

Public Plans Database snapshot

as of September 2021

Retirement benefits are a significant tool in encouraging employee retention in public sector employment and in meeting those employees' needs for retirement security. As of 2020, 91% of state and local government employees had access to some form of retirement benefits, with 83% participating.¹

Defined benefit pensions are the most common form of state and local retirement plan – offered to 86% of all employees – with defined contribution plans offered to 37%. See Figure 1.

Through the first quarter of 2021, those state and local plans have accumulated assets of \$5 trillion in defined benefit plans and \$531 billion in defined contribution plans.²

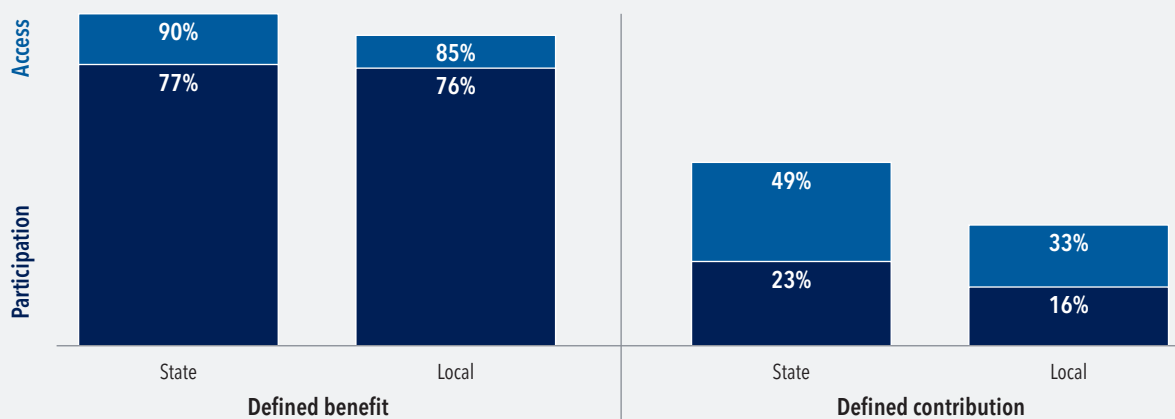
The Public Plans Database (PPD) is a repository of data on the largest state and local pension plans in the United States. Data are currently collected for 119 state-run plans and 91 locally-run plans, representing 95% of all state and local pension assets and participants.

New figures are uploaded to the database on a quarterly basis, depending on the end of each plan's fiscal year and the release of their annual financial reports. For this snapshot, 2020 data were available for most but not all of the 210 total plans.

