EQUABLE

State *of* Pensions 2026

7th Annual Edition

Equable Institute Analysis of 253 State & Local Pension Plans

85.0% Funded

$1.13T Shortfall

9.4% Average Return

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 253 of the largest statewide and municipal retirement systems in all 50 states to illuminate the scale and effects of these challenges.



The Year at a Glance

Key national numbers at a glance | Fiscal Year 2026

NATIONAL FUNDED RATIO

85.0%

+3.9pp vs. 2025

TOTAL UNFUNDED LIABILITIES

$1.13T

-$210B vs. 2025

AVERAGE INVESTMENT RETURN

9.4%

(beat 6.9% target)

EMPLOYER CONTRIBUTION RATE

31.83%

of payroll (historic high)

PLANS IN RESILIENT TIER

41.5%

(most in a decade)



Six Key Facts from this Year's Report

1

U.S. public pension funds remain **$1.13 trillion** short — just $210 billion better than 2009's $1.34 trillion gap despite 17 years of contributions and strong returns.

2

State governments now spend **31.83 cents per payroll dollar** on pensions — triple the rate in 2001.

3

If 2026's projected 85.0% funded ratio holds, it'd be the best since 2009 — yet **nearly 60% of public plans remain fragile or distressed** despite four straight above-target return years.

4

Over 27% of public pension assets could be overpriced or underpriced, based on the valuations used to determine their value; this is the highest level of valuation risk for public plans.

5

Roughly **8%-10% of public pension assets sit in A.I. companies** — likely an undercount, given limited transparency around private equity and externally managed stocks.

6

The **9.37% average return projected for 2026 beats the assumed rate of return target** (6.9% average) for the fourth straight year; the 10-year rolling average is now 8.69%.

Executive Summary

State of Pensions 2026: Progress, Limits, and What Comes Next

STATE OF THE SYSTEM

Pension funds are at their best funded status since 2009.

Public pension funds have hit their best funded status (85%) since the financial crisis's market bottom. Most states are paying full required contributions, and 15-year-old amortization schedules are finally outpacing interest on pension debt. Whether this holds depends on market volatility, asset valuation accuracy, and funding discipline in the next recession.

PROGRESS AND ITS LIMITS

Public plans share the same bets — and the same reliance on markets to sustain progress.

Four consecutive years of above-target investment returns have lifted funded ratios across most states. But public plans are vulnerable to a broad market downturn as their assets have collectively converged on an investment strategy that primarily seeks growth with little allocated to counter cyclical strategies.

LOOKING FORWARD

Public plans are still short of full recovery from the Global Financial Crisis.

Unfunded liabilities remain above $1 trillion even as funded ratios improve. If investments keep outperforming assumptions and contributions stay high, funded status should keep improving nationally in 2027. We're watching specific struggling states and plans, along with overall market vulnerability.

What to Watch in 2026 & 2027

Risk signals to monitor over the coming year — contribution pressures, investment returns, and influence of A.I.

Public pension plans are in better shape than they have been in a long time. Is this recovery real and sustainable? The answer depends on several important factors:

- Are the financial market returns from the last few years sustainable?
- If state budget pressure continues to develop (in part influenced by national policies and geopolitical events), will state leaders remain committed to full pension funding or seek contribution rate reductions?
- Will record high public plan valuation risk translate into lower than expected returns?
- Can the public plans resume their assumed rate of return reduction trend that has stagnated the last few years?

The goal for state and local pension plans isn't just to recover — it's to thrive, ensuring sustainability and a secure retirement for public employees. Achieving that depends heavily on how A.I. adoption unfolds.

The clearest link is public pension investment in A.I. companies, which now make up roughly 10% of assets by our high-level estimate. This could pay off: if A.I. delivers the productivity gains its proponents expect, current valuations reflect future earnings rather than a bubble, vindicating pension portfolios. But it also means every fund is making the same bet — and if it doesn't pay off, public plans face trouble.

A.I.'s influence extends beyond markets. Large language models, compute investment, and labor market shifts will all affect government revenue, either boosting economic output and tax revenue or destroying more jobs than it creates. That effect on revenue will shape states' capacity to fund pensions.

Liability growth will also shift. Health technology that extends lives increases the benefits pensions must pay out over time. Conversely, fewer employees due to A.I. adoption or reduced revenue could slow liability growth.

The key point: a single force now touches assets, revenue, and liabilities simultaneously — and can push each in different directions. A scenario where A.I. disappoints markets, weakens the tax base, yet still lengthens liabilities through health gains isn't the likely outcome, but it's plausible.

With so many unknowns, public plans have far more to monitor now than in the past. Their growth should be embraced — without assuming all problems are solved.

How 2025 Funded Status Has Developed Since our Last Report

Comparing last years' forecasts to actual reported numbers

Avg Investment Return

OUR JANUARY 2026 PREDICTION

9.5%

WHAT ACTUALLY HAPPENED

10.4%

WHAT THE GAP TELLS US

Financial markets performed stronger in the second half of 2025 than the first. Public plans with fiscal years ending in September and December generated stronger returns across almost every asset class (versus plans that ended in June).

National Funded Ratio

OUR JANUARY 2026 PREDICTION

82.5%

WHAT ACTUALLY HAPPENED

81.2%

WHAT THE GAP TELLS US

Actual contributions paid were slightly less than predicted because public payrolls grew slower than projected, meaning even though states paid over 100% of contributions as a percentage of payroll on average it generated fewer dollars toward paying down unfunded liabilities.

Unfunded Liabilities

OUR JANUARY 2026 PREDICTION

$1.27T

WHAT ACTUALLY HAPPENED

$1.37T

Who We Are and How We Do This Analysis

About Equable

Equable Institute is a bipartisan nonprofit dedicated to making public retirement systems work. We sit at the intersection of retirement policy and broader public policy, equipping policymakers, public employees, and retirement plan managers with independent, data-driven research, analysis, and education.

READ MORE ABOUT THE STATE OF PENSIONS REPORT

INTERACTIVE VERSION OF THE REPORT

Some states have not released their final data points for FY 2025; others have not yet finished their fiscal years. We will update our digital graphics and figures throughout the year as more states release information. Click here to sign up to be alerted when we issue our State of Pensions updates in October and January.

Report Authors



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Executive Director

Anthony Randazzo 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.



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Jonathan Moody, PhD has developed a wide range of academic and policy research on municipal finance subjects, including public sector retirement systems, state budgeting and reserve funds, state credit ratings, state fiscal management, and public retirement benefits.

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National Trends

Key findings from 253 public pension plans across all 50 states and D.C.

The national funded ratio average reached 85.0% in 2026, up from 81.2% in 2025.

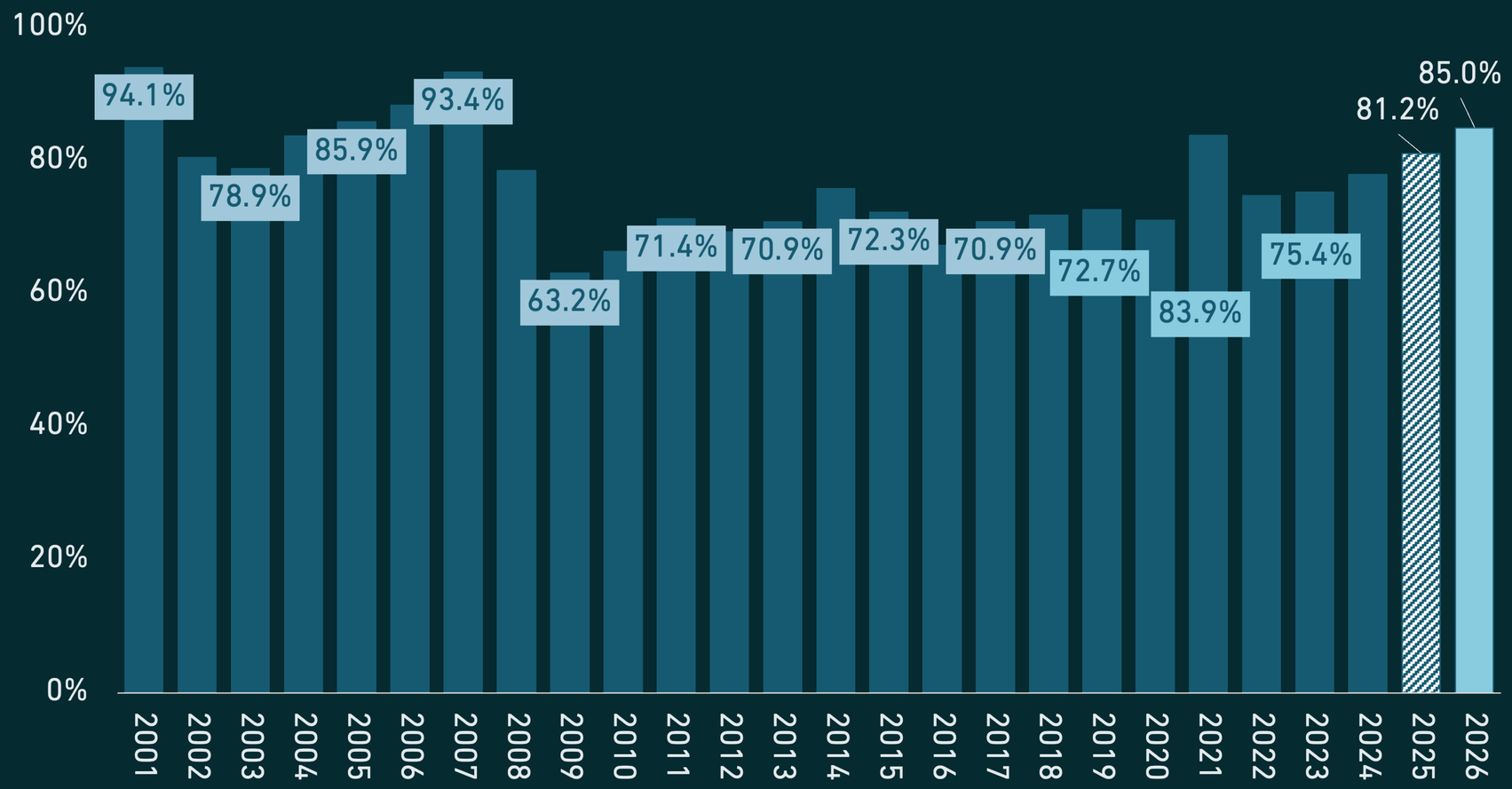
This is the fourth straight year of improvement in funded status. Absent market fluctuations between 2020 and 2022, there has been a steady decade of growth in funded status. Our 2026 estimate is also higher than 2021's most recent record high at 83.9%. However, funded status is still below pre-Global Financial Crisis levels, nearly two decades after the market shocks of 2008.

Based on 2025 Data Availability

2026 Estimate Based on June 30 Benchmark Returns

Funded Ratio Average for State & Local Pension Plans

Based on market valued assets | 2001–2026



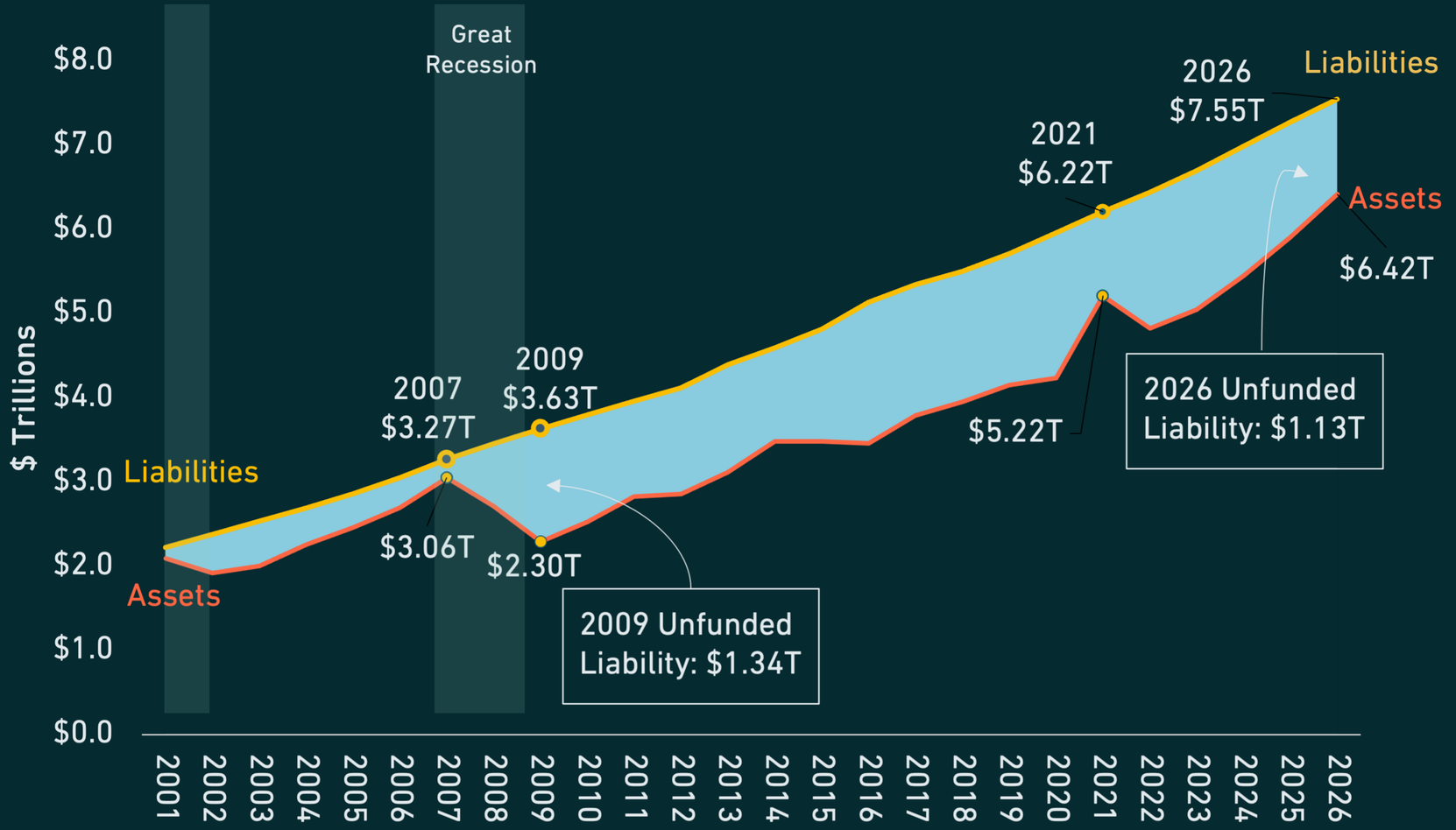
Source: Equable Institute analysis of public plan valuation reports and ACFRs. Data for 2001 to 2013 reflect the "actuarially accrued liabilities" reported by public plans. Data from 2014 onward use the GASB 67 "total pension liability" measurement. See methodology appendix for details on 2026 estimate.

The national shortfall in assets for state and local pension plans shrank from $1.37 trillion in 2025 to an estimated $1.13 trillion in 2026.

This is nearly the same national unfunded liability level last seen in 2021 ($1 trillion).

Total Unfunded Liabilities for State & Local Pension Plans

Total Unfunded Liabilities for State & Local Pension Plans



Source: Equable Institute analysis of public plan valuation reports and ACFRs. Trendline shown is based on market value of assets; using the "actuarial" value of assets shows a similar trend. See methodology section for details on 2026 estimate.

Unfunded Liability Drivers: Summary Analysis

What is driving today's pension debt, and what could drive it tomorrow

The primary sources of today's $1.13 trillion in unfunded liabilities are changes to actuarial assumptions, underperforming investments, contributions being less than interest on the debt.

Trend analysis suggests that contribution rates have increased enough that interest on the debt is declining as a share of unfunded liabilities — this is a positive sign for future unfunded liability levels because it suggests that today's high contribution rates are preventing unfunded liabilities from being even worse and might start to help drive down the total.

On the flip side, investment assumption changes have slowed down over the last five years and could resume again, meaning there is potential upward pressure on unfunded liability levels coming when state retirement systems resume adapting their future investment expectations to a lower return environment.

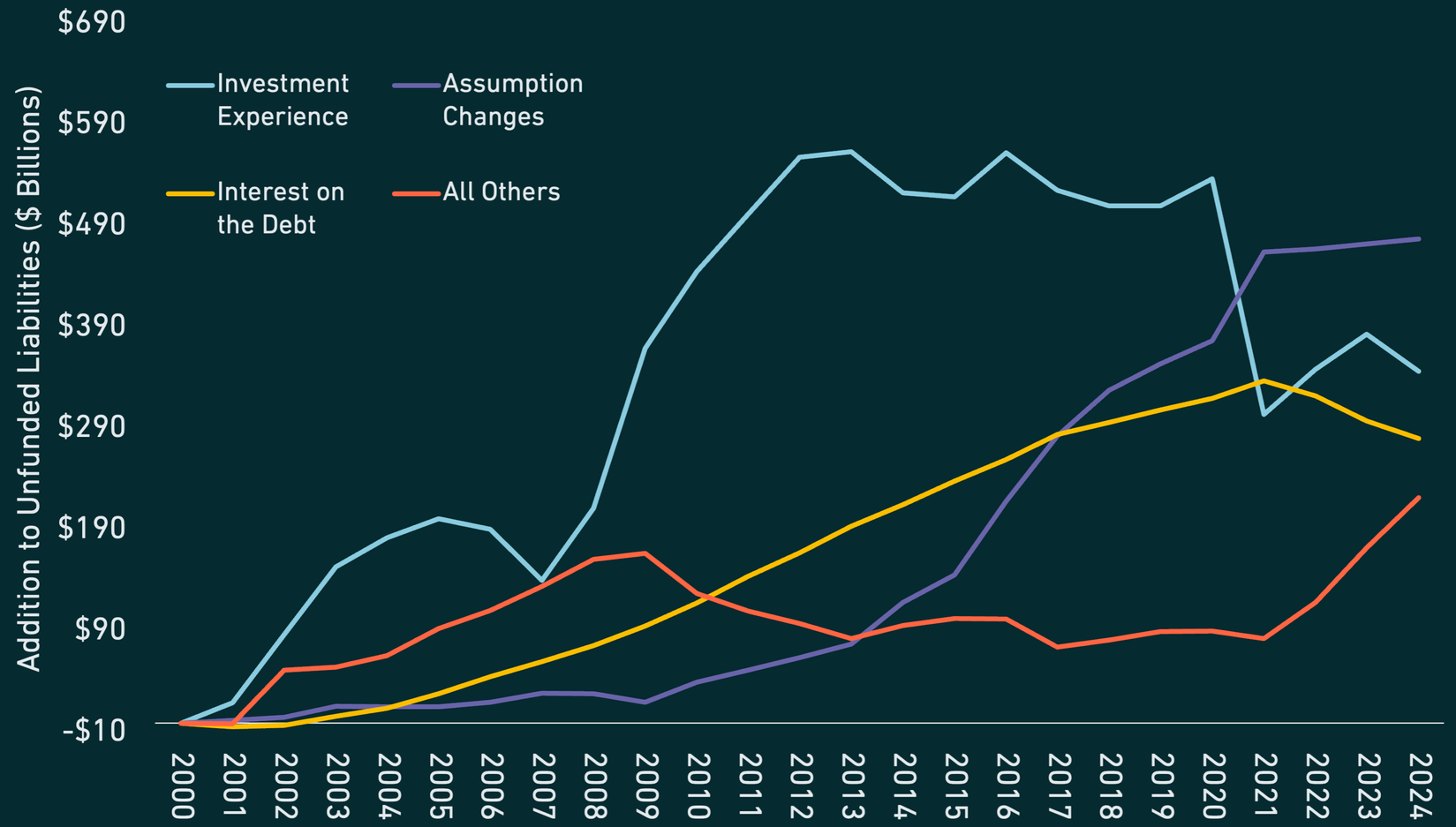
See the next page chart for a visual representation of these trends and also see the Special Section "Causes of Unfunded Liabilities" on page 41 for more in-depth analysis.

There are a range of factors that cause unfunded liabilities to increase or decrease each year, some are larger influences than others.

See previous page for analysis and the Causes of Unfunded Liabilities section for category descriptions and additional time frame measurements.

Recent Causes of Unfunded Liabilities

Change in contributing factors over time | 2000–2024



Source: Equable Institute analysis of actuarial gain/loss data in public plan valuation reports.

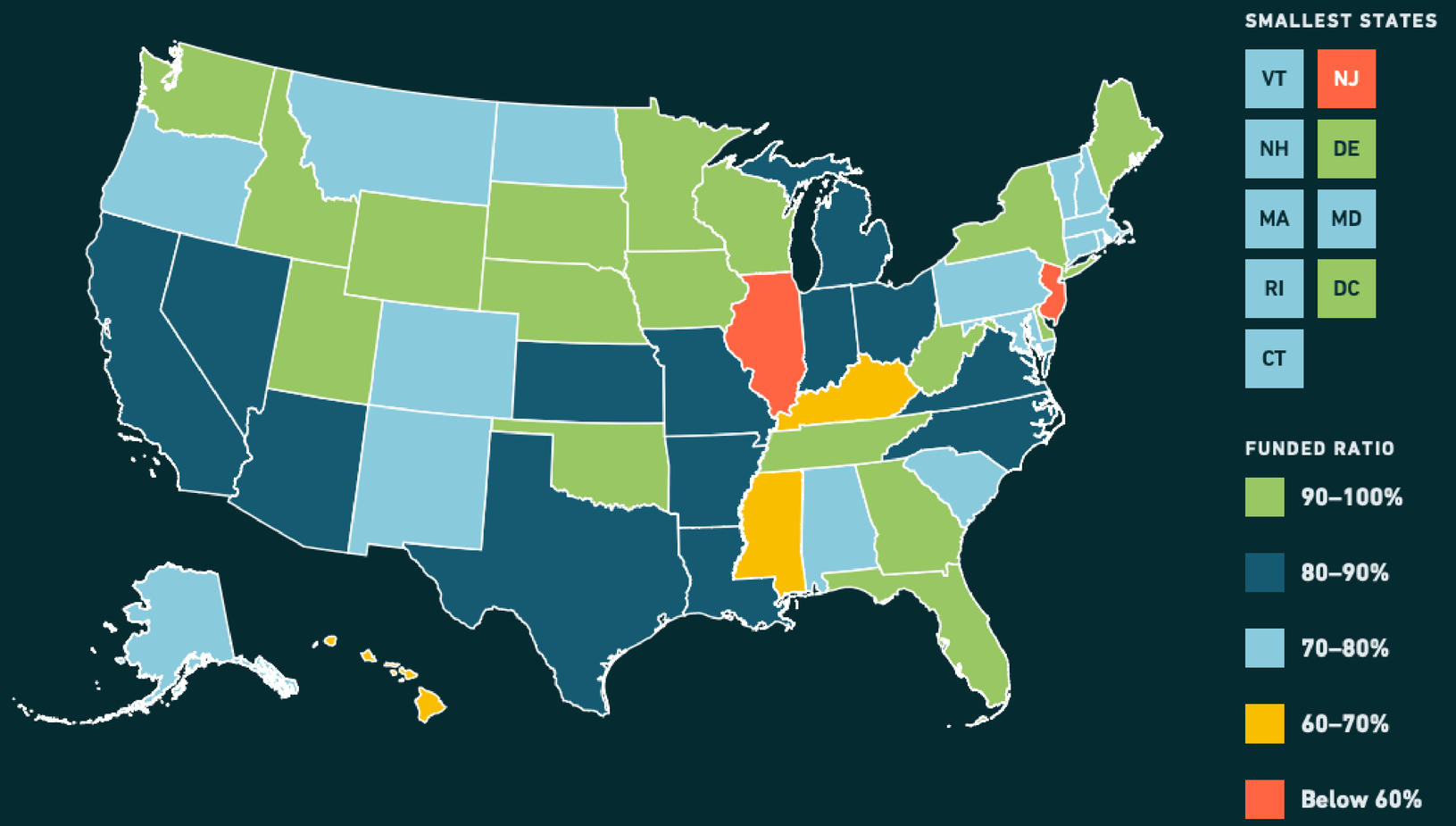
Note: Data is based on actuarial valued assets (AVA), as this is the basis for gain/loss data. For any given year the AVA based data varies slightly from market valued data that is otherwise used in this report.

There are 45 states that improved their funded status from 2025 to 2026; there are now seven states with at least a 100% average funded ratio.

Two states remain in a Distressed status with less than 60% funding: New Jersey and Illinois.Two other states, Kentucky (63.1%) and Mississippi (60.6%), improved in 2026 but have struggled with their funded status right around the Distressed line.

2026 Estimated Funded Ratios by State

Based on estimated assets for state & local pension plans



Source: Equable Institute forecast based on investment returns as of June 30, 2026, and reported asset allocation levels for each plan. For plans with fiscal year end dates after June 2026, the change in funded ratio shown is based only on the part of their fiscal year complete as of the measurement date. See methodology section for complete details.

NATIONAL TRENDS

States That Changed Funded Status Tier

2025 vs. 2026 — States moving between funded ratio categories

While most states remained in the same funded ratio tier from 2025 to 2026, a handful of states crossed tier boundaries. States that improved into the 90% to 100% range include Florida, Georgia, and Oklahoma. No states moved into a lower tier. States that remained distressed (below 60%) include New Jersey and Illinois, with Kentucky (63.1%) and Mississippi (60.6%) both near the threshold.

