Unintended Consequences:

How Scaling Back Public Pensions Puts Government Revenues at Risk

2025 NCPERS Research Update

The Voice for Public Pensions

The Voice for Public Pensions

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"This is the first study of its kind that examines the impact of investment of pension fund assets and spending of pension checks by retirees on state and local economies and revenues. It shows that pension funds play an important role in our economy and are net revenue producers. If there were no public pensions, taxpayers would have to pay more to receive the same level of services. Legislators should think twice before they convert public pensions into do-it-yourself retirement plans."

—2018 Endorsement from Robert Reich, Chancellor's Professor and Carmel P. Friesen Chair in Public Policy, Goldman School of Public Policy, UC Berkeley

Executive Summary

NCPERS' *Unintended Consequences* study aims to quantify the economic impact of public pensions at the state and local levels. By comparing the state and local revenues generated through retiree spending of pension benefits as well as the investment of pension assets to taxpayer contributions to public pensions, we are able to take a holistic approach to answering the question policymakers often face: are public pensions affordable for taxpayers?

This 2025 update of the *Unintended Consequences* study builds on the findings from the original report published in 2018 and subsequent 2020 edition to help us better understand what could be at risk if states and municipalities were to shift away from defined benefit systems.[1]

As detailed in the methodology section, this report introduces an econometric model designed to estimate the state-level economic and revenue effects of pension fund investments. While pension assets are often invested globally, the economic returns from those investments can be traced to individual states using parameters developed through publicly available historical data.

Our analysis shows that the economic contributions of public pensions remain crucial to overall economic health. In 2023, state and local public pensions contributed substantially to the U.S. economy through both retiree spending and pension fund asset investments. The scale of this contribution aligns closely with projections made in NCPERS' 2017 *Economic Loss* study, which estimated a potential $3 trillion shortfall in economic activity by 2025 in the absence of public pensions.[2]

Public pensions also have a substantial fiscal impact, generating significantly more in state and local revenues than taxpayers contribute to pension systems. This means that in 2023, every dollar taxpayers contributed to public pensions yielded approximately $13.41 in total economic activity, up from $9.59 in 2016 and $10.55 in 2018.

Beyond the economic and fiscal returns, defined benefit plans support the recruitment and retention of skilled public employees.[3] Some governments that shifted to individual retirement savings plans ultimately reversed course after facing challenges in maintaining a stable, experienced workforce.[4]

The findings of this report underscore the broader value of public pensions. They serve not only as a source of retirement security for teachers, first responders, and other public servants, but also as a driver of local economic activity and government revenues. As policymakers consider the future of retirement systems, a full accounting of these contributions is essential.

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[1] There was a lag in availability of the latest data for each study. For example, the 2018 study uses 2016 data, 2020 study uses 2018 data, and 2025 study uses 2023 data.

[2] Economic Loss The Hidden Cost of Prevailing Pension Reforms (Washington, DC: NCPERS, 2017), www.ncpers.org/files/NCPERS_2017%20Economic%20Loss.pdf.

[3] Laura D. Quinby, Geoffrey T. Sanzenbacher, and Jean-Pierre Aubry, "How Have Pension Cuts Affected Public Sector Competitiveness?" State and Local Pension Plans no. 59 (Boston: Center for Retirement Research at Boston College, 2018), http://crr.bc.edu/wp-content/uploads/2018/04/slp_59.pdf.

[4] National Institute on Retirement Security, "New Case Study Examines How Dismantling Pensions Triggered Mass Exodus of Public Safety Workers," February 8, 2018 - https://www.nirsonline.org/2018/02/new-case-study-examines-how-dismantling-pensions-triggered-mass-exodus-of-public-safety-workers/.

Introduction

In recent years, the idea that public pensions are unaffordable for taxpayers has gained traction in public discourse, often being treated as an unquestioned assumption. This narrative has shaped policy debates in many states, yet these discussions often do not take a holistic view that accounts for the broader economic and fiscal impacts of public pensions. The goal of this report is to provide data-driven insights into the role that public pensions play in supporting state and local economies and tax revenues.

Public pensions are best understood not as short-term budget items, but as long-term investments with widespread economic effects. Drawing on publicly available state and local data through 2023, this *Unintended Consequences* study update builds on previous analyses published in 2018 and 2020. It aims to address three central questions:

- How much tax revenue do state and local public pensions generate?
- Do these revenues exceed taxpayer contributions to public pensions?
- What would be the fiscal consequences for taxpayers if public pensions were significantly reduced or eliminated?

Public pensions contribute to state and local revenues in two primary ways. First, retirees' spending of pension income supports local businesses and economic activity, which in turn drives tax revenue growth. Second, pension funds provide investment capital to businesses, helping to stimulate job creation, wage growth, and further economic development. While a portion of these investments are national or international in scope, their impacts on local economies can be traced using our econometric model and methodology.

"Public pensions contribute to state and local revenues in two primary ways. First, retirees' spending of pension income supports local businesses and economic activity, which in turn drives tax revenue growth. Second, pension funds provide investment capital to businesses, helping to stimulate job creation, wage growth, and further economic development."

Given the scale of state and local pension fund assets—$5.5 trillion in 2023—and pension benefit payments totaling $392 billion that same year, it is reasonable to expect that the tax revenues generated by these activities exceed the $216.7 billion in annual taxpayer contributions to pensions. Our earlier studies have found this to be the case in most states, and this study demonstrates a similar pattern.

Despite this, concerns about the cost of public pensions continue to influence policy discussions. Large unfunded liability figures are sometimes presented without full context, using actuarial assumptions that can significantly affect their interpretation. These figures are often compared to one-year snapshots of state and local revenue, rather than considered over the same multi-decade time horizon used to calculate liabilities. In many cases, the broader economic role of public pensions is left out of the discussion entirely.

Some reform proposals advocate for replacing pensions with individual retirement accounts or reducing benefits, with the intent of containing costs. These ideas are often motivated by short-term fiscal considerations, but may underestimate the long-term impact on state and local economies. If public pensions were significantly scaled back, the cost of delivering the same level of public services could rise, shifting a greater burden onto taxpayers.

Previous NCPERS studies have found that reductions in pension benefits may increase economic disparities and dampen growth.[5] For example, a 2017 analysis projected that eliminating all public pensions could reduce national economic output by nearly $3 trillion by 2025.[6] This updated *Unintended Consequences* study reinforces the finding that state and local pension plans are net contributors to public tax revenue. In practical terms, this means that maintaining pension systems may be more fiscally advantageous than dismantling them.

The report is organized as follows. Section I reviews the existing literature on the links between pensions, economic activity, and government revenue. Section II outlines the data sources and econometric methodology used in the analysis. Section III presents the results of the state-by-state assessment. Section IV concludes with key takeaways.

