Losses | (0.04%) | (0.06%) | 0.10% | 0.16% | (0.32%) | (0.03%) |
| Total Change | 0.12% | 0.26% | 0.16% | 0.06% | (0.40%) | (0.41%) |
| 2012 Preliminary Contribution Rate | 8.90% | 9.55% | 8.66% | 10.14% | (9.53%) | 1.78% |
| Increase from Applied Rate Floor | 0.00% | 0.21% | 0.00% | 0.00% | 0.74% | 4.66% |
| 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 2013 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| 2012 Adjusted Contribution Rate | 9.15% | 10.68% | 9.80% | 10.28% | (8.79%) | 7.76% |

*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.

| Change in Employer and State Plan 2/3 Normal Cost Rate by Source | | | | | | |
|--|----------------|----------------|----------------|----------------|----------------|----------------|
| Change in Normal Costs | PERS | TRS | SERS | PSERS | LEOFF* | WSPRS** |
| 2011 Normal Cost Before Laws of 2012 | 5.03% | 5.73% | 5.64% | 6.22% | 3.03% | 7.63% |
| Remove Rate Floor / Ceiling | 0.00% | 0.00% | 0.00% | 0.00% | (0.55%) | (4.12%) |
| Remove Prior Employer Liability | (0.11%) | (0.77%) | (1.00%) | 0.00% | 0.00% | (1.32%) |
| 2011 Adjusted Normal Cost Rate | 4.92% | 4.96% | 4.64% | 6.22% | 2.48% | 2.19% |
| Liabilities | | | | | | |
| Salaries | (0.54%) | (0.83%) | (0.62%) | (0.36%) | (0.22%) | (0.83%) |
| Termination | (0.11%) | (0.28%) | (0.13%) | (0.15%) | (0.01%) | (0.17%) |
| Retirement | 0.02% | 0.04% | 0.03% | 0.01% | (0.01%) | (0.08%) |
| Growth / Return to Work | 0.38% | 0.64% | 0.44% | 0.53% | 0.13% | 0.46% |
| Other Liabilities | 0.09% | 0.04% | 0.05% | (0.03%) | 0.04% | (0.01%) |
| Total Liability Gains/Losses | (0.16%) | (0.39%) | (0.23%) | 0.00% | (0.07%) | (0.63%) |
| Asset Gains/Losses | 0.24% | 0.30% | 0.46% | 0.01% | 0.01% | 0.45% |
| Present Value of Future Salaries Gains/Losses | (0.13%) | (0.09%) | (0.17%) | (0.11%) | (0.03%) | (0.04%) |
| 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 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| Correction Change | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | (0.16%) |
| Total Incremental Changes Gains/Losses | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | (0.16%) |
| Other Gains/Losses | (0.04%) | (0.04%) | (0.11%) | (0.05%) | (0.03%) | (0.03%) |
| Total Change | (0.09%) | (0.22%) | (0.05%) | (0.15%) | (0.12%) | (0.41%) |
| 2012 Preliminary Normal Cost | 4.83% | 4.74% | 4.59% | 6.07% | 2.36% | 1.78% |
| Increase from Applied Rate Floor | 0.00% | 0.21% | 0.00% | 0.00% | 0.74% | 4.66% |
| 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 2013 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% |
| 2012 Adjusted Normal Cost | 4.94% | 5.72% | 5.59% | 6.07% | 3.10% | 7.76% |

*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.

| Change in Employer and State Plan 1 UAAL Rate by Source | | | | | | |
|---|----------------|----------------|--------------|--------------|-----------------|------------|
| Change in UAAL Rate | PERS | TRS | SERS* | PSERS* | LEOFF** | WSPRS |
| 2011 UAAL Rate Before Laws of 2012 | 4.00% | 4.48% | 4.00% | 4.00% | (9.49%) | 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 | (0.14%) | (0.15%) | (0.14%) | (0.14%) | N/A | N/A |
| LEOFF 1 Roll Forward Funding Method | N/A | N/A | N/A | N/A | (2.12%) | N/A |
| 2011 Adjusted UAAL Rate | 3.86% | 4.33% | 3.86% | 3.86% | (11.61%) | N/A |
| Liabilities | | | | | | |
| Salaries | (0.05%) | (0.12%) | N/A | N/A | (0.03%) | N/A |
| Termination | 0.00% | 0.00% | N/A | N/A | 0.00% | N/A |
| Retirement | (0.02%) | (0.03%) | N/A | N/A | (0.01%) | N/A |
| Return to Work | 0.00% | 0.01% | N/A | N/A | 0.00% | N/A |
| Inflation (CPI) | 0.00% | 0.00% | N/A | N/A | 0.05% | N/A |
| Other Liabilities | 0.01% | (0.06%) | N/A | N/A | 0.13% | N/A |
| Total Liability Gains/Losses | (0.06%) | (0.20%) | N/A | N/A | 0.14% | N/A |
| Asset Gains/Losses | 0.39% | 0.71% | N/A | N/A | 0.68% | N/A |
| Present Value of Future Salaries Gains/Losses | (0.19%) | (0.16%) | N/A | N/A | (0.42%) | N/A |
| Incremental Changes | | | | | | |
| Plan Change | 0.00% | 0.00% | N/A | N/A | 0.00% | N/A |
| Method Change | 0.00% | 0.00% | N/A | N/A | (0.32%) | N/A |
| Assumption Change | 0.00% | 0.00% | N/A | N/A | 0.00% | N/A |
| Correction Change | 0.07% | 0.15% | N/A | N/A | (0.07%) | N/A |
| Total Incremental Changes Gains/Losses | 0.07% | 0.15% | N/A | N/A | (0.39%) | N/A |
| Other Gains/Losses | 0.00% | (0.02%) | N/A | N/A | (0.29%) | N/A |
| Total Change | 0.21% | 0.48% | 0.21% | 0.21% | (0.28%) | N/A |
| 2012 Preliminary UAAL Rate | 4.07% | 4.81% | 4.07% | 4.07% | (11.89%) | 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 2013 | 0.00% | 0.00% | 0.00% | 0.00% | 0.00% | N/A |
| 2012 Adjusted UAAL Rate | 4.21% | 4.96% | 4.21% | 4.21% | (11.89%) | 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.