MOVED UP INTO RESILIENT

4 STATES · CROSSED 90%

Georgia	84.9% → **93.5%**
Florida	85.5% → **91.8%**
Oklahoma	89.3% → **94.8%**
Minnesota	89.8% → **91.5%**

MOVED TO A LOWER TIER

THIS REPORTING YEAR

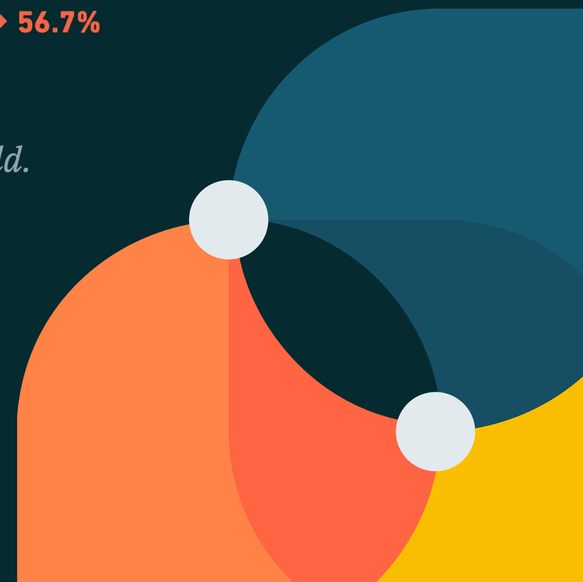
0 states fell to a lower funding tier

STILL DISTRESSED

BELOW 60% FUNDED

Illinois	53.4% → **56.4%**
New Jersey	53.5% → **56.7%**

Kentucky (63.1%) and Mississippi (60.6%) sit just above the threshold.



Note: Equable Institute analysis of 2026 funded ratios

Some states have navigated the financial market volatility of the post-pandemic years better than others.

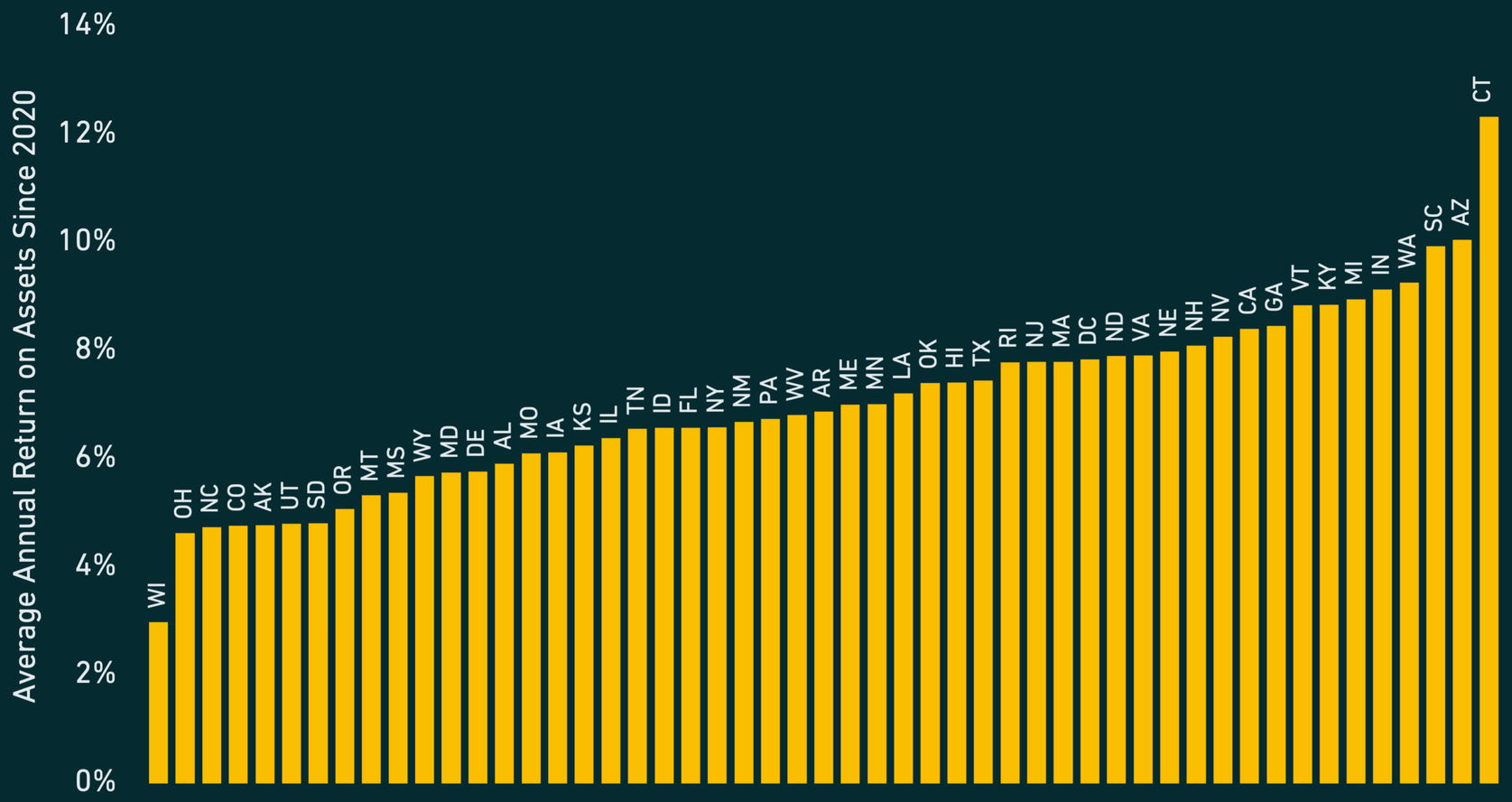
While state pension funds have increasingly similar annual returns, some have consistently produced the best investment returns. States have also varied on how much in supplemental dollars they've put into their pension funds.

Since 2020, states with the most improved assets (for the period 2020–26) include: CT, AZ, SC, WA, IN, and MI.

These all have performance more than 2x better than: WV, OH, NC, CO, and AK.

Worst to Best Asset Growth Since the Pandemic

Asset growth rate (annual average), by state | 2020–2026



Source: Equable Institute analysis of public plan valuation reports and ACFRs and forecast of investment returns as of June 30, 2026. Each state's investment return is based on an asset-weighted average of performance by pension fund.

NATIONAL TRENDS

Asset Growth: Those Left Behind

A few states have seen assets grow less than five percentage points per year on average since 2020 AND remain below 90% funded

While most states improved substantially during one of the strongest sustained return periods in modern pension history, seven states averaged less than five percentage points of growth per year in assets between 2020 and 2026. Some of these were already well funded (Wisconsin, Utah, South Dakota), but four states had slow growing assets and remained below 90% funded in FY2026: Ohio, North Carolina, Colorado, and Alaska. These data suggest a structural problem, not a timing issue.

Top 5 Most Improved Assets

STATE	AVG ASSET IMPROVEMENT	2020 FUNDED RATIO	2026 FUNDED RATIO
Connecticut	▲ +12.33 pp	44.4%	73.6%
Arizona	▲ +10.06 pp	62.0%	82.1%
South Carolina	▲ +9.94 pp	51.8%	70.6%
Washington	▲ +9.27 pp	94.4%	105.4%
Indiana	▲ +9.14 pp	68.6%	90.0%

Those Left Behind

Less than 5% percentage points of average annual asset growth from 2020 to 2026, AND below 90% funded

STATE	AVG ASSET IMPROVEMENT	2020 FUNDED RATIO	2026 FUNDED RATIO
Colorado	▲ +4.77 pp	70.4%	75.7%
Alaska	▲ +4.77 pp	65.3%	77.4%
North Carolina	▲ +4.74 pp	86.7%	87.5%
Ohio	▲ +4.63 pp	79.1%	86.8%



Source: Equable Institute analysis of public plan valuation reports and ACFRs and forecast of investment returns as of June 30, 2026. Each state's investment return is based on an asset-weighted average of performance by pension fund.

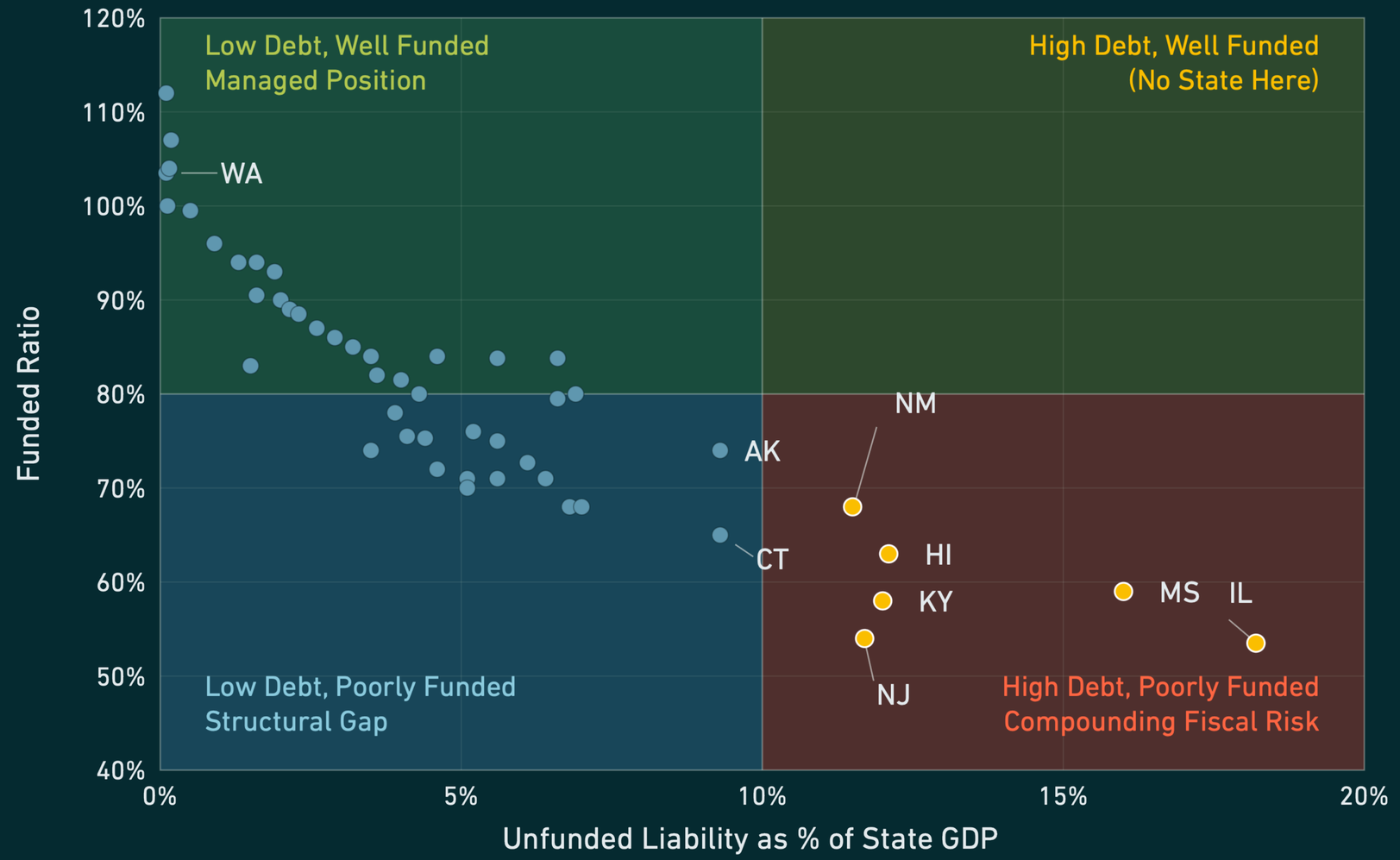
Eight states are facing high levels of pension debt as a share of their economic output and low funded ratios.

Most states (28) are well-funded with manageable debt. Seventeen have underfunded plans but economies large enough to fix it with sustained effort. Six face the worst combination — below 80% funded and pension debt over 10% of GDP: Illinois, Kentucky, New Jersey, Mississippi, Hawaii, and New Mexico. These states face structural pressure that market returns alone can't resolve. Alaska and Connecticut sit near that borderline, though not in the most distressed group.

(See next page for details on these quadrants.)

Pension Debt Relative to State Economies (2025)

Funded ratio vs. unfunded liabilities as a percentage of GDP, by state



Source: Equable Institute analysis of public plan valuation reports and ACFRs and forecast of investment returns as of June 30, 2026. Each state's investment return is based on an asset-weighted average of performance by pension fund.

Pension Debt Relative to State Economies

The fiscal implications of each quadrant in the UAL/GDP framework

28 STATES

Low Debt/Well Funded

The pension shortfall is a manageable share of state GDP. These states have structural resilience.

Risk: complacency, as confidence erodes discipline on assumptions or funding policy.

0 STATES

High Debt/Well Funded

No state currently holds this position. Generally, high debt and strong funding don't coexist.

17 STATES

Low Debt/Poorly Funded

A pension shortfall exists, but the state has capacity to address it.

Path to recovery: sustained political will on contributions, plus modest assumption improvements — a few disciplined years can move these states to the top-left quadrant.

6 STATES

High Debt/Poorly Funded

High pension debt-to-GDP with low funding — liabilities compound faster than assets recover.

Path to recovery: major measures — legislative change, large supplemental contributions, or benefit modification.

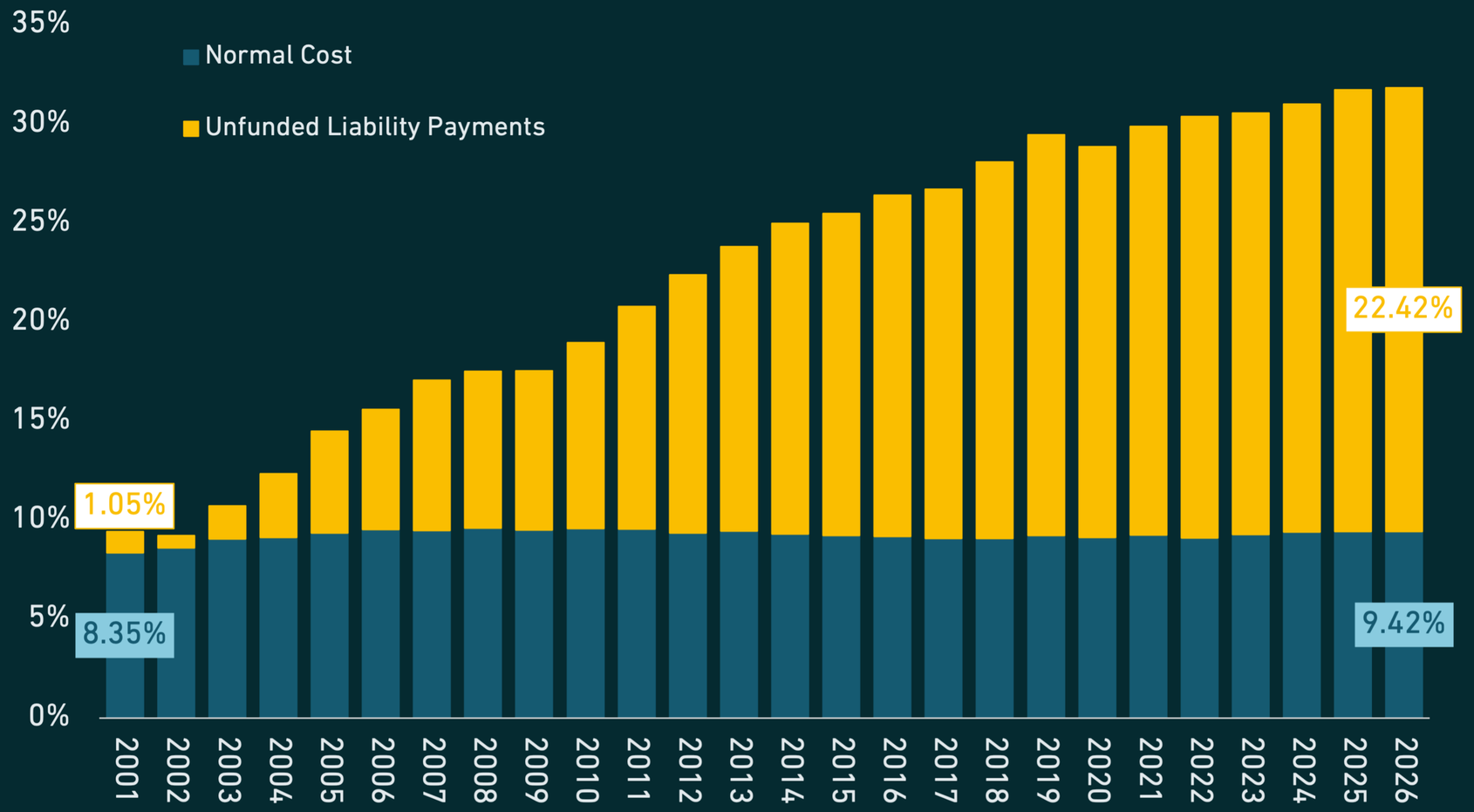
Source: Equable Institute analysis of public plan valuation reports and ACFRs; Bureau of Economic Analysis data for state GDP estimate in 2025. Unfunded liability and funded ratio data include statewide retirement plans and municipally managed retirement plans. Funded ratios reflect a weighted average of assets and liabilities for plans within each state.

Employers now contribute 31.83 cents of every payroll dollar to pension funds — a historic high.

This is more than triple the 9.3% rate in 2001. But only 9.42 cents of that goes toward funding new benefits (the “normal cost”). The remaining 22.42 cents goes toward paying down the accumulated unfunded liability. Since 2001, 95% of the increase in total cost is unfunded liability cost.

Employer Contribution Rates for State & Local Pension Plans

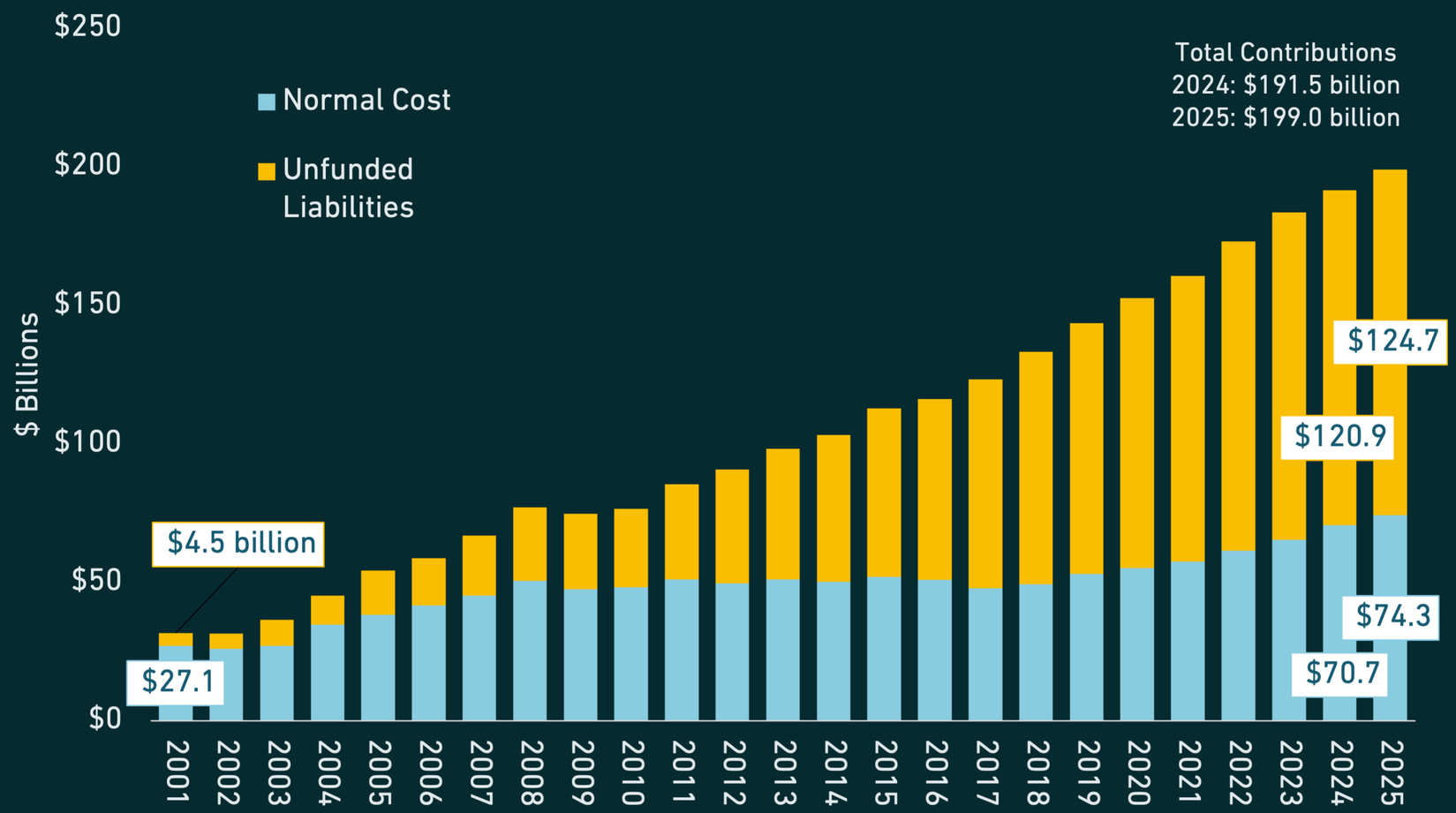
Normal cost vs. debt repayment | 2001–2026



Source: Equable Institute analysis of public plan valuation reports and ACFRs. Contribution rates shown for the year actually paid.

Employer Contributions to Normal Cost & Pension Debt Payments

Dollar value of contributions | 2001–2024 + 2025 Estimate



Between 2001 and 2025, the dollar payments toward normal cost more than doubled (up 174%) and for unfunded liability payments jumped over 2,643%.

Adjusted for inflation during the same period, normal cost grew 51%, while unfunded liability payments rose 1,414%.

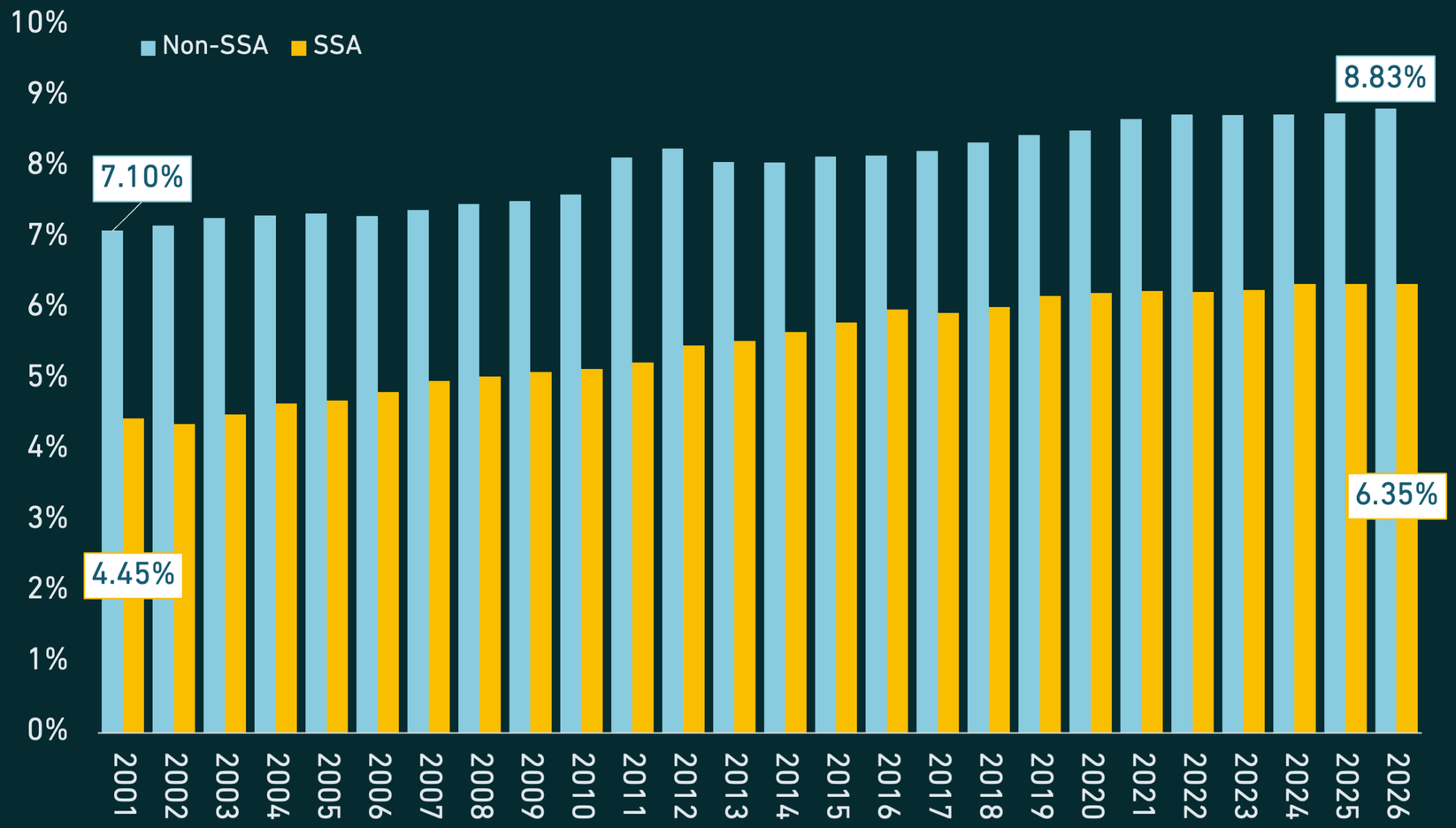
Source: Equable Institute analysis of public plan valuation reports and ACFRs. Contribution dollars show for the year actually paid. Complete data for 2025 was not fully published as of June 30, 2026—for the 48 plans without reported contributions paid, we used their reported contributions from the prior year and then split them into normal cost and UAL components based on their reported contribution rates as a % of payroll. This can result in a lower estimate than what was actually paid, meaning that totals for 2025 will likely be revised upward as more complete data are made available. Inflation adjustment is in 2025 dollars.

Public employee contribution rate increases have leveled off over the last four years.

Nearly 41% of active public pension plan members are in states that do not participate in Social Security or whose local government units are a mix of being in and out of Social Security. The contribution rate for employees of governments who do participate in Social Security is around 2.5 percentage points lower than for those who do not.

