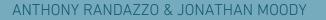
RESEARCH BRIEF

The State of Pensions 2023 | Year End Update

Market Uncertainty, Politics, and Risk Addiction in the Age of Volatility





The State of Pensions at the End of 2023 Remains Fragile.

At the end of fiscal year 2023, the average funded ratio for American public pension plans was 78.1%. While this is a modest improvement over the losses of 2022, it is also a continuation of the fragile funded status that has persisted for more than a decade and a half after the financial crisis. Government employers will need to increase regular contribution rates into their pension funds or face a likely future of persistent unfunded liabilities. That's because status quo policies are not going to solve the \$1.4 trillion unfunded liability problem states and cities are facing today.

Most pension funds had moderately positive to solid investment performance last year. Nearly every state paid 100% of required costs, and several states also made supplemental contributions to further bolster funds. Yet, the national average funded ratio only made modest improvement and unfunded liabilities only slightly declined. It is evident that investment returns on their own are not going to rescue state and local retirement plans. If allowed to persist, unfunded liabilities will likely result in uncontrolled and unknown cost increases.

This dynamic sets up an important debate for pension fund trustees and legislatures: Are governments willing to increase required contribution rates in order to: (a) target more realistic investment returns; and (b) have a serious strategy to pay down unfunded liabilities within the next 15–20 years? Or will they continue to tolerate uncontrolled unfunded liability costs? In either case, costs will increase and both approaches come with trade-offs and significant budgetary implications that should be carefully considered.

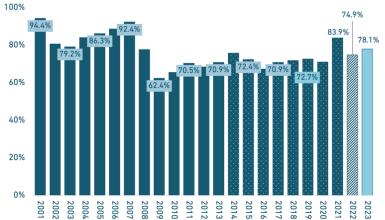
As we look ahead in 2024 for public pension plans in the U.S., here is what is important to know:

- Assumed rates of return have declined over the last few years but remain higher than what should be considered reasonable today (between 5.5% and 6.5%, depending on the pension fund).
- Valuation risk continues to grow, as public plans have not adopted any widespread reduction in their allocations to private equity, real estate, or other asset classes that lack transparent market pricing, despite declining valuations. For any given pension fund this may be the right choice, but the industry trend as a whole is a concern.
- The effects of inflation on pension funds are still not completely known. For example, increased COLAs may change benefit payment projections, and it is not clear how the Federal Reserve may adjust interest rate policies in 2024.
- An emerging investment trend is expanded allocations to private debt (including discussion of direct lending) alongside existing private equity holdings — which could have an eventful year with renewed interest in IPOs.

The average national funded ratio has improved from 74.9% in 2022 to 78.1% at the end of 2023.

This improvement is partially from investment returns and partially from supplemental contributions. One caution: The lagged timing of private equity performance reports means that some losses from the 2023 fiscal year may show up in 2024 numbers.

FUNDED RATIO AVERAGE



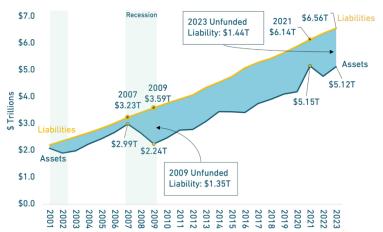
FOR STATE & LOCAL PENSION PLANS | 2001-2022 + 2023 Estimate

The total pension funding shortfall will decline to \$1.44 trillion in 2023, down from the historically high \$1.6 trillion in 2022 unfunded liabilities.

After investment swings in 2021 and 2022, returns stabilized in 2023. While this didn't translate into a substantial improvement, unfunded liabilities did decline slightly — which is positive.

FOTAL UNFUNDED LIABILITIES

FOR K-12 PENSION PLANS | 2001-2022 + 2023 Estimate



EQUABLE

The preliminary 7.47% average investment return for the 2023 fiscal year beat the 6.9% average assumed rate of return for 2023.