[5] The Hidden Costs of Pension Reforms: Rising Income Inequality, Lagging Economic Growth. Washington, DC: NCPERS, 2024), https://www.ncpers.org/files/resources/NCPERS_Research_Hidden_Costs_of_Pension_Reforms.pdf.

[6] Economic Loss: The Hidden Cost of Prevailing Pension Reforms (Washington, DC: NCPERS, 2017), www.ncpers.org/files/NCPERS_2017%20Economic%20Loss.pdf.

Section I: *Literature Review*

Prior to our 2018 *Unintended Consequences* study, limited research addressed whether public pensions in the United States were revenue-positive, neutral, or negative. Most existing studies focused narrowly on the economic and revenue impact of retiree spending, with virtually no analysis of the broader impact of pension fund investments. This literature review synthesizes existing research on three interrelated topics: the relationship between the economy and tax revenue; the impact of pension fund assets on the economy; and the combined effect of pensions on both economic growth and government revenue.

Taxes and Economic Growth

The relationship between taxes and economic performance remains under-explored. Corey Husak (2021), writing for the Washington Center for Equitable Growth, argues that typical marginal tax rate cuts increase income inequality, which in turn depresses economic growth.[7]

Beyond income inequality, it is broadly understood that tax cuts reduce government revenue, leading to spending cuts or borrowing, both of which can counteract any stimulative effects of the tax cuts themselves. Historical trends also suggest a negative net impact from tax cuts. For instance, during President George W. Bush's tenure (2001–2009), two major tax cuts preceded the Great Recession. Paul Krugman, Nobel Laureate in Economics, anticipated a similar outcome during President Trump's term: he predicted that the 2017 Tax Cuts and Jobs Act (TCJA) would increase the deficit and prompt renewed calls for cuts to Social Security, Medicare, and Medicaid.[8] Subsequent events have aligned with this forecast.

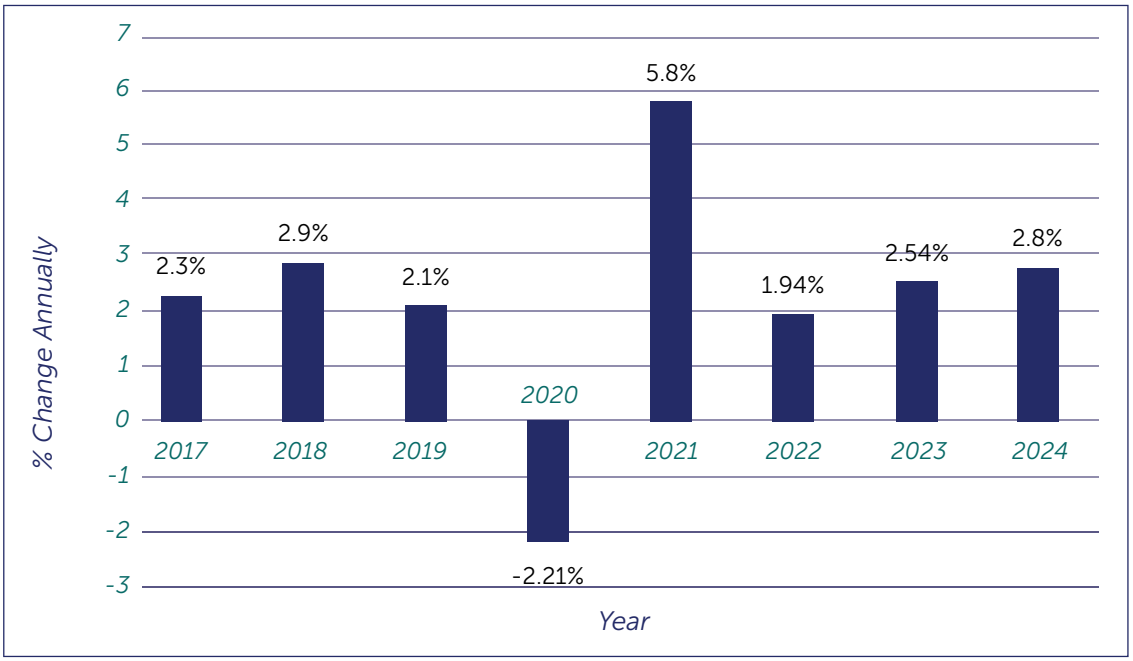
Supply-side advocates have long claimed that tax cuts would boost economic growth and offset lost revenue. Yet, the 2017 tax cuts added approximately $8 trillion to the federal deficit, and by 2020, real GDP growth had fallen to -2.21% (See Figure 1).

Figure 1 illustrates real U.S. GDP growth from 2017 to 2024. Following a sharp decline in 2020, partially due to the pandemic, the economy rebounded under a new administration from 2021 onward. Notably, this recovery occurred alongside tax increases for top earners and large corporations.

[7] Husak, Corey, "The Relationship Between Taxation and U.S. Economic Growth," Issue Brief, Washington Center for Equitable Growth, June 2021 - https://equitablegrowth.org/wp-content/uploads/2021/07/063021-tax-econgrowth-ib.pdf.

[8] Paul Krugman, "The Biggest Tax Scam in History," The New York Times, November 27, 2017, https://www.nytimes.com/2017/11/27/opinion/senate-tax-bill-scam.html.

Figure 1. United States Real GDP Growth, 2017-2024



Additional insights come from a Tax Foundation study drawing on data from *The Economist*, which observed that tax revenues typically follow economic performance: during periods of growth (mid-1980s to late 1990s), revenues increased, while recessions (e.g., 2007–2009) saw revenue declines.[9,10] Similarly, the Oklahoma Council of Public Affairs found that state-level income tax revenue growth was driven by job growth.[11]

Our own findings reveal that state and local revenues tend to lag behind economic growth. A 1.0% increase in GDP yields only a 0.8% increase in revenue. This mismatch is attributed to increasingly regressive state tax systems, which have replaced stable sources like income and property taxes with volatile alternatives such as lotteries, casinos, and excise taxes during downturns.[12]

Economic Impact of Pension Investments

Research on the macroeconomic effects of pension fund investments is limited but growing. A 2022 study by Morina and Grima, using data from the World Bank, IMF, and OECD, found that pension fund investments positively impacted economic growth in emerging markets, even after controlling for variables like public debt, inflation, and capital formation.[13]

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[9] Andrew Lundeen, "Economic Growth Drives the Level of Tax Revenue," Tax Foundation, October 15, 2014, https://taxfoundation.org/blog/economic-growth-drives-level-tax-revenue/.

[10] Buttonwood, "Is There a Limit to Revenue-Raising?," The Economist, October 13, 2014, www.economist.com/blogs/buttonwood/2014/10/tax-policy-and-economy.