Average Member Payroll Contributions

Based on Social Security participation | 2001–2026



Source: Equable Institute analysis of public plan valuation reports and ACFRs. Contribution rates shown for the year actually paid. We measured 12,096,315 active employees in fiscal year 2025 for the plans who had published data as of June 30, 2026; of those 4,920,145 are actives in states that either do not participate in Social Security or have mixed participation.

This marks the fourth consecutive year that actual returns have exceeded the average assumed rate of return.

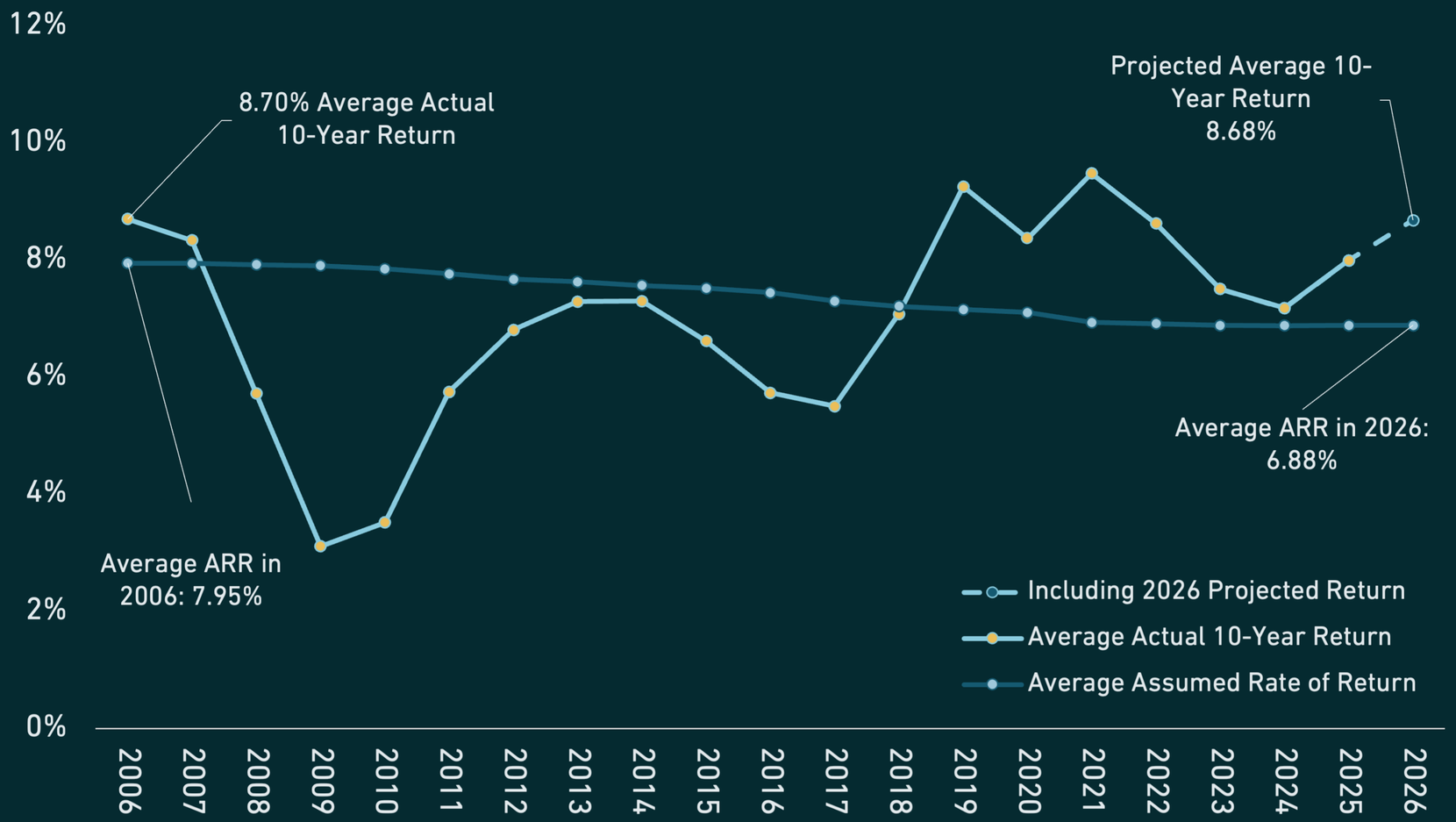
Through June 30, the average public plan return is 9.37% — down 1.04 points from 2025's 10.42%.

One-year returns can mislead, but the 10-year rolling average (8.69%) still beats the assumed rate.

Missing targets compounds shortfalls via interest; beating them shrinks unfunded liabilities.

Investment Returns for State & Local Pension Plans

Assumed rate of return vs. 10-year rolling average actual returns | 2001–2026



Source: Equable Institute analysis of public plan valuation reports and ACFRs. Average 10-year return for 2025 and 2026 is based partially on Equable projected investment returns for each retirement system. See downloadable datasets for additional, annualized information on this graph going back to the year 2000.

Note: Public plans with fiscal years ending in December are reporting measurably poorer 2026 returns for the first and second quarters of this year. Depending on how investments perform in the second half of the year, these could pull the 2026 national average lower or higher.

In the years since the Global Financial Crisis, the one-year return numbers have been getting increasingly similar for public pension funds.

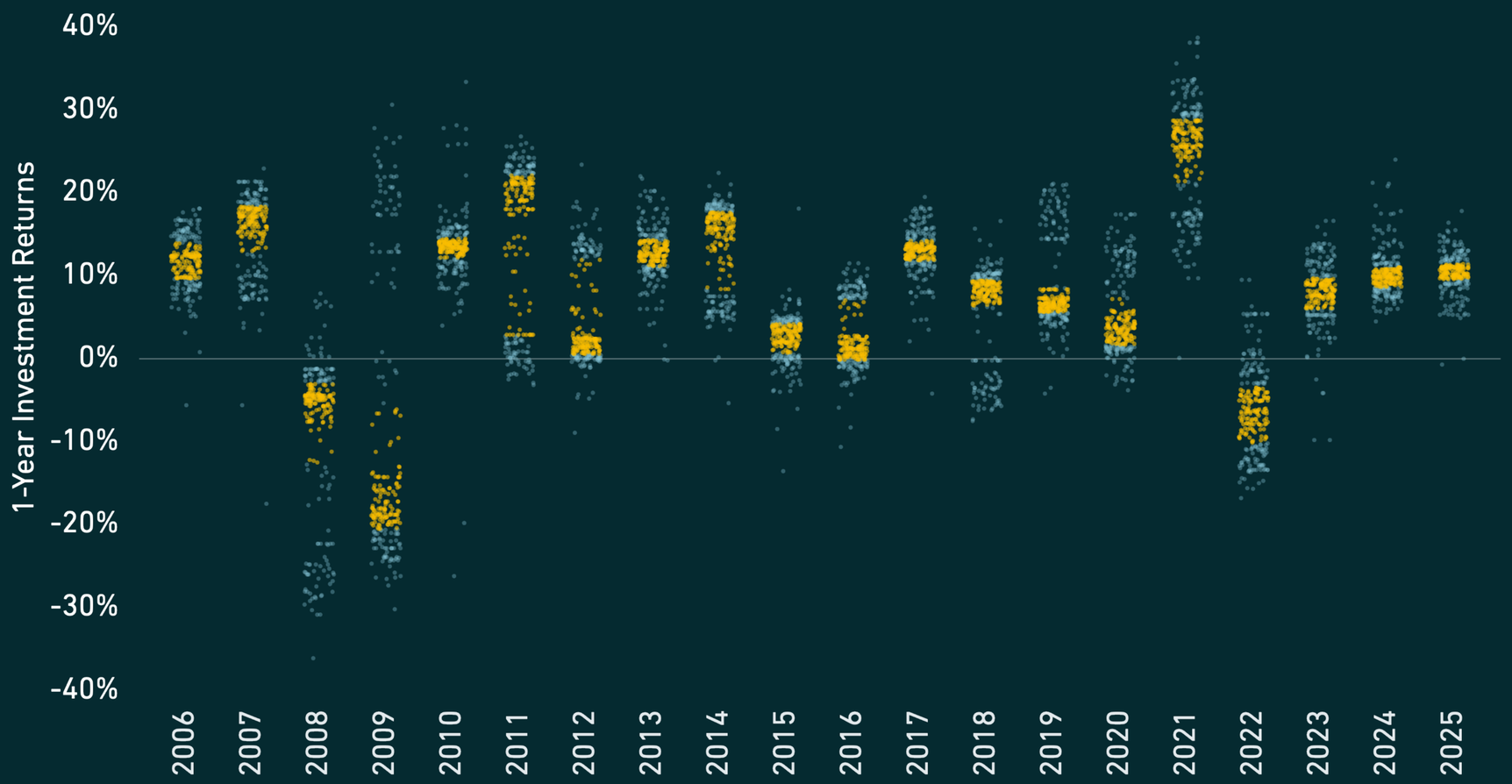
This chart shows the range of annual investment returns each year.

Each dot represents the return for one plan each year. The darker the shading the more plans are clustered at that point.

Yellow dots represent plans whose returns fall within the 25th to 75th percentile for that year. These reflect the most common returns.

Converging Range of One-Year Investment Returns

Distribution of annual returns | 2001–2026



Source: Equable Institute analysis of public plan valuation reports and ACFRs. Average 10-year return for 2024 and 2025 is based partially on Equable projected investment returns for each retirement system. See downloadable datasets for additional, annualized information on this graph going back to the year 2000.

Note: Public plans with fiscal years ending in December are reporting measurably poorer 2026 returns for the first and second quarters of this year. Depending on how investments perform in the second half of the year, these could pull the 2026 national average lower or higher.

Converging Range of One-Year Investment Returns

Analysis

The range of annual investment returns for public pension funds has been narrowing. Notably, the average percentile 25th-to-75th percentile gap fell from 8.6 points in 2007–2016 to 4.3 points in 2017–2026. The narrowing is especially notable post-2020, as the spread in returns has generally been declining.

There are at least two reasons that one-year investment returns have converged on common performance:

1. **Asset allocations have converged on a common risk/reward strategy.**
   After 2008, public plans collectively began reducing their fixed-income holdings and pursuing alternatives, including private equity, real estate, and hedge funds. (See next page for details.) While specific percentage allocation to different asset classes vary, public plans generally all pursue the same overall strategy of taking on investment risk to have a chance at large returns.

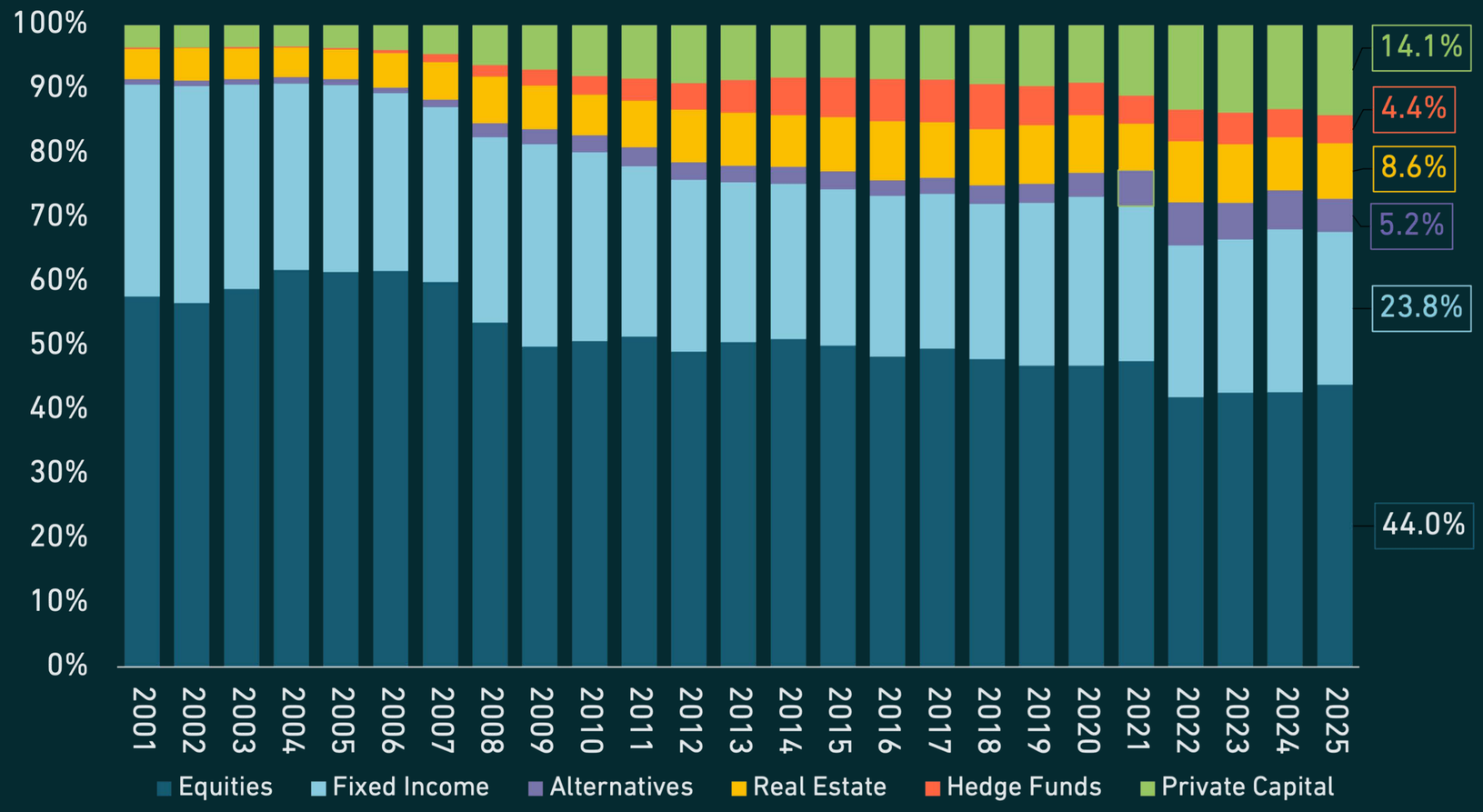
2. **Public equity returns are driven by a commonly owned set of large companies.**
   Over the last decade, the top 10 companies in the S&P 500 have roughly doubled their share of the index, to over 40% of its capitalization by the end of 2025. Since public plans typically all hold shares in these top companies, it means they tend to get common rates of return on their public equity portfolios.

Public pension asset allocations have shifted away from transparent public equities and relatively safe fixed-income investments into riskier categories as trustees search for stronger investment returns.

"Alternatives" are a third of pension fund investments (32.2%), driven by private capital investments (14.1%).

Asset Allocation for State & Local Pension Plans

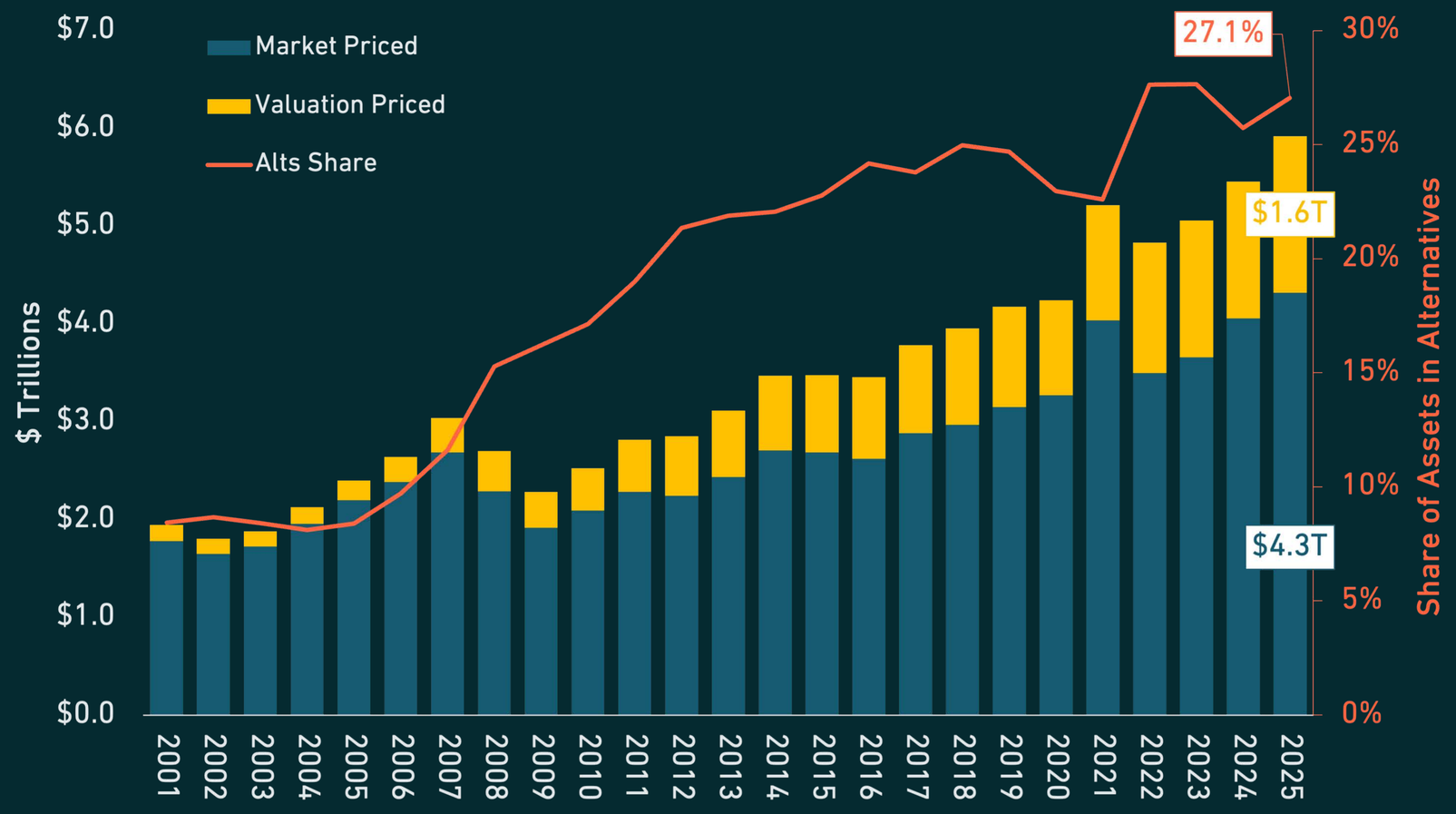
Asset class as a percentage of all assets | 2001–2025



Source: Equable Institute analysis of public plan valuation reports and ACFRs. Note: "Misc. Alternatives" include opportunistic funds, absolute return pools, tactical asset allocations, alpha strategies, etc. We have classified investments as each fund reports; ex. "private debt" may be allocated with "private capital" or "fixed income" depending on the fund.

Valuation Risk: Share of ‘Valuation Priced’ Assets Compared to ‘Market Priced’ Assets

Alternative investments use private valuations, not market prices | 2001–2025



Source: Equable Institute analysis of public plan valuation reports and ACFRs. Note: “Valuation Priced” investments include assets defined by public plans as private equity, private debt, real estate, or hedge fund.

The share of pension fund assets exposed to “valuation risk” has tripled since the Global Financial Crisis.

Alternative investments, like private equity and real estate, generally, are priced based on valuations, not market-based pricing. The share of pension fund assets priced based on valuations grew to 27.1% of assets as of 2025, up from an average of 9.0% between 2001–2007. For a deeper dive on this topic, see the special section on pages 36 to 40.

How AI Will Change Public Pension Plans

There are four channels where artificial intelligence and large language models will influence state and local retirement systems

The Four Channels of A.I. Influence on Public Pensions

Investment Effects

Public pension plans hold significant, material exposure to A.I.-driven market movements, balancing the potential of a major growth surge against the threat of an asset bubble. The critical challenge for these multi-billion-dollar funds is navigating potential market corrections and identifying which traditional companies may lose ground in the technological transition.

Government & Demographic Effects

Macroeconomic shifts driven by A.I. will fundamentally alter local tax bases and public workforce headcounts, which serve as the ultimate financial backstop for pension debt. As governments deploy automated productivity tools, a potential reduction in public headcounts could slow down payroll growth and/or change liability growth rates.

The Value of Promised Benefits Effects

Technological advancements in A.I. directly impact the liability side of public retirement plans by shifting underlying actuarial assumptions. Key areas of change include how A.I.-driven health care breakthroughs alter life expectancy projections, influence early disability retirement claims, and reshape mortality modeling.

Retirement System Operation Effects

Beyond broad economic and investment trends, A.I. is actively reshaping the day-to-day administration and operational workflows of public retirement systems. These systems could modernize internal structures and level the playing field in areas like recruiting investment management staff.

Investment Effects: A.I. Concentration in Public Pension Portfolios

Public pension funds are regular investors in the largest companies as well as specific technology companies. Based on SEC filings and our review of non-public data about private equity holdings, we estimate the amount of public plan assets directly exposed to A. I.-businesses is 10% or more.

- Reviewing SEC filings for the top 25 public pension funds, 23 of them disclosed specific holdings for all or a portion of their public equity investments. Among that group, 8.6% of their assets were concentrated in a basket of 51 publicly traded A.I.-related companies.
- Several public pension funds use external asset managers for trading public equities; these external managers do not disclose their specific stock holdings for specific pension funds. So the public equity holdings in the A.I.-basket are higher than just this 8.6% that is transparent.
- None of the top 25 public pension funds reported private equity or private debt investments in specific A.I.-companies. But we know that some of them are invested in private funds that are invested in A.I.-companies.

8% to 10%

Estimated Share of Public Pension Assets in A.I. Companies

~$600B

Estimated Share of Public Pension Assets in A.I. Companies

An 8% to 10% direct exposure to a select basket of A.I.-related companies is between $513 billion and $642 billion in pension assets, based on estimated 2026 figures.

Source: SEC 13F filings for Q1 2026 from the 25 largest public pension funds. See *methodology* for a complete list of company stocks analyzed. Of the 23 funds with measurable public equities, 74% of their A.I.-basket holdings were Magnificent 7 investments.

Investment Effects: A.I. Concentration in Public Pension Portfolios, Cont'd

Why these pension funds?

These top 25 funds manage money on behalf of 70 state and local retirement plans which cover over 67.6% of all public pension assets, so they are a strong sample to draw from for identifying investment patterns.

Which companies were analyzed?

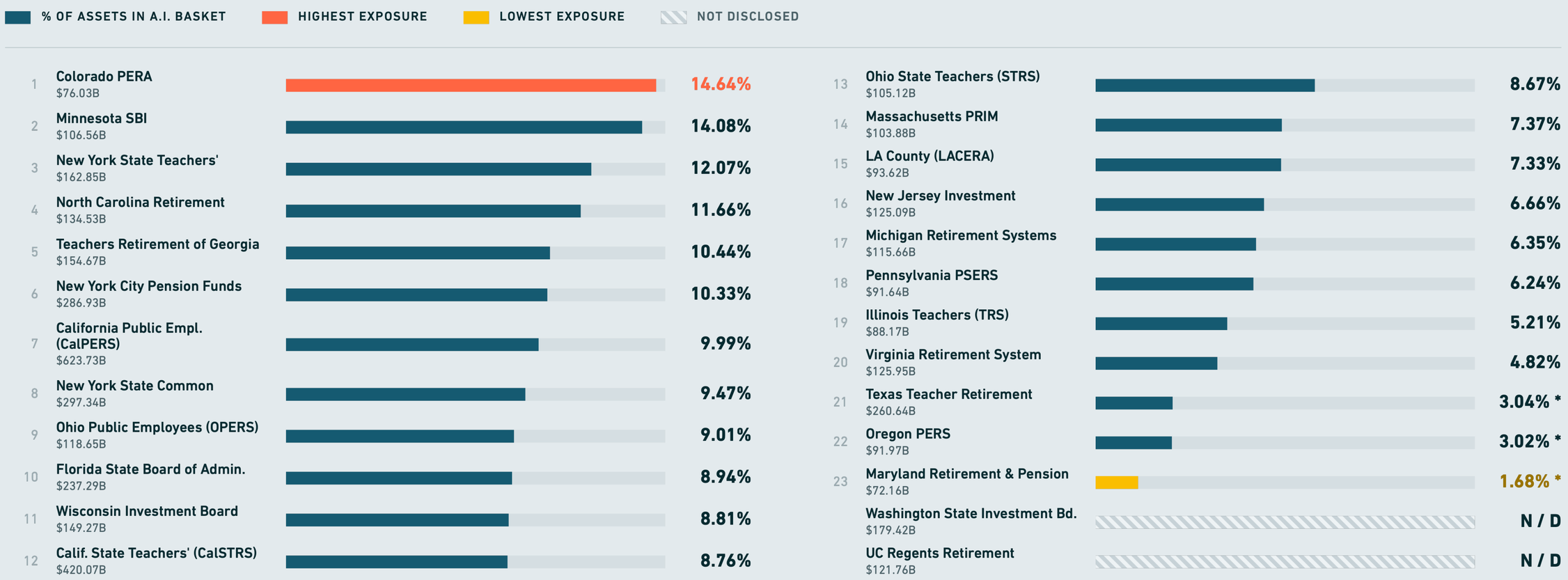
- Magnificent 7 (Google has two listings)
- 14 A.I. software companies
  (ex. Palantir, Snowflake)
- 14 A.I. infrastructure & power companies
  (ex. Dell, GE Vernova)
- 15 Chip & A.I.-equipment companies
  (ex. TSMC, Oracle)

See Methodology for complete list of companies

Source: SEC 13F filings for Q1 2026 from the 25 largest public pension funds. See Appendix 1 for a complete list of company stocks analyzed. Of the 23 funds with measurable public equities, 74% of their A.I.-basket holdings were Magnificent 7 investments.

A.I. Concentration in Public Pension Portfolios, Cont'd

Top 25 Public Pension Funds: Who is most heavily invested in A.I. companies?



Source: SEC 13F filings for Q1 2026 from the 25 largest public pension funds. See *Methodology* for a complete list of company stocks analyzed.

*Indicates that less than 10% of total fund assets are internally managed and disclosed in SEC 13F filings.

