Research Report

Examining the Financial Wellbeing of the U.S. Public Service Workforce

MissionSquare RESEARCH INSTITUTE

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Executive Summary

Many public service employees have experienced financial stress while at the front lines of recent crises, from the pandemic to natural disasters. For instance, a large share of state and local government employees say they have been negatively impacted financially by the pandemic, taking on more debt and spending their emergency savings (MissionSquare, 2022b). Rising inflation and high costs of essentials such as healthcare, childcare, and housing are putting increased strains on family budgets of state and local public service workers. Wage growth in the public sector has been modest amid rising prices. According to The Washington Post "the sting of rising prices has fallen disproportionately on the workers who take trash to the landfills, keep city governments running, fight wildfires, and transport Americans to and from work and school." (Gurley, 2022)

Against this backdrop, this report seeks to examine the financial wellbeing of public service employees to help inform decisions on how to foster greater financial security for a larger number of these workers. This report highlights where pockets of financial insecurity among public sector workers persist, summarizes the range of existing benefits for these employees, and demonstrates that benefits and support provided to public employees in building their own savings is a proven pathway for people to achieve financial security. That is, while public sector employers help create financial security for most of their employees, they can amplify these efforts to increase the number of workers who are financially secure.

The key findings of this report are as follows

Attaining financial security is a challenge for many public employees, but **public employers are well-positioned to support employee efforts to strengthen their financial security**. Specifically, public employers excel at providing efficient, broad-based benefits that can support their workforce via income and retirement security directly and indirectly. Special opportunities exist to facilitate short-term liquid savings, student loan forgiveness, and other benefits like telework and paid leave.

Substantial shares of public employees face financial difficulties. Close to one-fifth of all public employees and close to one-in-six employees in public education reported **skipping health care** because they could not afford it. The respective shares among single women, African Americans, Latinos, people of multiple races and ethnicities, and people without a college degree that skipped health care were especially large.

Liquid savings of public service employees are often not enough for a substantial emergency. Nearly one in three public employee households would have trouble coming up with $400 in an emergency.

A portion of public employee households cannot pay all of their bills. From 2017 through 2019, 14% of households employed in the public sector indicated that they could not pay all their bills, as did 11.3% of those employed in public education.

One strategy that helps strengthen the financial security of public sector employee households **stems from access to benefits** of all kinds – such as retirement plans, health and life insurance, health and education savings accounts, and paid time off.

Both **public sector employers and employees have concerns** about the economic and retirement security of the state and local workforce.

Acknowledgements

This report was prepared by Christian E. Weller, PhD, Professor and Chair, Department of Public Policy and Public Affairs, McCormack Graduate School at the University of Massachusetts Boston, and researcher Beth Almeida, along with input from MissionSquare Research Institute.

I. Introduction and Overview

Households save for their future in large part through their jobs. Decent wages and salaries allow people to put money aside for the future, while employment-based insurance benefits help protect households from unexpected and costly events, allowing people to keep more of their own money. In addition, employer-supported financial wellness education can help employees better understand how to manage their investments, debt, risk, standard or optional employee benefits, and household budgeting. Such protections enable people to either invest (save) more money or to reduce their debt. Either way, the result is greater financial security. More savings or less debt mean that households have more of a financial cushion in the case of short-term financial emergencies such as a layoff. They also can enjoy longer-term financial security, for instance, in older ages and to take advantage of opportunities such as buying a new house and supporting their families' education.

Household savings such as retirement assets, but also other assets, are unequally distributed, leaving many people with little financial security and fewer opportunities for upward economic mobility. This inequality is especially pronounced by race and ethnicity, but also by gender and education. Households of color, especially Black and Latino households, as well as single women and those without a college degree have typically less, often a lot less, wealth than White households, single men and married couples, and those with a college degree.

Public sector employment offers something of a counterweight. Public employees often have job stability given that taxpayers rely on continuity in their essential public services — from public safety to education. This makes it easier to plan for the future, as workers can worry less about unexpected drops in incomes, with layoffs most common only in exceptional circumstances, such as the Great Recession and the initial months of the COVID pandemic. Moreover, public employees often have strong employer-provided benefits, including defined benefit (DB) pensions, which encourage longer employment tenure, and/or 401(k)/403(b) type retirement savings accounts also known as defined contribution (DC) plans. Moreover, public sector workers typically also have employer-sponsored health insurance, life insurance policies, access to credit unions and paid time off. Through these types of benefits, employers cover part of the costs of unexpected and costly events and thus leave households with money to save for other things such as buying a house or paying for a child's college education.

The impact of these benefits is twofold. First, public employees have a fair degree of economic security. Second, assets are markedly less unequally distributed in the public sector, leaving many public employees in a more financially secure position than would be the case in the private sector. Many lower-income public sector households, for example, have access to key benefits such as DB pensions and DC plans, as well as paid time off. In this way, benefits offered in public employment provide key pathways for many, even entry-level employees, to build economic security.

That does not mean that every public employee household is financially secure. On the contrary, many struggle to pay all of their bills, carry medical debt, have trouble paying for college, and worry about their financial future in retirement. Financial insecurity for many public employees reflects a lack of meaningful amounts of emergency savings. Most employees have some liquid savings. But, about a third of government employees reported they could not come up with $400 in an emergency from 2017 to 2019.[1]

Survey research finds that both employers and employees have concerns about the economic security of state and local employees. The 2022 annual survey conducted by MissionSquare Research Institute, the International Public Management Association for Human Resources (IPMA-HR), and the National Association of State Personnel Executives (NASPE) found that only 41% of public sector human resources professionals feel their employees are financially prepared for retirement. Moreover, they identified compensation concerns as the top reason for employee departures (51%). (MissionSquare Research Institute, 2022a).

For their part, public employees report that the pandemic brought negative financial impacts, according to research by MissionSquare Research Institute. In November/December 2021, 44% reported that they and their families had been negatively impacted financially by the pandemic, with 6% indicating the financial impact has been negative to a significant extent. Additionally, the pandemic has led state and local workers and other members of their households to take a variety of negative financial actions; those most frequently cited were taking on more debt than they would have otherwise (23%), spending money from an emergency fund to make ends meet (21%), and/or borrowing money from friends or family (12%). These financial strains are reflected in employees' perceptions of their future retirement security, with 81% worrying whether they will have enough money to last them through retirement.[2]

This report examines the financial wellbeing, benefits, and savings of public employees based on a range of data sets to inform potential changes to those benefits or compensation structures.[3] The report specifically documents public

employees' short-term and long-term financial security and helps to identify potential shortfalls. The report also uses a range of data sets and methodologies to highlight proven pathways to building savings and reducing debt in the public sector. This approach clarifies future strategies to close existing gaps in financial security among public employees. The bottom line is that economic security gaps exist, but the public sector already has several tools at its disposal — most importantly, efficient, widespread benefits — to help meet employees' needs. State and local governments can build on those tools, for instance, by providing more short-term liquid savings vehicles, additional benefits such as more access to telework, or other non-traditional or optional benefits tailored to meet each employees' interests and circumstances.

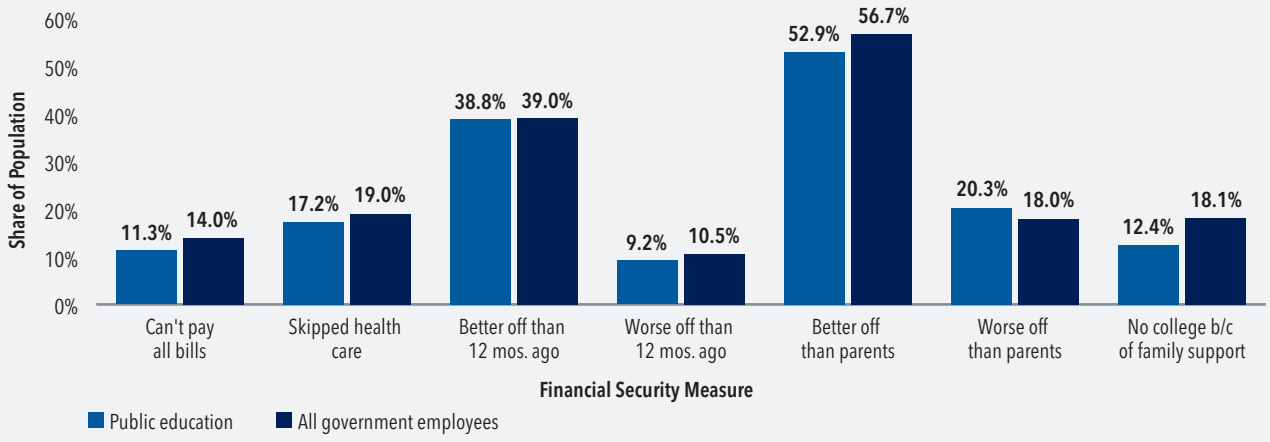
Importantly, this report serves as an initial benchmark of the financial health of the state and local workforce. This report is structured as follows. Section II summarizes data on short-term and long-term financial security before and during the pandemic. Section III presents summary data on public employees' household economics as well as the inequality of overall assets (minus debt) in general and retirement savings in particular. Section IV discusses the mechanisms by which public employers help their employees build economic security, focusing in particular on cost efficiency and cost reductions through the provision of a wide range of benefits. Section V presents the results of survey research about the economic security of state and local workers. Section VI draws conclusions about public employment as a pathway toward economic security.

II. Measuring the Financial Security of Public Sector Employees

The Federal Reserve's annual Survey of Household Economics and Decisionmaking (SHED) includes a range of short-term and longer-term financial security measures for U.S. households.[4] The indicators for short-term financial security include a household's ability to pay all of its bills, whether they skipped health care in the past 12 months, and whether they are financially better or worse off than a year ago. The longer-term measures include indicators of whether the household is financially better or worse off than their parents and whether they did not attend or complete college because they had to support their family.

Figure 1 shows the relevant shares of households for each of these measures for all government workers and separately for only public employees in education from 2017 to 2019.[5] The data indicate that from 2017 to 2019, 14% of all public sector workers could not pay all of their bills, nor could 11.3% of public employees in public education (Figure 1). Similar issues exist within other categories — race, ethnicity, gender, marital status, and educational attainment. Typically, people of color, single women, and those without a college degree face more financial insecurity than White workers, single men and married couples, and those with a college degree.