[11] Curtis Shelton, "What Drives Income Tax Revenues: Tax Rates or Economic Growth?," Oklahoma Council of Public Affairs, March 27, 2017, https://ocpathink.org/post/analysis/what-drives-income-tax-revenues-tax-rates-or-economic-growth-1.

[12] Peaceful Coexistence: The Facts about Pensions and Education Funding (Washington, DC: NCPERS, 2019), www.ncpers.org/files/NCPERS_peaceful-coexistence_revised_pages%20for%20web.pdf.

[13] Morina, Fisnik and Grima, Simon, "The impact of pension fund assets on economic growth in transition countries, emerging economies, and developed countries," Quantitative Finance and Economics, Volume 6, Issue 3: 459-504, 2022, https://www.aimspress.com/article/doi/10.3934/QFE.2022020?viewType=HTML.

Another study examining 69 industrial sectors across 34 OECD countries (2001–2010) concluded that pension assets significantly boost growth in sectors where they are invested.[14] A more recent review of literature focused on the experience of developing countries similarly demonstrated a positive correlation between the growth of pension assets and national economic growth.[15]

Pensions, the Economy, and Tax Revenues

Among the most comprehensive studies on pensions' economic and revenue impacts is the *Pensionomics* series from the National Institute on Retirement Security (NIRS). The 2025 edition, using 2022 data, reported that $680.6 billion in pension benefits paid to 26.3 million retirees produced $1.5 trillion in economic output, 7.1 million jobs, and $224.3 billion in tax revenue across all levels of government.[16] While the NIRS analysis includes both public and private pensions and provides state-level breakdowns, it does not account for the revenue impact of pension fund investments.

Some state pension systems conduct their own impact analyses. The Teacher Retirement System of Texas (2019) reported that $19.1 billion in benefits paid to 420,000 retirees generated $22.4 billion in economic activity and $1.6 billion in tax revenue.[17] Similarly, a 2024 study by the Colorado Public Employees' Retirement Association (PERA) found that its operations contributed over $7.1 billion to the state's economy and $382 million in tax revenue.[18]

Most of these studies assess only the spending of pension benefits, omitting the economic and fiscal impacts of pension fund investments. Notable exceptions are California's CalPERS and CalSTRS systems, which have analyzed how their investments influence California's economy. Our previous research used these data to estimate the associated revenue effects.[19]

In the absence of comprehensive national studies on pension fund investment impacts, it is necessary to develop a methodology capable of assessing both the retiree spending and investment components of public pensions across all 50 states. The next section presents such a methodology.

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[14] Michiel Bijlsma, Casper van Ewijk, and Ferry Haaijen, "Economic Growth and Funded Pension Systems," CPB Discussion Paper 279 (The Hague: CPB Netherlands Bureau for Economic Policy Analysis, 2014), https://www.cpb.nl/sites/default/files/publicaties/download/cpb-discussion-paper-279-economic-growth-and-funded-pension-systems.pdf.

[15] Kajwang, B. "Role of pension management on economic growth: A review of literature." International Journal of Research in Business and Social Science 11, no. 6: 635-641, 2022, https://doi.org/10.20525/ijrbs.v11i6.1948.

[16] Boivie, Ilana and Doonan, Dan, "Pensionomics 2025: Measuring the Economic Impact of DB Pension Expenditures," Washington DC: National Institute on Retirement Security, 2025 - https://www.nirsonline.org/wp-content/uploads/2025/01/NIRS-Pensionomics-2025-Report-FINAL-1-1.pdf.

[17] "The Impact of Annuity Payments by the Teacher Retirement System on Texas and Local Areas Within the State" (The Perryman Group, September 2022), https://www.trs.texas.gov/TRS%20Documents/trs_value_brochure.pdf.

[18] "Colorado PERA's Economic and Fiscal Impacts" (Pacey Nehls Economic Consulting, June 2024), https://content.copera.org/wp-content/uploads/2024/07/economic-and-fiscal-impacts-report-2024.pdf.

[19] See "CalPERS For California 2016 Report" (Pacific Community Ventures, June 19, 2017), https://www.pacificcommunityventures.org/2017/06/19/calpers-california-2016-report/; also "Public Pensions Are a Good Deal for Taxpayers," NCPERS Research Series (National Conference on Public Employee Retirement Systems, August 2017), https://www.ncpers.org/files/ncpers-research-series-public-pensions-are-a-good-deal-for-taxpayers-august-2017.pdf.

Section II: *Data and Methodology*

Despite the growing national conversation around public pensions, few studies have comprehensively assessed the full economic and tax revenue impact of state and local pensions over and above the role of retiree spending.

To help fill this gap, we developed a three-part methodology that accounts for both retiree spending and the long-term investment of pension fund assets. This study builds on historical state-level data from publicly available sources, including the U.S. Census Bureau, the Bureau of Economic Analysis (BEA), and the Bureau of Labor Statistics (BLS). Our approach covers all 50 states. Reliance on public data is important as it allows other researchers to replicate the analysis, especially since replicability is one of the key characteristics of good research.

Step 1: Estimating the Impact of Pension Fund Investments

Public pension funds are among the largest institutional investors in the U.S. economy, and the capital they provide helps finance business growth, job creation, and innovation. To estimate the contribution of pension assets to economic performance, we constructed a national-level regression model that measures the relationship between pension fund investment and personal income—a widely used indicator of economic health.

In this model, personal income serves as the dependent variable, and we include several key predictors of long-run economic performance.[20] These variables are supported in economic literature as important drivers of growth:

- **State and local public pension fund assets** (in $ thousands)
- **K–12 education spending** (in $ thousands)
- **Higher education spending** (in $ thousands)
- **Infrastructure investment** (in $ thousands)
- **Multifactor productivity** (measured as an index)
- **Income inequality** (measured as the ratio of income in the top quintile to the bottom quintile)

Each of these factors reflect public investments or structural dynamics that influence long-term economic growth. Multifactor productivity, for instance, captures improvements in efficiency and innovation, while education and infrastructure support workforce development and commerce. Pension assets are included because they represent long-term capital that can stimulate growth through financial markets and direct investment.

[20] *Sources:* Infrastructure investments (E006), K-12 education (E027), and higher education (E030): Tax Policy Center, State and Local Finance Data (original source: U.S. Census Bureau), https://state-local-finance-data.taxpolicycenter.org/pages.cfm; Multifactor productivity: U.S. Bureau of Labor Statistics, Total Factor Productivity Data, https://www.bls.gov/productivity/data.htm; Pension assets: U.S. Census Bureau, 2023 Annual Survey of Public Pensions Summary Table, https://www.census.gov/data/tables/2023/econ/aspp/aspp-historical-tables.html; Income inequality: U.S. Census Bureau, American Community Survey, https://data.census.gov/table/ACSDT1Y2023.B19081?q=state+by+state+income+by+quintiles.