Summarizing A.I. Effects on Public Pensions

"Investment effects" and "government & demographic effects"

Investment Effects

- **Direct Exposure:** Public pension funds already hold a massive concentration of their assets — often between 8% and 10% — in a narrow basket of AI-related public companies.
- **Growth vs. Bubble:** Plans are balancing a highly lucrative "A.I. powers the world" growth scenario against the systemic risk of an A.I. asset bubble.
- **Winners and Losers:** Multi-billion-dollar funds face the challenge of identifying traditional companies losing ground in the A.I. revolution, which shrinks the gap between top-performing and average funds.

Government & Demographic Effects

- **Revenue Changes:** A.I.-driven economic shifts will directly alter local tax collections, which serve as the critical financial backstop for public pension plans.
- **Workforce Shifts**: As governments adopt automated productivity tools, a potential reduction in government headcounts risks shrinking the active member payroll base.
- **The Debt Problem:** If payroll growth slows down due to a smaller public workforce, future pension debt contributions will grow more slowly than current long-term projections assume (unless legislatures intervene).

Summarizing A.I. Effects on Public Pensions

"The value of promised benefits effects" and "retirement system operation effects"

The Value of Promised Benefits Effects

- **Life Expectancy:** Breakthroughs in A.I.-driven health care and medicine are expected to shift baseline mortality rates, directly altering how long plans must pay out benefits. If even a few years are added to life expectancy, it could mean hundreds of millions in additional required contributions.
- **Disability Claims:** Workplace automation and shifting job demands will likely change the patterns and volume of early disability retirement claims.
- **Actuarial Modeling:** The retirement systems themselves will adopt A.I. tools to fundamentally modernize how they calculate future liabilities and model risk.

Retirement System Operation Effects

- **Internal Modernization:** Public retirement systems are actively restructuring their day-to-day operations to securely integrate automated processing and A.I. tools.
- **Workforce Demands:** The administrative staff of these funds will require new skillsets to manage and oversee A.I.-driven operational workflows.

Deep Dive | Valuation Risk & Alternative Investments

VALUATION RISK

Understanding “Valuation Risk”

Why private asset pricing matters for pension stability

“Valuation Risk” is the risk to pension funds that the value of their assets as reported to them is inaccurate (e.g., understating or overstating the actual value) because the asset pricing method used is based on valuation models, as opposed to market-based prices.

- If asset values are overstated today, then that means reported funding levels are overstated. This in turn can lead to lower-than-appropriate contribution rates, which will mean larger unfunded liabilities in the future than if assets were more accurately priced.
- Overstated pension asset values can also lead to other policy decisions that could influence future funded status — such as raising the value of benefits or having lower political priority for supplemental funding to pay down unfunded liabilities faster than planned.

This is in contrast to “opportunity risk” (the risk that a specific use of capital doesn’t justify the risk-adjusted returns relative to other opportunities), or “asset risk” (the risk of losing money on an investment), or “management risk” (the risk that trustees will inefficiently allocate capital).

The significant lack of transparency in how pension funds invest in valuation-priced asset classes like private equity and real estate exacerbates concerns about valuation risk.

Note: Consider that general partners managing a private equity fund often value their portfolio companies using the valuation of a recent funding round, which may or may not reflect an overstated price agreed to by a small set of exuberant investors. This potentially overstated pricing approach can lead to an overstated valuation of a pension fund’s limited partner share in that private equity fund, which in turn can lead to reporting overvalued assets that translate to lower contribution rates than would be appropriate.



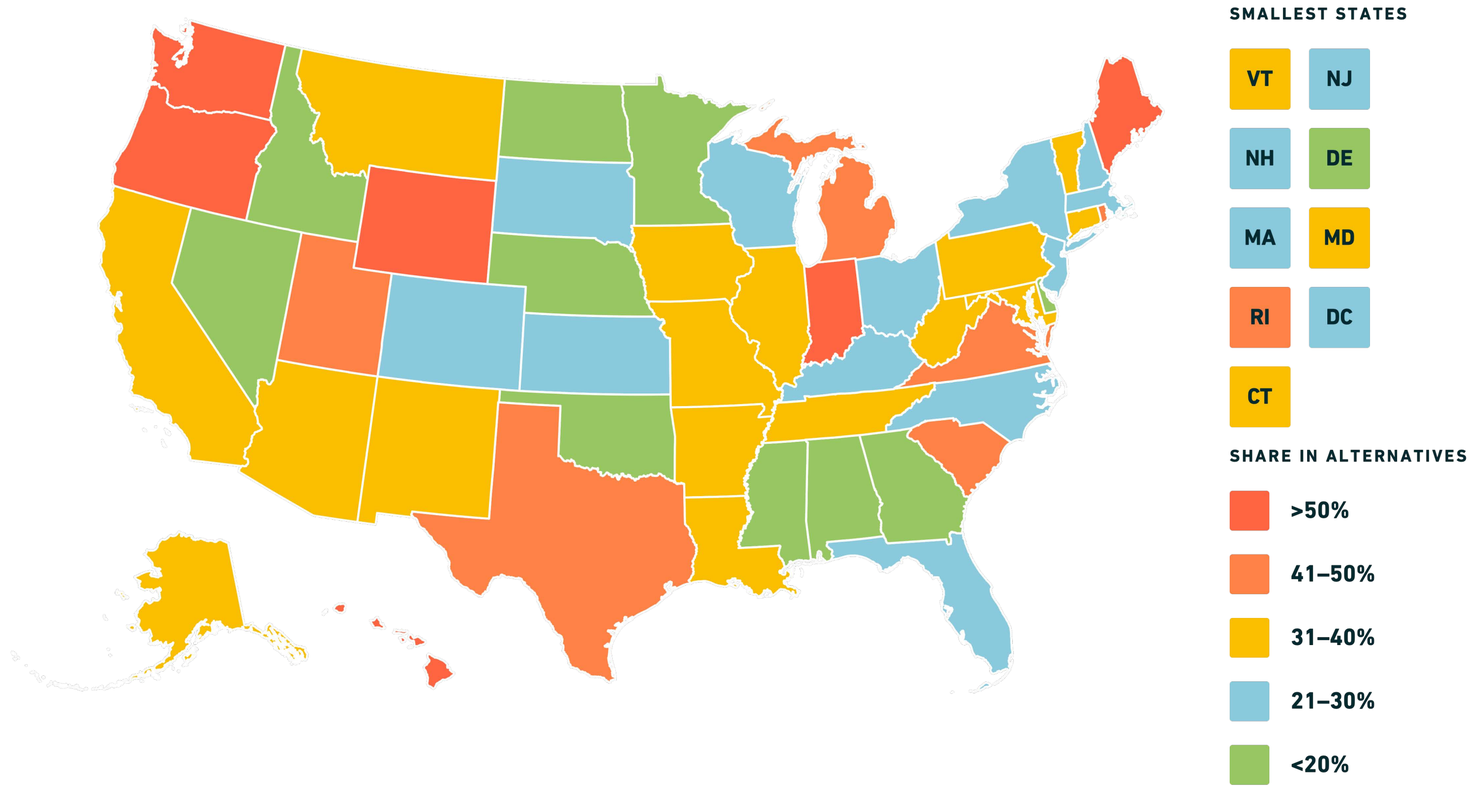
VALUATION RISK

There is a wide variance in how much state and local pension funds have invested in alternatives.

Most states have between 20% and 40% of their collective pension fund investments allocated to alternative asset classes. However, a few outliers are more aggressive — some have over 50% of their pension fund money in alternatives — and a handful are more conservative.

States by Share of Pension Assets in Alternatives

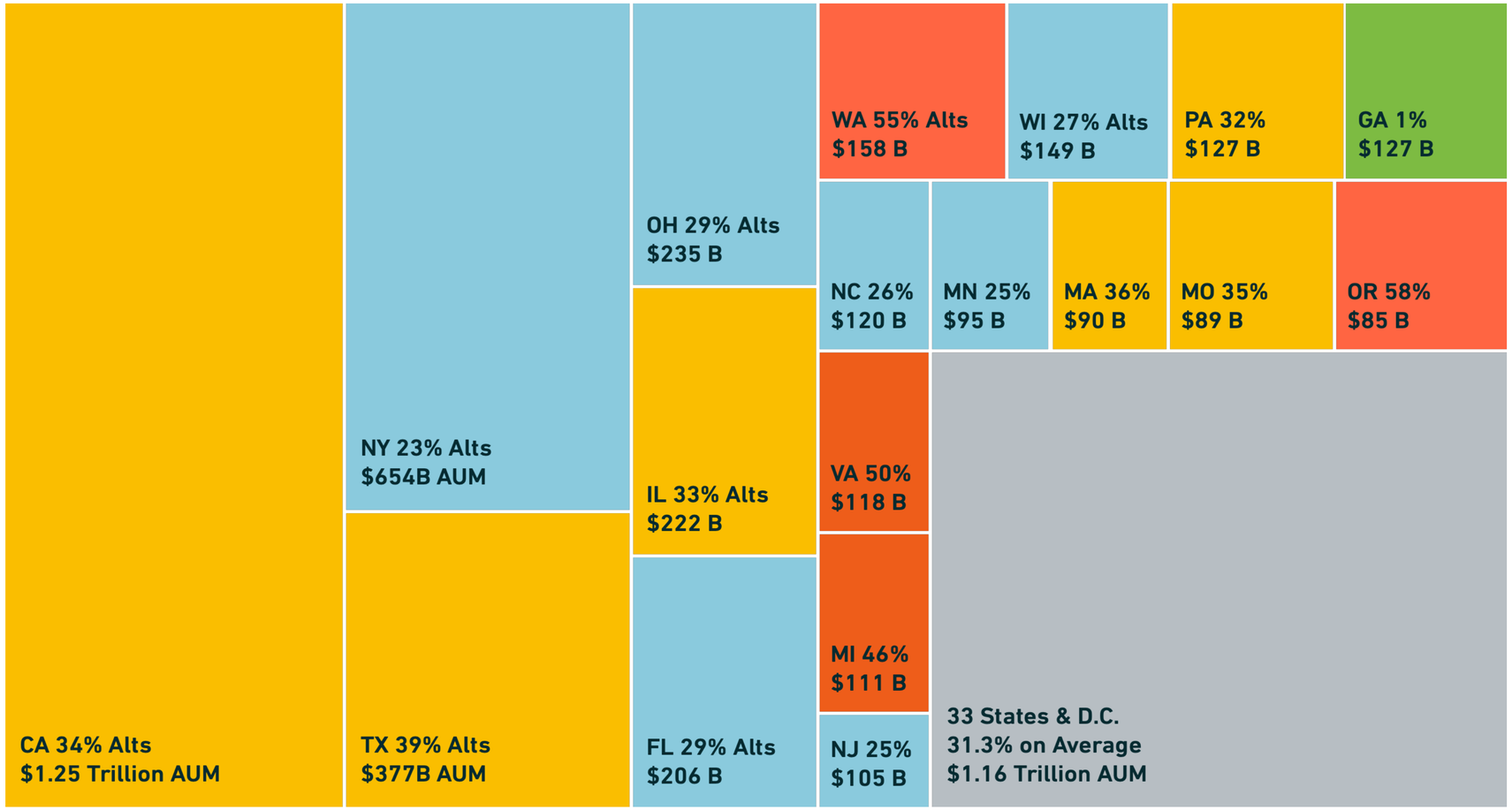
Based on 2025 asset allocation data and asset values



Source: Equable Institute analysis of public plan valuation reports and ACFRs. Note: “Alternative” investments include private capital, hedge funds, real estate, commodities, and tactical asset allocations.

States by Total Assets Under Management & Share of Investments in Alternatives

Where are there the highest concentration of assets in alternatives | 2025



Source: Equable Institute analysis of public plan valuation reports and ACFRs. Note: "Alternative" investments include private capital, hedge funds, real estate, commodities, and tactical asset allocations.

This infographic shows states based on their assets under management (AUM) and the percentage of those assets invested in private capital, real estate, hedge funds, and miscellaneous alts. Five states (CA, NY, TX, OH, IL) manage half of all public pension assets in the United States. So, the dollar allocations to alternative investments in these states are a major driver of national figures. But the size of state pension fund assets is not related to their alternative investments. Some smaller states have over 50% of pension assets invested in alternatives.

VALUATION RISK

Some pension funds have committed a particularly large share of their assets to alternative investments.

This list shows the 20 state and local pension funds (or investment commissions, if assets of multiple retirement plans are commingled) that have the largest share of assets in alternatives.

20 Largest Allocations to Alternatives

Portfolio percentage in alternatives (Alts Share) and assumed rate of return (ARR) | 2025

RANK	INVESTMENT FUND	ALTS SHARE	ARR	RANK	INVESTMENT FUND	ALTS SHARE	ARR
1	Louisiana School Employees' Retirement System	71.3%	6.80%	11	Illinois State Teachers' Retirement System	50.3%	7.00%
2	San Francisco City & County Employees' Retirement System	60.0%	7.20%	12	Virginia Retirement System	49.4%	6.75%
3	Oregon Investment Council	55.8%	6.90%	13	Missouri Local Government Employees Retirement System	49.0%	7.00%
4	Maine Public Employees Retirement System	54.9%	6.50%	14	Michigan Department of Treasury (MSERS, MPSERS, MSPRS)	47.8%	6.00%
5	Texas County & District Retirement System	54.8%	7.50%	15	Houston Police Officers' Pension System	47.6%	7.00%
6	Indiana Public Employees Retirement System	54.4%	6.25%	16	Arkansas Teacher Retirement System	45.0%	7.25%
7	Washington State Investment Board	54.0%	7.25%	17	Houston Firefighters Relief and Retirement Fund	45.0%	7.00%
8	Employees' Retirement System of the State of Hawaii	52.6%	7.00%	18	Utah Retirement System	44.5%	6.85%
9	Wyoming Retirement System	51.7%	6.80%	19	San Bernardino County Employees Retirement Association	44.3%	7.25%
10	Louisiana Teachers' Retirement System	50.3%	7.25%	20	Kern County Employees' Retirement Association	44.2%	7.00%

Source: Equable Institute analysis of public plan valuation reports and ACFRs. Note: "Alternative" investments include private capital, hedge funds, real estate, commodities, and tactical asset allocations.

Deep Dive | Causes of Unfunded Liabilities

Why Pension Debt Has Grown: Three Stories

1 Investment Experience and Assumption Changes are Deeply Interrelated.

When public pension boards overestimate investment returns, it increases unfunded liabilities. When those boards revise down their assumptions, it means recognizing there are more unfunded liabilities than previously documented but increases the chances that future investment performance will exceed expectations. While these are independent points of experience, Investment Experience and Assumption Changes should be analyzed together.

2 Interest on the Debt is a Self-Reinforcing Mechanism.

Once a large unfunded liability exists, it takes a while to pay it off. If the amortization schedule used to stretch out pension debt payments is too long, it will mean contributions paid in a given year are less than accruing interest. This is why fully paid contributions can still allow the debt to grow — and why early action is exponentially more valuable than late action.

3 For the National Picture, Most Other Categories — Demographic Changes, Benefit Enhancements, Contribution Shortfalls — are Small.

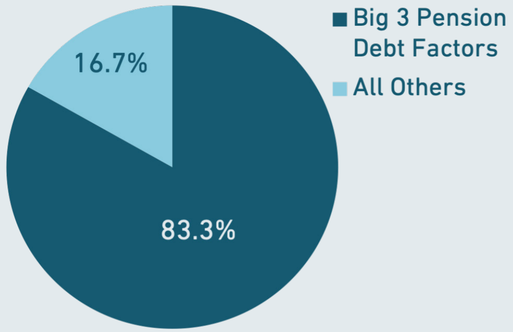
There are benefit and demographic factors that matter for specific states (Illinois, New Jersey, Kentucky), but they are minor components of the over $1 trillion in aggregate unfunded liabilities at the end of 2024. The national problem is fundamentally about investment expectations and their compounding cost when not paid down fast enough.

62.1%

The share of unfunded liabilities attributable to actuarial assumption changes and investment experience relative to expectations.

3 Years

Combined interest on the debt has been falling for four straight years; many plans have turned a corner on their amortization schedules.



The Nine Factors that Determine Unfunded Liability Levels

Assumption Changes
Changes to liabilities due to adopting new assumptions

Interest on the Debt
Expected contributions are greater or less than interest growth on liabilities

Investment Experience
Changes to assets due to investment returns higher/lower than assumed

Demographic Experience
Experience in retirement, payroll, mortality, etc. different than assumed

Benefit Experience
Changes to benefit values, COLA experience, different than assumed

Contribution Experience
Contributions paid are greater, the same, or less than expected

Other Experience
Changes to liabilities that are reported in a generic "other" category

Unreported Change
Changes to liabilities that are not documented in pension plan reporting

Starting Status
Funded status at the start of a plan's actuarial gain/loss data reporting

Managing pension plans requires a wide range of assumptions about future events: investment returns, mortality rates, workforce turnover, salary growth, inflation, government contributions, and more. There are lots of places where actual experience may not line up with actuarial expectations — leading to unfunded liabilities or improved funding.

Pension funds compare actuarial and assumed experience every year, along with other factors that can change the value of liabilities.*

We can use the data to look at the internal structure of public pension plans and measure exactly which categories are causing the country's collective unfunded liabilities.

*Note: This is typically called actuarial gain/loss data, or some equivalent. States vary in their degree of transparency on these data. For complete methodology see source paper.



Looking at how each of the causes of unfunded liabilities has changed over time provides some perspective on problems that have been largely solved by policy improvements versus existing challenges today.

Underperforming investment experience was the largest contributor to unfunded liabilities, until historically strong 2021 investment returns.

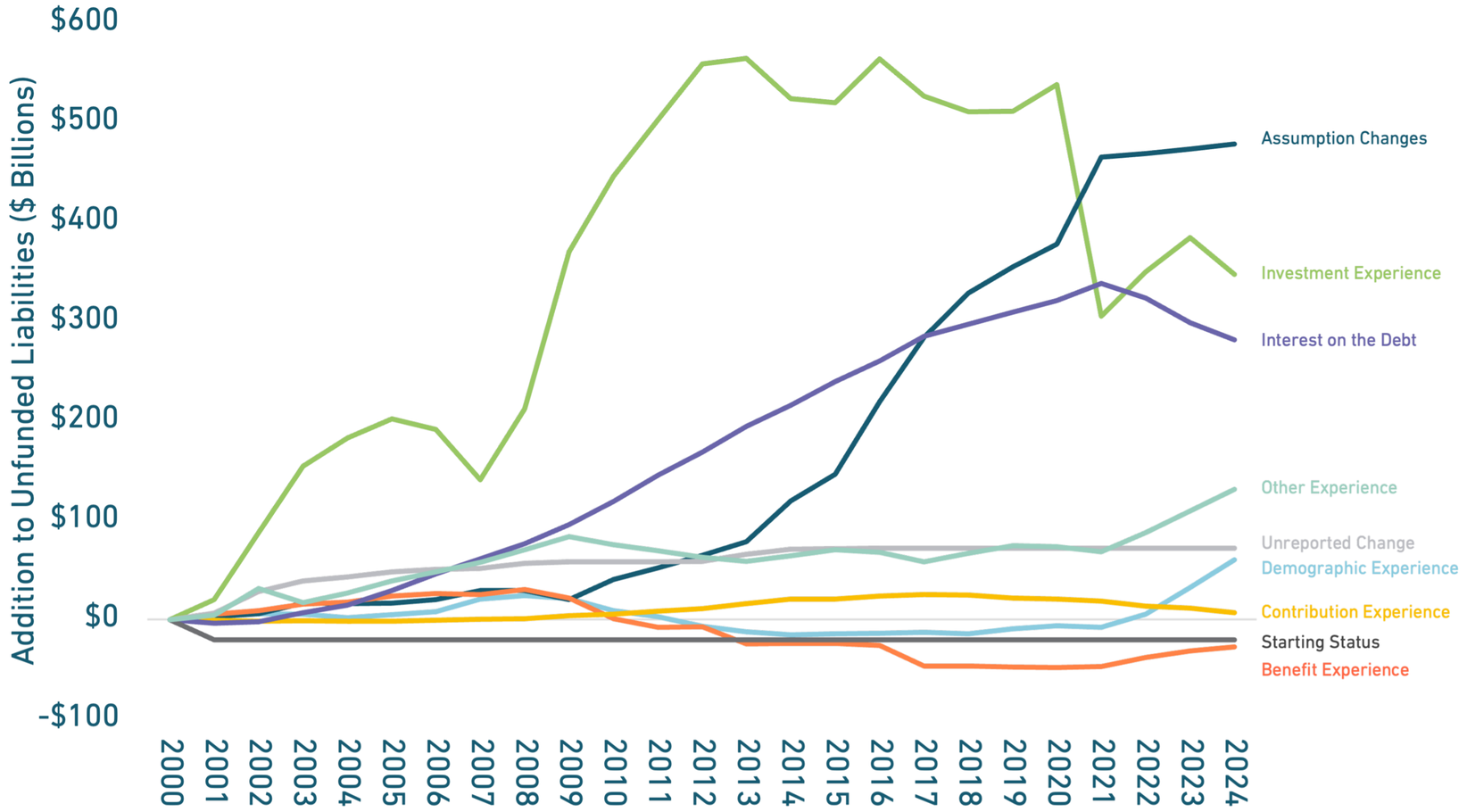
Interest on pension debt has been steadily increasing as a cause of unfunded liabilities for nearly two decades.

Benefit experience has gone from causing unfunded liabilities to reducing pension debt.

Changes to assumption leveled off as a contributor to unfunded liabilities.

The Specific Causes of Unfunded Liabilities, Change in Annual Amount Over Time

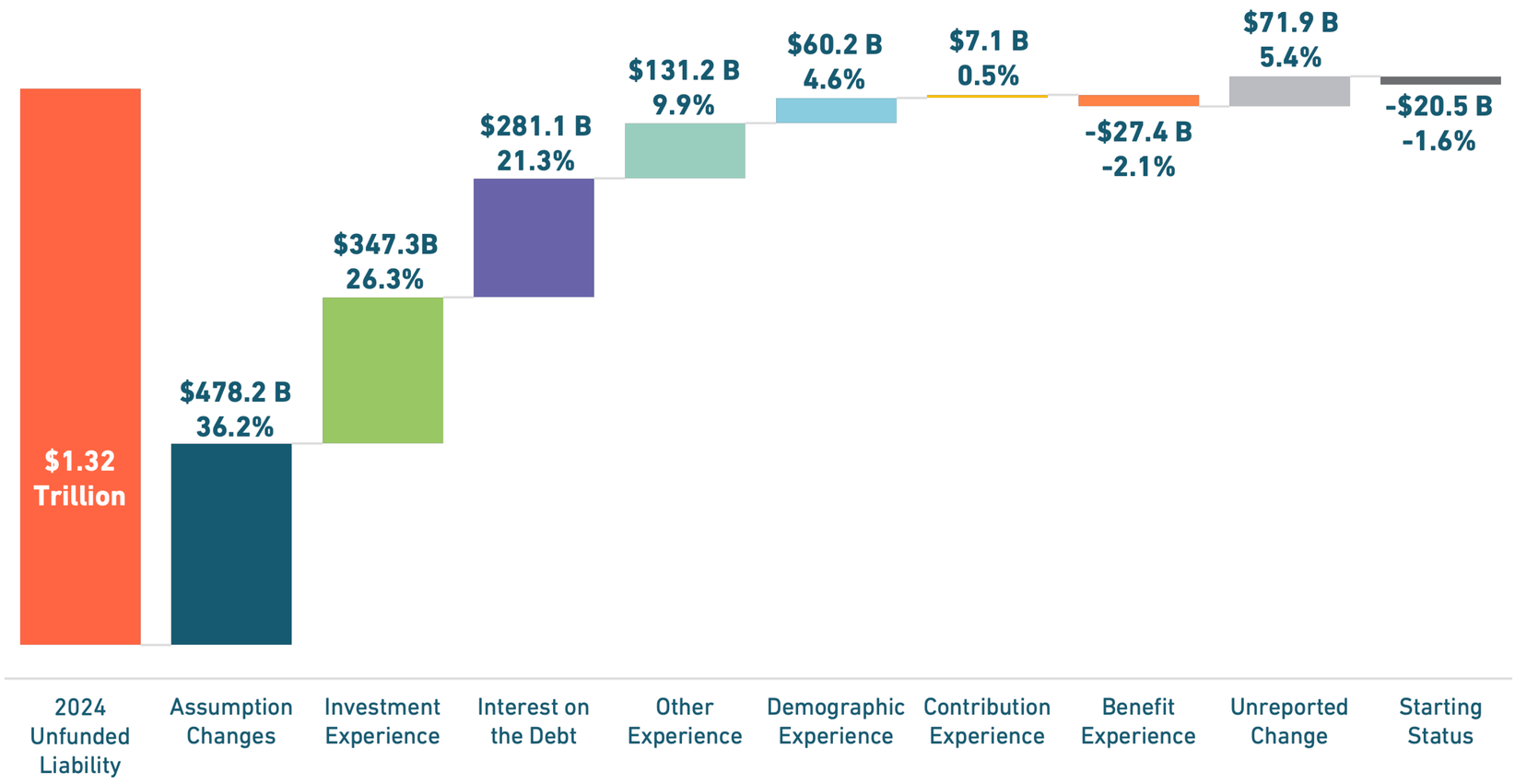
Annual contribution to unfunded liabilities by category | 2000–2024



Source: Equable Institute analysis of actuarial gain/loss data in public plan valuation reports and methodology from Fuchsman, Hengerer, Moody, and Randazzo (2024). Note: Data is based on actuarial valued assets (AVA), as this is the basis for gain/loss data. For any given year the AVA based data varies slightly from market valued data that is otherwise used in this report.

Cumulative Causes of Public Pension Unfunded Liabilities

Total contribution by category | 2000–2024



Source: Equable Institute analysis of actuarial gain/loss data in public plan valuation reports and methodology from Fuchsman, Hengerer, Moody, and Randazzo (2024). Note: Data is based on actuarial valued assets (AVA), as this is the basis for gain/loss data.

