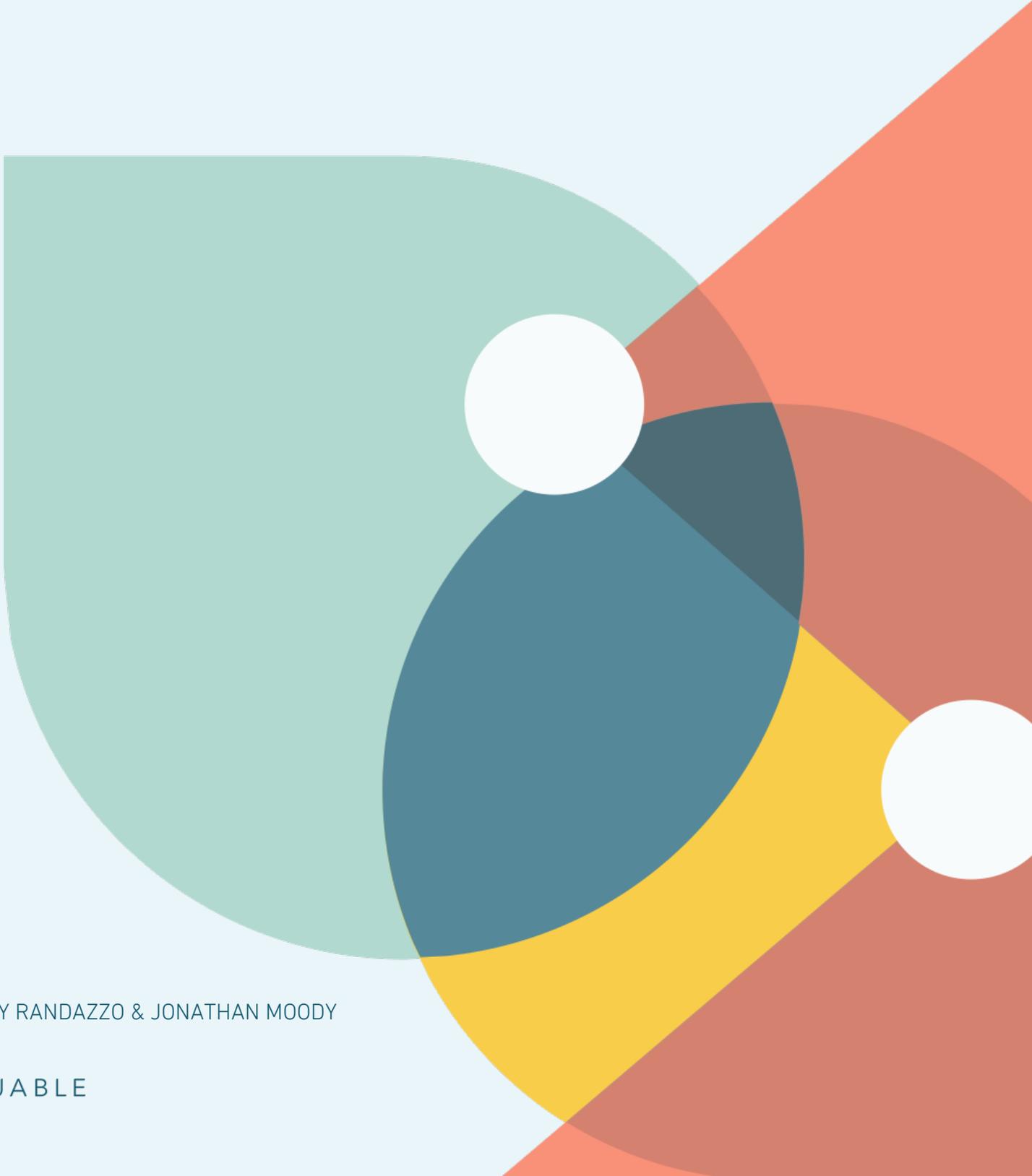


RESEARCH BRIEF

# The State of Pensions 2022 | October Update

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The Era of Volatility: Asset Shocks, Inflation, and War