Figure 1 **Select Measures of Short-term and Long-term Financial Security by Sector, 2017 to 2019**



Other measures underscore the point that substantial shares of public employees face financial difficulties. For example, close to one-fifth – 19% – of all public employees and close to one-in-six – 17.2% – of employees in public education skipped health care because they could not afford it (Figure 1). The respective shares among single women, African Americans, Latinos, people of multiple races and ethnicities, and people without a college degree that skipped health care were especially large (Table A2 in the appendix). For example, 24.2% of single women in public education skipped health care in the previous 12 months because of the costs (Table A2 in the appendix). These data indicate that providing sufficient financial security for all public employees remains a challenge.

III. Savings, Inequality, and Employment-Based Benefits

Building economic security for most public employees is not an accident. These workers tend to have access to important job benefits, with retirement benefits as the most widespread. For instance, 92% of state and local government employees had access to retirement benefits at work in 2020, though some may not have participated (BLS, 2021).

State and local government employees also have access to other benefits, which can reduce the cost-impact of health-related or other unexpected events and make it easier to save for retirement and other purposes. For instance, 89% of state and local government employees had access to health insurance benefits from their employers in 2020 (BLS, 2021). Moreover, public employers contributed 71% of the medical care premiums for family coverage plans if state and local government employees had such coverage (BLS, 2021). In addition, 92% of state and local government employees had paid sick leave available to them in 2020 (BLS, 2021).

Retirement and other benefits are especially important in helping households boost savings and longer-term financial security. Employer-sponsored retirement benefits help public employees overcome some of the well-known obstacles to saving for the longer term on their own, such as inertia that keeps people from putting money away for an emergency. One tool to do this is via so-called auto-enrollment features in employer-provided DC plans. In these cases, employees are automatically enrolled in a DC plan and contribute a default contribution rate, and their investments are often allocated to a secure default investment option. Employees can always opt out of any of these features, but now inertia – the failure to make a proactive decision – works in their favor. In fact, MissionSquare Research Institute's behavioral study on auto-enrollment features showed employees both likely to remain in a DC plan in which they were auto-enrolled and likely to increase their contribution beyond the default rate (see: **Nudging Deferral Rates within Public Sector Supplemental Retirement Plans, MissonSquare 2019**). Moreover, by offering benefit programs on a group basis, employers can negotiate lower costs for employees as they save for retirement (Doonan and Fornia, 2021).[6]

It is possible, though, that public employees' benefit advantages may have diminished over the past two decades, especially after the Great Recession in 2008 and 2009. State and local governments pursued austerity budgets at that time, which resulted in declining public sector employment (Bach, 2012). Moreover, pension funding had not yet recovered from the stock market downturn of 2001 (Gustman et al 2010; Helppie McFall 2011; Butrica et al 2012) when the market crashed again in 2008. As a result, many state and local government employers or plan sponsors enacted changes to their DB pensions that raised contributions and cut benefits for new hires, which may have lowered the expected DB pension benefits relative to total employee and employer contributions.

At the same time, the share of state and local government employees that have access to DC plans has gone up. In 2019, 37% of state and local government employees had access to DC plans at work, compared to 31% in 2012 (BLS, 2012, 2019).

Retirement benefit provision among state and local government employees may thus have shifted gradually from DB pensions to DC accounts – with reductions in still widely available DB benefits and DC plans as add-ons – and thus may have slowly led to more variation in the level of retirement benefits provided within the public sector (Sabelhaus and Henriques Volz, 2019).

Financial State of Public Employees

Table 1 summarizes overall assets for public employees by time period based on the Federal Reserve's Survey of Consumer Finances (SCF), as detailed in the appendix. Public employee households here are households where the primary earner works in public employment.[7]

The data in Table 1 show three key points. First, average savings tend to be much larger than savings at the median, reflecting the fact that savings in general are unequally distributed. This is basically the flipside of the data that a substantial share of public employees faces short-term and longer-term financial insecurity, as discussed above. Second, DB pensions are a major source of retirement security for most public employee households as discuss in more detail further below. Median savings with DB pensions are about two-and-half to three times as large as median savings without DB pensions (Table 1). Third, there are no systematic differences by employer size, likely reflecting the fact that many public employees across all government agencies have similar access to benefits that help them save for their future.

It is important to note that many public service employees in state and local government are not covered by Social Security, under the presumption that their long-term needs are being met via their retirement plan(s). Where existing employer-sponsored benefits are not sufficient, those individuals may thus need to save more money to finance retirement. An analysis of the distribution of household assets among public employees in states where most public employees are covered by Social Security and among public employees where most employees are not covered suggests no difference, though. Whether or not Social Security coverage is provided does not seem to correlate to systematically lower assets (Table A5 in the appendix).[8] This again suggests that public employees across all governments have access to similar benefits to save for their future, but it also could suggest that employees in states without Social Security may be in greater need for additional assistance.

Inequality in Savings

The summary of the data so far suggests that financial assets are somewhat equally distributed across the public sector workforce. Overall retirement inequality has grown over time, although it is not a major contributing factor to overall inequality of household savings (Sabelhaus and Henriques Volz, 2019). At the same time, the shift from DB pensions – fewer benefits and thus less DB pension wealth – to DC plans that provide greater tax advantages for higher-income earners (Weller and Ghilarducci, 2015) may have increased retirement savings inequality over time.

Table 1 **Public Employees' Average and Median Household Wealth By Employer Size, 2010 to 2019**

	Average wealth w/o DB pensions	Average wealth w/DB pensions	Median wealth w/o DB pensions	Median wealth w/DB pensions	Average financial assets	Median financial assets	Median Wealth to income w/o DB pensions	Median Wealth to income w/DB pensions
All employers	$350,098	$871,320	$132,160	$309,526	$168,440	$45,768	181.5%	327.7%
Small employers	$363,037	$872,079	$133,428	$293,861	$206,289	$53,498	155.4%	270.5%
Large employers	$318,958	$869,493	$129,961	$350,794	$173,339	$56,040	350.3%	352.7%

Notes: Sources are Board of Governors, Federal Reserve, Various Years, Survey of Consumer Finances 2010, 2013, 2016, 2019, Washington, DC Fed and Sabelhaus, John, and Alice Henriques Volz (2019). "Are Disappearing Employer Pensions Contributing to Rising Wealth Inequality?," FEDS Notes. Washington: Board of Governors of the Federal Reserve System, February 1, 2019, https://doi.org/10.17016/2380-7172.2308. All dollar values expressed in 2019 dollars. Sample includes only households with at least one spouse working as wage or salary employee. Definitions of public sector employees vary by data source. See Appendix, Table A1.

Table 2 **Measures of Savings (Net of Debt) Dispersion In the Public Sector By Period**

Dispersion measures	Total savings without DB pensions			Total savings with DB pensions		
	1989 to 1998	2001 to 2007	2010 to 2019	1989 to 1998	2001 to 2007	2010 to 2019
Share of bottom 50%	7.0%	8.3%	4.2%	8.4%	8.5%	5.8%
Share of top 10%	52.2%	49.8%	57.2%	49.6%	46.4%	51.3%
Upper limit, bottom 20%	$18,880	$43,328	$16,142	$48,369	$87,997	$59,030
Upper limit, 2nd quintile	$67,237	$136,408	$83,490	$132,709	$300,949	$199,834
Upper limit, middle quintile	$147,497	$293,296	$197,825	$284,754	$642,204	$481,798
Upper limit, fourth quintile	$290,502	$584,770	$438,980	$550,776	$1,280,031	$1,272,482

Notes: Sources are Board of Governors, Federal Reserve, Various Years, Survey of Consumer Finances 2010, 2013, 2016, 2019, Washington, DC Fed and Sabelhaus, John, and Alice Henriques Volz (2019). "Are Disappearing Employer Pensions Contributing to Rising Wealth Inequality?," FEDS Notes. Washington: Board of Governors of the Federal Reserve System, February 1, 2019, https://doi.org/10.17016/2380-7172.2308. All dollar values expressed in 2019 dollars. Sample includes only households with at least one spouse working as wage or salary employee.

Table 2 shows several measures of savings inequality in the public sector. The data also show that DB pensions are a critical equalizing force in the public sector. The minimum amount for the top 20% – equal to the upper limit for the fourth quintile – is 27 times the maximum amount for the bottom 20%, when DB pensions are not included – $438,980 to $16,142 (Table 2). The minimum amount at the top – $1.3 million – is only 22 times the maximum amount at the bottom – $59,030 (Table 2). Savings are always unequally distributed, but widespread access to DB pensions in the public sector helps to somewhat shrink that inequality.

Furthermore, savings inequality has increased in the public sector (Table 2). It is important to highlight the trends over time to see whether reductions in public employee benefits, especially after the Great Recession, are apparent in the data. This table thus shows inequality measures for the periods from 1989 to 1998, from 2001 to 2007, and from 2010 to 2019. The breaks in the time series correspond with major recessions and financial market downturns in 2001 and 2008/09. The share of savings held by the bottom 20%, for example, has fallen from more than 8% before the recession to less than 6% in the years afterwards (Table 2). At the same time, the share of savings accruing at the top has grown to over 50% (Table 2). The increasing savings inequality in the public sector thus also reflects the persistence of financial insecurity among many public employee households, as discussed before.

Detailed Assets and Benefits in the Public Sectors

It is critical to understand how public employment correlates with savings to identify strategies to improve savings for those who do not have enough to avoid financial insecurity. Public employees are likely able to save for their future at all stages of their career. After all, they get assistance from their employers to save for retirement through DB pensions and DC accounts. They also have a wide range of other benefits (BLS, 2019) that could help blunt the costs a household would otherwise face in an emergency or unexpected life event – such as health insurance, life insurance, and paid sick leave (BLS, 2021) – thus making it easier to save. The data on public employees' financial security during the coronavirus pandemic, for instance, show that 46.4% of public employees took paid leave when childcare became unavailable or closed (see Table A4 in the appendix). In comparison, only 34.4% of private sector employees did so.[9] Paid leave, especially job-protected paid leave, not only provides short-term income replacement when employees are unable to work, but importantly, fosters greater employment stability in the long run, both of which enhance financial security.

