Matrix Assesses State Pensions' Long-Term Fiscal Health

California

California's main pension plans—the California Public Employees' Retirement System (CalPERS) and the California State Teachers' Retirement System (CalSTRS)—are the nation's largest state plans. CalPERS requires that participating employers make the full actuarially recommended contributions but has been managing pension debt attributed to unfunded benefit increases offered in 1999. CalSTRS received less than the actuarially recommended contribution for several years, but reforms in 2014 strengthened the plan's funding policy.

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72% Funded ratio, 2019
Average state funded ratio is 71%.

-15% Change in funded ratio, 2008-19
The 50-state funded ratio **declined 12%** from 2008 to 2019.

-0.7% Operating cash flow, 2019
Below -5% is an early warning sign of fiscal distress.

26.6% of payroll Historical contribution volatility, 2008-19
Successful state plans keep contribution volatility to less than 3% of payroll through risk management.

Does stress testing? **Yes**
16 states follow the best practice of regularly stress testing their pension plans.

Positive net amortization, 2019
35 states met this minimum contribution benchmark in 2019.

Note: Figures have been rounded. More detail can be found in "The State Pension Funding Gap" and Pew's Fiscal Sustainability Matrix.

The combination of a decade of increasing pension contributions and the strong market rally of 2021 has had a stabilizing effect on state pension plans. As a result, The Pew Charitable Trusts estimates that pension plan assets have risen by more than half a trillion dollars since 2011, leading to a 50-state funded ratio—the share of pension liabilities backed by plan assets—of over 80% and total state pension debt of less than $800 billion at the end of fiscal year 2021. This represents the highest funded ratio since before the Great Recession and the greatest progress in closing the state pension plan funding gap—the difference between plan liabilities and assets—this century.

However, not all state pension funds are approaching long-term fiscal sustainability, defined as government revenues matching expenditures without a corresponding increase in public debt. Although pension funds are currently benefiting from surging investment returns—which plans count on to cover 60% of the benefits they pay out—Pew estimates that long-term returns will decrease to about 6% annually, which is less than what most state pension plans are currently budgeting for.

To help policymakers navigate the uncertainty inherent in pension management and evaluate their plans' resiliency, Pew has developed a 50-state matrix of fiscal sustainability metrics. The matrix highlights the practices of successful state pension systems, presenting critical data in a single table to facilitate comparative analyses and state plan assessments. Specifically, these data points illuminate historical outcomes from policy choices, measures of cash flow that determine long-term solvency, and indicators of risk and uncertainty.

Why do the metrics above matter, and what do they mean?

- Historical actuarial metrics such as funded ratio—the value of a plan's assets in proportion to the pension liability—and change in funded ratio over time highlight past policies' impact on a plan's current financial position. These metrics are the foundation of any fiscal assessment; however, they provide little information to assess future investment or contribution risks.
- Current plan financial metrics speak directly to whether existing policy is sufficient to pay down unfunded liabilities and help public employees and taxpayers determine whether a plan is following funding policies that target debt reduction or if it is at risk of fiscal distress. The metrics are operating cash flow ratio—the difference, before investment returns, between payments and contributions, divided by assets—and net amortization, which measures whether total contributions to a public retirement system would have been sufficient to reduce pension debt if all actuarial assumptions (primarily investment expectations) had been met for the year. Based on historical cash flows and funding patterns, these metrics aid in assessing the risk of future underfunding or insolvency.
- State budgetary risk metrics, such as historical contribution volatility—the range between the lowest and highest employer contribution rate over a fixed period—and the regular practice of pension stress testing, are designed to assist policymakers as they plan for uncertainty or volatile costs in the future. Because state and local budgets often bear much or all of the risks taken on by public pension plans, these metrics are essential for long-term planning and can prompt reforms where needed.

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