ANTHONY RANDAZZO & JONATHAN MOODY

# The State of Pensions Remains Fragile in 2022.

When the fiscal year ended for most state pension plans on June 30th this year, the S&P 500 was down 10.6% year over year, and the Russell 3000 was down 15.1% over the same timeframe too. That, along with a complicated year for alternative investments, contributed to a decline in funded status for state and local pension plans. And in the three months since then, major indices have experienced a surge of improvement and another decline in value.

At the same time, public plans have been reporting strong real estate and private equity returns for their 2022 fiscal years. Given the nature of real estate markets the former is intuitive; however, the strength of private equity returns — with gains of 20% or more being typical — is perhaps unexpected. The net effect is that over the last three months, the outlook for state and local pension funds has improved slightly. Whether or not this is partially due to countercyclical private equity returns or a reticence to mark down the value of assets, remains to be determined.

Whichever the case, the narrative this year for state and local retirement systems remains the same: public pension plan funding in the United States is fragile. Asset shocks over the last three quarters have dramatically reduced public plan funded levels from 2021 figures. Thought, on net, the funded ratio for public plans has improved over the past three years, meaning the poor returns in 2022 didn't completely wipe out gains from 2021.

This research brief updates some of the topline numbers and trendline graphics from State of Pensions 2022 with a closer-to-complete set of data for 2021 actual figures as reported by retirement systems, and an updated estimate to funded status figures for the fiscal year 2022 using preliminary rate of return data released by pension plans.

The volatility and fragility of the past few years point to the clear reality: public retirement systems collectively are not going to invest their way out of their poor funded status. The primary path forward for most pension funds with fragile or distressed funded ratios will likely require assumption changes and contribution increases.

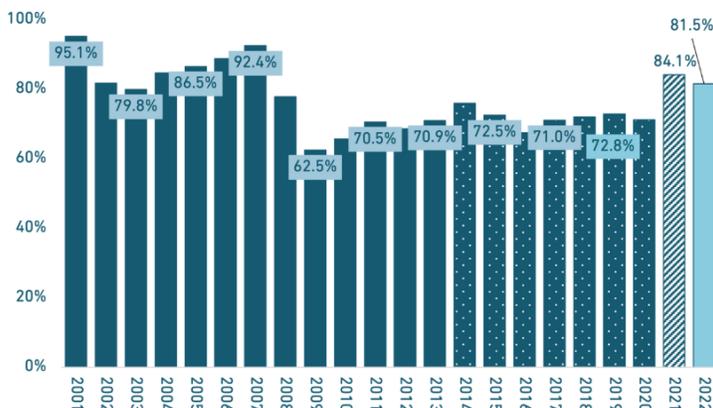
The national funded ratio average is projected to decline from 84.1% in 2021 to 81.5% in 2022.

States and cities have made full contributions to their pension funds and in many cases even provided supplemental contributions. But poor investment returns in 2022 have driven down the average funded ratio for state and local plans. This is a loss of roughly one-fifth of last year's improvement.

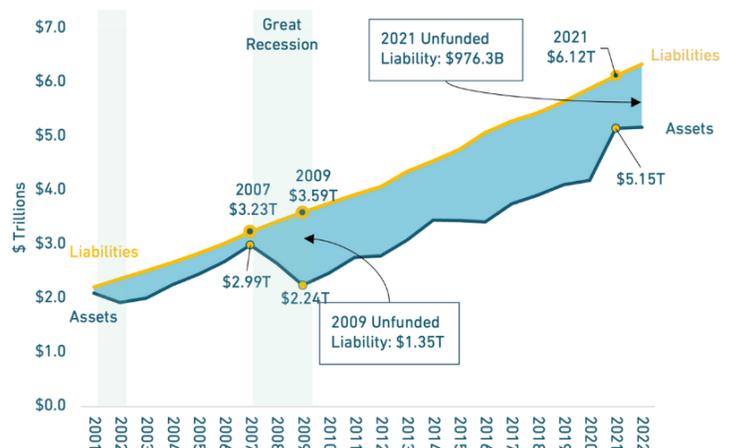
The total pension funding shortfall will increase to \$1.2 trillion in 2022, reversing the one-year drip below the \$1 Trillion line in 2021.