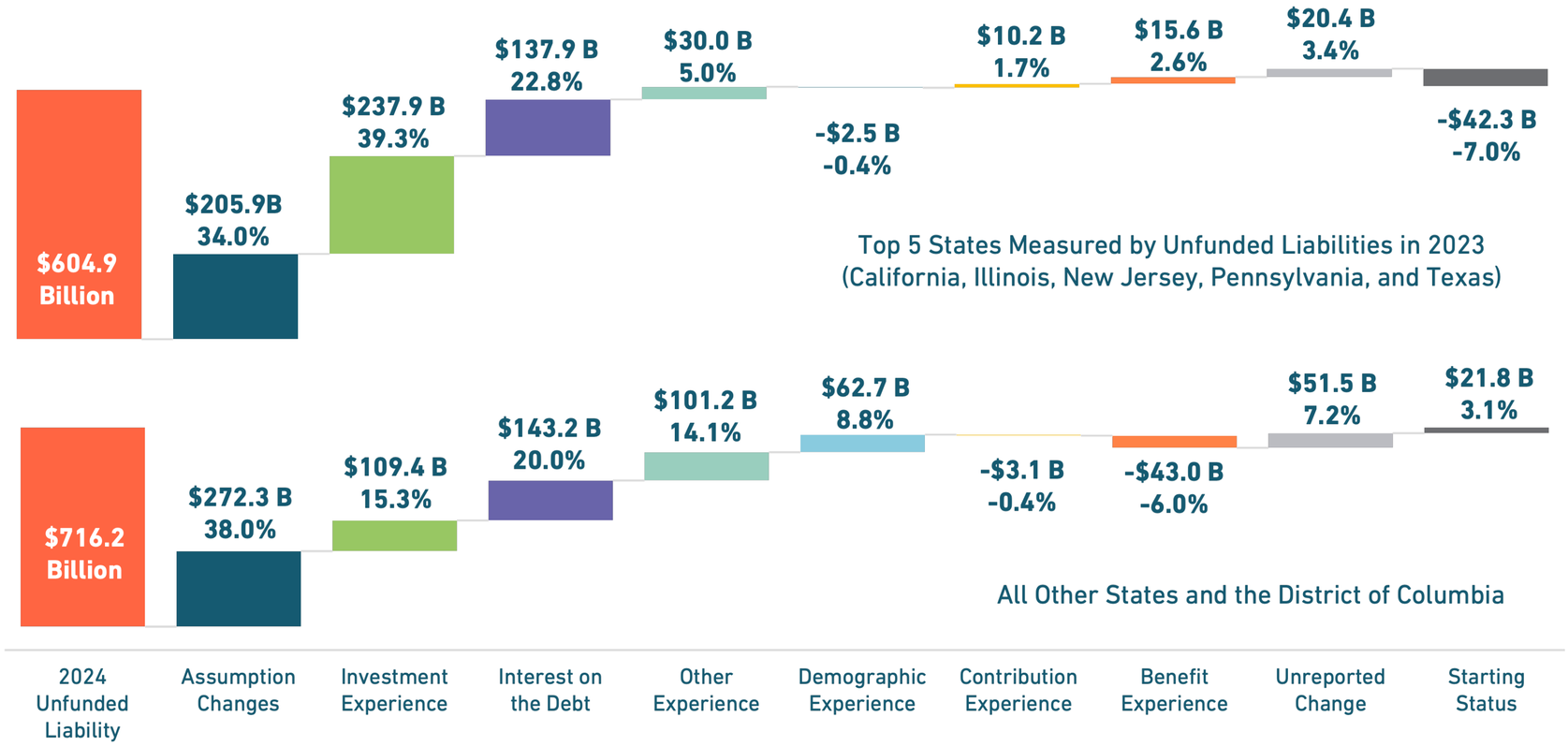
State and local plans track unfunded liability changes using "actuarially valued assets" (AVA), which can differ slightly from the market-valued assets used elsewhere in this report. For fiscal year 2024, the market-valued unfunded liability across all plans was $1.54 trillion, versus $1.52 trillion actuarially valued. Some plans don't report annual actuarial gain/loss data, but detailed cause data covers $1.33 trillion in unfunded liabilities (87.2% of the total).

The largest contributor to that $1.33 trillion, accumulated since 2000, was actuarial assumption improvements: $478.2 billion (36.2%). Next came underperforming investment returns (26.3%) and interest outpacing contributions (21.1%).

The national aggregate masks important state-level differences. California's debt is driven overwhelmingly by assumption changes. For Illinois this is a combination of interest compounding and contribution history. Texas and New York, despite large absolute liabilities, have well-controlled cause structures. State-specific analysis is important for developing any substantive policy changes to address unfunded liabilities.

Where the Story Differs: State-Level Cause Analysis

Top 5 states by total unfunded liabilities and their primary causes | 2024



Source: Equable Institute analysis of actuarial gain/loss data in public plan valuation reports and methodology from Fuchsman, Hengerer, Moody, and Randazzo (2024). Note: Data is based on actuarial valued assets (AVA), as this is the basis for gain/loss data.

Within the Trends

Analysis of varying experience within national trendlines

FUNDED STATUS | INVESTMENTS | CONTRIBUTIONS | CASH FLOWS

Defining Levels of Funded Status

How we categorize pension plan health across three tiers

We think about the sustainability of state-managed pension funds in three groups: Resilient, Fragile, and Distressed. No single data point on its own should be used to measure a pension plan's fiscal health, so we use a multi-factor matrix when thinking about plan sustainability. This includes funded ratio, unfunded liability as a share of GDP, the assumed return, share of required contributions received, and availability of risk-sharing tools. Here is a breakdown of how we think about the first of these factors, the funded ratio:

Resilient

A resilient pension system has a funded ratio of 90% or more for at least three years in a row. These plans are generally in a strong position to recover from financial downturns as funding policy improvements are easier to make when the plan's finances are stable.

Fragile

A fragile pension fund is consistently between 60% and 90% funded. While these plans aren't going insolvent anytime soon, they will be building up unfunded liabilities that will gradually become a strain on budgets and government revenues. A plan that is 85% funded for several years in a row is healthier than one 65% funded, but it is still exposed to risk. One or two asset shocks could send the plan into a downward spiral.

Distressed

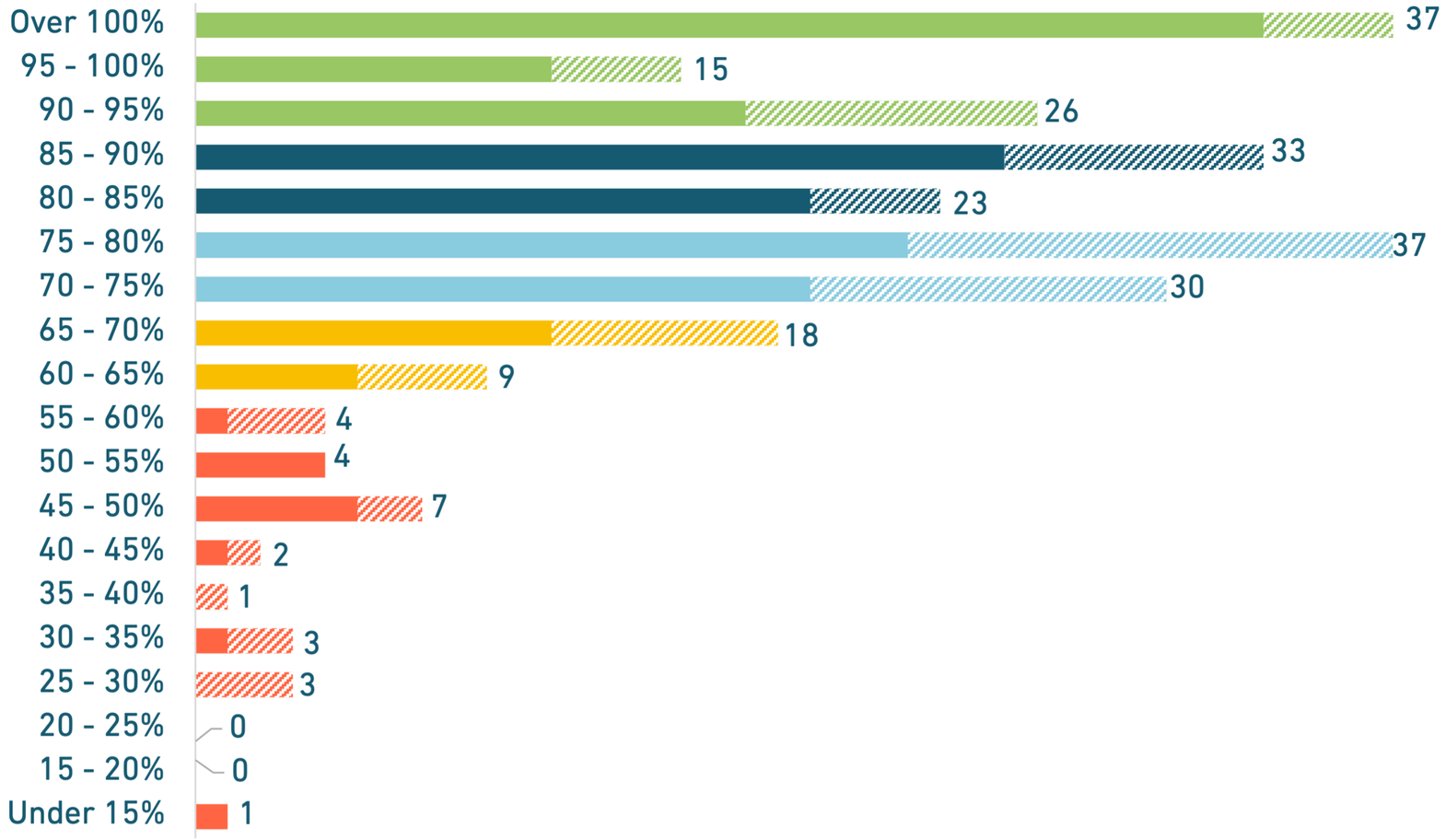
Pension systems with funding levels below 60% should look to make immediate steps toward fixing their problems. While the specific threshold may vary across plans, at a certain point it is much harder for a plan to return to fiscal health.

FUNDED STATUS

Roughly 31% of plans are within Resilient funded status, while almost 10% of plans are Distressed.

State & Local Pension Plan Funded Status

2025 Funded Ratio | Resilient · Fragile · Distressed



Source: Equable Institute analysis of public plan valuation reports and ACFRs. See notes for a list of plans that have fiscal years ending in December and have not yet reported complete 2025 data; for these plans the figure above is based on estimates of their assets using actual reported investment returns as of June 30, 2025.

FUNDED STATUS

2025: The Top 10 and Bottom 10 Statewide Plans

Among state plans that have reported FYE 2025 data

Top 10 Statewide Plans, by Funded Ratio

RANK	PLAN	FUNDED RATIO
1	Washington Law Officers Plans 1 & 2*	143.4%
2	DC Police and Fire	116.4%
3	Utah Firefighters	115.3%
4	Oklahoma Public Employees	111.5%
5	Nebraska PERS State Cash Balance	110.5%
6	California Judges II	110.4%
7	Tennessee Teacher Plans*	109.5%
8	Delaware County and Municipal	108.2%
9	Nebraska PERS Schools	107.2%
10	West Virginia Public Employees	107.1%

Bottom 10 Statewide Plans, by Funded Ratio

RANK	PLAN	FUNDED RATIO
165	New Jersey State Police Retirement System	54.1%
166	Missouri State Employees' Retirement System	53.8%
168	Illinois Teachers	47.7%
169	Illinois State Employees	45.9%
170	Illinois Judges	45.7%
171	Arizona Elected Officials	45.5%
172	Illinois University Retirement System	45.5%
173	New Jersey Teachers	42.0%
174	Kentucky State Employees Nonhazardous	30.4%
175	California Judges**	3.1%

Source: Equable Institute analysis of public plan valuation reports and ACFRs. | Notes: * Indicates two plans administered by the same retirement system that have been averaged to produce this figure. **Indicates a pay-as-you-go plan that does not use traditional pre-funding methods.

FUNDED STATUS

2025: The Top 10 and Bottom 10 Local Plans

Among state plans that have reported FYE 2025 data

Top 10 Local Plans, by Funded Ratio

RANK	PLAN	FUNDED RATIO
1	Detroit General Employees Plan 1	107.8%
2	Los Angeles Fire and Police	104.7%
3	Los Angeles Water and Power	103.6%
4	New York City Board of Education	102.6%
5	Houston Firefighters	100.0%
6	Marin County Employees	96.9%
7	Contra Costa County Employees	95.8%
8	Alameda County Employees	95.6%
9	Detroit Police and Fire Plan 1	94.4%
10	Houston Police	94.3%

Bottom 10 Local Plans, by Funded Ratio

RANK	PLAN	FUNDED RATIO
69	Chicago Transit	55.4%
70	Chicago Teachers	47.7%
71	Jacksonville Police & Fire	46.6%
72	Chicago Laborers	44.1%
73	Dallas Police and Firefighters	39.0%
74	Chicago Parks	33.4%
75	Providence Employees	32.4%
76	Chicago Police	26.7%
77	Chicago Firefighters	25.2%
78	Chicago Municipal	25.1%

Source: Equable Institute analysis of public plan valuation reports and ACFRs. | Notes: * Indicates two plans administered by the same retirement system that have been averaged to produce this figure. **Indicates a pay-as-you-go plan that does not use traditional pre-funding methods.

Statewide plans typically are better funded than municipally managed plans; but state agency only plans are the least well-funded type of state pension plan. (Note: this table does not include retirement systems that cover different combinations of state, local, public school, and public safety employees and, therefore, are not generally classifiable.)

Types of Pension Funds and Their Funded Status

Fiscal year 2025

	FUNDED RATIO	UNFUNDED LIABILITIES	PLAN COUNT
K-12 Teachers and Public School Employees Only*	79.0%	$537.1 billion	51 Plans
Higher Education Only	76.2%	$42.4 billion	California URS + Illinois SURS
Statewide for All Public Employees	86.3%	$98.0 billion	10 Plans
State Agency Employees Only	69.2%	$168.8 billion	22 Plans
Municipal Civilian Employees (State-Managed)	89.6%	$41.0 billion	21 Plans
Municipal Civilian Employees** (Muni-Managed)	82.2%	$108.2 billion	49 Plans
Public Safety Only (State Managed)***	84.3%	$51.5 billion	42 Plans
Public Safety Only (Muni-Managed)***	79.2%	$40.4 billion	22 Plans

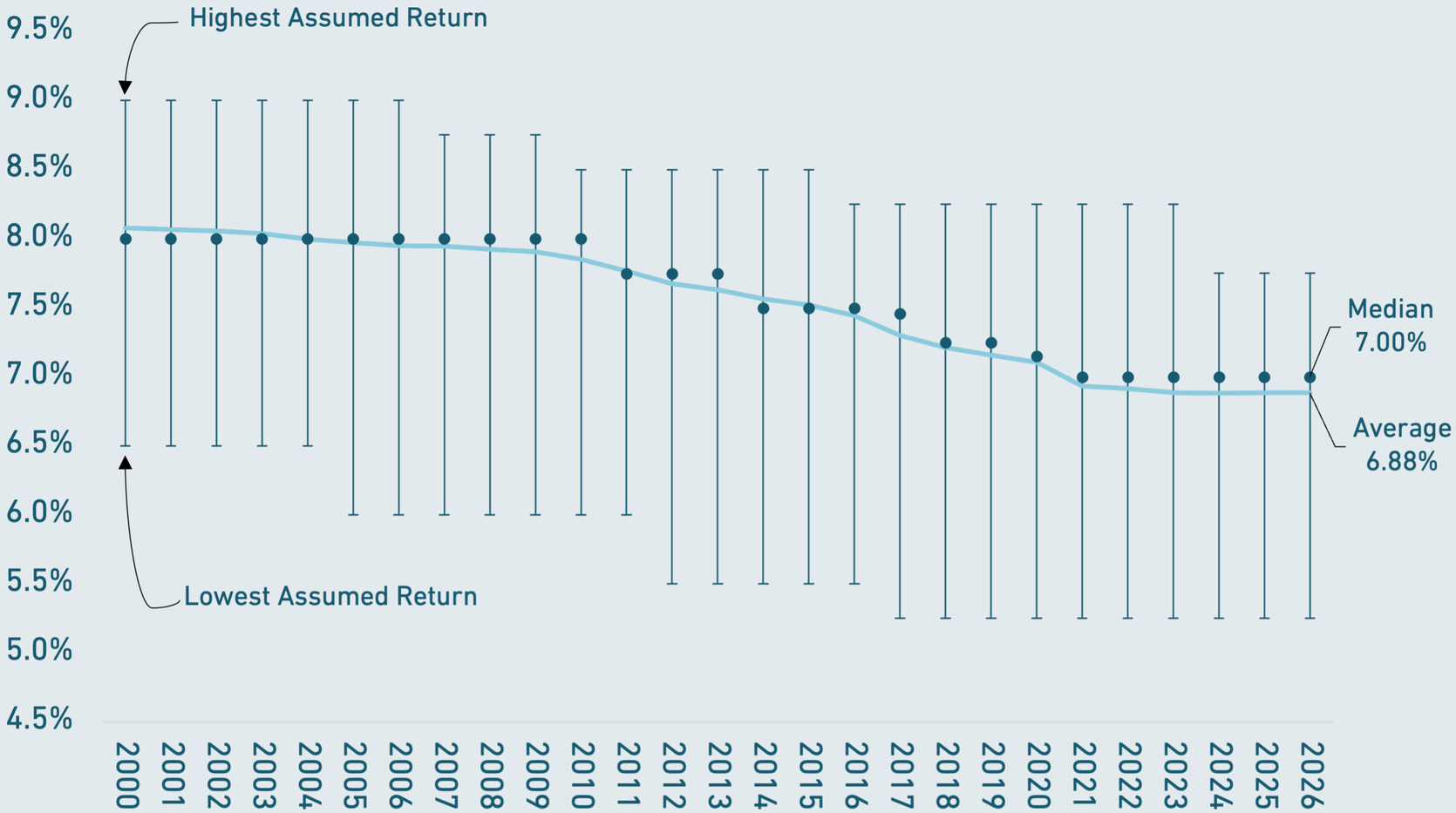
Source: Equable Institute analysis of public plan valuation reports and ACFRs. There are 34 plans in our data set not represented on this list because they had not yet released final data for 2025 or were not generally classifiable because of their broad coverage (including CalPERS).

The average assumed rate of return has gradually declined from 8.07% in 2001 to 6.88% in 2026.

The lowest rate adopted by any plan is 5.25%. The highest rate currently used by a statewide plan is 7.50%, and the highest rate by a local plan is 7.75%.

Average & Median Assumed Rate of Return

For state & local plans | 2001–2025



Source: Equable Institute analysis of public plan valuation reports, ACFRs, and board of trustees reports. | Note: A legacy, pay-as-you-go plan called California Judges has a 3% discount rate.

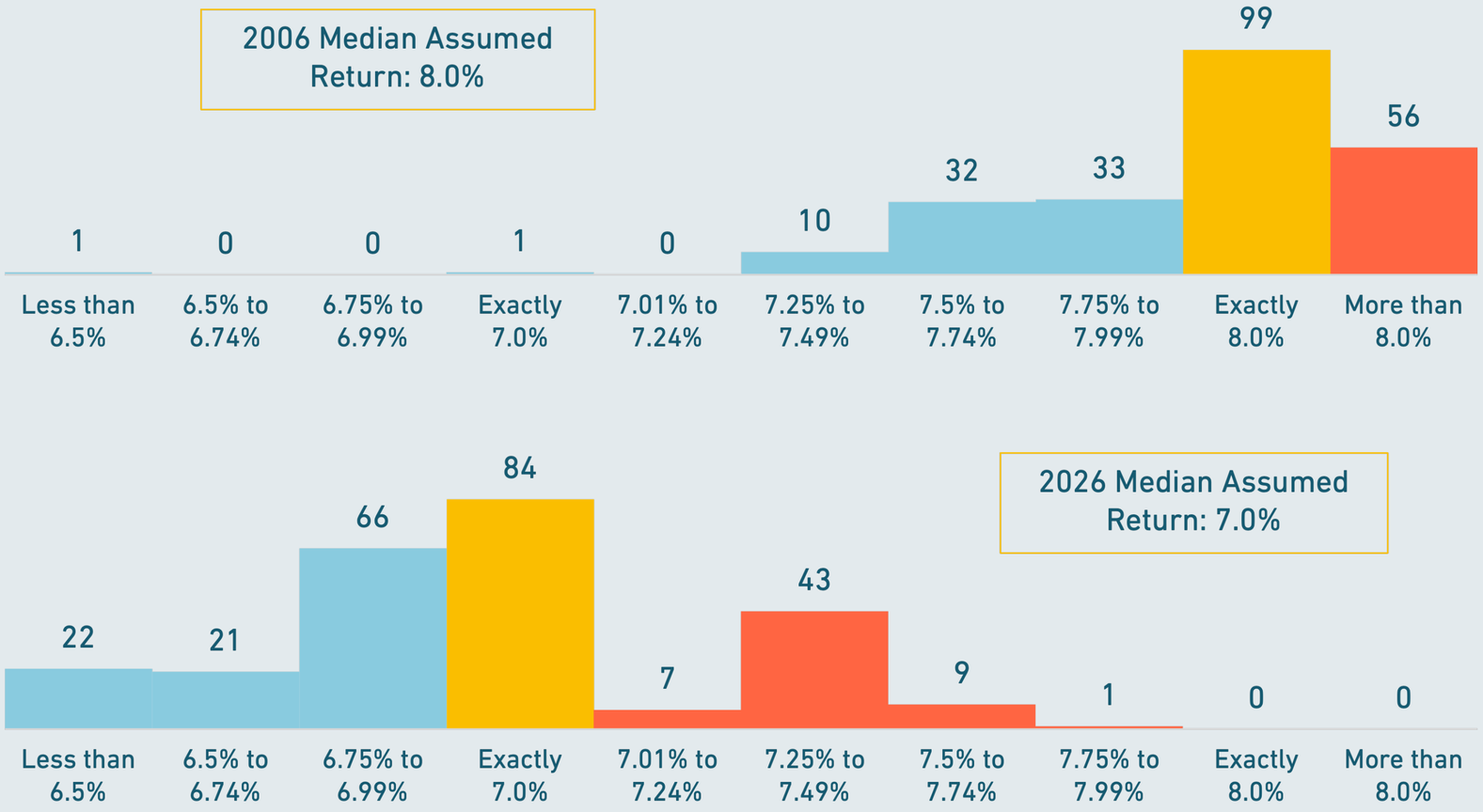
INVESTMENTS

There were 230 major public pension plans with assumed rates of return higher than 7% in 2006. That has fallen to just 60 plans today.

Still, 40 plans have assumed returns of 6.5% or less. These plans are leading their peers in adopting more realistic future expectations.

Distribution of Assumed Rates of Return

By pension plan count | As of June 2006 & June 2026



Source: Equable Institute analysis of public plan valuation reports and ACFRs. Assumed rates of return for 2026 were cross-checked against published board materials, news reports, and other secondary sources to corroborate any changes in plan assumptions from 2025 to 2026.

The decision-makers of the plans on this list (e.g., pension board trustees, state legislatures) are taking on high underperformance risk and/or using inappropriate assumptions to avoid recognizing additional unfunded liabilities.

Plans Being Left Behind

Assumed returns higher than 7.25%

PLAN	ARR
Chicago Transit Authority Employees Retirement Plan	7.75%
Arkansas State Highway Employees	7.50%
Cincinnati Employees	7.50%
Iowa Municipal Fire and Police	7.50%
Montgomery County (MD) Employees	7.50%
Ohio Police & Fire Pension Fund	7.50%
Oklahoma Firefighters	7.50%
Oklahoma Law Enforcement	7.50%
Oklahoma Police (PPRS)	7.50%

PLAN	ARR
Texas County & Districts (CDRS)	7.50%
Alabama Employees	7.45%
Alabama Teachers	7.45%
Austin Firefighters	7.30%
Missouri Public Educations (PEERS)	7.30%
Missouri Public Schools (PSRS)	7.30%
Montana Employees (PERS)	7.30%
Philadelphia Muni Employees	7.30%

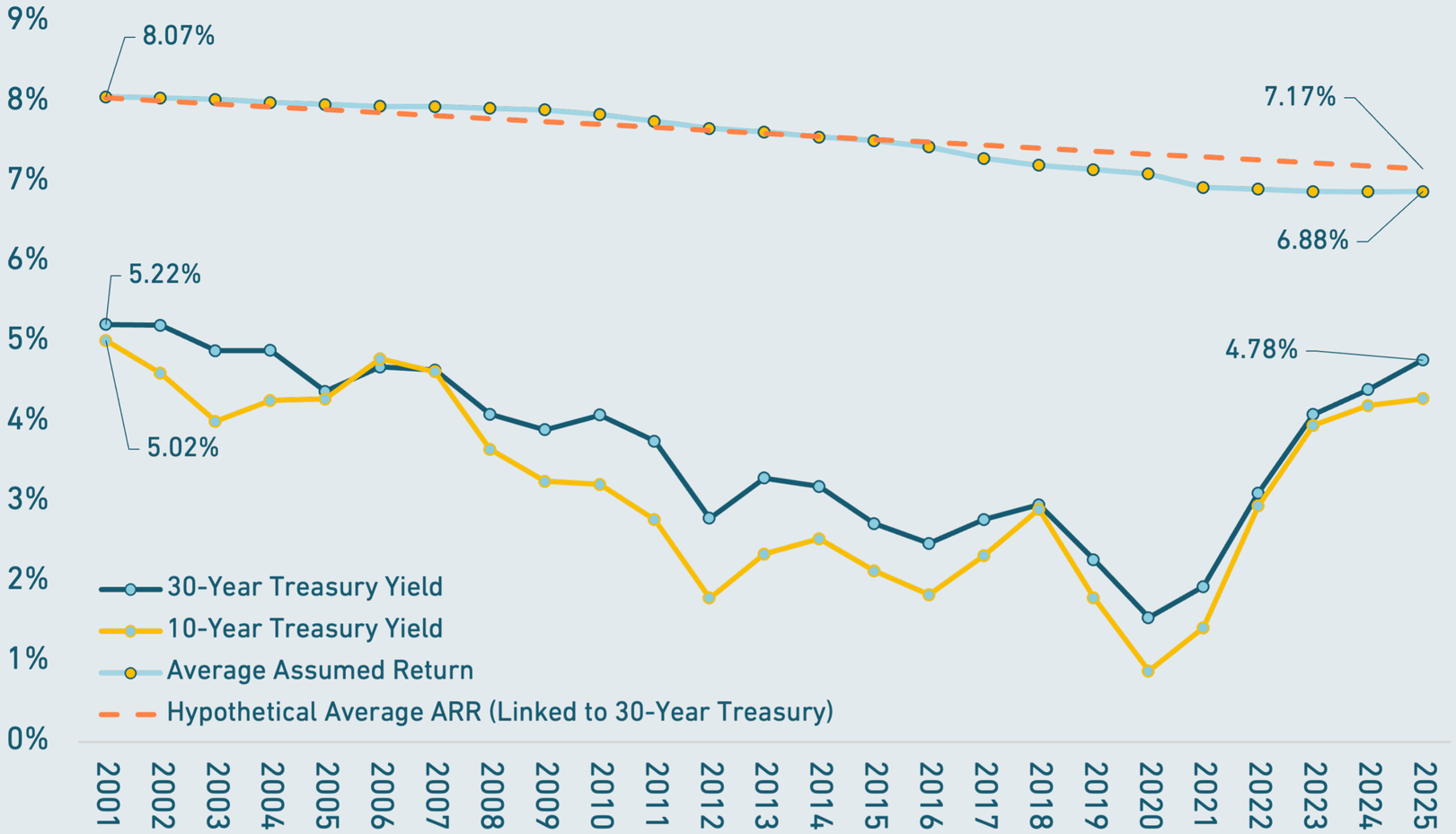
Source: Equable Institute analysis of public plan valuation reports and ACFRs. Note: Assumed returns shown are reported in each plan's most recently published actuarial valuation. For most plans this is 2025.