From this model, we calculate a **beta coefficient** for pension assets—an estimate of how much personal income increases for every unit increase in pension fund assets. We then apply this coefficient to each state's pension asset holdings to estimate the economic contribution at the state level.

To reflect the full ripple effect of these investments throughout the economy, we apply a **multiplier effect of 2.5**, consistent with findings from several peer-reviewed economic studies.[21] This step adjusts for the broader impact of each dollar invested, acknowledging that most Americans spend a large portion of their income, which in turn fuels additional economic activity. Since pension funds invest globally, we adjust the economic impact of pension investments for individual states by the ratio of state to national economy.

Finally, we convert the estimated economic contribution into **state and local revenue impact** by calculating a "revenue quotient"—a ratio derived from historical data (1977–present) linking changes in personal income to changes in state and local tax collections. This allows us to estimate how much revenue growth can be attributed to the presence of pension assets.

Step 2: Estimating the Impact of Retiree Spending

The second component of our analysis assesses the effect of pension benefit payments on state and local economies and revenues.

We treat pension payments as a direct input into the economy, equivalent to household income. Like the investment returns, this income is assumed to have a multiplier effect, as retirees spend much of it on local goods and services.

We apply the same **2.5 multiplier** to calculate the broader economic effect of these payments and then use each state's revenue quotient to estimate the resulting increase in tax revenues.

Step 3: Comparing Revenue Impact to Taxpayer Contributions

To evaluate whether public pensions are a net fiscal benefit or cost, we compare the combined revenues generated by pension investment and spending to the amount taxpayers contribute to public pension systems.

- We first sum the revenue effects calculated in Steps 1 and 2.
- We then compare this figure with taxpayer contributions, using the latest comprehensive data on state and local pension funding levels.
- The result indicates whether public pensions return more in revenues than they cost—and by how much.

This comparison also helps illustrate a key policy question: If public pensions were eliminated, how much more would taxpayers need to contribute through other forms of taxation to maintain the same level of public services?

[21] The marginal propensity to consume (MPC) is equal to AC / AY, where AC is change in consumption and AY is change in income. For example, if consumption increases by 80 cents for each additional dollar of income, then MPC is equal to 0.8 / 1 = 0.8. If the MPC is equal to 0.8, then the multiplier can be calculated as follows: Multiplier = 1 / (1 - MPC) = 1 / (1 - 0.8) = 1 / 0.2 = 5.

Summary

This analysis uses a combination of economic modeling and historical revenue patterns to estimate the fiscal impact of public pensions. Our findings suggest that public pension systems are not only economically beneficial, but also fiscally efficient. They deliver long-term investment capital and stable income streams that generate state and local revenues well in excess of taxpayer contributions. Full results of the analysis follow in the next section.

Section III: *Results*

This section presents the findings of the study across five areas:

- The economic impact of pension fund assets
- The contribution of pension asset investments to state economies and revenues
- The impact of retiree spending (pension checks) on state economies and revenues
- Whether public pensions yield net revenue benefits
- Trends over time in the economic and fiscal effects of public pensions

Economic Impact of Pension Fund Assets

To evaluate how pension fund investments affect state economies, we developed a new framework—referred to here as the NCPERS model. This model estimates how various factors influence overall personal income across states, which serves as our primary measure of economic impact.

In addition to pension assets, the model incorporates other major drivers of economic performance: investments in infrastructure, K–12 and higher education, multifactor productivity, and income inequality. By including these variables, the model helps isolate the specific impact of pension fund investments, while accounting for other factors known to affect economic growth.

The model's results, shown in Table 1, include the estimated effect (coefficient) of each variable on personal income.

Table 1. Estimated Effects of Key Variables on the Economy (2023)

(All values reflect the dollar increase in personal income per unit change in each input.)

Variable	Coefficient
Intercept	17,291,600,078
Pension Assets	2.36
Investment in K-12 Education	3.04
Investment in Higher Education	32.78
Investment in Infrastructure	2.713
Multifactor Productivity	-220,610,766
Income Inequality	92,432,580
$R^2 = 0.99$	

The coefficient of 2.36 for pension assets suggests that for every $1,000 invested, the economy (as measured by personal income) grows by approximately $2,360. While this effect is smaller than that of some other factors in the model (e.g., higher education), the large scale of U.S. public pension fund assets—$5.5 trillion in 2023—means the aggregate impact is substantial.

This effect has been consistently positive in recent years. Comparable estimates using data from 2016 and 2018 were $1,088 and $1,362, respectively, suggesting that as pension funds have grown and diversified, their influence on state economies has become more pronounced.

Contribution of Pension Asset Investments to State Economies and Revenues

Using the NCPERS model, we applied the estimated coefficient for pension fund assets to each state's asset holdings to quantify their economic and fiscal contributions. The resulting impacts are presented in Table 2.

Column two shows the total value of pension fund assets in each state. Column three estimates the contribution of these investments to the state's economy, measured in terms of personal income. Column four estimates the resulting state and local tax revenues.

In 2023, total public pension assets of $5.5 trillion contributed an estimated $1.9 trillion to state economies and generated approximately $453 billion in state and local revenues.

Table 2. Estimated Economic and Revenue Contributions of Pension Asset Investments by State (2023)

(All figures in thousands of dollars)

State	Pension Assets	Economic Impact of Investment of Assets	Revenue Attributable to Investment of Assets
Alabama	$44,929,467	$3,131,966	$600,553
Alaska	$18,189,175	$236,396	$50,305
Arizona	$72,686,711	$8,544,995	$1,396,252
Arkansas	$36,224,865	$1,626,388	$360,769
California	$1,259,488,116	$1,007,433,687	$260,317,817
Colorado	$70,324,993	$8,350,442	$1,513,065
Connecticut	$60,176,783	$4,941,371	$875,604
Delaware	$13,744,730	$243,591	$54,958
Florida	$230,160,519	$230,160,519	$14,618,943
Georgia	$134,627,129	$22,427,735	$4,145,089
Hawaii	$22,456,892	$543,923	$135,348
Idaho	$21,685,218	$640,527	$112,941
Illinois	$215,561,885	$49,409,155	$9,732,991
Indiana	$43,905,424	$4,668,683	$838,553
Iowa	$45,359,745	$2,304,479	$570,269