The average of *actual* reported 2023 fiscal year investment returns for state and local pension funds is 7.05%. But the calendar year ended strong for investments, and when we include *estimated* returns for pension plans that haven't yet reported their 2023 data (e.g., those with December 31 fiscal year end dates), the average return for 2023 is 7.47%.

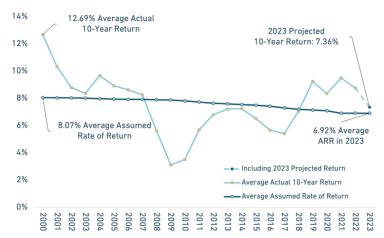
Around 53% of plans beat their own assumed return for 2023. Within the plans there is a wide range of for 2023 returns (-4.1% to 13.3%). Pension funds with a fiscal date ending in September averaged the best returns (10.5%).

Most state and municipal pension plans in the United States are <u>distressed</u> or <u>fragile</u>.

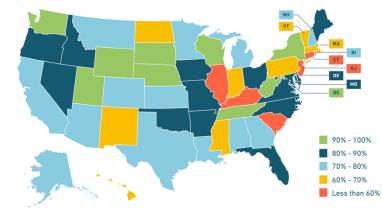
Within the states, funded ratios and unfunded liability levels continue to vary considerably from state to state. For example, in California the Public Employees' Retirement System is 72% funded while the City of Los Angeles Fire and Police Pension Plan is 99.6% funded.

A few state pension plans still report a Resilient funded status (90% or better for three years continuously). However, the vast majority of U.S. pension plans have a Fragile (90% to 60%) or Distressed (60% or less) funded status.

INVESTMENT RETURN AVERAGES COMPARED TO ASSUMED RATES OF RETURN | 2001-2023



2023 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 2023 estimated rate of return shifted from 5.6% (as of October 30) to 7.5% (as of December 31) after factoring in reported preliminary returns and final fiscal year market returns.
- The average 2023 estimated funded ratio shifted from 78.8% to 78.1% based on updated return data.
- The total 2023 unfunded liability estimate shifted from \$1.39 trillion to \$1.44 trillion based on updated data.
- The average 2022 actual funded ratio shifted from 75.0% to 74.9% based on additional reported plan data.
- The total 2022 actual unfunded liability reported shifted from \$1.59 trillion to \$1.60 trillion based on additional reported plan data.

To read more about State of Pensions visit http://equable.org/StateofPensions2023