This chart shows the average assumed return since 2001 (light blue) and the historic change in interest rates, as represented by the 10-year and 30-year Treasury yields (yellow and dark blue lines). The chart also shows what a hypothetical average investment assumption would look like if public plans today kept the same relative risk tolerance they had in 2001.

Compared to 2001, public pension plans have less tolerance for missing their assumed rate of return.

Assumed Return: Actual Compared to Hypothetical Interest Rate-Linked

Assumed return versus interest rates | 2001–2026



Source: Equable Institute analysis of public plan valuation reports and ACFRs. | Notes: (1) Yields for 2026 are the average as of June 30, 2026; (2) No 30-year treasury bonds were issued between February 18, 2002, and February 8, 2006, but the Federal Reserve has imputed yields for those periods.

The national average return figure hides the range across individual pension funds.

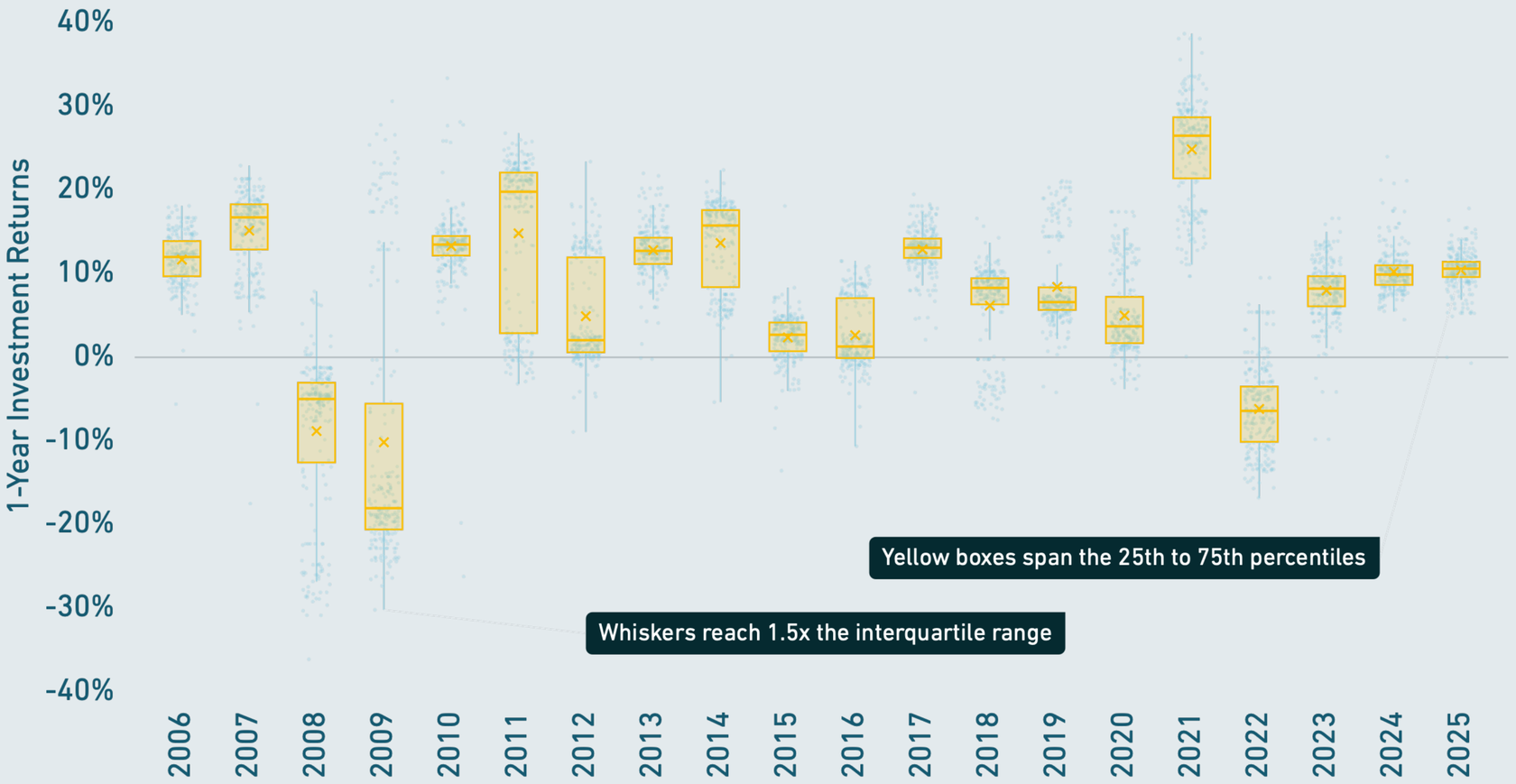
Each box shows how our 253 state and local pension funds performed in a single fiscal year. The yellow box marks the middle half (25th–75th percentile), with the median line inside. Whiskers reach the 10th and 90th percentiles; dots mark outliers.

Box height is the key signal: tall means widely varying returns, short means tight clustering. Reading left to right, boxes shrink over time. Crisis years like 2008-2009 show huge spread; recent years show funds clustering closely.

As with the scatterplot on Page 25, the 25th–75th percentile gap averaged 8.6 points for 2007-2016, narrowing to 4.3 points over the last decade. Standard deviation confirms this, falling from 5.2% in 2022 to 2.3% in 2025.

Range of 1-Year Investment Returns

Distribution of returns and interquartile returns | 2006 –2025



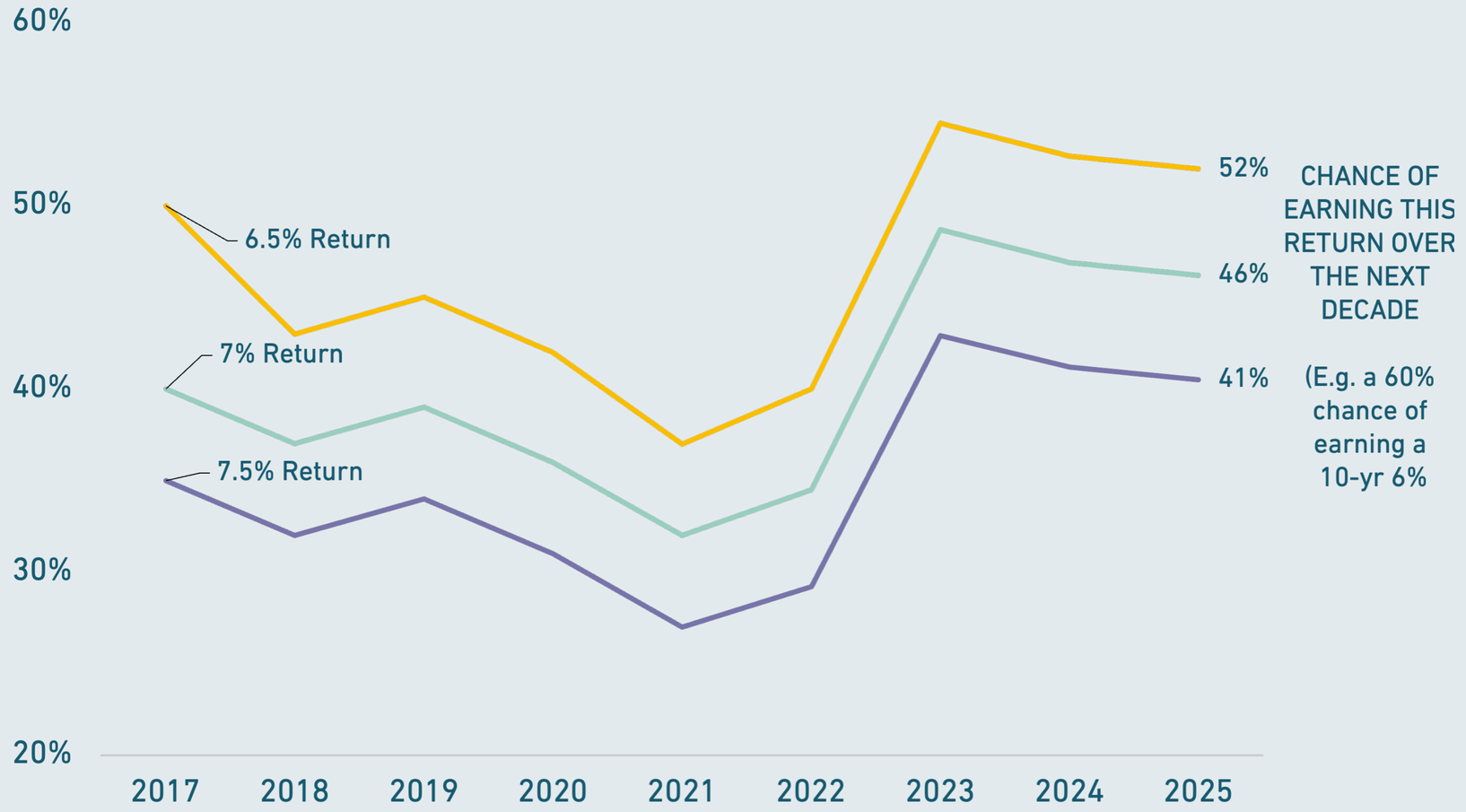
Source: Equable Institute analysis of public plan valuation reports and ACFRs.

The increase in interest rates has driven up investment return expectations. Where a 6.5% return assumption had a roughly 40% probability going into 2022, it had an over 50% probability going into 2025 (which public plans exceeded on average).

Notably, despite this improvement in the outlook for investment returns, there is still a less than 50% chance of an average pension fund earning a 7% return, which is the median assumption for state and local pension plans.

Probability of a Standard Pension Fund Earning Returns Between 6.5% and 7.5%

10-year capital market forecast average



Source: Horizon, "Survey of Capital Market Assumptions: 2025 Edition." Note: The figures show the average capital market forecast for a typical multi-employer pension plan with an average diversified asset allocation.

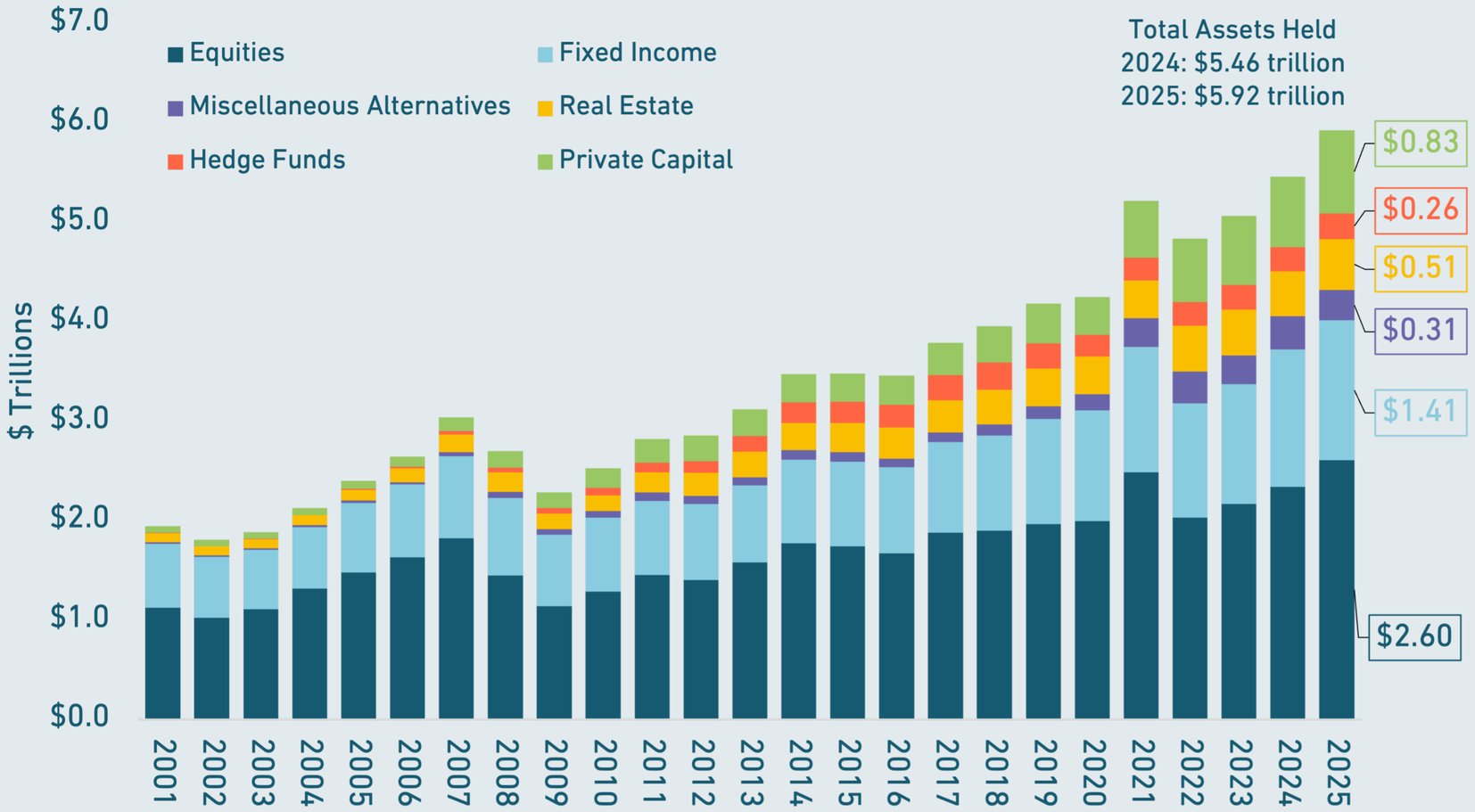
INVESTMENTS

Dollar expansion to alternatives has grown from $424.5 billion in 2009 to $1.91 trillion in 2025.

The largest component of that is private capital, now accounting for a reported $831.9 billion of public pension plan assets.

Dollar Distribution of Pension Fund Investments

By asset class | 2001–2025

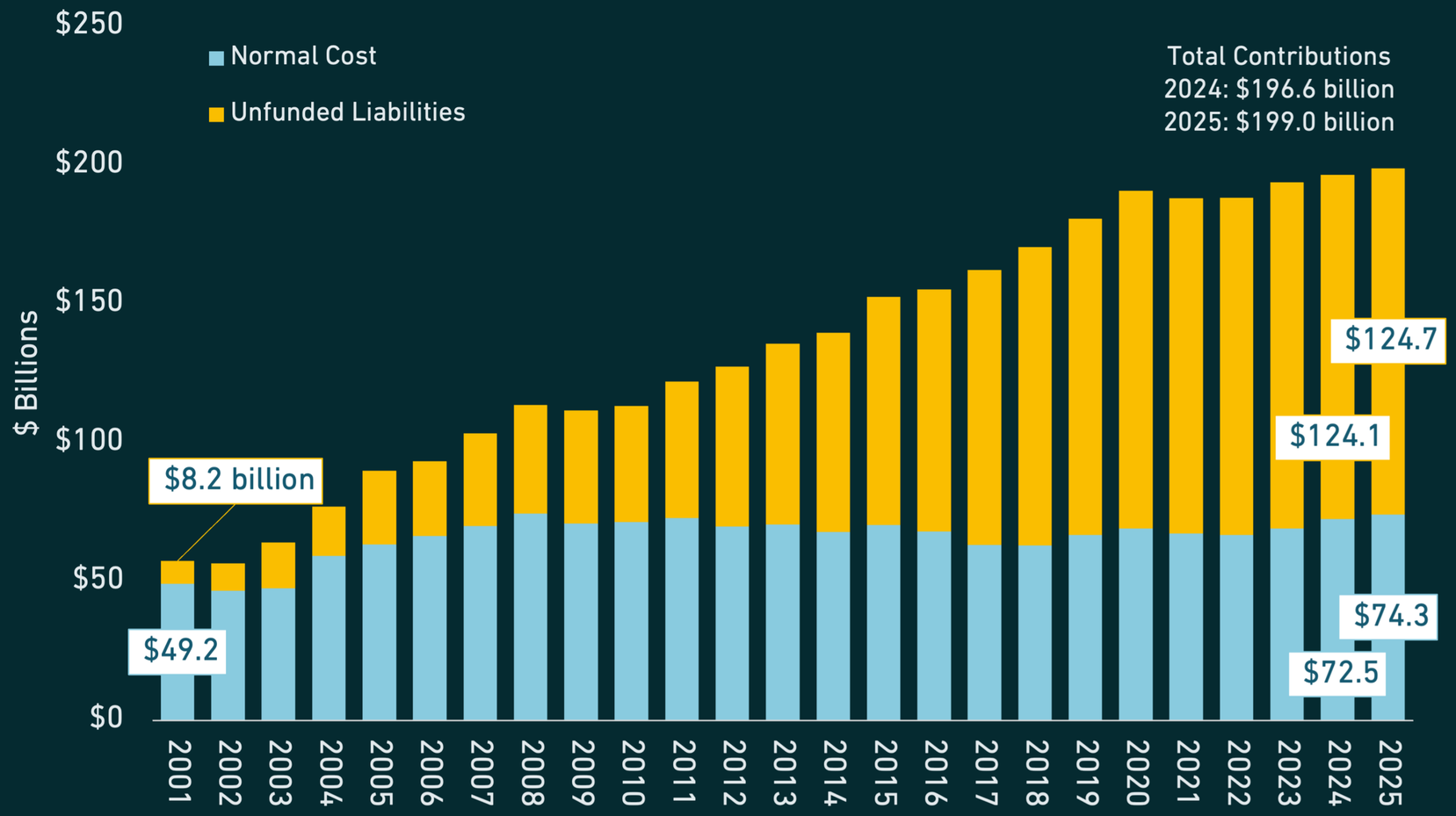


Source: Equable Institute analysis of public plan valuation reports and ACFRs. Data for 2024 are incomplete pending the release of investment data from late-reporting systems. Note: "Alternative" investments include private capital, hedge funds, real estate, commodities, and tactical asset allocations.

On an inflation-adjusted basis, there has been a slow increase in normal costs (due to lower discount rates), while unfunded liability amortization payments have increased from $8.2 billion in 2001 to $124.7 billion in 2025.

Inflation Adjusted Change in Actual Employer Contributions

Normal cost vs. unfunded liability amortization payments | 2001–2025

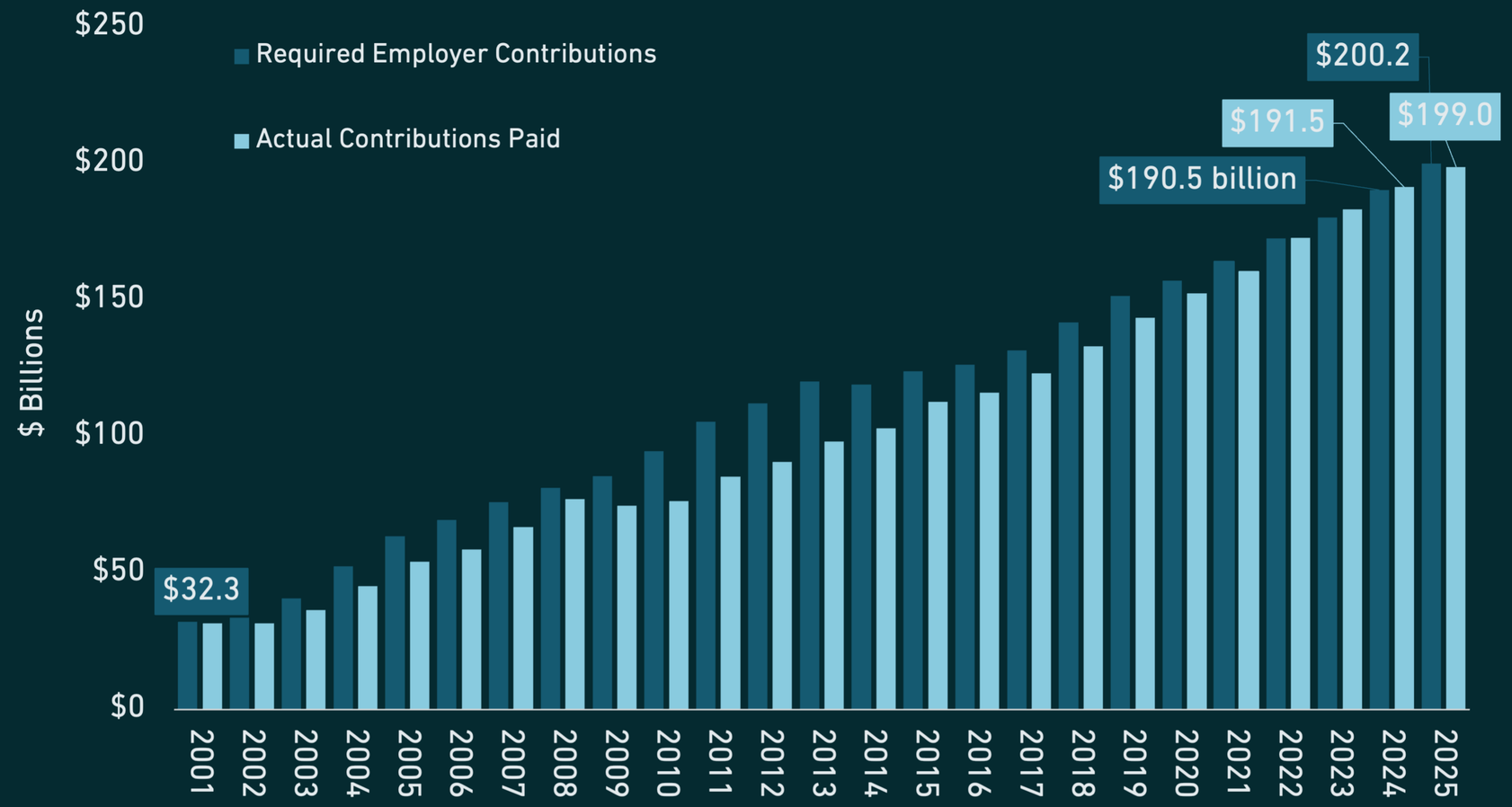


Source: Equable Institute analysis of public plan valuation reports and ACFRs. “Required” based on GASB definitions for ARC and ADC.

In recent years, states have paid all required contributions on average. In fact, supplemental contributions using budget surpluses have led to overpayment of required costs in fiscal years 2023 and 2024.

Employer Contributions

Required vs. actual contributions | 2001–2025



Source: Equable Institute analysis of public plan valuation reports and ACFRs. "Required" based on GASB definitions for ARC and ADC. Plans that have not published their 2025 data were estimated based on reported contribution rates as a percentage of payroll and a roll-forward of payroll based on plan assumptions.