State	Pension Assets	Economic Impact of Investment of Assets	Revenue Attributable to Investment of Assets
Kansas	$27,782,453	$1,362,236	$268,529
Kentucky	$42,532,288	$2,688,477	$512,066
Louisiana	$66,742,337	$4,534,224	$846,162
Maine	$18,993,341	$437,592	$86,547
Maryland	$93,361,194	$10,975,472	$1,895,440
Massachusetts	$106,389,666	$17,032,267	$2,939,069
Michigan	$111,019,947	$17,183,279	$3,199,136
Minnesota	$88,041,556	$9,257,878	$2,153,480
Mississippi	$34,709,421	$1,271,285	$292,577
Missouri	$97,990,218	$9,609,362	$1,863,660
Montana	$14,210,687	$260,244	$44,600
Nebraska	$24,130,012	$855,288	$179,280
Nevada	$58,860,105	$3,129,445	$612,613
New Hampshire	$11,672,050	$324,077	$46,533
New Jersey	$92,598,460	$17,833,028	$3,153,697
New Mexico	$33,048,792	$976,179	$239,525
New York	$647,746,376	$263,650,102	$72,864,190
North Carolina	$114,355,410	$19,388,417	$3,660,768
North Dakota	$7,683,231	$108,933	$25,294
Ohio	$214,244,116	$39,235,061	$8,721,877
Oklahoma	$41,335,659	$2,563,999	$458,356
Oregon	$99,273,676	$7,213,449	$1,877,268
Pennsylvania	$138,607,782	$31,279,133	$5,875,996
Rhode Island	$12,655,780	$239,245	$56,515
South Carolina	$41,483,275	$3,234,824	$662,090
South Dakota	$15,184,745	$251,171	$46,600
Tennessee	$76,457,101	$8,581,736	$1,461,796
Texas	$358,992,644	$183,232,717	$31,429,946
Utah	$42,696,340	$2,370,949	$468,812
Vermont	$5,044,526	$56,621	$10,326
Virginia	$127,384,472	$20,694,404	$3,697,381
Washington	$150,615,695	$24,023,580	$4,848,464
West Virginia	$20,287,982	$479,405	$105,444
Wisconsin	$155,406,013	$15,056,201	$3,031,194
Wyoming	$20,232,472	$239,047	$51,921
United States	**$5,501,291,474**	**$1,924,414,969**	**$453,010,610**

These findings show that public pension fund investments are a major contributor to state-level economies and tax revenues. The largest impacts are observed in states with the most substantial pension fund assets—such as California, New York, and Texas—though the effect is measurable across all states.

> **"In 2023, total public pension assets of $5.5 trillion contributed an estimated $1.9 trillion to state economies and generated approximately $453 billion in state and local revenues."**

State-by-state data in Table 2 show that the economic and revenue impacts of pension fund investments vary widely, largely reflecting differences in the size of pension assets held by each state. California, with over $1.2 trillion in pension assets, saw the largest economic contribution—more than $1 trillion—and an estimated $260 billion in associated state and local revenues. Other states with large economies and pension systems, such as Texas, New York, and Florida, also experienced substantial impacts. In contrast, smaller states with lower pension asset levels, such as Vermont, Wyoming, and North Dakota, saw more modest but still positive contributions.

Contribution of Pension Benefit Spending to State Economies and Revenues

In addition to investment, pension systems influence state economies through the spending of benefits. Retirees use their pension checks on goods and services, creating demand that supports local businesses, jobs, and public revenues. This analysis estimates the economic activity and state and local tax revenues generated from benefit spending using a standard multiplier approach. The estimates are based on actual pension benefit payments made in each state in 2023 and reflect how those payments cycle through the economy.

Table 3. Impact of Spending of Pension Checks on State and Local Economies and Revenues (2023)

(All figures in thousands of dollars)

State	Total Payments	Economic Impact of Pension Checks	Revenue Attributable to Pension Checks
Alabama	$4,246,080	$10,615,200	$2,035,461
Alaska	$1,625,665	$4,064,163	$864,854
Arizona	$5,195,438	$12,988,595	$2,122,336
Arkansas	$2,464,351	$6,160,878	$1,366,621
California	$73,198,175	$182,995,438	$47,285,467
Colorado	$7,007,245	$17,518,113	$3,174,209
Connecticut	$6,407,821	$16,019,553	$2,838,642
Delaware	$951,055	$2,377,638	$536,434
Florida	$15,443,598	$38,608,995	$6,251,753
Georgia	$11,015,325	$27,538,313	$5,089,625
Hawaii	$1,795,411	$4,488,528	$1,116,913
Idaho	$1,299,217	$3,248,043	$572,711
Illinois	$22,389,733	$55,974,333	$11,026,250
Indiana	$2,811,660	$7,029,150	$1,262,522
Iowa	$2,838,027	$7,095,068	$1,755,755
Kansas	$2,249,651	$5,624,128	$1,108,647
Kentucky	$4,895,045	$12,237,613	$2,330,861
Louisiana	$5,473,931	$13,684,828	$2,553,817
Maine	$1,191,972	$2,979,930	$589,374
Maryland	$6,544,452	$16,361,130	$2,825,531
Massachusetts	$9,243,342	$23,108,355	$3,987,552
Michigan	$10,318,600	$25,796,500	$4,802,723
Minnesota	$5,891,146	$14,727,865	$3,425,856
Mississippi	$3,309,707	$8,274,268	$1,904,260
Missouri	$6,675,907	$16,689,768	$3,236,850
Montana	$1,083,260	$2,708,150	$464,121
Nebraska	$1,483,474	$3,708,685	$777,389
Nevada	$3,390,560	$8,476,400	$1,659,320
New Hampshire	$1,008,804	$2,522,010	$362,127
New Jersey	$12,841,832	$32,104,580	$5,677,562

State	Total Payments	Economic Impact of Pension Checks	Revenue Attributable to Pension Checks
New Mexico	$2,755,486	$6,888,715	$1,690,283
New York	$40,598,838	$101,497,095	$28,050,448
North Carolina	$7,446,525	$18,616,313	$3,514,986
North Dakota	$571,448	$1,428,620	$331,721
Ohio	$17,426,994	$43,567,485	$9,684,967
Oklahoma	$3,007,561	$7,518,903	$1,344,123
Oregon	$6,568,617	$16,421,543	$4,273,634
Pennsylvania	$15,247,789	$38,119,473	$7,160,999
Rhode Island	$1,318,353	$3,295,883	$778,564
South Carolina	$3,821,906	$9,554,765	$1,955,627
South Dakota	$734,573	$1,836,433	$340,714
Tennessee	$4,099,122	$10,247,805	$1,745,590
Texas	$25,689,439	$64,223,598	$11,016,287
Utah	$2,098,567	$5,246,418	$1,037,382
Vermont	$2,086,706	$5,216,765	$951,341
Virginia	$7,777,880	$19,444,700	$3,474,102
Washington	$6,788,445	$16,971,113	$3,425,128
West Virginia	$1,568,166	$3,920,415	$862,284
Wisconsin	$7,638,137	$19,095,343	$3,844,375
Wyoming	$750,064	$1,875,160	$407,288
United States	**$392,285,100**	**$980,712,750**	**$208,895,388**

Table 3 presents the estimated impact of pension benefit spending on state economies and revenues. In total, retiree spending of public pension benefits contributed about $980.7 billion in economic output and approximately $208.9 billion in state and local revenues in 2023. These impacts are substantial and reflect the stabilizing role of pension income, especially in rural areas and smaller communities where such income represents a significant share of household earnings.