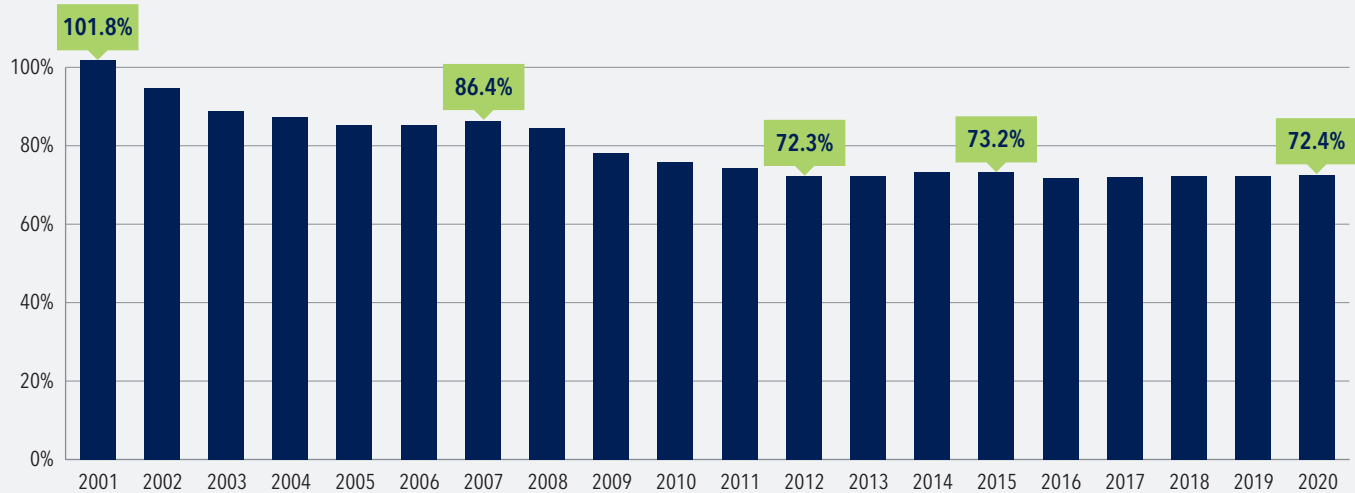
Funded ratio

Back in 2001, the national average funded ratio was more than 100%. In the aftermath of the dot-com recession that followed, that funded ratio dropped, and after inching slightly higher at 86.4% in 2007, decreased again with the Great Recession. Since 2012, it has hovered in the low 70s.

Figure 1 **Retirement benefits: access and participation**



Source: U.S. Bureau of Labor Statistics, Retirement benefits: Access, participation, and take-up rates, State and local government workers, March 2019. Percentage with access is shown atop each column, with the percentage participating shown as the partial figure below.

Figure 2 **Funded ratio**

Source: Public Plans Database, National average weighted by plan size, as of August 2021 (n = 169).

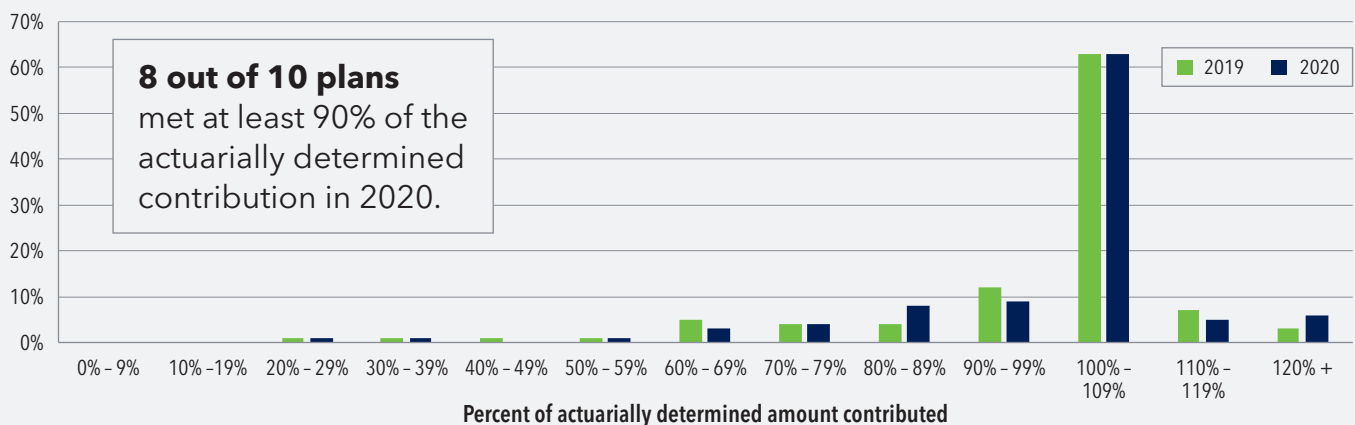
In the past year, the share of plans achieving at least a 70% funded ratio decreased from 60% to 56%.

paying less than 70% of the ADEC decreased from 9% of all plans in 2019 to 6% in 2020.