Table 3 **Employment Based Benefits for Public Employees by Household Characteristics, 2010 to 2019**

Dispersion Measures	All	Small employers	Large employers	No college	College	Single women	Single men	Married	White	Black	Hispanic/ Latino	Other
Has DB pension	59.1%	56.4%	65.5%	57.8%	60.7%	45.8%	57.6%	62.2%	62.2%	52.2%	56.7%	52.0%
Has 401(k)/403(b)	63.3%	61.3%	68.3%	60.3%	66.9%	61.3%	54.0%	65.4%	65.1%	57.0%	66.6%	60.0%
Median 401(k)/403(b) value	$46,000	$42,417	$56,007	$34,043	$65,000	$32,945	$50,000	$50,000	$51,843	$40,416	$29,456	$38,289
Has life insurance	86.0%	86.7%	84.3%	86.5%	85.4%	82.3%	80.0%	87.8%	87.3%	90.1%	77.7%	77.1%
Credit union member	57.0%	55.8%	60.1%	58.9%	54.8%	53.6%	56.5%	57.9%	58.0%	60.5%	53.1%	48.5%
Has employer-sponsored health insurance	79.4%	75.2%	89.5%	74.6%	84.9%	81.4%	72.6%	80.1%	80.3%	79.1%	80.5%	72.7%
Has health or education savings account	5.3%	5.0%	6.2%	3.0%	8.0%	2.4%	1.8%	6.6%	6.5%	2.7%	3.7%	3.3%

Notes: Sources are Board of Governors, Federal Reserve, Various Years, Survey of Consumer Finances 2010 to 2019, Washington, DC Fed. All dollar values expressed in 2019 dollars. All median values are conditional on having that specific asset. Sample includes only households with at least one spouse working as wage or salary employee. Survey years from 2010 to 2019 are pooled to ensure sufficiently large sample sizes. DB pensions refer to such pensions from people's current job. Life insurance includes cash value life insurance as well as term life insurance. Term life insurance is much more widespread and its patterns determine the overall life insurance coverage shown here. The public version of the SCF combines answers on health and education savings accounts. Health savings accounts are likely employment based, while many education savings accounts are not.

Table 3 summarizes employment-based assets and benefits for the period from 2010 to 2019 to highlight one channel – cost sharing by employers – through which public employees may be able to save money for retirement and non-retirement purposes. The data show that most public employees have specific assets or benefits. For example, 57% of public employees had credit union accounts (Table 3), and, 79.4% of public employees had employer-sponsored health insurance (Table 3). Having these benefits through an employer reduces the costs associated with a number of economic risks – such as premature death of a breadwinner or ill health – and thus frees up additional resources for people to save for their future.

Two additional points related to employment-based benefits are noteworthy. First, the majority of public sector employees in all subpopulations by employer size, race, ethnicity, gender, marital status and educational attainment have the enumerated benefits (Table 3). This finding tracks with the fact that the majority of public employees across racial, ethnic, gender, marital and educational lines are financially secure, as described in Section II.

Second, large gaps in benefits persist among public employees. A substantial minority of public employees do not have life insurance (14%) or employer-sponsored health insurance (20.6%), for example (Table 3). Other data sources also indicate that, while many public employees have access to paid family leave, almost one quarter of public employees do not (BLS, 2021). As a consequence of these benefit gaps, many public employees may still experience short-term and long-term financial insecurity, as discussed previously.

But how can it be verified that employer-provided benefits are, in fact, acting as a lynchpin of public employees' financial security? After all, it is possible that because of public employees' access to benefits, they have fewer non-employment–based assets and accumulate fewer financial assets in these non-employment–based plans or accounts. If this were the case, then greater employment-based benefits

Table 4 **Non-Employment Based Assets for Public Employees by Household Characteristics, 2010 to 2019**

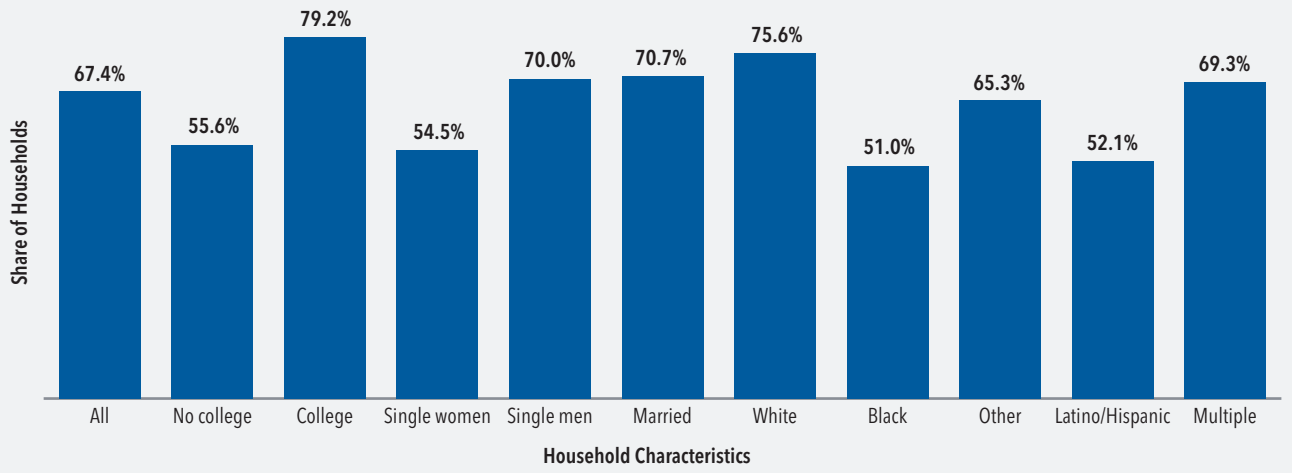
Dispersion Measures	All	Small employers	Large employers	No college	College	Single women	Single men	Married	White	Black	Hispanic/ Latino	Other
Has IRA	33.6%	33.9%	33.1%	21.6%	47.7%	26.3%	26.4%	36.5%	39.9%	16.9%	14.4%	34.2%
Has liquid savings	99.2%	99.4%	98.9%	98.9%	99.6%	98.4%	99.4%	99.4%	99.8%	97.7%	98.0%	99.3%
Homeownership rate	73.2%	72.4%	74.9%	69.8%	77.2%	63.3%	52.3%	78.9%	78.2%	58.6%	70.9%	66.0%
Median home equity	$77,764	$77,641	$78,000	$60,091	$101,039	$72,000	$97,000	$77,764	$82,477	$54,242	$76,586	$101,039

Notes: Sources are Board of Governors, Federal Reserve, Various Years, Survey of Consumer Finances 2010 to 2019, Washington, DC Fed. All dollar values expressed in 2019 dollars. All median values are conditional on having that specific asset. Sample includes only households with at least one spouse working as wage or salary employee. Survey years from 2010 to 2019 are pooled to ensure sufficiently large sample sizes. DB pensions refer to such pensions from people's current job.

might simply reflect a substitution of one type of financial security for another. But this turns out not to be the case. Table 4 presents data on assets held in individual retirement accounts (IRAs), liquid assets such as checking and savings accounts, and homeownership rates. In general, the vast majority of all groups of public employees have liquid savings and are homeowners. Only a small share of public employees also has IRAs, though. More importantly, the groups of people that are more likely to have employment-based benefits, such as those with a college degree, are also much more likely to have an IRA than those without a college degree – 47.7% compared to 21.6%. Similar correlations between employment-based benefits and non-employment–based retirement savings exist by race and ethnicity and gender (Tables 3 and 4). These data lend even more support to the argument that employer-provided benefits make it easier for public employees to save money in all forms of assets, presumably because the benefit provision directly encourages savings and indirectly facilitates savings due to cost sharing.

A related point is that most public employees have emergency savings (Figure 2). Overall, from 2017 to 2019, 67.4% of public employees could come up with that $400 to pay for unanticipated expenses (Figure 2). Emergency savings were less common among some breakout groups,

Figure 2 **Share of Public Employees that Could Come Up with $400 in an Emergency by Household Characteristics, 2017 to 2019**



such as single women, Black, or Hispanic public employees. In addition, since the onset of the pandemic, 21% of state and local employees have indicated that they have had to spend money from their emergency savings to make ends meet.[10] Many public employees remain in a potentially precarious financial situation if something goes wrong.

The bottom line is that public employment goes along with substantial savings and financial security for most workers. Moreover, financial security as well as economic opportunity are somewhat evenly distributed among public sector employees.[11]

IV. Pathways to Building Economic Security in the Public Sector

This section now turns to the question of how that economic security is achieved for public sector workers. This stems from employment and income stability and employment-based benefits as highlighted in regression-based decompositions below. That is, efficiency of and widespread access to benefits are key direct and indirect contributors to the observed economic security for public sector employees.

Retirement Savings Behavior

Table 5 presents data on key aspects of retirement savings behavior – the primary saving behavior for which there is detailed individual data. It also includes a number of key metrics of saving behavior at the household level. Individual retirement savings behavior include 401(k) contributions, IRA withdrawals and 401(k) loan incidences, and median loan amounts for 401(k) account holders. Household-level data on saving include long-term financial planning horizon, overall likelihood of saving money and indicators of whether the prior year's income was unusually high or low, as a measure of income volatility. Less income volatility makes it easier for people to save since their finances are more predictable.