Are Public Pensions Net Revenue Positive?

One central question is whether public pension systems contribute more to state and local revenues than they cost in taxpayer-funded contributions from government employers. To answer this, we compare the combined revenue impact from both investment returns and benefit spending with the annual employer (government) contributions made to pension plans.

Table 4. State and Local Revenues Attributable to Spending of Pension Checks and Investment of Pension Fund Assets Compared with Taxpayer Contributions to Pension Funds (2023)

(All figures in thousands of dollars)

State	State and Local Revenue from Investment of Pension Assets	State and Local Revenue from Spending of Pension Checks	Total State and Local Revenue from Public Pensions	Taxpayer Contribution to Public Pensions	Net State and Local Revenue Attributable to Public Pensions
Alabama	$600,553	$2,035,461	$2,636,014	$1,721,645	$914,369
Alaska	$50,305	$864,854	$915,159	$688,113	$227,046
Arizona	$1,396,252	$2,122,336	$3,518,588	$3,447,531	$71,057
Arkansas	$360,769	$1,366,621	$1,727,390	$1,105,689	$621,701
California	$260,317,817	$47,285,467	$307,603,284	$49,466,469	$258,136,815
Colorado	$1,513,065	$3,174,209	$4,687,274	$2,905,722	$1,781,552
Connecticut	$875,604	$2,838,642	$3,714,246	$5,704,589	($1,990,343)
Delaware	$54,958	$536,434	$591,392	$436,873	$154,519
Florida	$14,618,943	$6,251,753	$20,870,696	$6,501,568	$14,369,128
Georgia	$4,145,089	$5,089,625	$9,234,714	$4,884,900	$4,349,814
Hawaii	$135,348	$1,116,913	$1,252,261	$1,274,221	($21,960)
Idaho	$112,941	$572,711	$685,652	$525,960	$159,692
Illinois	$9,732,991	$11,026,250	$20,759,241	$16,450,178	$4,309,063
Indiana	$838,553	$1,262,522	$2,101,075	$5,512,236	($3,411,161)
Iowa	$570,269	$1,755,755	$2,326,024	$1,019,859	$1,306,165
Kansas	$268,529	$1,108,647	$1,377,176	$1,370,412	$6,764
Kentucky	$512,066	$2,330,861	$2,842,927	$2,356,816	$486,111
Louisiana	$846,162	$2,553,817	$3,399,979	$3,554,259	($154,280)
Maine	$86,547	$589,374	$675,921	$558,524	$117,397
Maryland	$1,895,440	$2,825,531	$4,720,971	$3,537,907	$1,183,064
Massachusetts	$2,939,069	$3,987,552	$6,926,621	$5,740,767	$1,185,854
Michigan	$3,199,136	$4,802,723	$8,001,859	$7,270,353	$731,506
Minnesota	$2,153,480	$3,425,856	$5,579,336	$1,825,866	$3,753,470
Mississippi	$292,577	$1,904,260	$2,196,837	$1,339,386	$857,451
Missouri	$1,863,660	$3,236,850	$5,100,510	$3,264,624	$1,835,886
Montana	$44,600	$464,121	$508,721	$422,854	$85,867
Nebraska	$179,280	$777,389	$956,669	$675,086	$281,583
Nevada	$612,613	$1,659,320	$2,271,933	$1,219,446	$1,052,487
New Hampshire	$46,533	$362,127	$408,660	$685,117	($276,457)
New Jersey	$3,153,697	$5,677,562	$8,831,259	$9,716,323	($885,064)
New Mexico	$239,525	$1,690,283	$1,929,808	$1,135,178	$794,630

State	State and Local Revenue from Investment of Pension Assets	State and Local Revenue from Spending of Pension Checks	Total State and Local Revenue from Public Pensions	Taxpayer Contribution to Public Pensions	Net State and Local Revenue Attributable to Public Pensions
New York	$72,864,190	$28,050,448	$100,914,638	$16,942,982	$83,971,656
North Carolina	$3,660,768	$3,514,986	$7,175,754	$4,176,101	$2,999,653
North Dakota	$25,294	$331,721	$357,015	$237,806	$119,209
Ohio	$8,721,877	$9,684,967	$18,406,844	$5,326,519	$13,080,325
Oklahoma	$458,356	$1,344,123	$1,802,479	$1,647,499	$154,980
Oregon	$1,877,268	$4,273,634	$6,150,902	$2,675,088	$3,475,814
Pennsylvania	$5,875,996	$7,160,999	$13,036,995	$9,346,072	$3,690,923
Rhode Island	$56,515	$778,564	$835,079	$848,929	($13,850)
South Carolina	$662,090	$1,955,627	$2,617,717	$2,612,469	$5,248
South Dakota	$46,600	$340,714	$387,314	$169,110	$218,204
Tennessee	$1,461,796	$1,745,590	$3,207,386	$1,947,055	$1,260,331
Texas	$31,429,946	$11,016,287	$42,446,233	$11,306,611	$31,139,622
Utah	$468,812	$1,037,382	$1,506,194	$1,471,062	$35,132
Vermont	$10,326	$951,341	$961,667	$466,906	$494,761
Virginia	$3,697,381	$3,474,102	$7,171,483	$5,413,822	$1,757,661
Washington	$4,848,464	$3,425,128	$8,273,592	$3,563,800	$4,709,792
West Virginia	$105,444	$862,284	$967,728	$622,060	$345,668
Wisconsin	$3,031,194	$3,844,375	$6,875,569	$1,367,977	$5,507,592
Wyoming	$51,921	$407,288	$459,209	$290,523	$168,686
United States	**$453,010,609**	**$208,895,386**	**$661,905,995**	**$216,750,862**	**$445,155,133**

As Table 4 shows, in 2023, total state and local government contributions to pension funds amounted to approximately $216.7 billion. In contrast, the combined state and local revenues generated from investment activity ($453 billion) and benefit spending ($208.8 billion) totaled approximately $661.9 billion, almost three times greater than the initial outlay. This suggests that, on balance, public pension systems generate $445 billion net positive fiscal impacts for state and local governments.[22]

[22] Net revenue attributable to public pension is approximately $445 billion ($661.9-$216.7=$445.2).