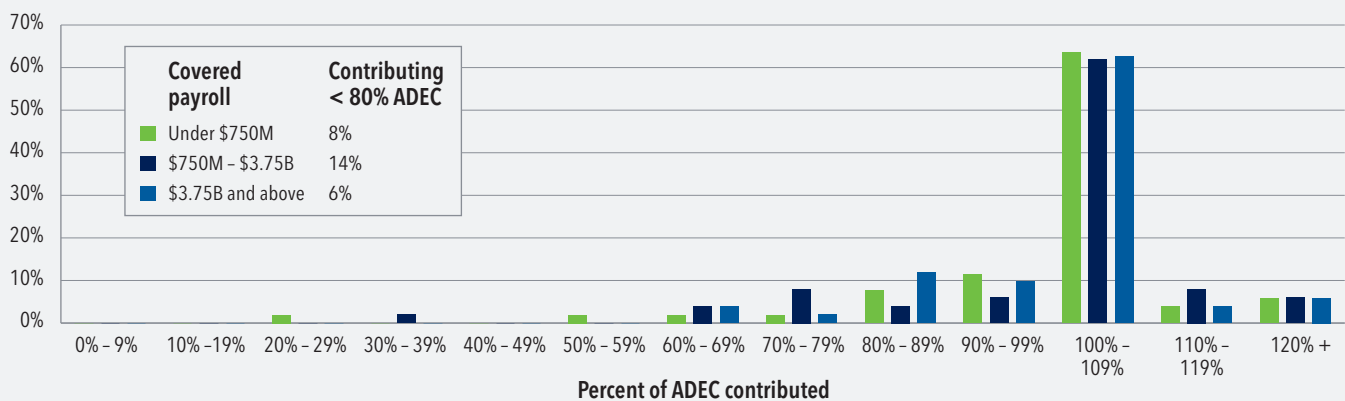
Actuarially determined contributions

Despite the early economic disruption of the pandemic, the share of plans contributing at or near their full actuarially determined employer contribution or ADEC (paying 90% or more of that amount) remained high, although decreasing from 85% of all plans in 2019 to 83% in 2020. The share that was

During tight budget times, it can be tempting to reduce pension contributions temporarily. Unfortunately, doing so has the potential to adversely affect long-term funded ratios as it reduces the principal available for investment. Most plans continued making all or most of their annual contributions in 2020 (see Figure 3). Among those with a funded ratio below 50%, 13 of the 16 contributed at least 70% of their ADEC, and the other three contributed between 60-70% of this amount.

Figure 3 **Percentage of plans by share of actuarially determined amount contributed, 2019-2020**

Source: Public Plans Database, Author's calculations based on data available in August 2021. Data not weighted (n = 154 for 2020 and 193 for 2019).

Figure 4 **Percentage of small, medium and large plans by share of actuarially determined amount contributed in 2020**

Source: Public Plans Database, Author's calculations based on data available in August 2021. Data not weighted (n = 54 with an actuarially determined contribution under \$150M, 46 between \$150-750M, and 54 over \$750M).