Table 5 provides comparisons between public and private sector employees to illustrate the key pathways toward more savings for public employees. The data in Table 5 show that, generally speaking, public employees are better savers than private sector employees. Most notably, public employees had higher combined employer and employee contribution rates to DC plans (401(k) or 403(b) type plans) than private sector employees – 15.7% compared to 13% (Table 5). IRA withdrawal rates were virtually identical across sectors as were DC plan loan amounts (Table 5). But public employees were more likely to have an outstanding DC plan loan than was the case for private sector employees. This could reflect larger DC plan account balances and thus easier access to this liquidity. It could also indicate a higher age and thus a greater need for people to dip into their DC plans to buy or repair a house, support their children's education or pay for health care.[12] And, it could be a reflection of larger DC plan contributions that people make with the expectation to

Table 5 **Retirement Savings Behavior By Private and Public Employment, 2010 to 2019**

Variable	Private sector employees	Public sector employees
individual variables		
Average combined employer and employee 401(k)/403(b) contribution rate	10.6%	11.6%
Average withdrawal rate	4.2%	15.0%
Share with 401(k)/403(b) loans	8.8%	11.0%
Median 401(k)/403(b) loan amount	$5,000	$5,000
Average years with current employer	7.5	11.3
Household variables		
Share with planning horizon 10 years or longer	13.1%	12.9%
Spends less than income	59.1%	66.3%
Last year's income unusually high	9.0%	8.0%
Last year's income unusually low	18.5%	11.7%

Notes: Sources are Board of Governors, Federal Reserve, Various Years, Survey of Consumer Finances 2010, 2013, 2016, 2019, Washington, DC Fed. Contributions and loans are conditional on having such accounts. Dollar amounts are expressed in 2019 dollars. Median loan amounts calculated only for those who have such loans. Withdrawals are conditional on having any retirement account. Sample includes only households with at least one spouse working as wage or salary employee.

access their savings pre-retirement. Higher contribution rates often go along with more access to DC plan loans and larger loan amounts (Wenger and Weller, 2014). It is also important to keep in mind that while virtually all employees with a DC plan contribute to such an account, only about one-in-ten people with a DC plan had an outstanding loan from 2010 to 2019. That is, the additional contributions matter more than somewhat more widespread DC plan loans for the financial wellbeing of the average or median public employee. Furthermore, most public employees also have a DB plan, meaning that loans probably pose less of a risk to their overall financial security than for those who rely solely on a DC plan for their retirement security.

As is also shown in Table 5, public employees tend to have longer tenure with their employer than private sector employees do (an average of 11.3 years vs. 7.5 years, although this 2010-2019 data predates the Great Resignation). Substantial employment stability means that public employees are less likely to have to pay back the loan unexpectedly due to job loss, a phenomenon that often results in people having to repay their loans on short notice. Public employees tend to be more likely to save for retirement, make larger contributions to their retirement accounts, and end up with more retirement savings.

Additional data on saving further support the idea that public employees are strong savers. Most importantly, 66.3% of public employees said that they saved money (Table 5). And, public sector employees have a low likelihood of experiencing unusually low incomes at 11.7% (Table 5). This suggests that public employees faced less income risk and thus could put more money aside, not just in retirement accounts, but also in other assets.

The summary data show that most public employees have access to retirement benefits, which translates into a strong economic position in retirement. These workers also tend to make substantial contributions to their retirement accounts and likely do so for long periods as they tend to work for an employer longer than is the case for private sector employees (Madowitz et al., 2020).[13]

The analysis next shows the link between retirement type contributions, fees, and total balances using simulation models for hypothetical public employees to illustrate the efficiency of employment-based retirement benefits.

Simulated Retirement Contributions, Fees, and Retirement Savings

This study simulates hypothetical public sector employees, their contributions to retirement plans — DB pensions, DC plans, and IRAs, as well as their account balances. The goal of these simulations is to demonstrate the cost effectiveness of public employee benefits across a number of different subpopulations. The assumptions and mechanics of simulations are detailed in the appendix. The results of these simulations for people who turn 25 in 2024 are the total contributions, the fees, and the total assets at age 65 (all in 2022 dollars) after they will have completed a career in public service. In particular, it is assumed that people work for 30 years for a state or local government during the 40-year span from age 25 to age 65. Results are reported for all workers, broken down by education (college or no college degree) and presented separately for state employees and local government employees.

Table 6 reports the simulation results and makes several key points.[14] Total assets in DB pensions are larger than the accumulated balances in either DC plans or IRAs for state and local government employees without a college degree (Table 6). This is true for those people who have either a DC account or a DB pension as well as for population averages. The gaps are larger for population averages than for individuals (Table 6).[15] That is, DB pensions are the key form of retirement assets for public employees because they are more widely available. However, public employees also gain liquid assets with retirement accounts.

Second, the real value of investment earnings increases the value of people's contributions, especially in DB pensions. The ratio of real assets to real contributions shows the impact of investment earnings. Any number greater than 100% indicates positive earnings and a number of 200%, for instance, shows that investment earnings over people's careers made up the same share as total lifetime contributions to retirement plans. In all of the simulations, the real value of total DB assets is more than twice as large as the contributions. That is, more than half of the total retirement assets in DB pensions came from investment earnings.[16] The ratio of total DB assets to contributions is also greater than for DC accounts because DB pensions provide implicit insurance protections against longevity and market risks, as discussed in the appendix. These additional benefits increase the ratio of assets to contributions in the simulations. In comparison, less than half of the final account balance comes from investment earnings in DC accounts (Table 6). The difference stems from lower implicit benefits and higher fees. Moreover, the contribution of investment earnings to total account balances is smaller for IRAs than for DC plans, especially for people without a college degree because of higher account fees (Table 6).

Table 6 **Real Retirement Contributions, Fees and Wealth For State and Local Government Employees, By Education, Employment and Retirement Wealth**

	Total real contributions		Total real fees		Total real assets at age 65		Ratio of assets to contributions	
	College	No college	College	No college	College	No college	College	No college
All								
401(k) type plans	$301,780	$169,613	$30,624	$18,441	$524,632	$304,174	173.8%	179.3%
IRAs	$197,888	$155,608	$29,396	$32,011	$331,706	$257,968	167.6%	165.8%
DB pension	$249,822	$157,157	$11,896	$7,484	$659,221	$428,498	263.9%	272.7%
State								
401(k) type plans	$257,628	$173,613	$25,960	$18,932	$446,489	$311,778	173.3%	179.6%
IRAs	$166,212	$150,968	$24,520	$31,143	$277,800	$250,561	167.1%	166.0%
DB pension	$191,586	$139,212	$9,123	$6,629	$560,952	$421,369	292.8%	302.7%
Local								
401(k) type plans	$322,149	$164,565	$33,056	$18,015	$562,808	$296,059	174.7%	179.9%
IRAs	$212,991	$155,250	$31,989	$32,149	$358,678	$258,077	168.4%	166.2%
DB pension	$344,880	$201,107	$16,423	$9,577	$804,916	$498,578	233.4%	247.9%
Population averages (all)								
401(k) type plans	$171,191	$94,586	$17,372	$10,283	$297,609	$169,625	173.8%	179.3%
IRAs	$19,609	$15,415	$2,913	$3,171	$32,869	$25,555	167.6%	165.8%
DB pension	$176,125	$109,715	$8,387	$5,225	$464,751	$299,145	263.9%	272.7%

Notes: All dollar values are in 2022 dollars. Values are based on simulated savings for state and local government employees, who have a specified retirement plan. See the text for details on the underlying assumptions.

These simulations hence show the added value that public employee receive from particular retirement benefits.

Third, public employees incur varying levels of fees associated with their retirement benefits. Fees are comparatively low for DB pensions and relatively high for IRAs. In these simulations, an employee without a college degree, who consistently contributes to an IRA, pays a total of $32,010 (in 2022 dollars) in fees. The same employee, though, pays only $5,987 in fees for their DB pensions. Public employees would still pay fewer total fees for their DB pensions, even if fees for DB pensions were three times larger than was assumed in the simulations. Thus, the results reflect the cost effectiveness of employment-based retirement benefits in the public sector.

Identifying Factors that Contribute to Additional Savings for Public Employees

Finally, this study looks at the relative contributions of a number of factors to overall public employee savings. That is, how important is job stability – measured by tenure with the current employer – as well as other factors for the economic security of public employees? This section uses a common statistical tool, known as Oaxaca-Blinder decompositions for this purpose. It calculates the hypothetical savings for public-sector employees if they had the same characteristics of private employees. If the difference in savings shrinks as a result of changing a particular characteristic (such as tenure with an employer) from the actual one for public employees to the hypothetical one for private sector employees with similar other characteristics, that particular characteristic, (e.g., tenure) "explains" that part of the savings difference. The calculations can attribute the change in savings behavior between public and private sector employees to differences in specific characteristics such as age, education, and tenure with the current employer. The analysis uses the Federal Reserve's SCF. A decomposition shows what the savings of public employees would have looked like if they had the same characteristics on average as private employees.

Decompositions are performed for total savings with or without DB pensions, DC plan balances, and all financial assets. In all four instances, total assets are transformed to account for the skewness of the data by using their inverse hyperbolic sine. The underlying calculations can then also attribute parts of the explained difference to individual characteristics. The models include demographics – age, gender, and risk aversion – education, employer size, income, and employment stability (length with an employer as well as the chance of an unexpected loss or gain of income in the prior year), and employer benefits (health and life insurance) as characteristics.[17]

Defined Benefit Retirement Plans as a Workforce Management Tool

DB pensions serve as a counterbalance to the more constrained ability for public sector employers to compete with the salary increases and bonuses that may be available in the private sector in this particularly competitive labor market. In addition, the minimum tenures required to fully vest in those plans encourages greater employee retention, with that stability being particularly important at a time when many longtime public sector employees are now retiring.

As indicated by the annual workforce survey conducted by the Research Institute, IPMA-HR, and NASPE, only 44% of human resources staff feel the wages they are able to offer are competitive with the labor market, while 85% feel their benefits compensation is competitive (including retirement, health care, and other offerings). See Figure 3 and 4.

For further discussion, see also: **Win-Win: Pensions Efficiently Serve American Schools and Teachers**, Christian E. Weller, 2017.

Human Resources Perspective

Figure 3 **Do you feel the wage compensation you offer your employees is competitive with the labor market? (n=252)**

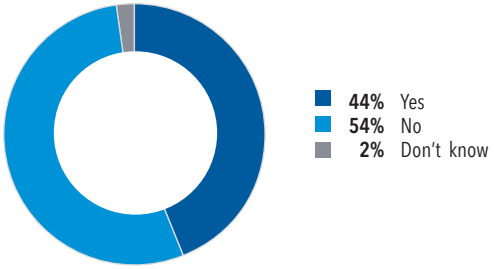
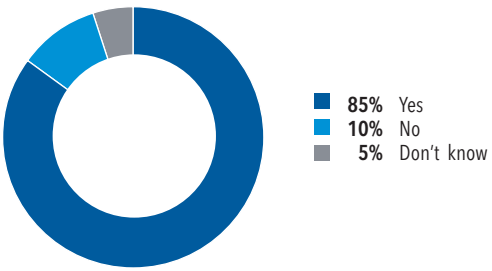


Figure 4 **Do you feel the benefits compensation you offer your employees is competitive with the labor market? (n=252)**



Source: **State and Local Workforce 2022, MissionSquare Research Institute, 2022a.**

Table 7 shows the decomposition results. It shows the parameter estimates and calculates the share of the explained difference in total balances between assets and debt between public and private sector employees attributable to each characteristic. Overall, the models explain between 52% and 108% of the observed difference in savings, depending on the model.[18] The models are thus generally good fits.