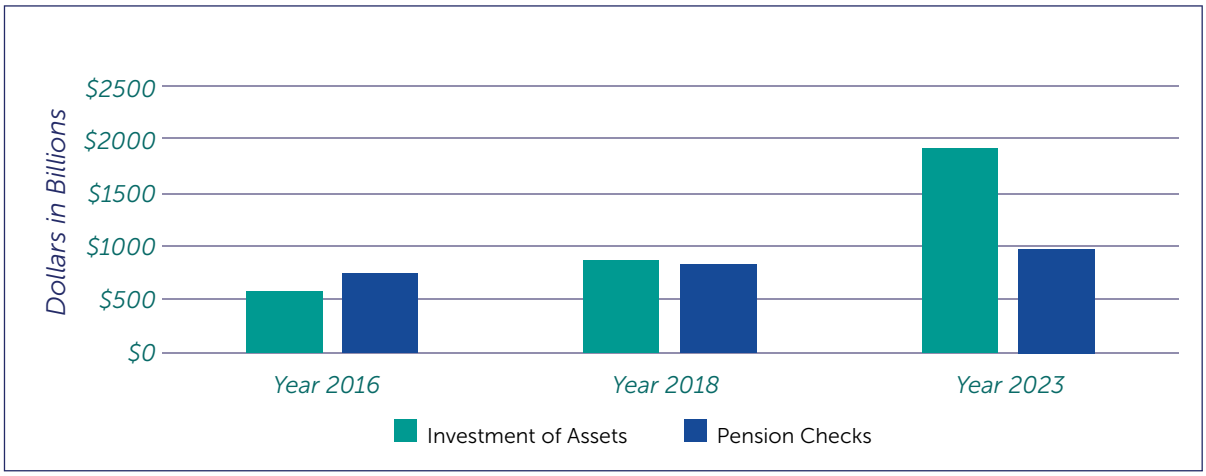
Trends in the Economic and Revenue Impacts of Public Pensions

With the *Unintended Consequences* study now completed three times—using 2016 data in the 2018 original report, 2018 data in the 2020 update, and 2023 data in the current 2025 edition—we can now assess clear trends in the economic and fiscal impact of public pensions over time.

Rising Economic Impact from Investments and Benefit Spending

The total economic contribution of state and local public pensions—combining the effects of both pension fund investments and retiree benefit spending—has grown substantially, from $1.3 trillion in 2016 to $1.7 trillion in 2018, and $2.9 trillion in 2023. As shown in Figure 2, investment-driven economic activity has become an increasingly dominant share of that impact. In 2016, retiree spending contributed more than investments ($757.8 billion vs. $587 billion), but by 2018, investments had surpassed spending ($872 billion vs. $837 billion), and by 2023 the investment contribution had more than doubled that of benefit spending ($1.9 trillion vs. $980 billion).

Figure 2. Economic Impact of Public Pensions, United States, 2016-2023

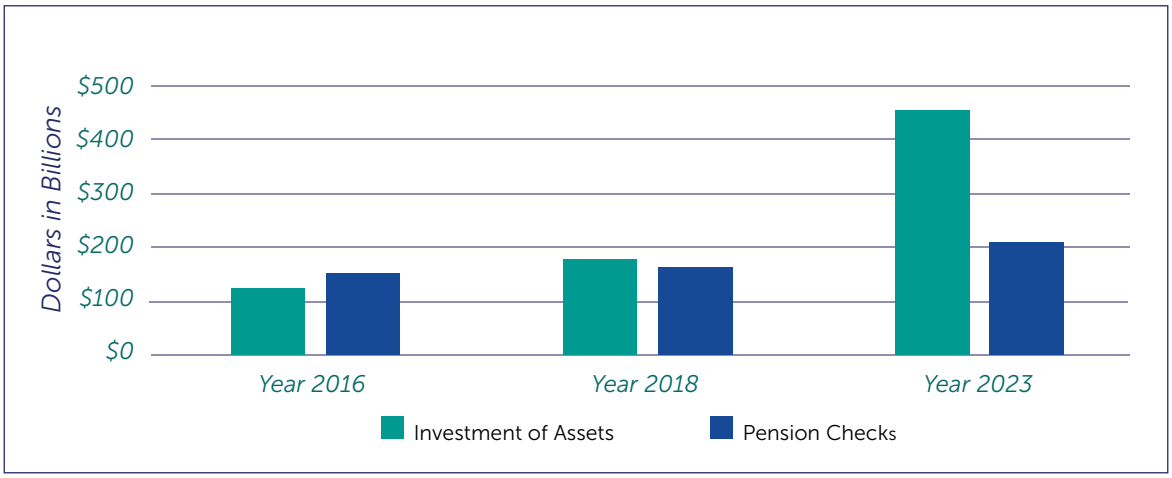


This growth reflects both the rising value of pension fund assets and potential shifts in asset allocation strategies. The economic return per $1,000 of invested assets rose sharply—from $1,088 in 2016 to $1,362 in 2018, and to $2,360 in 2023—indicating improved performance or efficiency in pension fund management over time.

Increasing Tax Revenue Impact for States and Localities

Public pensions have also generated steadily increasing state and local tax revenues. As shown in Figure 3, total revenue impacts rose from $277.6 billion in 2016 to $341.4 billion in 2018, and jumped to $661.9 billion in 2023. In 2016, benefit spending generated more state and local revenue than investments ($151.9 billion vs. $125.7 billion). However, by 2018, this reversed ($178.8 billion from investments vs. $162.6 billion from benefits), and by 2023, investment-driven revenue reached $453 billion—more than twice the $208.9 billion from benefit spending.

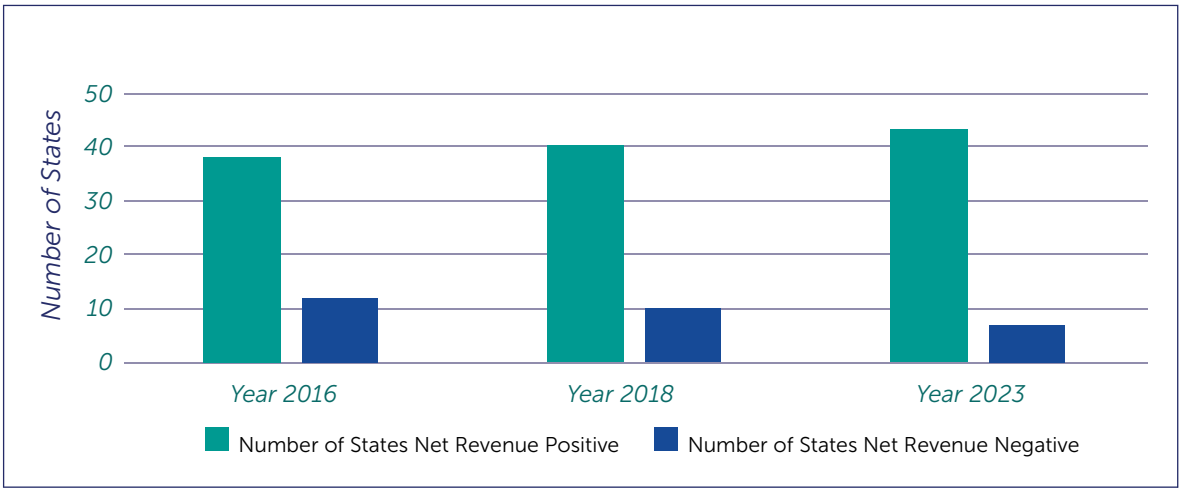
Figure 3. Revenue Impact of Public Pensions, United States, 2016-2023