Strong investment returns 2021 led to a decline in unfunded liabilities down to \$976.3 billion. We think pension debt will increase back up to \$1.2 trillion in 2022 due to poor investment returns. This increase would have been larger if not for better-than-expected performance from private equity investments.

FUNDED RATIO AVERAGE  
FOR STATE & LOCAL PENSION PLANS | 2001-2021 + 2022 Estimate



TOTAL UNFUNDED LIABILITIES  
FOR STATE & LOCAL PENSION PLANS | 2001-2021 + 2022 Estimate

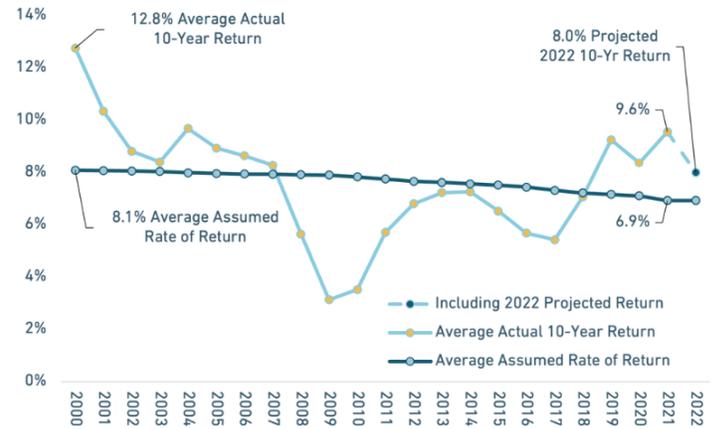


A -6.0% average investment return for the 2022 fiscal year has erased nearly one-fifth of the funded ratio gains of 2021.

Preliminary 2022 investment returns (for data reported as of September 30) show a -6.0% return on average for state and local plans. All systems are forecast to miss their assumed return for the year, currently averaging 6.9%. The net result is that assets have declined notably.

Last year's incredible investment returns (24.8% on average) did include some future returns that were "pulled forward" and ultimately led to a market correction. The average return for 2020-2022 is 7.9%; capital market forecasts suggest the average return over the next decade is likely to be around 6%.

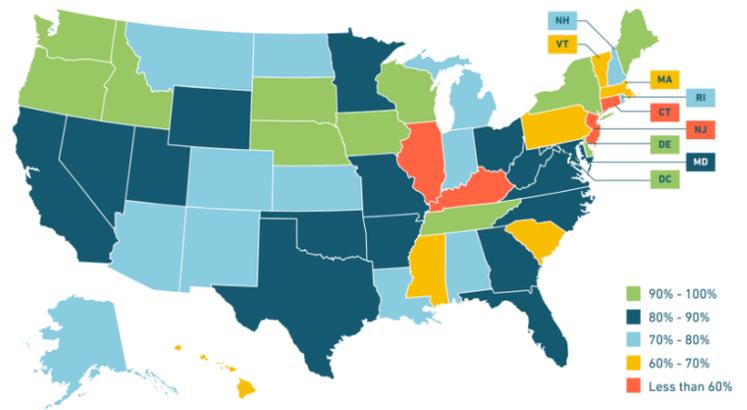
INVESTMENT RETURN AVERAGES  
COMPARED TO ASSUMED RATES OF RETURN | 2001-2022



A majority of U.S. state and municipal pension plans are distressed or fragile.