Decompositions allow researchers to apportion shares of the overall differences in outcomes (in this case the balance between assets and debt) between two groups (here public and private sector workers) to the average differences of explanatory variables. The most relevant explanatory factor is income, which contributes between 21.6% and 50.9% to the explained difference (Table 7). This captures the average differences in incomes between private and public sector workers. Not surprisingly, higher assets correlate with higher incomes. Higher incomes in the public sector reflect a wide range of factors. Average incomes in the public sector tend to be higher because of greater educational attainment, even beyond college degrees, higher earnings because of longer experience on the job, and more widespread dual-earner couples, among other factors. For instance, among married/partnered couples, 72.9% of public sector worker households were dual earner households, while only 58.6% of private sector worker households were from 2010 to 2019.19 The measures for income stability and employment-based benefits contribute to a similar degree to the differences in savings, although the size of their contribution can vary by asset. For instance, income and employment stability explains 28.4% of the difference

Table 7 **Decomposition Results of Wealth Differences Between Private and Public Employees, 2010 to 2019**

	Total balances with DB Pensions		Total balances without DB pensions		401(k) type balances		Financial assets	
	Estimates	Shares	Estimates	Shares	Estimates	Shares	Estimates	Shares
Total difference (inverse hyperbolic sine)	2.380***		0.977***		1.898***		1.081	
	(0.278)		**(0.192)**		**(0.077)**			
Explained difference	1.250***	52.5%	1.057***	108.2%	1.672***	88.1%	0.981	90.8%
	(0.117)		**(0.117)**		**(0.098)**		**(0.063)**	
Share of explained difference from demographics	0.156**	12.5%	0.145***	13.7%	0.153***	9.1%	0.117	11.9%
	(0.073)		**(0.073)**		**(0.038)**		**(0.028)**	
College education	-0.033**	-2.6%	-0.045**	-4.3%	0.053***	3.2%	0.097	9.9%
	(0.017)		**(0.019)**		**(0.014)**		**(0.018)**	
Large firm	0.103***	8.3%	-0.024	-2.2%	0.088***	5.3%	0.012	1.3%
	(0.033)		**(0.037)**		**(0.027)**		**(0.010)**	
Income stability	0.309***	24.7%	0.300***	28.4%	0.330***	19.8%	0.104	10.6%
	(0.037)		**(0.037)**		**(0.038)**		**(0.014)**	
Income (inverse hyperbolic sine)	0.493***	39.4%	0.538***	50.9%	0.361***	21.6%	0.333	34.0%
	(0.058)		**(0.058)**		**(0.041)**		**(0.039)**	
Employer based benefits	0.222***	17.8%	0.144***	13.7%	0.688***	41.2%	0.318	32.5%
	(0.046)		**(0.048)**		**(0.054)**		**(0.027)**	

Notes: Balances are the difference between assets – what people have – and debt – what they owe. Except, in the case of 401(k) balances, pension loans are not subtracted since those are both assets and debts to the person with the account. Estimates based on Oaxaca decomposition models. Dependent variables are inverse hypolic sine of wealth and asset values in 2019 dollar values. Demographics include age, race, ethnicity and gender. Income stability includes length of time with current employer, as well as indicator of having experienced an unusual increase or decrease in income in the previous year. Employer based benefits include health insurance, term or cash value life insurance and credit union membership. Sources include Board of Governors of the Federal Reserve, (2018, 2019, 2020). Survey of Household Economics and Decisionmaking, (2017, 2018, and 2019). Washington, DC: Fed and Board of Governors of the Federal Reserve, (2011, 2014, 2017, 2020). Survey of Consumer Finance, (2010, 2013, 2016 and 2019). Washington, DC: Fed and Sabelhaus, John, and Alice Henriques Volz (2019). "Are Disappearing Employer Pensions Contributing to Rising Wealth Inequality?," FEDS Notes. Washington: Board of Governors of the Federal Reserve System, February 1, 2019, https://doi.org/10.17016/2380-7172.2308.

in total savings without DB pensions, but only 10.6% in the case of all financial assets (Table 7). And employment-based benefits make up 32.5% of the explained difference in total financial assets, but only 13.7% in the case of total savings without DB pensions (Table 7). Not surprisingly, cost sharing through additional benefits matters most for assets, where employees' individual savings decisions can have the largest influence. The key takeaway is that the bulk of the difference in results between public and private employees correlates with higher educational attainment and related compensation, more widespread benefits, and greater job and income stability in the public sector.

V. Employees and Employers Have Economic and Retirement Security Concerns

Survey research finds that both employers and employees have concerns about the economic security of state and local employees. The 2022 annual workforce survey conducted by MissionSquare Research Institute, IPMA-HR, and NASPE found that only 41% of public sector human resources professionals feel their employees are financially prepared for retirement. Moreover, they identified compensation concerns as the top reason for employee departures (51%; see **State and Local Workforce 2022, MissionsSquare Research Institute, 2022a**).

Even before the COVID-19 pandemic, workers expressed concern about their economic security. Some 54% of state and local government workers were worried about their finances/financial decisions while at work. Additionally, only 29% of state and local government workers are offered a financial wellness program by their employer, but 68% would be likely to participate if offered one (see: **A Focus on Public Sector Financial Wellness Programs: Employee Needs and Preferences**, MissionSquare Research Institute, 2020).

And since the pandemic, financial concerns have grown. In the wake of the pandemic, MissionSquare Research Institute survey results indicate there have been negative financial impacts on workers. In November/December 2021, 44% of workers polled reported that they and their family had been negatively impacted financially by the pandemic, with 6% indicating the financial impact has been negative to a significant extent. Additionally, the pandemic has led state and local workers and other members of their households to take a variety of negative financial actions: most frequently taking on more debt than they would have otherwise (23%), spending money from an emergency fund to make ends meet (21%), and/ or borrowing money from friends or family (12%).

When it comes to retirement security, 81% worry whether they will have enough money to last them through retirement. More than twice as many (43%) were not too confident or not at all confident. Additionally, 26% have reduced their retirement savings since the start of the pandemic, and 43% are concerned about being able to save enough to be financially secure through retirement (see: **Continued Impact of COVID-19 on Public Sector Employee Job and Financial Outlook, Satisfaction, and Retention**, MissionSquare Research Institute, 2022b).

VI. Conclusion

This benchmark report summarizes data from several sources and uses a range of methodologies to present as complete a picture as possible of public employees' financial wellbeing and their available savings and benefits. The data show that public employees on average have a degree of economic security, although many public employees remain financially insecure, face economic struggles in the present, and may not have the resources to fully support their upward economic mobility. For instance, many are unable to pay all of their bills and lack emergency savings.

Importantly, the data presented in this report show that public employment includes several pathways for employees to build more financial security. Public employers provide a wide range of cost-effective benefits that either directly or indirectly build savings for the future. Benefits that directly build economic security include mainly retirement benefits, especially DB pensions, but also DC or other retirement savings accounts. Benefits that indirectly help employees save more money include job and income stability, paid time off, health insurance, and life insurance. Public employers worried about their employees' financial insecurity can build on those proven mechanisms.

As employers, one of governments' ultimate goals is to enhance financial security and opportunity for all public employees so that their organizations can optimize employee recruitment and retention.

First, many public employees still face short-term financial insecurity. Even though almost all public employees have liquid savings, about one-in-three government employment cannot come up with $400 in an emergency (Figure 3). Just as employers can help their employees gain long-term retirement security, they can assist with building short-term emergency savings.

In the same vein, public employers could play a key role in helping their employees' households build economic security for the longer term. Helping employees with accessing existing or proposed student loan forgiveness programs may be an efficient way of doing that. About one-third of public employees have outstanding student loan balances. Federal programs provide for student loan forgiveness for many of those working in public service. Yet, these programs are riddled with red tape. Public employers may be able to provide help in cutting through that red tape. Loan forgiveness would then immediately boost public employees' financial position.

Second, the data highlight the importance that employer-provided benefits play for saving. Those benefits reduce costs during unexpected events and allow people to take a longer-term view of their finances. Expanding benefits like telework could help. Telework allows people to juggle competing demands on their time and could help reduce costs for commuting as well as for childcare, among others.

The main takeaway is that public employment is a pathway toward economic security. Public employers worried about competing over crucial talent can do more to help their employees build financial security and to communicate the value of those benefits as part of their recruitment and retention efforts.

Financial Security During the Pandemic

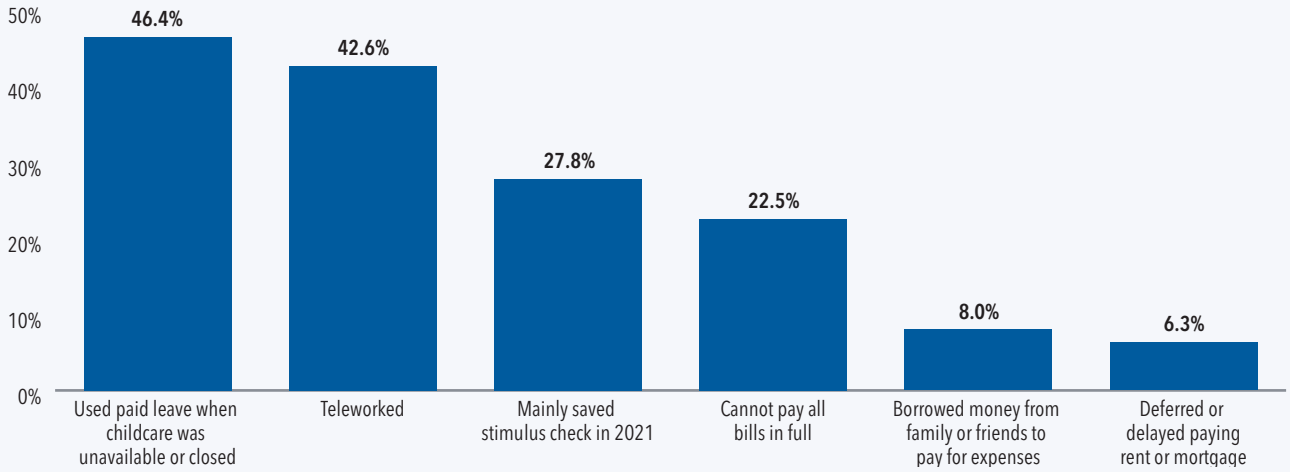
The coronavirus pandemic that started in March 2020 presented massive challenges to all households. Most immediately, people had to deal with novel health challenges caused by an as-of-then unknown virus. At the same time, health care facilities – hospitals, doctors' offices, and nursing homes, among others – had to protect their own staff while handling an onslaught of new virus cases, leading to delayed and triaged health care. Moreover, millions of people quickly lost their jobs, saw their hours being cut back, and were furloughed as entire industries had to shut down overnight. Others had to shift to remote work. Further, schools and childcare facilities either started remote instruction or closed completely. Households had to juggle work and care for others – children, grandchildren, parents, and grandparents – amid their own health and financial challenges. Many public workers were also essential workers in public safety, health care, transportation, education, and other critical services. They needed to come to work, even as schools, offices, and many businesses closed. Finally, households could not necessarily address all of these challenges with the additional money that Congress provided in expedited assistance. Caregiving challenges, for example, remained as schools and childcare centers were closed and health risks were high in long-term care facilities. In other words, the pandemic posed a real-world test of people's own preparedness for a wide range of financial risks.