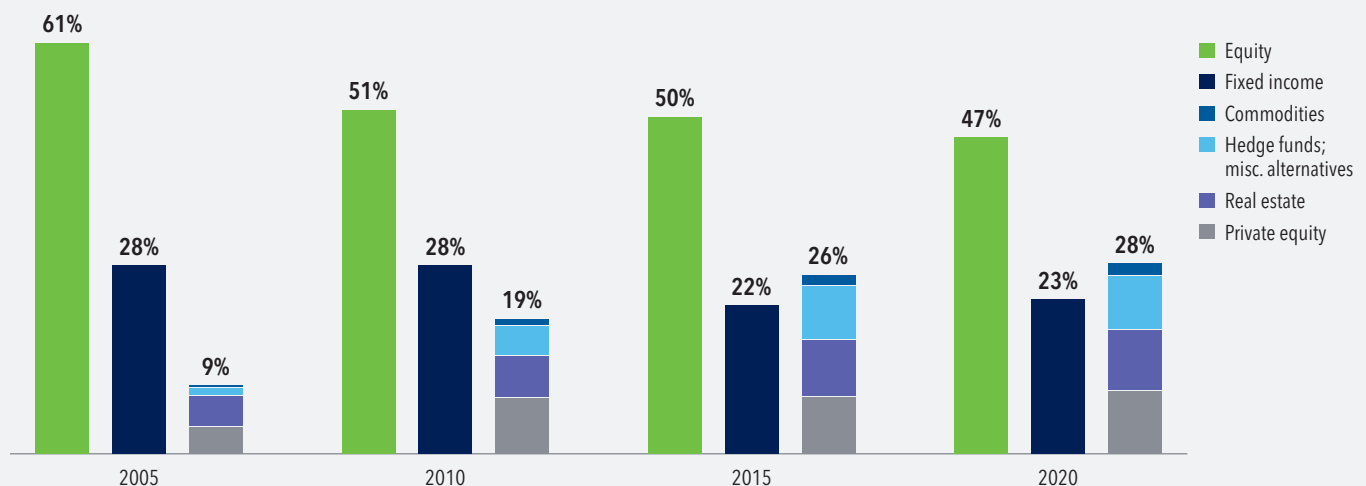
Figure 4 shows that it was slightly more common for plans with a smaller covered payroll to have contributed a lower percentage of the actuarially determined amount. Among those with the largest payrolls, only 6% funded less than 80% of their ADEC.

Asset allocation

Another factor in the ability to maintain or build a plan's funded ratio, manage risk, and ensure overall investment diversity is the asset allocation among public equities, fixed income investments, and other instruments. While private equity and

real estate have long been common elements in investment portfolios, those segments have grown, along with hedge funds, miscellaneous alternatives, and commodities. Together, these investments are now more than three times what they were in 2005 and represent a larger share of the state and local portfolio than fixed income investments.

Diversification can help protect against being overinvested in any given area, but some alternative investments may carry higher risks, and therefore may reflect a choice by fund managers to compensate for smaller contributions with a higher risk/higher reward investment policy.

Figure 5 **Asset allocation to equities, fixed income, and alternative investments**

Source: Public Plans Database, based on data available in August 2021. Data are weighted by plan size. Cash and other investments are not included on this display.

Investment earnings

The assumed returns for each plan are part of the calculation of actuarially determined contributions. Thus, if the actual results are lower than the assumption – such as in 2009, when the assumed return was 7.9%, and the actual experience was a loss of 20.9% – the cost of the defined benefit not supported by interest earnings is instead factored into subsequent recommended contributions.

To account for expectations public retirement plans and systems have regarding future investment returns, plans have adjusted their earnings assumptions from an average of 8.2% in 1992 to 7.2% in 2019. Regardless, even prior to the pandemic, average 2019 earnings were 3 percentage points lower than assumptions.