More States Becoming Net Revenue Positive

These trends have translated into growing fiscal net gains for state and local governments. As shown in Figure 4, the number of states where public pensions generate more in revenue than they cost in taxpayer contributions has increased—from 38 states in 2016, to 40 in 2018, and 43 in 2023.

Figure 4. Number of States Net Revenue Positive and Net Revenue Negative, United States 2016-2023

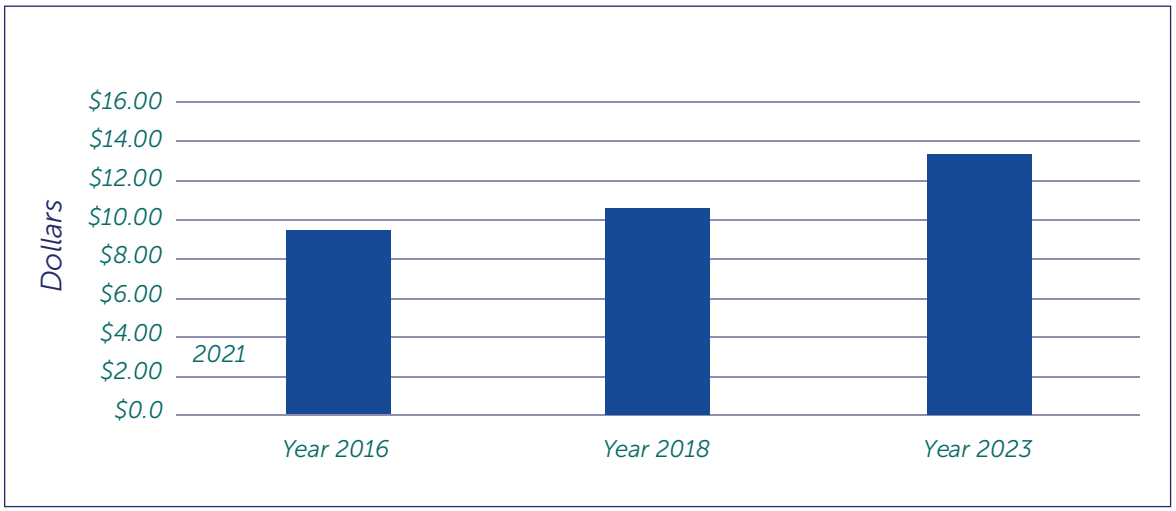


Only seven states were net revenue negative in 2023: Connecticut, Hawaii, Indiana, Louisiana, New Hampshire, New Jersey, and Rhode Island. In several of these cases, the negative margin was small or influenced by above-average contributions aimed at improving plan funding. For example, Rhode Island contributed $849 million to its pensions in 2023, while total pension-generated revenue was $835 million—covering 98% of the cost.

Rising Return on Taxpayer Contributions

As shown in Figure 5, the return on investment for taxpayer contributions to public pensions has also improved over time. In 2016, each dollar of taxpayer contributions supported $9.59 in economic output. This increased to $10.55 in 2018 and reached $13.41 in 2023—demonstrating a growing economic payoff from these public investments.

Figure 5. Economic Return on Each Dollar of Contribution to Public Pensions by Taxpayers, United States, 2016-2023



Section IV: *Conclusions*

Policymakers across the country have long grappled with difficult decisions about the future of public pensions—whether to transition to retirement savings plans that shift investment risks to employees, reduce benefits, or increase employee contributions. These decisions are often made without fully accounting for the broader economic and fiscal impacts of public pensions.

Our analysis shows that public pensions continue to deliver significant benefits to state and local economies. In 2023, public pensions contributed $2.9 trillion to the U.S. economy and generated $661.9 billion in state and local tax revenues. Of the total economic contribution, $1.9 trillion came from the investment of pension assets, and $980.7 billion from the spending of retiree pension checks. Similarly, the revenue impact was composed of $453 billion from investment returns and $208.9 billion from pension spending.

> **"Pension funds produced $445.2 billion more in state and local tax revenues than they received in taxpayer contributions. Dismantling public pensions would not reduce costs; it would impose new ones."**

These findings challenge the notion that public pensions are an unsustainable burden on taxpayers. In 2023, taxpayer contributions to public pensions totaled $216.7 billion—far less than the $661.9 billion in state and local revenues generated by those pensions. In effect, pension funds produced $445.2 billion *more* in state and local tax revenues than they received in taxpayer contributions.

Dismantling public pensions would not reduce costs; it would impose new ones. The data suggest that curtailing pensions could increase taxpayer burdens, while also weakening retirement security for public servants and reducing economic activity at the state and local level.

Going forward, efforts to preserve and strengthen public pensions should be paired with a broader reassessment of state and local revenue systems. This includes identifying ways to ensure tax structures reflect modern economic realities and considering areas where tax benefits or exemptions may be eroding the revenue base. In this context, thoughtful, evidence-based policy decisions are essential to maintaining the long-term sustainability and benefits of public pensions.

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Established in 1941, the National Conference on Public Employee Retirement Systems (NCPERS) is the largest trade association working on behalf of public sector retirement systems, industry stakeholders, and the service providers that support them. Through essential education, innovative research, and unwavering advocacy, NCPERS works to protect and expand pension access for a ctive and retired public servants.

We are a 501(c)(3) nonprofit organization with a diverse membership that includes 500 plans, plan sponsors, and stakeholders who collectively oversee approximately $6 trillion in retirement funds. From the largest statewide systems to the smallest local funds, our members share our commitment to safeguarding the retirement security of more than 20 million teachers, police officers, firefighters, and other public servants.

As the leading voice for the public pension industry, NCPERS works relentlessly to meet the ever-changing needs of public pension leaders. Here's a brief overview of how we do it:

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