Figure 5 summarizes a number of indicators of financial security during the pandemic for public sector employees. These measures include an indicator of whether households cannot pay all of their bills in full, whether they had to defer or delay their rent or mortgage payments, and whether they borrowed money from friends or family to pay for their expenses. It also has a measure of whether a household mainly saved their stimulus checks in late 2020 or early 2021. Households that mainly saved their money presumably have enough income and wealth to cover various emergencies. Moreover, the figure includes an indicator of whether people teleworked in the past seven days and whether they took paid time off to deal with childcare disruptions. These two measures both capture the flexibility of wage and salary employees to address rapidly changing demands on their time.

The data in Figure 5 suggest that some public employees did not have the resources to handle the various challenges of the pandemic. For example, 22.5% of public employees said that they could not pay all of their bills in 2020 and 2021 (Figure 5). Public employees also appear to have had important benefits as 46.4% of parents in the public sector, whose childcare fell through, could use paid time off (Figure 5). Also, many public sector employees were unable to telework. That is, many public sector workers lacked flexibility at work but had access to income and several benefits to handle the onslaught of various risks during the pandemic.

Two additional points on financial security during the pandemic are worth highlighting. First, financial insecurity was more widespread among single women, people of color, and those without a college education than among married people, White workers, and those with a college degree (see Table A4 in the appendix). Second, many public sector workers still struggled financially during the pandemic. For instance, 8% of public sector employees borrowed from family and friends to pay their current expenses, a general reflection of people's financial hardship when incomes and savings are low.[20] Many fell through the cracks and struggled financially. Lack of paid leave appears to have created specific economic burdens for Black public employees and those who were unmarried.

Figure 5 **Select Measures of Short-term and Long-term Public Sector Financial Security, 2017 to 2019**



Gender Equality in Public Employee Benefits

Public employment has often served as a potential pathway to greater gender equality. Especially women with less education and women of color find greater job stability, higher wages, and better career paths than they would in private sector employment. Public employment is associated with smaller gender wage gaps.

This report presents all data on financial security and assets broken down by gender, where possible. The overall conclusion is that single women tend to be in a reasonable financial position when they work in the public sector, although they still fare worse than single men, for instance. This is true with respect to short-term financial security and subjective assessments of retirement preparedness. Yet gender inequality in financial security, especially with respect to short-term financial security as well as retirement assets, still persist in the public sector.

Table A2, for example, presents a number of short-term financial security indicators for single women and single men in public employment and in public education.[21] In general, most single women find themselves in decent financial shape. For example, 71.8% of single women in the public sector said that they were doing okay or comfortably from 2017 to 2019 (Table A2). Moreover, 51.3% of single women in public employment said that their retirement plans were on track, highlighting that most single women in the public sector enjoyed both short-term and longer-term financial security (Table A3).

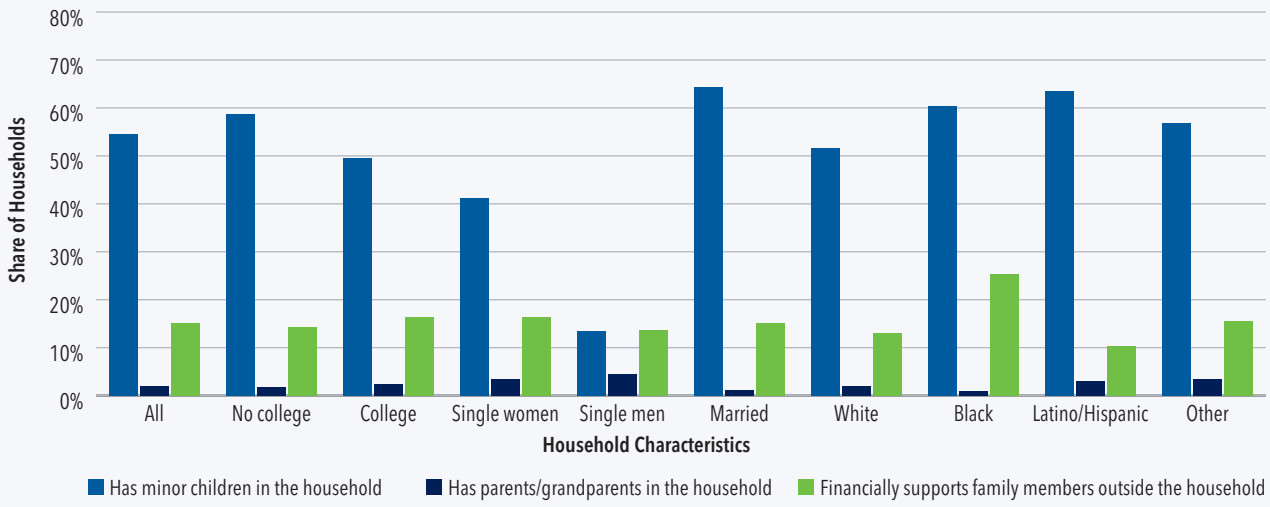
This research also finds that gender inequality persists in the public sector, at least with respect to short-term financial security. For example, 30.1% of single women skipped health care from 2017 to 2019 because they could not afford it, while this was the case for 14.4% of single men in public service (Table A2). Overall, the picture is more mixed with respect to longer-term financial security and opportunity. For example, 53.1% of single women indicated from 2017 to 2019 that they did better than their parents, while 45.4% of single men did (Table A3). On the other hand, 51.3% of single women indicated that they were on track for retirement, while 59.8% of single men said that about their retirement (Table A3).[22] These data suggest that women may be able to close persistent gaps with respect to short-term and longer-term financial security with access to a range of benefits.

The gender difference in short-term financial security may reflect greater short-term caregiving risk exposure for single women than for men (Figure 6). For example, 41.2% of single women in public employment had a minor child in the household from 2010 to 2019, while only 13.5% of single men did (Figure 4). And 16.4% of single women provided financial support for a family member outside the household at the same time, while 13.6% of single men did (Figure 6). Importantly, most single women, whose childcare was unavailable or closed during the pandemic – 63.2% – did not use paid leave to handle their childcare needs (Table A4). More than one-third of single women used paid leave when childcare was unavailable (Table A4). Caregiving risks can quickly materialize, as they did during the pandemic, and then disrupt single women's earnings and savings, resulting in greater financial insecurity.

The observed gender difference in subjective assessments of retirement confidence is also not surprising. Single women in public employment are less likely to have a DB pension and they have smaller 401(k) account balances than is the case for single men, for instance (Table 3). Moreover, women overall have a lot less retirement savings than men in public employment (Table A7). Men in the public sector had median retirement wealth of $239,463 from 2010 to 2019, compared to $137,199 for women – a difference of 74.5% (Table A7).[23]

With the economic conditions and market volatility since the onset of the pandemic, women employed in public service are also more likely than men to report worries about their available emergency funding or retirement savings (see: **Inflation, Market Volatility, and Retirement: How Employer Benefits Can Help Public Sector Worker Anxiety Over Current Economy**, MissionSquare Research Institute, 2022c).

Figure 6 **Measures of Family Support Among Public Employees, 2010 to 2019**



Student Loans

Household debt is the flipside to household assets when it comes to assessing household economic security. Many borrow money, most notably in the form of mortgages and business loans, to buy assets. Student loan debt is widespread and only has an indirect and unclear link to savings. College graduates can earn more than those without a degree, but many who borrow money to go to college never complete a degree. Even those who graduate often start their careers with a heavy debt burden that impedes other savings.

This is especially true for women as well as African Americans and Latinx. Figure 7, for example, shows that single women in public service were more likely to have had outstanding student loan debt than single men – 29.6% compared to 26% – and that all groups of people of color were more likely than White households to have student loans (Figure 7). In fact, almost half of African Americans in public employment – 46.2% – had outstanding student loan debt, while less than a third – 28.6% – of White households did (Figure 7). Moreover, women and people of color are also more burdened by student loan debt after graduation. AAUW estimates that women who graduated from college owed an average of almost $22,000, compared with $18,880 owed by men (AAUW, 2022). Black women graduate with an average of $37,558 in student debt (AAUW, 2022). Not surprisingly, then, women hold nearly two-thirds of the outstanding student debt in the United States – close to $929 billion (AAUW, 2022).

Borrowers who go to work for state and local government have an opportunity to reduce debt burdens thanks to the Public Service Loan Forgiveness (PSLF) and Teacher Loan Forgiveness (TLF) programs (GAO, 2019; Safier, 2022). Nationally, some 9.3 million employees are potentially eligible to have their federal student loans forgiven (Safier, 2022). This group represents 22.9% of all federal student borrowers (Safier, 2022).