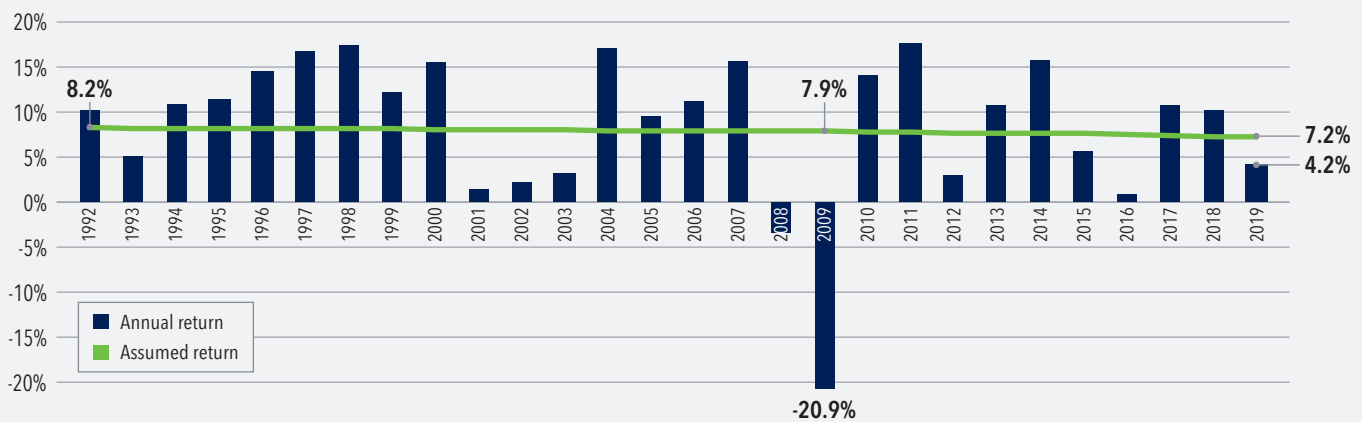
Actives vs. beneficiaries

When a plan does not have a full funding level and where a plan has a smaller number of active members compared to its total beneficiaries, there may be reduced capacity to spread the costs of annual contributions out across the participating employers, or for those employers to absorb those costs.

In 2001, high ratios of active participants to beneficiaries were common, particularly among smaller or medium-sized plans.

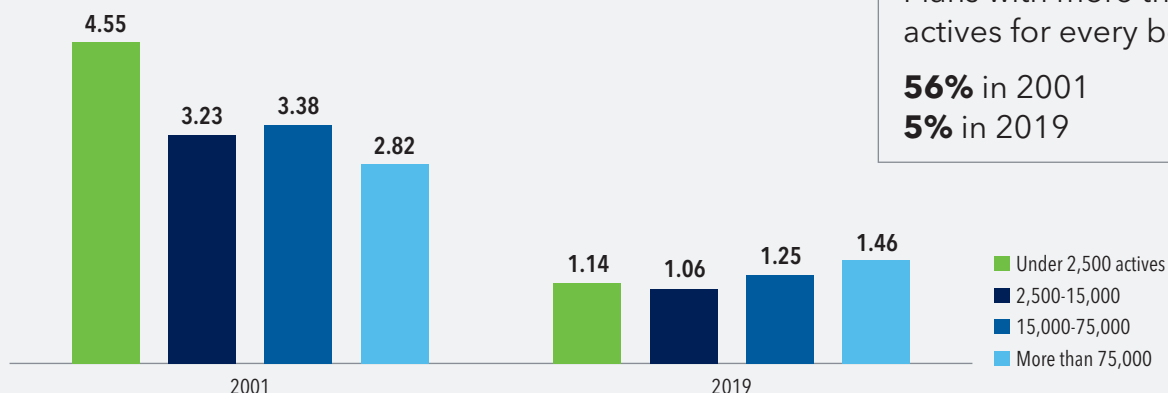
By 2019, all sizes of plans were averaging **1-1.5 active participants for each beneficiary**. This may relate to both the aging of the workforce as well as the maturing of some newer plans, which may have had a very small number of retirees in 2001.

Figure 6 **Assumed vs. actual returns, 1992-2019**



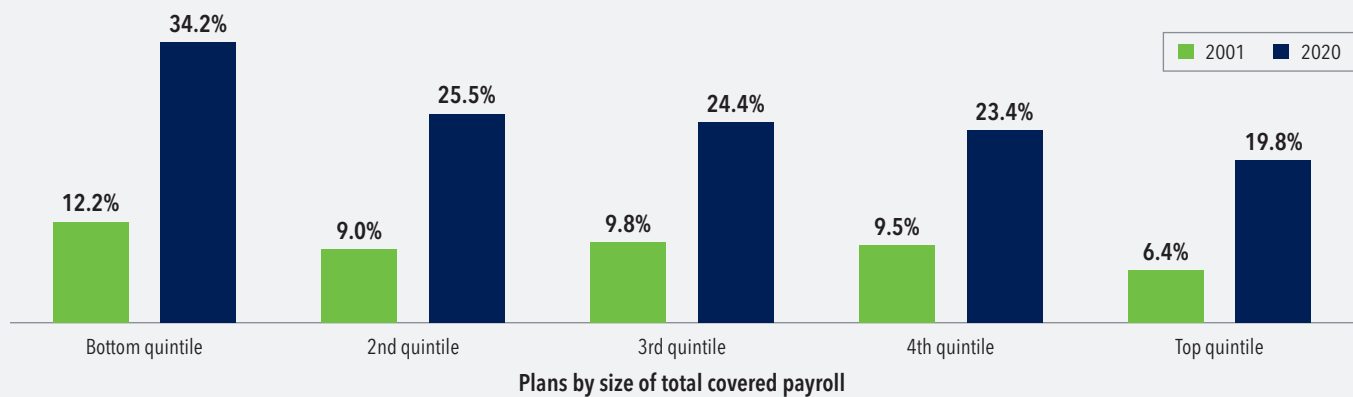
Source: Census of Governments. Average data for the PPD sample includes both gross returns and returns net of fees, with national data averages weighted by plan size.