Funded Ratio Ranking, by State | 2023

Rank	State	Funded Ratio	Unfunded Liability	Rank	State	Funded Ratio	Unfunded Liability
1	District of Columbia	107.2%	-\$728,545,536	27	Texas	76.9%	\$97,586,978,816
2	Utah	107.0%	-\$3,272,062,976	28	Kansas	76.5%	\$8,558,312,448
3	Tennessee	105.0%	-\$3,197,822,464	29	Alaska	76.5%	\$5,626,329,088
4	Washington	103.5%	-\$5,050,556,416	30	Georgia	75.8%	\$36,104,192,000
5	Wisconsin	100.2%	-\$255,329,792	31	Minnesota	75.2%	\$24,812,568,576
6	South Dakota	100.0%	\$0	32	Rhode Island	74.6%	\$3,695,855,616
7	Nebraska	98.1%	\$346,958,336	33	Louisiana	74.2%	\$19,638,831,104
8	Wyoming	93.6%	\$732,098,560	34	Michigan	73.9%	\$38,263,537,664
9	West Virginia	93.1%	\$1,376,829,952	35	Arizona	73.2%	\$26,824,454,144
10	New York	92.0%	\$54,593,851,392	36	New Hampshire	73.2%	\$4,548,948,992
11	lowa	89.6%	\$5,139,864,064	37	Montana	73.0%	\$4,377,816,576
12	Idaho	88.9%	\$2,749,214,720	38	Alabama	71.5%	\$18,876,729,344
13	North Carolina	88.6%	\$15,240,099,840	39	Colorado	71.4%	\$27,807,348,736
14	Oregon	88.2%	\$12,111,323,136	40	Massachusetts	68.8%	\$35,148,951,552
15	Delaware	87.6%	\$1,567,005,696	41	Pennsylvania	68.3%	\$60,126,621,696
16	Maine	87.2%	\$2,766,481,664	42	North Dakota	67.4%	\$3,387,496,960
17	Virginia	85.6%	\$14,582,269,952	43	Mississippi	66.3%	\$17,831,391,232
18	Arkansas	84.7%	\$6,797,541,376	44	New Mexico	65.4%	\$17,331,079,168
19	Florida	81.8%	\$42,371,813,376	45	Hawaii	65.4%	\$12,523,927,552
20	Nevada	81.8%	\$13,867,799,552	46	Vermont	63.3%	\$3,396,195,840
21	Ohio	81.3%	\$53,688,205,312	47	South Carolina	59.9%	\$27,221,536,768
22	Maryland	80.8%	\$17,443,424,256	48	Connecticut	57.8%	\$37,287,247,872
23	Missouri	80.5%	\$19,543,875,584	49	New Jersey	53.5%	\$95,228,624,896
24	Oklahoma	80.0%	\$9,703,258,112	50	Illinois	50.9%	\$208,011,984,896
25	California	79.8%	\$292,125,736,960	51	Kentucky	50.1%	\$40,548,839,424
26	Indiana	78.1%	\$10,870,506,496				

Data for each state include statewide plans and large municipally managed plans (those with at least \$1 billion in liabilities). Negative unfunded liability numbers indicate "overfunded" status for the fiscal year.

> Funded ratio rankings for individual pension plans are available at Equable.org/PensionPlanFundedRatios

WHAT IS INCLUDED IN THIS UPDATE?

When we published State of Pensions in July 2023, there were still 33 state or local retirement systems that had not released data for the fiscal year ending 2022. These plans amounted to 4.7% of anticipated accrued liabilities for 2022. Further, our July report relied almost entirely on estimated investment returns, using benchmarks for the various reported asset classes pension funds were using at the start of their 2023 fiscal year.

Over the last six months many retirement systems have released new and updated data, including preliminary investment return reports and some valuation reports. This January 2024 fact sheet uses those reports to include the following:

- Updated 2022 actual financial data, including the addition of actuarial valuation report data from 30 retirement systems that represent 4.6% of the accrued liabilities in our dataset. There are still outstanding 2022 reports from three retirement systems (Pennsylvania Municipal, Dallas Police and Fire, and Kansas City Missouri Schools).
- Updated 2023 estimates use preliminary investment returns from retirement systems, pension fund trusts, and state treasurer or comptroller offices. As of this update, 168 (75%) of the 225 retirement systems in the available data have reported preliminary returns for their 2023 full fiscal year. For the remaining retirement systems included, 42 plans have reported partial investment returns during the 2023 fiscal year, meaning our estimate combines partial-year preliminary actual returns and benchmarks. The remaining 15 plans have not reported any investment performance for fiscal year 2023, meaning their estimates are based entirely on market benchmarks and their respective asset allocations.

The Equable Public Retirement Research Database includes 232 retirement plans; however, data were insufficient to include seven of these plans in State of Pensions analysis because of delayed reporting.

Note: This report is not estimating mid-2024 fiscal year funded status for any plan. Each pension fund's data for "2023" is based on when they end their fiscal year. We use their valuation reports or preliminary investment return data if published, and then estimate returns and roll forward assets and liabilities for the pension funds that haven't yet released data (such as the pension funds with December 31 fiscal year end dates).

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, often with unpredictable pension costs. State of Pensions analyzes trends in public pension funding, investments, contributions, cash flows, and benefits for 225 of the largest statewide and municipal retirement systems in all 50 states and D.C. to illuminate the scale and effects of these challenges. <u>Click here</u> 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.