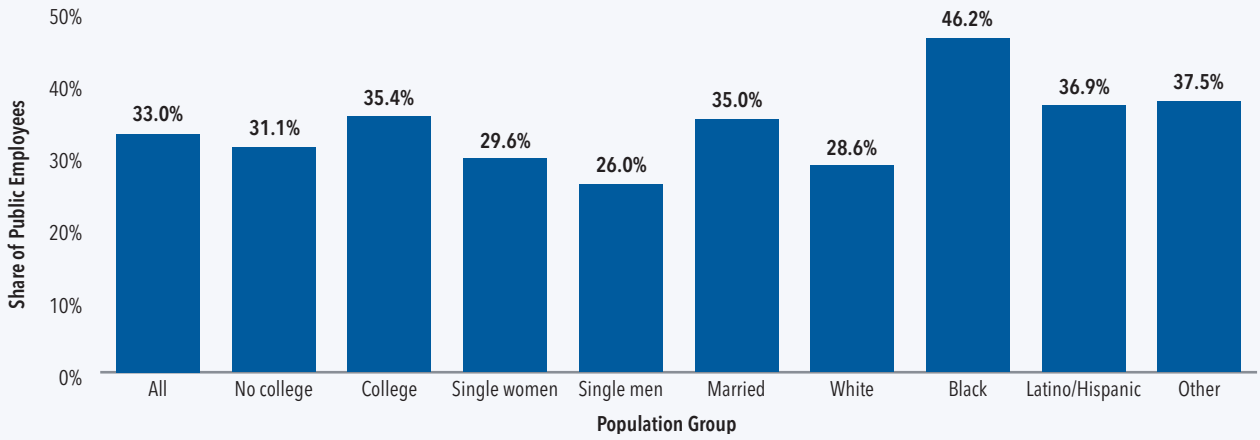
Many more borrowers employed by state and local government may qualify for TLF, a program specifically targeted to teachers in schools with high enrollment of students from low-income families (GAO, 2019). But uptake in these programs is anemic and even those who apply report becoming tripped up by the documentation requirements and tangled in red tape (GAO, 2019). According to one estimate, just 6.7% of eligible borrowers applied for loan forgiveness – a shocking statistic considering the potential boost such loan forgiveness can provide (Hanson, 2022). According to a U.S. Government Accountability Office (GAO) study, the median borrower who successfully achieved loan forgiveness had $32,000 in debt forgiven (GAO, 2019).

It may be that many borrowers do not realize they are eligible for loan forgiveness. Or they may be daunted by the notoriously complicated application process (Will, 2021). Indeed, a GAO report found that until recently the program was riddled with administrative failures and almost all of those who applied for loan forgiveness (99%) were denied (GAO, 2019).

State and local government employers are in a unique position to assist their employees in documenting their eligibility for PSLF, TLF, and other loan forgiveness programs, and in navigating the process of successfully applying for this relief. Indeed, more and more private sector employers are adopting innovative new benefits to help employees pay back student loans (Dhue and Epperson, 2022). Nearly one-half (48%) of large employers surveyed said they offered or were planning to offer a program to assist employees with student debt. As of spring 2022, 7% of state and local governments indicated that they were providing student loan repayment assistance (see **State and Local Workforce 2022, MissionsSquare Research Institute, 2022a**).

Other financial wellness benefits, like financial counseling, planning and coaching can also be effective ways to support older employees struggling with how to pay for college for their children or grandchildren, without jeopardizing their own finances (Copeland, 2021). And whether financial wellness programs are geared toward early or later life stages – student loans to home purchases, budgeting to estate planning and elder care – 68% of state and local government employees indicate they would be interested in enrolling in such a program if offered (see: **A Focus on Public Sector Financial Wellness Programs: Employee Needs and Preferences**, MissionSquare Research Institute, 2020).

Figure 7 **Share of Public Employees With Student Loan Debt, 2010 to 2019**



Appendix

A1. Data, variables, and samples

This report uses the Federal Reserve's Survey of Consumer Finances (SCF) and Survey of Household Economics and Decisionmaking (SHED) for its analyses. It also draws on the U.S. Census Bureau's Household Pulse Survey (HPS) for relevant financial security information during the pandemic.

The Survey of Household Economics and Decisionmaking (SHED)

The SHED is meant to capture short-term and long-term financial security. These measures include the shares of households that cannot pay all bills, that find it difficult to or are just getting by, that skipped health care and that have medical debt following unexpectedly large medical bills. Measures of longer-term financial investments include being somewhat or much worse off than 12 months ago, being somewhat or much worse off than parents were, and not completing college to earn money or to support a family.

The SHED also includes information on families' assets. It includes information on total financial assets, broken down into six categories ranging from "less than $50,000" to "$1,000,000 or more." This report shows the share of families that indicated they had fewer than $50,000 in assets. The SHED also includes information on homeownership, being covered by a DB pension, and owning a 401(k) retirement account. It also allows survey respondents to put their 401(k) balances into a range of categories similar to total financial assets. Finally, the SHED contains the information to calculate whether a household can cover $400 in an emergency with cash or cash equivalent.

The SHED contains a wide range of demographic variables for each household. These include indicators for race or ethnicity, age, educational attainment, marital status, gender, industry, and occupation. This enables use of the data to identify people working in public education, for instance, in addition to all public employees.

Survey of Consumer Finances (SCF)

The SCF shows access and contributions to retirement plans, especially 401(k) type plans and IRAs, as well as wealth accumulated in such retirement plans. The SCF is a triennial nationally representative cross-sectional dataset with the most recent data collected in 2019. It contains comprehensive information on households' assets, debt, and income as well as on their financial behaviors. The data set includes information on retirement plan participation, specifically in 401(k) plans and IRAs, and the level of employee and employer contributions to 401(k) plans. The SCF also allows for calculations of DC plan balances and the implicit value of DB pensions (Sabelhaus and Henriques Volz, 2019). Moreover, the SCF contains information on a respondent's industry, employer size, education, wages, and time with the current employer for both the survey respondent and their spouse.

This report combines data for four survey years from 2010 to 2019. This ensures sufficiently large sample sizes. The sample used is restricted to people working in wage or salary employment. These sample restrictions ensure that analyses are not unduly skewed by people who are not yet working or who already withdraw money for retirement.

There is one caveat to note: as is the case with other observational data, the industry breakdown refers to public administration and armed forces. This industry thus includes federal employees as well as state and local government employees. This report addresses this shortcoming to some degree by reporting data for small and large employers. The industry data, though, still exclude large parts of the public sector workforce, such as teachers. Some selective data by education is included here to partially address this issue.

In the summary, data is primarily shown for households, not individuals. Financial security in general tends to be a household measure. Household members may trade off assets within the household to maximize tax advantages, for instance. Reporting retirement savings at the household level then avoids modeling potential tradeoffs in retirement savings between spouses.

The study undertakes two robustness tests to ensure that the main conclusions hold. First, the sample is separated for married or partnered public employees between those couples where only one partner works in public employment and those where both work in public employment. This comparison between these groups will show whether public employment is a key correlate for household retirement savings. Second, individual retirement balances are presented in addition to household retirement savings. If savings differences between subpopulations mirror those observed at the household level, it would again suggest that savings differences reflect benefits and savings from public employers.

The data summary shows retirement assets, retirement plan participation and retirement savings behavior – DC plan contributions, IRA withdrawals, and 401(k) loans. It shows data on retirement asset inequality. And it also shows select breakdowns by education – college compared to no college degree – and by employer size – more or less than 500 employees.

Household Pulse Survey

The report uses the U.S. Census Bureau's experimental Household Pulse Survey (HPS) data from August 2020 to December 2021 to analyze the financial security of wage and salary employees during the pandemic. The Census Bureau collected key information during the pandemic on a biweekly basis in that time. The HPS measures a range of key variables related to financial security (e.g., ability to pay all bills), teleworking, childcare availability, and the receipt of informal financial support (e.g., borrowing from family and friends). The HPS also provides data on the receipt and use of stimulus or Economic Impact Payment (EIP) checks. In addition, the HPS includes information on people's race, ethnicity, age, education, gender, and industry. The HPS captures all government employees in federal, state, and local governments. Unlike the SHED sets, the HPS allows for the calculation of individual rather than household characteristics associated with financial security. This allows for a more direct comparison of the financial security experienced by private and public employees.

Comparison of Public Employees in Varying Data Sets

The definitions of public employees vary between the data sets. A number of separate subpopulations of public employees are used to ensure the robustness of the conclusions. Table A1 summarizes key characteristics of public employees for the SHED, the SCF, and the HPS in addition to the relevant data for state and local government and private sector employees from the Bureau of Labor Statistics' Current Population Survey (CPS). The data for public employees in all three data sets are similar in many key aspects to data for state and local government employees, such as age, college education, and homeownership (Table A1).

Differences exist, though, between single women and single men in the data sets. At the same time, the share of single women in public employment is always much larger than the share of single men, while the respective shares in private employment are very similar in the private sector (Table A1).

Table A1 **Demographics of Public Employees in Several Surveys**

Survey	Survey of Household Economics and Decisionmaking		Household Pulse Survey	Survey of Consumer Finances			Current Population Survey	
Years	2017 to 2019		Aug. 2020 to Oct. 2021	2010 to 2019			2019	
Universe	Government employees, all	Government employees, education and tutoring	Government employees	Public administration and armed forces, all	Public administration and armed forces, small employers	Public administration and armed forces, large employers	State and local government employees	Private sector
College degree	49.8%	73.8%	48.7%	44.6%	45.4%	42.6%	56.4%	34.3%
Average age	43.7	44.2	44.2	45.4	45.7	44.5	44.5	40.8
Married	66.8%	71.2%	60.4%	74.0%	73.3%	75.6%	60.0%	49.7%
Single women	20.0%	18.4%	23.4%	14.4%	13.9%	15.6%	25.2%	24.9%
Single men	13.3%	10.4%	15.7%	11.7%	12.8%	8.8%	14.8%	25.4%
White	60.9%	72.4%	58.9%	65.7%	67.5%	61.2%	78.0%	76.9%
Black	15.9%	9.6%	15.9%	16.1%	15.5%	17.4%	14.3%	12.8%
Latino/Hispanic	14.8%	12.5%	15.7%	7.5%	5.6%	12.2%	10.2%	15.4%
Homeowners	69.3%	71.6%	74.2%	74.4%	74.2%	75.1%	75.3%	63.6%