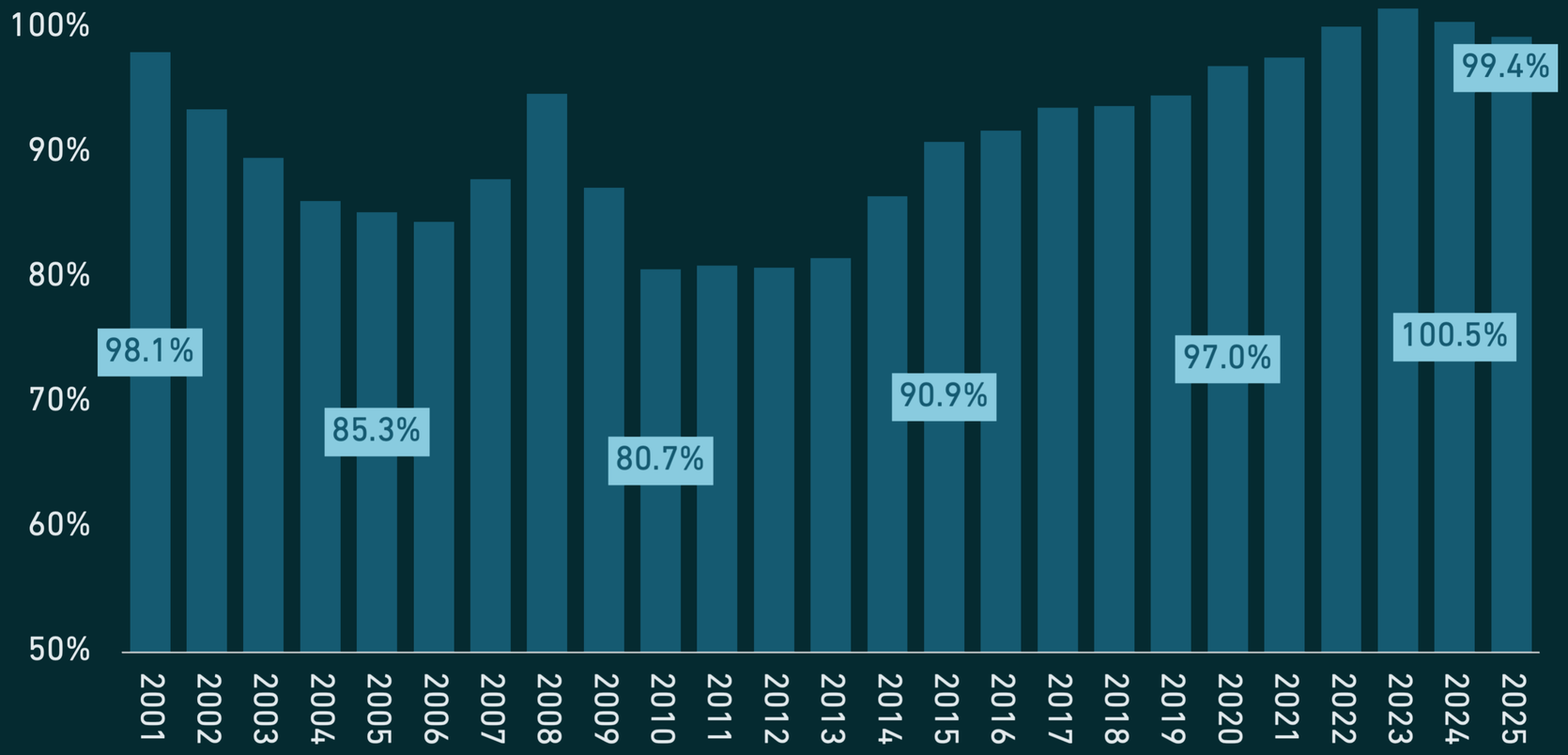
CONTRIBUTIONS

State commitment to paying required contributions has steadily improved since a post-recession low in 2010.

While a few states are still not paying 100% of required contributions, on net the country paid 100% for three years in a row. In 2025, the actual amount paid among those who have reported data is 99.4% of required contributions — strong, but not quite the 100% target. (This is partially because supplemental payments have come down, no longer covering the few states that continue to pay less than actuarially required.)

Share of Required Contributions Paid

By statewide plans | 2001–2025

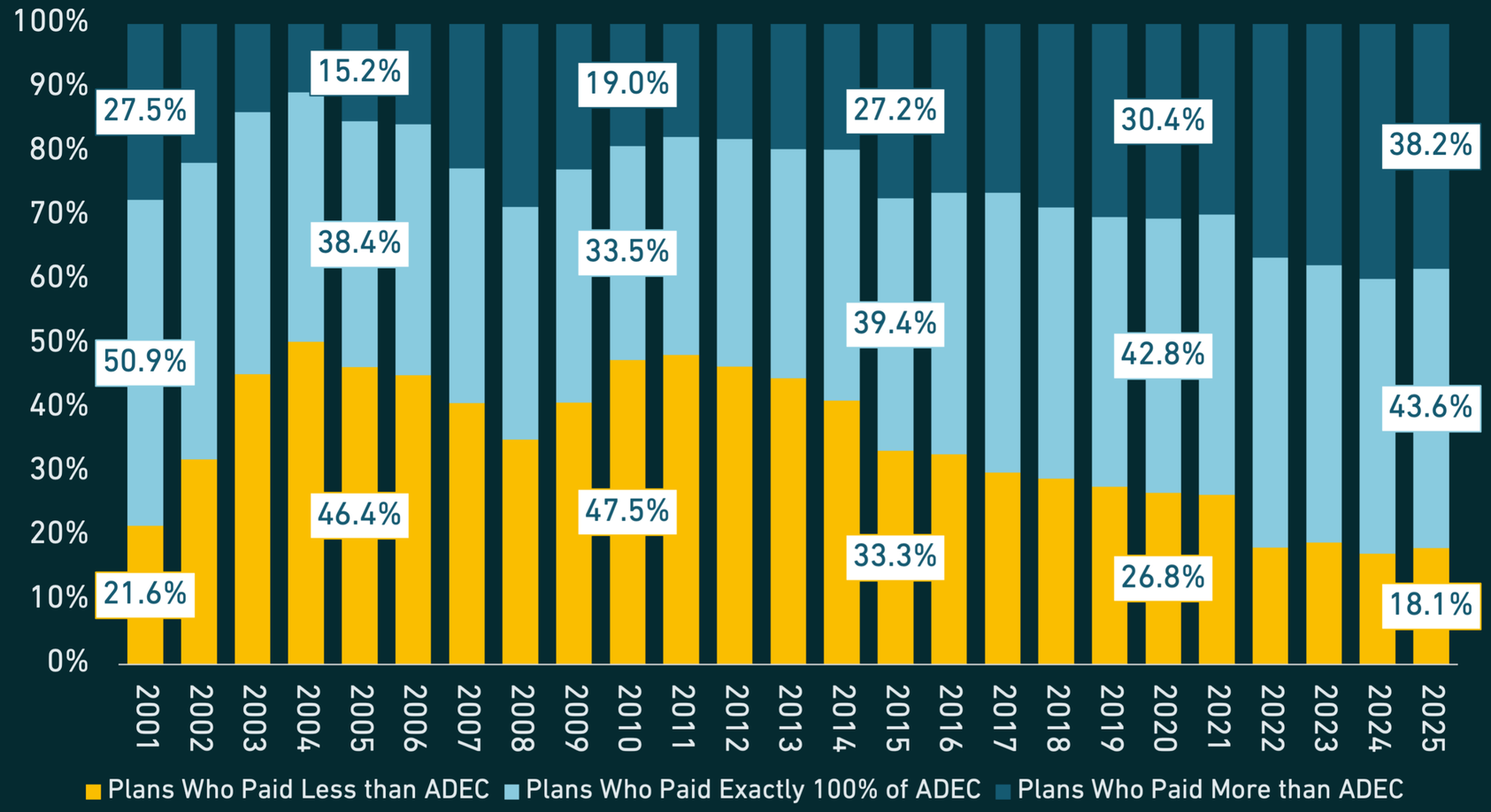


Source: Equable Institute analysis of public plan valuation reports and ACFRs. “Required” based on GASB definitions for ARC and ADC.

While the national average is close to 100% of actuarially required contributions paid, this doesn't mean that every plan is paying 100% of the rate determined by actuaries. Some states or plans still pay less than required. However, increasingly, state and local plans are paying above their actuarially required rate — often with supplemental payments to get pension debt paid down faster.

Percentage of Plans Paying More or Less Than Actuarially Required

2001–2025



Source: Equable Institute analysis of public plan valuation reports and ACFRs. "Required" based on GASB definitions for ARC and ADC.

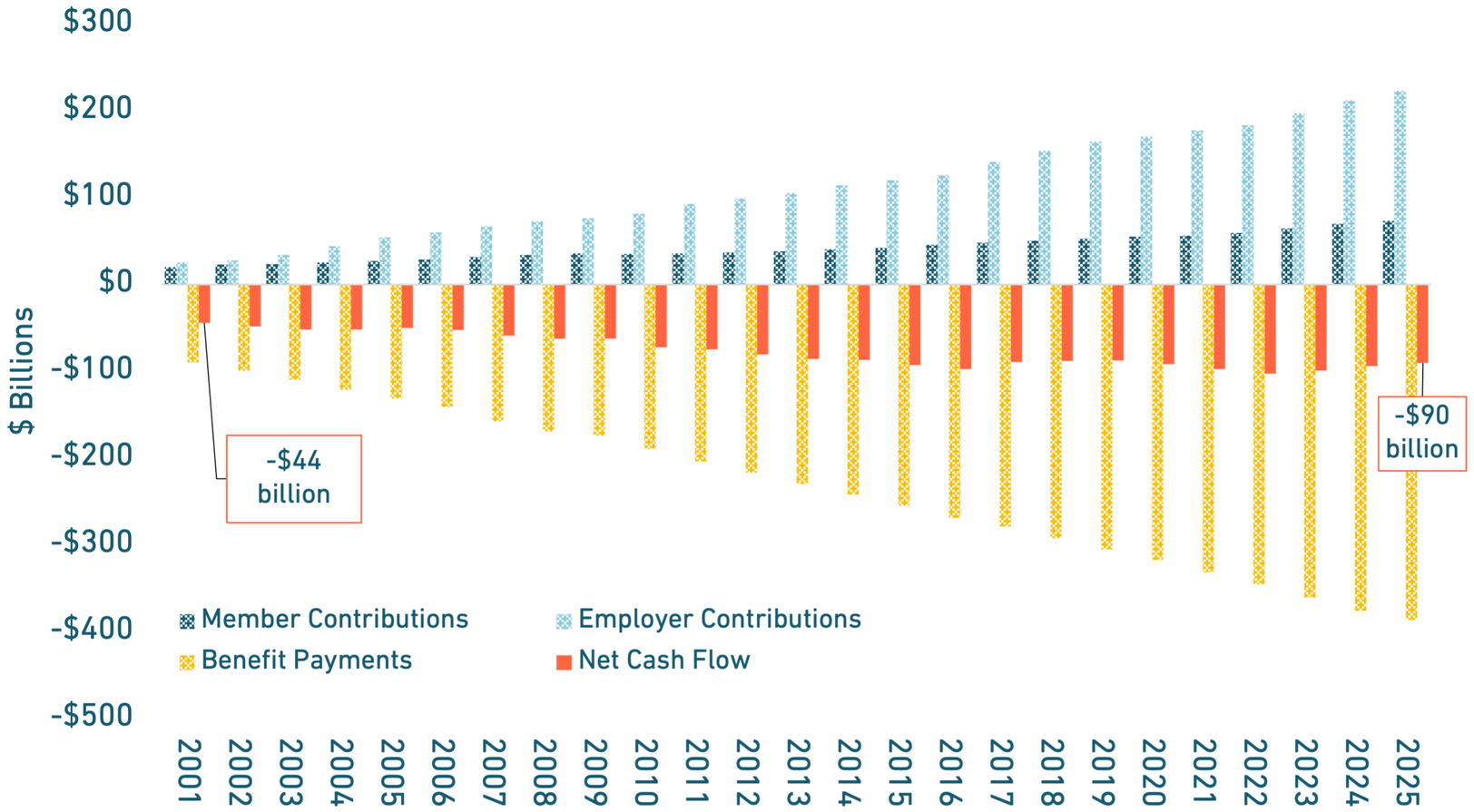
CASH FLOWS

Negative net cash flows from contributions and benefit payments have steadily increased over the past two decades, reflecting more “mature” pension plans.

Larger negative cash flows put increased pressure on investment return income each year to make up the difference.

Non-Investment Cash Flow for State & Local Pension Plans

Contributions, benefit payments, and net cash flow | 2001–2025



Source: Equable Institute analysis of public plan valuation reports and ACFRs. Note: Contribution data for 2025 do not yet include retirement plans that haven’t published final data, including CalPERS.

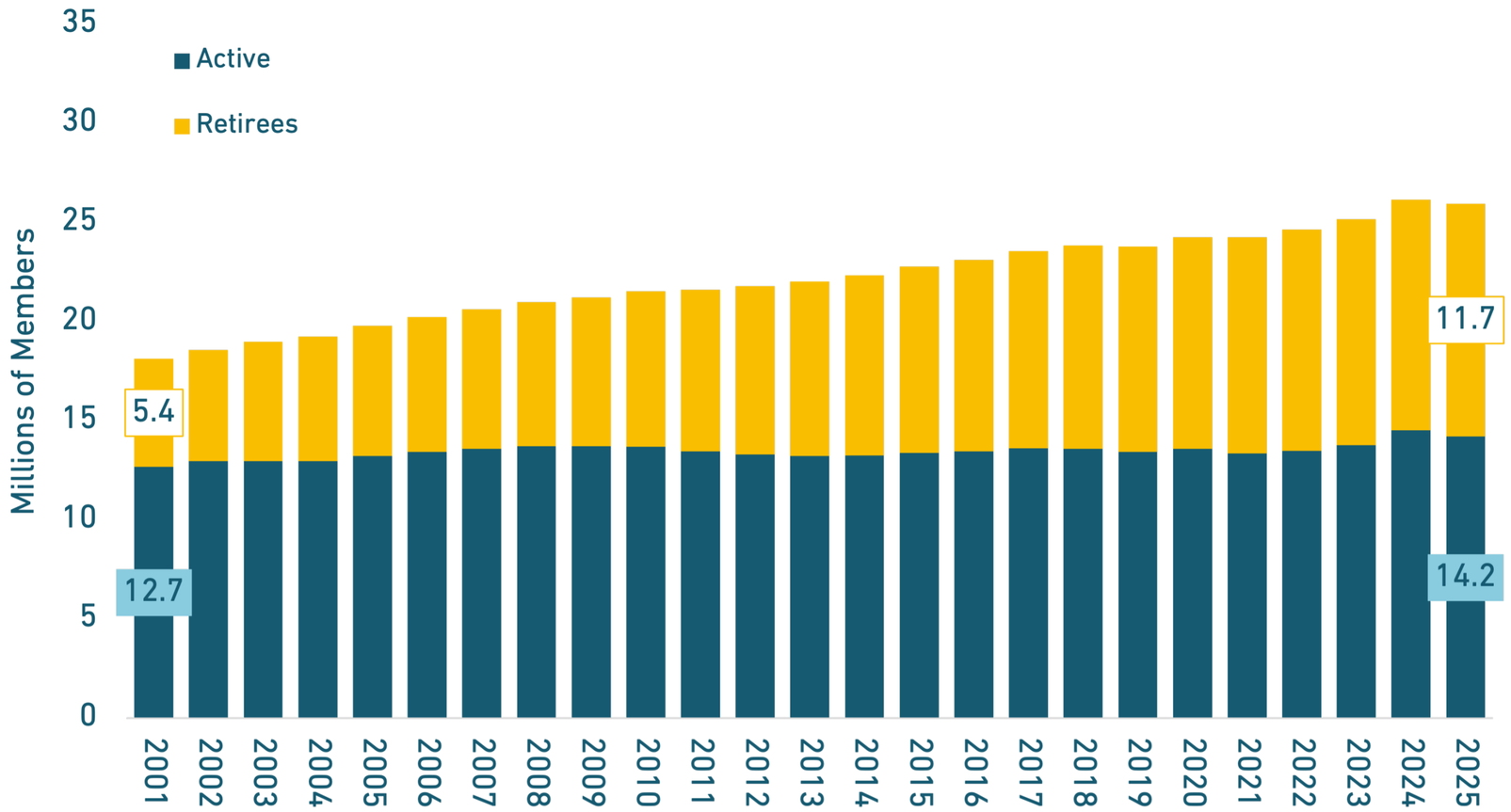
CASH FLOWS

The ratio of active workers to retirees provides a signal about cash flows into and out of pension funds.

People are living longer and retiring faster (as the Baby Boomer generation phases out of the labor force). Public sector hiring rates slowed down after the Great Recession. The net result is active member counts have been relatively stable for the past few years, while the total number of retirees collecting benefits has grown.

Ratio of Active Members to Retirees, A Historic Trend

2001–2024



Source: Equable Institute analysis of public plan valuation reports and ACFRs.

Note: Versions of this graphic in prior State of Pension reports included inactive members of public plans with retirees. To reduce confusion the graphic now presents only active members relative to retirees that are currently claiming benefits.

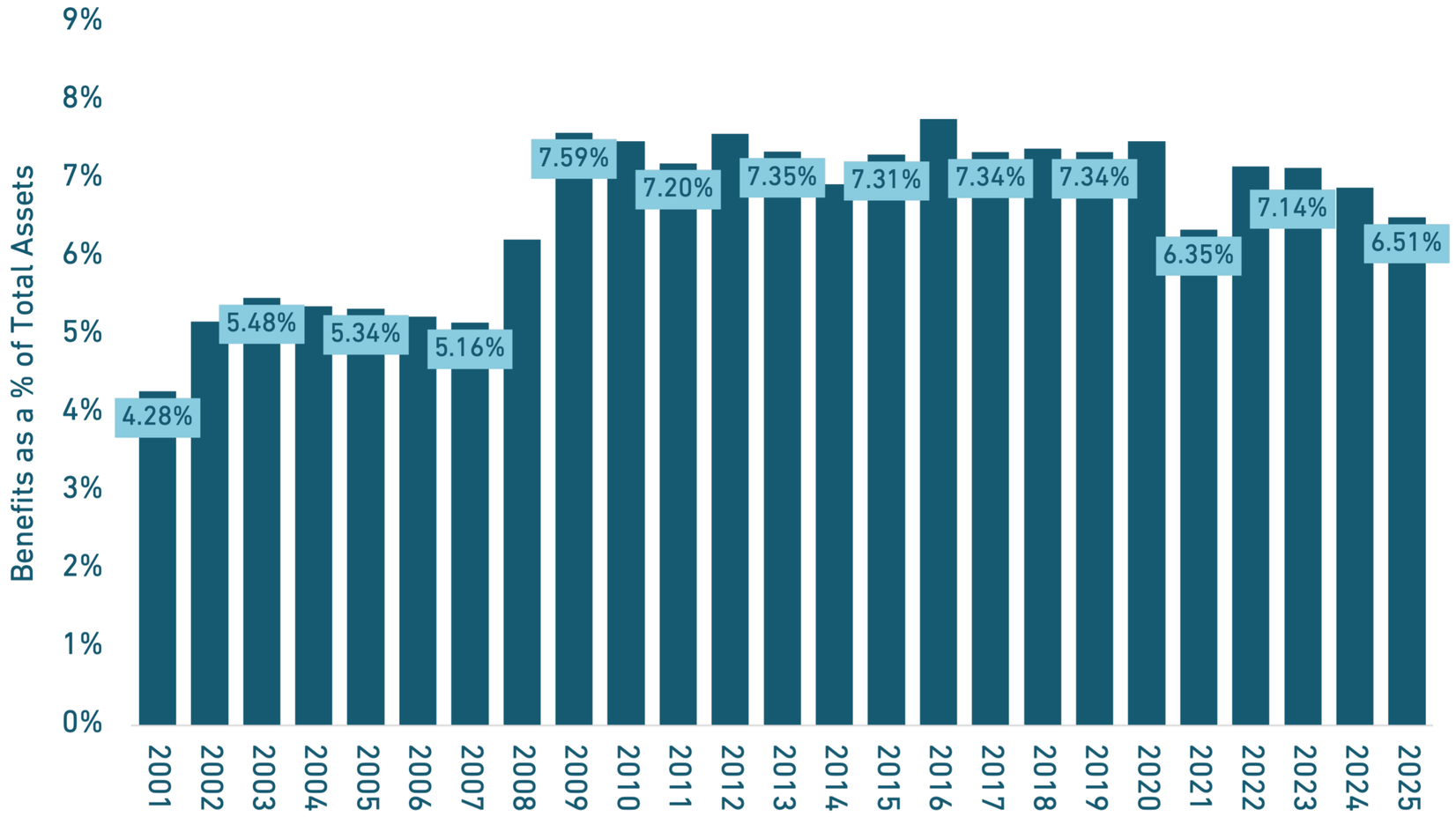
CASH FLOWS

For every $1 paid in benefits, the fund holds $15.40 in assets — down from $23.40 in 2001.

The benefit-to-asset ratio is a helpful metric for states and pension boards to monitor whether they are at risk of running into a liquidity crunch. The closer a pension plan is to a 1:1 ratio, the closer they are to running out of cash. But beyond solvency, there is also an investment concern here: As more of the asset base is being used to pay benefits, there is less money that can be invested in long-term assets to earn returns.

Benefit Payments as a Share of Assets

2001–2024



Source: Equable Institute analysis of public plan valuation reports and ACFRs.

The Record

Analysis, key terms, methodology, and list of plans covered in the analysis

ANALYSIS & TERMS | METHODOLOGY | PLAN LIST

Within the Trends: Summary Analysis

What we see in the state and local data that varies from national trends

Funded ratio and unfunded liability levels vary considerably from state to state. The national aggregate funding level compresses a plan-level range running from 24.6% funded ratio (Chicago Municipal) to 119.6% (Oklahoma PERS) for open plans; closed legacy plans range from 2.8% funded (California JRF) to 190% (Washington Law Enforcement). There are 42 over 100% funded and 24 plans below 60% — with the distress concentrated heavily in Illinois and Chicago systems.

Contribution rates also have a lot of variance at the state and plan level. While the national figure shows at or near 100% of required contributions paid since 2022, only about 43% of plans pay exactly their full required contribution. Roughly 38–40% of plans overpay, offsetting a stable 17–19% minority that continues to underpay. This means about one in five plans still does not fund fully.

By contrast, investment returns and assumptions are heavily concentrated. While there is still some range of assumed returns, the national average reflects a heavy concentration of similar targets. The number of plans with an aggressive approach above 7.25% has been whittled down to just 17 out of 253.



Factors Driving Our Analysis

Funded status matters because it reflects both the solvency of a pension fund and the underlying costs of providing the benefit.

There is no inherent reason that a pension fund needs to be exactly 100% funded every year. The funded level of a plan will fluctuate over time. However, if a pension fund remains at 70% or 80% funded perpetually, the costs of funding benefits will grow. A plan that is consistently below 100% funded for more than two to three years will have consistent unfunded liabilities. The costs of carrying unfunded liabilities for a long period of time can grow exponentially. While a pension fund that is 80% funded for 10 years in a row is at no risk of near-term insolvency, their unfunded liability amortization payments could very well double in that time frame, making the costs of providing the same benefit higher than necessary over the long term.

Reported funded ratio and unfunded liability numbers are only as good as the underlying assumptions.

Funded ratios and unfunded liability numbers depend on accurately measuring the value of promised liabilities and assets. This means the reported funded status is dependent on accurate assumptions like mortality rates used to measure promised benefits and valuation methods used to measure assets. There is an academic debate about whether pension plans should use the assumed rate of return on assets as the discount rate for liabilities. There is a separate debate about whether the assumed rates of return used by plans (current median is 7%) is too high. Moody's Analytics uses an alternative process for measuring liabilities from most actuaries and winds up with a discount rate usually 5% or less. Actuarial firm Milliman measures liabilities using an assumed rate of return (6.6%) that is much lower than the national average.

The most significant problem for pension fund investments currently is low interest rates.

Interest rates are an important trendline for retirement systems because they reflect the kind of financial market that pension funds are investing in. If interest rates are low, it makes it harder to earn higher returns from relatively safe, fixed-income investments like bonds. Since the Great Recession, low interest rates have caused pension funds to shift their assets into higher risk categories to try and earn high returns.

Factors Driving Our Analysis

The most important actuarial assumption for public pension resilience is the assumed rate of return.

The assumed rate of return is used to help determine what the level of contributions is each year. The assumed rate of return is the annual target for a pension fund. Just earning a return greater than 0% is not good enough. If a state plan is assuming 7.25%, then anything less than that will add unfunded liabilities.

Ensuring the actuarially determined contribution rate is fully paid each year is the minimum states can do if their goal is to ensure resilient, sustainable retirement systems.

There are reasonable debates to be had over public policy priorities for any given state or municipality, including over-allocation of resources to various policy goals and what tax rates are appropriate or not. Whether states should use resources to pre-fund retirement benefits is often a part of these debates. While state and local leaders might have acceptable arguments for a choice that trades off fully funding a pension plan, if a state has the goal of maintaining a sustainable retirement system, then the bare minimum requirement each year is paying at least 100% of the ADC.

Actuarially determined contribution rates are only as sound as the underlying assumptions used to calculate them.

Actuarially determined contribution rates are based on numerous actuarial assumptions (i.e., investment returns, mortality, payroll growth, etc.) that factor into measuring liabilities. In addition, pension boards can set amortization policies that target 100% funding over an excessive period of time (more than 25 years) or, in some cases, target less than full funding in the first place. As a result, a number of states pay their full ADC every year but still have mounting unfunded liabilities. Just paying the actuarially required rate each year is not enough on its own to ensure full funding in the long term. If the assumptions and funding policies are flawed, then the ADC alone cannot put a pension plan on the path to full funding.

Factors Driving Our Analysis

Simply hiring more people would improve near-term cash flows, but it would also mean faster growth of promised benefits which is already outpacing assets.

A frequently proposed solution to cash flow problems is hiring more people because this will mean more contributions. However, this also means more promised benefits. The existing challenge for statewide pension plans is that promised benefits are outpacing the growth of assets (Page 64). So, hiring more people could exacerbate the long-term problem. The additional "contributions" that come from hiring more workers are all coming from government resources in the first place — member contributions are from their paychecks; employer contributions are from taxpayer resources. If there is money available to hire more workers, then those funds, including the amounts for paychecks, in theory could be used to pay down existing funding shortfalls without taking on the additional liabilities that come from hiring more members. This is not to say governments should not hire more people — there are plenty of public policy reasons why that might or might not be appropriate for any given state at any given time. This is to say that hiring more people is not a solution to the cash flow problem.

If public plans were fully funded, the active-to-retiree and benefit-to-asset ratios would not be a concern.

Pensions are supposed to be "pre-funded" with contributions plus investment earnings. The benefits earned each year are supposed to be matched by contributions that will be sufficient to pay those benefits, assuming: (1) the value of the benefits was calculated correctly; and (2) the contributions earn assumed investment earnings. This means that new members and their contributions should not be necessary to pay retiree benefits. In practice, there isn't a problem with a pension fund paying out all its assets if there is enough to meet all promises. If a fully funded pension plan were to stop adding new members, it could be gradually wound down over time without fear of running out of money because it was appropriately pre-funded. Each passing year, the ratio of retirees to active members would grow and the benefit-to-asset ratio would shift toward 1:1 or worse, but that would be expected and not a problem.