Within the states, funded ratios and unfunded liability levels continue to vary considerably from state to state. The vast majority of plans have a Fragile (90% to 60%) or Distressed (60% or less) funded status.

2022 ESTIMATED AGGREGATE STATE FUNDED RATIOS BASED ON ESTIMATED ASSETS FOR STATE & LOCAL PENSION PLANS



## How This Update Changes Our Findings for State and Local Pension Plans:

- The average 2022 estimated rate of return shifted from -10.4% to -6.0% after factoring in reported preliminary returns and updated private equity data for the second quarter of 2022.
- The average 2022 estimated funded ratio shifted from 77.9% to 81.5% based on updated return data.
- The total 2022 unfunded liability estimate shifted from \$1.4 trillion to \$1.2 trillion based on updated return data.
- The average 2021 actual funded ratio shifted from 84.8% to 84.1% based on additional reported plan data.
- The total 2021 unfunded liability report shifted from \$933 billion to \$976.3 billion based on additional reported plan data.

To read more about State of Pensions visit [Equable.org/StateofPensions2022](https://Equable.org/StateofPensions2022)

## WHAT IS INCLUDED IN THIS UPDATE?

When we published State of Pensions in July 2022, there were still 33 state or local retirement systems that had not released data for the fiscal year ending 2021. These plans amounted to 16.6% of anticipated accrued liabilities for 2021, most of which is related to CalPERS (although we did include their reported market valued asset data). Further, our July report relied almost entirely on estimated investment returns using benchmarks for the various reported asset classes that pension funds were using as of 2021.

Over the last three months several retirement systems have released new and updated data, including preliminary investment return reports. This October 2022 fact sheet uses those reports to includes the following:

- Updated 2021 actual financial data, including the addition of actuarial valuation report data from 21 retirement systems that represent 6.8% of the accrued liabilities in our dataset. There are still outstanding 2021 reports from 3 state systems (CalPERS, Pennsylvania Municipal Retirement System, and Utah Retirement System) and 4 municipal systems.
- Updated 2022 estimates, using preliminary investment returns from retirement systems, pension fund trusts, and state treasurer or comptroller offices. As of this update, 128 (56.4%) of the 227 retirement systems in the available data have reported preliminary returns for their full fiscal 2022. For the remaining 99 plans, 72 (31.7% of total plans) use reported investment returns through some point in 2022, resulting in an estimate that uses a combination of both partial year preliminary actual returns and benchmarks. The last 27 plans (11.9% of total plans) have not reported any investment performance for fiscal 2022, meaning that their estimates are based entirely on market benchmarks and their respective asset allocations.

For this update, there were no additional retirement systems or pension plans added to the database of 227 entities that comprise the Equable Public Retirement Research Database. We note, that Equable's full finance database includes 232 plans; however, data were insufficient to include five plans in this analysis.

## ABOUT STATE OF PENSIONS

State of Pensions is Equable Institute's annual report on the status of statewide public pension systems, put into a historic context. Governments face a wide range of challenges in general – and some of the largest are growing, and often unpredictable, pension costs. State of Pensions analyzes trends in public pension funding, investments, contributions, cash flows, and benefits for 228 of the largest statewide and municipal retirement systems in all 50 states to illuminate the scale and effects of these challenges. [Click here](#) to access previous editions of State of Pensions, as well as additional data and resources.

## ABOUT EQUABLE INSTITUTE

Equable Institute is a bipartisan nonprofit that works with public retirement system stakeholders to solve complex pension funding challenges with data-driven solutions.

## ABOUT THE AUTHORS

**Anthony Randazzo (Executive Director)** is a national expert on public sector pension policy and has provided technical assistance to more than a dozen states and cities on ways to improve retirement plan sustainability.

**Jonathan Moody, PhD (Vice President for Research)** has developed a wide range of academic and policy research on municipal finance subjects, including state budgeting and reserve funds, state credit ratings, state fiscal management, and public retirement benefits.