Figure 7 **Ratio of active plan participants to beneficiaries**



Source: Public Plans Database; author's calculations by number of active participants.³

Figure 8 Actuarially determined contribution as a percentage of payroll

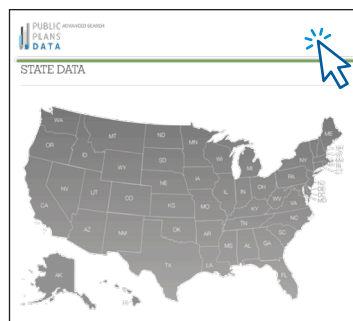


Source: Source: PPD; author's calculations by size of total covered payroll.

In Figure 8, the actuarially determined contribution is expressed as a percentage of payroll. From 2001 to 2020, the percentage has more than doubled for all payroll sizes and is highest among the plans with the lowest covered payroll.

Available data

For those looking to monitor performance more directly, the PPD includes options to download data and graphs on a **national** or **state** basis, as well as by **retirement system** or **pension plan**.



Defined contribution plans

Starting in 2020, the PPD also includes defined contribution plans. Data represent approximately 1.5 million active participants and \$140 billion in assets across 45 state-administered primary defined contribution plans. Of those, half are hybrid plans and 7% are cash balance plans.

For most plans, there are now at least 5 years of data within the PPD, including the plan type (401a, 401k, 457, etc.), number of investment options, number of eligible employee groups, covered payroll, and detailed descriptions of contribution and match provisions.

Average contribution rates:

4.4% for employees
4.9% for employers

Questions? Visit publicplansdata.org or email info@slge.org

1. U.S. Bureau of Labor Statistics, Economic News Release, "Retirement benefits: Access, participation, and take-up rates," March 2020.
2. Federal Reserve, "Financial Accounts of the United States Flow of Funds, Balance Sheets, and Integrated Macroeconomic Accounts, State and Local Government Employee Retirement Funds," June 10, 2021.
3. Where the 2001 or 2019 ratio was not available for a particular plan, the next closest year's figure was substituted. The Washington School Employees Plan 2/3 inception date of 2000 leads to an extremely high initial ratio of actives to beneficiaries, and it is thus excluded from the calculations.

This report was prepared by Gerald Young, Senior Research Analyst with MissionSquare Research Institute (formerly the Center for State and Local Government Excellence). We are also grateful for the assistance provided by Jean-Pierre Aubry, Director of State and Local Research, Center for Retirement Research at Boston College (CRR). MissionSquare Research Institute and CRR established a partnership in 2007 to 1) produce research on state and local pension plans and the retirement prospects of state and local workers; 2) disseminate research findings broadly; and 3) develop and make available comprehensive data on state and local pensions and retiree health benefits. These data, covering both defined benefit and defined contribution plans, are updated regularly and have been expanded over time. The National Association of State Retirement Administrators (NASRA), which has been collecting and sharing public plan data since 2001, supports the partnership by providing review and assistance on the development of data models, validation of data, and development and administration of surveys.

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