Key Terms to Know

LIABILITIES

Accrued liability (AAL): Total amount of promised pension benefits, counting up all expected pension checks for active members and retirees and then reporting those in today's dollars.

Total pension liability (TPL): A technical definition from the Governmental Accounting Standards Board for the value of promised benefits. All retirement systems that want to comply with GASB reporting requirements must measure their pension obligations in a particular way that sometimes can be slightly different from AAL.

ASSETS

Actuarial value of assets (AVA): A "smoothed" value of assets, typically used for the purposes of determining contribution rates and measuring unfunded liabilities. Actuaries "smooth" any gains and losses of a particular number of years to minimize year-to-year changes in the value of the AVA. For example, actuaries typically smooth investment gains and losses over a five-year period, only recognizing 20% of the market valued return each year for the purposes of determining the AVA.

Market value of assets (MVA): The actual fair market value of the plan's total assets, measured by the price that would be received to sell an asset in an orderly transaction.

Fiduciary net position: A technical definition from the Governmental Accounting Standards Board for the market value of assets. All retirement systems that want to comply with GASB reporting requirements are required to measure the real value of their assets instead of the actuarial value.

PENSION DEBT

Unfunded liabilities: The difference between the value of promised benefits and assets available to pay those benefits. This is the shortfall in assets that should be in the pension fund and invested so that all promised benefits can be paid. An easy way to think about unfunded liabilities is as pension debt.

Net pension liability (NPL): A technical definition from the Governmental Accounting Standards Board for pension funding shortfalls. All retirement systems that want to comply with GASB reporting requirements are required to measure their obligations as total pension liabilities and their assets using a market value called fiduciary net position (FNP). The difference between these two accounting metrics is the net pension liability.

Pension debt: A non-technical way to think about "unfunded liabilities," which is the difference between the value of promised benefits and the assets available to pay those benefits. Pension debt isn't like typical government debt. Money isn't borrowed and put into the pension fund. Instead, it is money the pension fund needs to make up for past contributions that weren't enough to appropriately pre-pay for benefits.

METHODOLOGY

Which Public Pension Plans Are We Counting?

- For our analyses, we focus on statewide and municipally managed retirement systems and the various defined benefit plans within those systems. Eligible plans hold at least $1 billion in accrued liabilities.
- For certain retirement systems, we separate their respective plans (e.g., Colorado PERA is split into four plans) and count each separately as they have independently measured and reported assets, liabilities, contribution rates, and other data.
- Numerous states have hybrid systems (e.g., Michigan, Pennsylvania, and Tennessee) that include both defined benefit and defined contribution portions. For those plans, we include the defined benefit portions in our data and analyses.
- We treat guaranteed return/cash balance plans in the same fashion as hybrid plans. We report defined benefit totals as they are presented in plan actuarial valuations and comprehensive annual financial reports.
- The result of this approach is a population of 175 statewide retirement plans and 78 municipally managed retirement plans across the 50 states and Washington, D.C. In total, this results in 253 plans that provide benefits for both state and local public employees being included in our analyses. (Our data collection includes additional plans — Birmingham Police and Fire, Birmingham RRS, Georgia PSERS, Memphis RS, Nashville-Davidson ERS, New Castle County RS, Omaha Police & Fire, Omaha Employees, Portland FDPR, Richmond RS, and Utah Governors and Legislators Retirement System — however, these have been excluded from this analysis due to extremely limited public data availability which prevent us from estimating their funded levels and other important information.)
- A full list of included plans is available on Pages 78 to 82.



What Years Are We Measuring?

- Our analyses focus on actual reported data for the years 2001 through 2025 with projections for the fiscal year ending (FYE) 2026.
- We use reported figures for all plans that have published their actuarial valuation reports or annual reports for the fiscal year ending 2025. For all plans that do not yet report those values, we either roll them forward using the reported assumptions of the retirement system (e.g., payroll growth) or simply carry forward their reported values for FYE 2024 when reasonable and when a roll-forward is not possible.
- We will update this report later this year when all FYE 2025 data have been reported.
- We have also published a table online with each plan, the measurement date, the topline funding numbers, assumed returns, and other metrics used in our analyses. That table can be accessed here.



METHODOLOGY

What Data Sources Do We Use?

- Our primary sources for state and local plan data between 2001 and 2025 are the actuarial valuation published by the retirement system and annual comprehensive financial report (ACFR).
- For pension finance data not available in the valuation, we also use the system's ACFR and separately published GASB 67 statements.
- State GDP data are compiled from both the Bureau of Economic Analysis and Federal Reserve.
- State budget data are drawn from the National Association of Budget Officers' annual State Expenditure Report.
- Interest rate data and pre-2001 pension finance data are drawn from the Federal Reserve.
- Cost-of-living adjustment data are gathered from a range of sources, including public retirement system websites, public reports (ACFRs, valuation reports, etc.), and members communications (such as newsletters or other published materials).



METHODOLOGY

How We Produced Our 2026 Estimates

- We collected asset allocation data for each plan using their most recent published report, usually in the ACFR but occasionally via an investment report on the plan's website. We broke these data into the following categories: U.S. Equities, Global Equities, U.S. Fixed Income, Global Fixed Income, Private Capital, Hedge Funds, Real Estate, Commodities, and Cash.
- We collected actual returns for benchmarks for these categories and applied those benchmarks to each plan's allocation to get an approximate estimated return.
- This methodology has some clear disadvantages: It does not account for the actual strategies employed by each fund — for instance, the actual equity allocation may differ significantly from broad market metrics, and it does not account for special leverage or hedges that might aid or harm a fund's overall performance. However, as a tool for approximating a return, our methodology has the advantage of working with many plans. For some we will overestimate and others underestimate.
- We rolled forward each plan's liabilities using their TPL (or AAL if the TPL was not available) as the base. We rolled forward each plan's assets using their FNP (or MVA if the FNP was not available) and the approximate return generated by the above methodology. Backtests of these methodologies were with a reasonable range of actual figures on a one- and two-year roll-forward basis.
- We used these approximate figures for assets and liabilities to estimate 2026 unfunded liability and funded ratio levels.
- For plans with fiscal years ending later than June 2026, we only rolled their assets and liabilities forward as far as June 30, 2026.
- Their actual asset performance during the rest of their fiscal year may vary considerably based on market trends and could cause the final funded ratio figure for the full fiscal year ending 2026 to vary from our current estimate.



A.I.-Related Companies Reviewed for Concentration Analysis

COMPANY TICKER	CATEGORY
NVDA	Magnificent 7
MSFT	Magnificent 7
AAPL	Magnificent 7
AMZN	Magnificent 7
GOOGL	Magnificent 7
GOOG	Magnificent 7
META	Magnificent 7
TSLA	Magnificent 7
AVGO	Processors/Chips
AMD	Processors/Chips
QCOM	Processors/Chips
ARM	Processors/Chips
MRVL	Processors/Chips
TXN	Processors/Chips
ADI	Processors/Chips
INTC	Processors/Chips
MPWR	Processors/Chips

COMPANY TICKER	CATEGORY
TSM	Chip Foundry
ASML	Datacenter Equipment
AMAT	Datacenter Equipment
LRCX	Datacenter Equipment
KLAC	Datacenter Equipment
MU	Memory
ORCL	AI-Software
PLTR	AI-Software
NOW	AI-Software
CRM	AI-Software
SNOW	AI-Software
CRWD	AI-Software
PANW	AI-Software
NET	AI-Software
DDOG	AI-Software
IBM	AI-Software
PATH	AI-Software

COMPANY TICKER	CATEGORY
GTLB	AI-Software
CDNS	AI-Software
SNPS	AI-Software
ANET	AI-Infrastructure
VRT	AI-Infrastructure
DELL	AI-Infrastructure
SMCI	AI-Infrastructure
CRWV	AI-Infrastructure
NBIS	AI-Infrastructure
CIEN	AI-Infrastructure
HPE	AI-Infrastructure
APH	AI-Infrastructure
CEG	AI-Power Supply
VST	AI-Power Supply
NRG	AI-Power Supply
GEV	AI-Power Supply
ETN	AI-Power Supply

PLAN LIST

Retirement Systems in Our Dataset

FULL PLAN NAME	SHORTHAND
Alabama Employees' Retirement System	Alabama ERS
Alabama Teachers' Retirement System	Alabama TRS
Alameda County Employees' Retirement Association	Alameda County ERS
Alaska Public Employees' Retirement System	Alaska PERS
Alaska Teachers' Retirement System	Alaska TRS
Arizona Corrections Officers Retirement Plan	Arizona CORP
Arizona Corrections Officers Retirement Plan Tier 3	Arizona CORP Tier 3
Arizona Elected Officials Retirement Plan	Arizona EORP
Arizona Public Safety Personnel Retirement System	Arizona PSPRS
Arizona Public Safety Personnel Retirement System - Tier 3	Arizona PSPRS Tier 3
Arizona State Retirement System	Arizona SRS
Arkansas State Highway Employees Retirement System	Arkansas DOT
Arkansas Local Police and Fire Retirement System	Arkansas Local P&F
Arkansas Public Employees Retirement System	Arkansas PERS
Arkansas Teacher Retirement System	Arkansas TRS
Atlanta General Employees' Pension Fund	Atlanta ERS
Atlanta Fireman's Pension Fund	Atlanta Fire
Atlanta Police Officers' Pension Fund	Atlanta Police
City of Austin Employees' Retirement System	Austin ERS
Austin Firefighters Relief and Retirement Fund	Austin FRS
Austin Police Retirement System	Austin Police
Baltimore Fire and Police Employees' Retirement System	Baltimore Fire and Police
Baton Rouge City Parish Employees' Retirement System	Baton Rouge City Parish RS
Boston Retirement System - Non-Teachers	Boston Employees
Boston Retirement System - Teachers	Boston Teachers
California Judges Retirement Fund	California JRF
California Judges Retirement Fund II	California JRF II
University of California Retirement System	California URS
California Public Employees Retirement Fund	CalPERS
California State Teachers' Retirement System	CalSTRS
Firemen's Annuity and Benefit Fund of Chicago	Chicago Firemen
Laborers' & Retirement Board and Employees' Annuity and Benefit Fund of Chicago	Chicago Laborers
Chicago Municipal Employees' Annuity Benefit Fund	Chicago Municipal
Park Employees' Annuity and Benefit Fund of Chicago	Chicago Parks
Chicago Policemen's Annuity Benefit Fund	Chicago Police
Public School Teachers' Pension and Retirement Fund of Chicago	Chicago Teachers
Retirement Plan for Chicago Transit Authority Employees	Chicago Transit
Chicago Metropolitan Water Reclamation District Retirement Fund	Chicago Water
Cincinnati Employees' Retirement System	Cincinatti ERS
Colorado Public Employee Retirement Association - Denver Public Schools Fund	Colorado DPS
Colorado Public Employee Retirement Association - Judges	Colorado Judges
Colorado Public Employee Retirement Association - Local Division Fund	Colorado Local
Colorado Fire and Police Pension Association	Colorado P&F
Colorado Public Employee Retirement Association - Schools Division Fund	Colorado Schools
Colorado Public Employee Retirement Association - State Division Fund	Colorado State
Connecticut Municipal Employees Retirement System	Connecticut MERS
Connecticut State Employees Retirement System	Connecticut SERS
Connecticut State Teachers' Retirement System	Connecticut STRS
Contra Costa County Employees' Retirement Association	Contra Costa County
Cook County Employees' Annuity Benefit Fund	Cook County ERS
District of Columbia Police Officers and Fire Fighters' Retirement Fund	D.C. POFRP

PLAN LIST

Retirement Systems in Our Dataset, cont'd

FULL PLAN NAME	SHORTHAND
District of Columbia Teachers' Retirement Fund	D.C. TRP
Employees' Retirement Fund of the City of Dallas	Dallas ERS
Dallas Police and Firefighters Retirement System	Dallas PFRS
Delaware County and Municipal Employees Pension Plan	Delaware Muni
Delaware County and Municipal Police and Fire Employees Pension Plan	Delaware Muni P&F
Delaware State Employees' Pension Plan	Delaware SEPP
Denver Employees Retirement Plan	Denver ERS
Detroit General Retirement System - Component I	Detroit General RS 1
Detroit General Retirement System - Component II	Detroit General RS 2
Detroit Police and Fire Retirement System - Component I	Detroit PFRS 1
Detroit Police and Fire Retirement System - Component II	Detroit PFRS 2
Fairfax County Employees' Retirement System	Fairfax County ERS
Educational Employees' Supplementary Retirement System of Fairfax County	Fairfax County Schools
Florida Retirement System - Defined Benefit Plan	Florida RS
Georgia Employees' Retirement System	Georgia ERS
Georgia Teachers Retirement System	Georgia TRS
Hartford Municipal Employees' Retirement Fund	Hartford MERF

FULL PLAN NAME	SHORTHAND
Employees' Retirement System of the State of Hawaii	Hawaii ERS
Houston Municipal Employees Pension System	Houston MEPS
Houston Firefighters Relief and Retirement Fund	Houston PFRS
Houston Police Officers' Pension System	Houston Police
Public Employee Retirement System of Idaho	Idaho PERS
Judges' Retirement System of Illinois	Illinois JRS
Illinois Municipal Retirement Fund	Illinois MRF
Illinois State Employees Retirement System	Illinois SERS
Illinois State University Retirement System	Illinois SURS
Illinois State Teachers' Retirement System	Illinois TRS
Indiana 1977 Police Officers' and Firefighters' Pension and Disability Fund	Indiana 1977 P&F
Indiana Public Employees Retirement Fund	Indiana PERF
Indiana State Teachers Retirement Fund - 1996 Account	Indiana TRF 1996
Indiana State Teachers Retirement Fund - Pre-1996 Account	Indiana TRF Pre-96
Iowa Municipal Fire and Police Retirement System	Iowa MFPRS
Iowa Public Employees' Retirement System	Iowa PERS
Jacksonville General Employees Retirement Plan	Jacksonville ERS

FULL PLAN NAME	SHORTHAND
Jacksonville Police and Fire Retirement Plan	Jacksonville P&F
Civilian Employees' Retirement System of the Police Department of Kansas City, Missouri	Kansas City Missouri Civilian Police
Kansas City Missouri Employees' Retirement System	Kansas City Missouri ERS
City of Kansas City Missouri Firefighters' Pension System	Kansas City Missouri Fire
Police Retirement System of Kansas City, Missouri	Kansas City Missouri Police
Kansas City Missouri Public School Retirement System	Kansas City Missouri Schools
Kansas Retirement System for Judges	Kansas JRS
Kansas Public Employees Retirement System - Local Employees	Kansas PERS-L
Kansas Public Employees Retirement System - State Employees	Kansas PERS-S
Kansas Public Employees Retirement System - School Employees	Kansas PERS-T
Kansas Police and Firefighter's Retirement System	Kansas PF
Kentucky County Employees' Retirement System - Hazardous Employees	Kentucky CERS H
Kentucky County Employees' Retirement System - Nonhazardous Employees	Kentucky CERS NH
Kentucky Employees' Retirement System - Hazardous Employees	Kentucky ERS H
Kentucky Employees' Retirement System - Nonhazardous Employees	Kentucky ERS NH
Kentucky State Police Retirement System	Kentucky SPRS
Kentucky Teachers' Retirement System	Kentucky TRS

PLAN LIST

Retirement Systems in Our Dataset, cont'd

FULL PLAN NAME	SHORTHAND
Kern County Employees' Retirement Association	Kern County ERS
Los Angeles County Employees Retirement Association	LA County ERS
City of Lincoln Police and Fire Pension Fund	Lincoln P&F
Los Angeles City Employees' Retirement System	Los Angeles ERS
Los Angeles City Fire and Police Pension System	Los Angeles Fire and Police
Los Angeles Water and Power Employees' Retirement Plan	Los Angeles Water and Power
Firefighters Retirement System of Louisiana	Louisiana FRS
Louisiana State Employees' Retirement System	Louisiana LASERS
Louisiana Municipal Employees Plan A	Louisiana MERS A
Louisiana Municipal Employees Plan B	Louisiana MERS B
Louisiana Municipal Police Employees Retirement System	Louisiana MPERS
Louisiana State Parochial Employees Retirement System - Plan A	Louisiana SPERS A
Louisiana State Parochial Employees Retirement System - Plan B	Louisiana SPERS B
Louisiana State Police Retirement System	Louisiana SPRS
Louisiana School Employees' Retirement System	Louisiana SRS
Louisiana Teachers' Retirement System	Louisiana TRS
Maine Public Employees Retirement System - Consolidated Plan for Participating Local Districts	Maine CPPLD
Maine Public Employees Retirement System - State Employee and Teacher Program	Maine SETP
Marin County Employees Retirement Association	Marin County ERS
Maryland State Retirement and Pension System - Employees Combined System	Maryland ECS
Maryland State Retirement and Pension System - Teachers' Combined System	Maryland TCS
Massachusetts State Employees' Retirement System	Massachusetts SERS
Massachusetts Teachers' Retirement System	Massachusetts TRS
Miami Firefighters' and Police Officers' Retirement Trust	Miami Fire and Police
City of Miami General Employees' and Sanitation Employees' Retirement Trust - GESE	Miami GESE
Michigan Municipal Employees' Retirement System	Michigan MERS
Michigan Public School Employees' Retirement System	Michigan PSERS
Michigan Public School Employees' Retirement System Pension Plus Plan	Michigan PSERS PPP
Michigan Public School Employees' Retirement System Pension Plus Plan 2	Michigan PSERS PPP2
Michigan State Employees' Retirement System	Michigan SERS
Michigan State Police Retirement System	Michigan SPRS
Milwaukee City Employees' Retirement System	Milwaukee City ERS
Milwaukee County Employees' Retirement System	Milwaukee County ERS
Minnesota General Employees Retirement Plan	Minnesota GERF
Local Government Correctional Service Retirement Plan of Minnesota	Minnesota LCEP
Minnesota Public Employees Police & Fire Plan	Minnesota PEPFP
Minnesota State Correctional Retirement Fund	Minnesota SCEP
Minnesota State Employees Retirement Fund	Minnesota SERF
Minnesota State Patrol Retirement Fund	Minnesota SPRS
Minnesota Teachers Retirement Association	Minnesota TRA
Public Employees' Retirement System of Mississippi	Mississippi PERS
Missouri Department of Transportation and Highway Patrol Employees' Retirement System	Missouri DOT
Missouri Local Government Employees Retirement System	Missouri LGERS
Missouri Public Education Employee Retirement System	Missouri PEERS
Missouri Public School Retirement System	Missouri PSRS
Missouri State Employees' Retirement System	Missouri SERS
Montana Public Employees' Retirement System	Montana PERS
Montana Teachers' Retirement System	Montana TRS
Montgomery County (MD) Employees' Retirement System	Montgomery County Maryland ERS
Nebraska Public Employees Retirement System - State Employees Cash Balance	Nebraska PERS-CB
Nebraska Public Employees Retirement Systems - School Employees	Nebraska SEP

PLAN LIST

Retirement Systems in Our Dataset, cont'd

FULL PLAN NAME	SHORTHAND
Public Employees' Retirement System of Nevada - Police and Firefighters Subfund	Nevada PERS-PF
Public Employees' Retirement System of Nevada - Regular Subfund	Nevada PERS-R
New Hampshire Retirement System	New Hampshire RS
New Jersey Public Employees' Retirement System - Local Plan	New Jersey PERS-L
New Jersey Public Employees' Retirement System - State Plan	New Jersey PERS-S
New Jersey Police & Firemen's Retirement System - Local Division	New Jersey PFRS-L
New Jersey Police & Firemen's Retirement System - State Division	New Jersey PFRS-S
State Police Retirement System of New Jersey	New Jersey SPRS
New Jersey Teachers' Pension & Annuity Fund	New Jersey TPAF
New Mexico Educational Retirement Board	New Mexico ERB
New Mexico Public Employees Retirement Association	New Mexico PERA
Board of Education Retirement System of the City of New York	New York City BERS
New York City Employees' Retirement System	New York City ERS
New York City Fire Pension Fund	New York City Fire
New York Police Pension Fund	New York City Police
Teachers' Retirement System of the City of New York	New York City Teachers
New York State and Local Retirement System - Employees' Retirement System	New York SLRS ERS
New York State and Local Retirement System - Police and Fire Retirement System	New York SLRS PFRS
New York State Teachers' Retirement System	New York STRS
North Carolina Local Government Employees' Retirement System	North Carolina LGERS
North Carolina Teachers' and State Employees' Retirement System	North Carolina TSERS
North Dakota Public Employees Retirement System	North Dakota PERS
North Dakota Teachers' Fund for Retirement	North Dakota TFR
Ohio Highway Patrol Retirement System	Ohio HRS
Ohio Public Employees' Retirement System	Ohio PERS
Ohio Police and Fire Pension Fund	Ohio PFPF
Ohio School Employees' Retirement System	Ohio SERS
Ohio State Teachers' Retirement System	Ohio STRS
Oklahoma Firefighters Pension & Retirement System	Oklahoma FRS
Oklahoma Law Enforcement Retirement System	Oklahoma LERS
Oklahoma Public Employees Retirement System	Oklahoma PERS
Oklahoma Police Pension and Retirement System	Oklahoma PPRS
Oklahoma Teachers' Retirement System	Oklahoma TRS
Orange County Employees Retirement System	Orange County ERS
Oregon Public Employees Retirement System - Tier1/2 and OPSRP Combined	Oregon PERS
Pennsylvania Municipal Retirement System	Pennsylvania MRS
Pennsylvania Public School Employees' Retirement System	Pennsylvania PSERS
Pennsylvania State Employees' Retirement System	Pennsylvania SERS
Philadelphia Municipal Retirement System	Philadelphia Municipal
Phoenix Employees' Retirement System	Phoenix ERS
Providence Employee Retirement System	Providence ERS
Employees' Retirement System of Rhode Island - State Employees	Rhode Island ERS-S
Employees' Retirement System of Rhode Island - Teachers	Rhode Island ERS-T
Municipal Employees' Retirement System of Rhode Island	Rhode Island MERS
Sacramento County Employees' Retirement System	Sacramento County ERS
San Antonio Firemen's and Policemen's Pension Fund	San Antonio P&F
San Bernardino County Employees Retirement Association	San Bernardino ERA
San Diego City Employees' Retirement System	San Diego City ERS
San Diego County Employees Retirement Association	San Diego County
San Francisco City & County Employees' Retirement System	San Francisco City & County
City of San Jose Police and Fire Department Retirement Plan	San Jose P&F

PLAN LIST

Retirement Systems in Our Dataset, cont'd

FULL PLAN NAME	SHORTHAND
Seattle Employees' Retirement System	Seattle ERS
South Carolina Police Officers' Retirement System	South Carolina PORS
South Carolina Retirement System	South Carolina RS
South Dakota Retirement System	South Dakota RS
St Louis Employees Retirement System	St. Louis Employees
St Louis Police Retirement System	St. Louis Police
Public School Retirement System of the City of St. Louis	St. Louis School Employees
St. Paul Teachers Retirement Fund	St. Paul Teachers
Tennessee Public Employees Retirement Plan	Tennessee PERP
Tennessee Teacher Legacy Pension Plan	Tennessee TLPP
Tennessee Teacher Retirement Plan	Tennessee TRP
Texas County & District Retirement System	Texas CDRS
Texas Employees Retirement System	Texas ERS
Texas Law Enforcement & Custodial Officer Supplemental Retirement Plan	Texas LECOS
Texas Municipal Retirement System	Texas MRS
Texas Teachers Retirement System	Texas TRS
Tucson Supplemental Retirement System	Tucson Supplemental RS

FULL PLAN NAME	SHORTHAND
Utah Public Employees Contributory Retirement System	Utah CRS
Utah Tier 2 Public Employees Contributory Retirement System	Utah CRS-T2
Utah Firefighters Retirement System	Utah FRS
Utah Judges Retirement System	Utah Judges
Utah Public Employees Noncontributory Retirement System	Utah NRS
Utah Public Safety Retirement System - Contributory	Utah PSC
Utah Tier 2 Public Safety and Firefighter Contributory Retirement System	Utah PSC-T2
Utah Public Safety Retirement System - Noncontributory	Utah PSN
Vermont Municipal Employees' Retirement System	Vermont Muni
Vermont State Employees' Retirement System	Vermont SERS
Vermont State Teachers' Retirement System	Vermont STRS
Virginia Judicial Retirement System	Virginia JRS
Virginia Law Officers' Retirement System	Virginia LORS
Virginia State Police Officers' Retirement System	Virginia SPORS
Virginia Retirement System - Political Subdivisions	Virginia RS-L
Virginia Retirement System - State Employees Division	Virginia RS-S
Virginia Retirement System - Teachers Division	Virginia RS-T

FULL PLAN NAME	SHORTHAND
Washington Law Enforcement Officers' and Firefighters Retirement System - Plan 1	Washington LEOFF Plan 1
Washington Law Enforcement Officers' and Firefighters Retirement System - Plan 2	Washington LEOFF Plan 2
Washington Public Employees' Retirement System - Plan 1	Washington PERS 1
Washington Public Employees' Retirement System - Plan 2 & 3	Washington PERS 2/3
Washington Public Safety Employees' Retirement System - Plan 2	Washington PSERS 2
Washington School Employees' Retirement System - Plan 2/3	Washington SERS 2/3
Washington State Patrol Retirement System Plan 1 & 2	Washington SPRS 1/2
Washington Teachers Retirement System Plan 1	Washington TRS 1
Washington Teachers Retirement System Plan 2 & 3	Washington TRS 2/3
West Virginia Public Employees' Retirement System	West Virginia PERS
West Virginia Teachers' Retirement System	West Virginia TRS
Police and Fire Retirement System of Wichita, Kansas	Wichita P&F
Wichita Employees' Retirement System	Wichita WERS
Wisconsin Retirement System	Wisconsin RS
Wyoming Retirement System	Wyoming RS