Notes: All samples are limited to wage and salary employees. Definitions of public sector employees vary across surveys. The SHED and HPS refer to government employees, which encompasses federal, state and local government employees. The SCF only includes civilian workers in the armed forces and those in public administration, which can include workers at all levels of government. Only the CPS refers specifically to state and local government employees. The SHED and SCF samples include multiple years to ensure sufficiently large sample sizes. SHED data for 2020 are not included here to avoid combining observations during a relatively calm economic period with those collected during the turmoil of the pandemic. The HPS only exists from May 2020 forward. Sources include Board of Governors of the Federal Reserve System. (2018, 2019, 2020). Survey of Household Economics and Decisionmaking (2017, 2018, 2019). Washington, DC: Fed; Board of Governors of the Federal Reserve System. (2011, 2014, 2017, 2020). Survey of Consumer Finances (2010, 2013, 2016, 2019). Washington, DC: Fed; U.S. Census Bureau. (2021). Household Pulse Survey. Washington, DC: Census; and Sarah Flood, Miriam King, Renae Rodgers, Steven Ruggles, J. Robert Warren and Michael Westberry. Integrated Public Use Microdata Series, Current Population Survey: Version 9.0 [dataset]. Minneapolis, MN: IPUMS, 2021. https://doi.org/10.18128/D030.V9.0

Moreover, the data used in this report by and large confirm the findings in the literature related to employment differences by personal characteristics and sector. A larger proportion of employees in the public sector have college degrees, as compared with the private sector (Bender & Heywood, 2010; Yakoboski & Franzel, 2014; Mayer, 2014; Greenfield, 2007). More than half of the public sector employees have a bachelor's degree or higher (Cooper & Wolfe, 2020; Cooper et al., 2012). And public sector employment has traditionally offered a path to middle-class financial security for people of color, especially for African-Americans.[24] Further, public sector employment tends to be a factor in achieving greater gender equality, although it has also been associated with occupational segregation by gender (Gornick and Jacobs, 1998; ILO, n.d.).

The bottom line is that, while the analyses of separate data sets represent separate populations of public employees, they likely present a reasonably accurate picture of the financial situation of state and local government employees overall as well as of particular subpopulations.

A2. Confirming that Public Employment Correlates with More Savings

Second, additional data can help address concerns of a possible selection bias when discussing public employees' savings. It is theoretically possible that public employees are married to private sector employees who have significant financial assets of their own. This would mean that people choose public employment and potentially lower pay and similar benefits because they know that their private-sector spouse or partner will have comparatively high income or savings from their jobs. That is, substantial household savings and financial security among public employee households do not readily reflect savings accumulated by a public employee.

The data allow for a breakdown of retirement assets – the primary category associated with employment – into two groups of public employee households: those with one public employee and those with two public employees. If these two groups are similar to each other, it would suggest that savings correlate with public employment. The data, summarized in Table A2 show that households with only one public employee systematically looked like households with two public employees (see Table A2). Public employment seems to be a key pathway to retirement savings.[25]

Further analyses underscore the point that public employment is the key correlate of greater retirement savings. Table A3 shows a data summary of individual retirement savings – rather than household savings – broken down by education, gender, and employer size (Table A3).[26] In considering these data, it is important to keep in mind that there is no evidence from the prior tables (Tables 3 and 4) that suggests that public employee households trade off less non-employment-based retirement wealth for more employment-based retirement wealth. That is, access to retirement savings at work also translates into more overall

Table A2 **Household Retirement Assets By Number of Spouses in Public Employment, 2010 to 2019**

2010 to 2019		
Asset ownership	**One spouse in public sector**	**Both spouses in public sector**
Has retirement assets	94.8%	96.0%
Median retirement assets	$198,342	$284,290
Has DB pension	61.7%	67.0%
Median DB pensions	$256,965	$576,408
Has 401(k)/403(b)	65.2%	66.9%
Median 401(k)/403(b) value	$49,486	$86,149
Has IRA retirement accounts	36.6%	35.4%
Median IRA balance	$35,347	$21,271

Notes: Sources are Board of Governors, Federal Reserve, Various Years, Survey of Consumer Finances 1989 to 2019, Washington, DC Fed and Sabelhaus, John, and Alice Henriques Volz (2019). "Are Disappearing Employer Pensions Contributing to Rising Wealth Inequality?," FEDS Notes. Washington: Board of Governors of the Federal Reserve System, February 1, 2019, https://doi.org/10.17016/2380-7172.2308. Retirement assets are the sum of DB pensions from past and current jobs, 401(k) type assets and IRA account holdings. All dollar values expressed in 2019 dollars. Sample includes only households with at least one spouse working as wage or salary employee. Rows indicating the employee has a DB pension and median DB pension value refer only to the employees' current job.

Table A3 **Household Retirement Assets By Number of Spouses in Public Employment, 2010 to 2019**

	All	Small Employer	Large Employer	Without College Degree	With College Degree	Men	Women
Has retirement wealth	89.5%	88.1%	93.4%	85.2%	93.9%	89.0%	90.7%
Median retirement wealth	$190,716	$186,412	$201,015	$135,857	$239,100	$219,826	$131,374
Has DB pension	47.4%	45.9%	51.5%	47.9%	46.8%	51.2%	38.0%
Median DB pensions	$383,442	$401,232	$375,162	$351,231	$524,872	$426,246	$279,958
Has 401(k)/403(b)	55.0%	52.1%	63.1%	50.9%	59.3%	53.2%	59.6%
Median 401(k)/403(b) value	$43,965	$41,479	$48,924	$34,034	$53,021	$49,486	$35,347
Has IRA retirement accounts	28.4%	27.8%	30.2%	16.6%	40.6%	26.8%	32.3%
Median IRA balance	$30,634	$31,907	$17,586	$18,685	$33,344	$32,974	$23,399

Notes: Sources are Board of Governors, Federal Reserve, Various Years, Survey of Consumer Finances 1989 to 2019, Washington, DC Fed and Sabelhaus, John, and Alice Henriques Volz (2019). "Are Disappearing Employer Pensions Contributing to Rising Wealth Inequality?," FEDS Notes. Washington: Board of Governors of the Federal Reserve System, February 1, 2019, https://doi.org/10.17016/2380-7172.2308. Retirement wealth is the sum of DB pensions, 401(k) type assets and IRA account holdings. All dollar values expressed in 2019 dollars. Sample includes only households with at least one spouse working as wage or salary employee. Small employers are those with fewer than 500 employees. Retirement wealth includes all DB pensions – from past and current job – while DB pensions refer to only pensions from people's current job.

savings. Public employee groups with more employment-based retirement savings also were more likely to have non-employment-based savings such as IRAs (Table A3). The evidence indicates that public employment goes along with retirement savings, mainly through employer-sponsored retirement benefits, and thus also likely substantial savings overall for most employees.

A3. Wealth Differences Attributable to Public Employment

The results indicate that most public employees have access to a wide range of savings and benefits through their employers and that those savings are not offset by lower private savings. But can the numbers confirm that and show how public sector employment results in more savings and thus more financial security? Multivariate regression models for a number of household savings indicators can show the key correlations of a wide variety of variables with household savings. Public employment is one such variable. If the estimate is positive and statistically significant, that would indicate that public employees indeed have more savings, such as via a higher likelihood of being homeowners, having a DB pension, having an employment-based retirement benefit, having a 401(k) plan, and having an IRA as well as the total amount of wealth, total financial assets, and 401(k) balances. And, if those differences are especially pronounced for employment-based retirement benefits, they would further confirm that public employment specifically helps workers to save for their future.[27]

This statistical technique isolates the correlation between public employment and wealth by simultaneously accounting for several relevant factors such as age, marital status, gender, and education in the baseline model. It also includes expanded models, depending on the available data to account for other relevant factors such as actual and expected Inheritances, employer provided benefits – health insurance, life insurance, and credit union membership – and length of time with the current employer.

The regression models are based on two separate data sets, the Federal Reserve's SCF and SHED. Table A5 specifically presents odds ratios derived from logit regressions for binary variables. Odds ratios indicate how much more or less likely a particular population group – in this case public employees – is to have a particular asset. An odds ratio of greater than 100% indicates that public employees are more likely to have an asset, while an odds ratio of less than 100% indicates that public employees are less likely to have an asset compared to private sector employees. For total retirement savings, the correlate estimates are based on linear regressions, using data from the SCF. But, in this case, savings are transformed using a mathematical conversion known as inverse hyperbolic sine. This transformation eliminates the skewness of the data – it is heavily concentrated among the upper income brackets – and is defined at zero. The parameter estimate for public employees then roughly indicates how much more savings – in percent – public employees have relative to private sector employees. Finally, the estimates for the determinants of total assets and 401(k) assets, using the

Table A4 **Parameter Estimates for Public Employment Determining Asset Ownership**

	SCF		SHED	
	Baseline	Expanded	Baseline, All	Baseline, Public Education
Homeownership	1.3391**	1.0040	1.2727***	1.2837*
	(0.1594)	**(0.0858)**	**(0.0795)**	**(0.1816)**
Defined benefit pension	4.6815***	4.5020***	6.7978***	3.3436***
	(0.5108)	**(0.3659)**	**(0.3792)**	**(0.3924)**
Employer-based retirement plan	5.0426***	3.6515***	1.7672***	1.3816**
	(0.8604)	**(0.4587)**	**(0.1048)**	**(0.1767)**
401(k) type plan	1.7165***	1.2109**	0.7597***	0.7841**
	(0.2004)	**(0.0993)**	**(0.0434)**	**(0.0954)**
Individual Retirement Accounts	1.2146*	1.0507	0.9199	0.9214
	(0.1400)	**(0.0865)**	**(0.0482)**	**(0.1058)**
Wealth with DB pensions		1.1554***		
		(0.2034)		
Wealth without DB pension		-0.0521		
		(0.2617)		
401(k) balances		0.3685**	0.8494***	0.8683
		(0.1794)	**(0.0497)**	**(0.1120)**
Financial assets		0.0708	0.8482***	0.7802**
		(0.0594)	**(0.0437)**	**(0.0884)**

Notes: Parameter estimates for asset ownership are odds ratios based on logit regressions. Parameter estimates for wealth and asset amounts, based on SCF, are based on the correlates with the inverse hyperbolic sine of wealth or assets and thus constitute quasi-elasticities. Parameter estimates for total assets and 401(k) balances are based on linear regressions of correlates with asset categories. Number in parantheses are standard errors. *** indicates significance at the one percent level, ** indicates significance at the five percent level and * indicates significance at the 10 percent level. Samples include only wage and salary employee households. SHED data are for 2017, 2018 and 2019. SCF data are for 2016 and 2019. Sources include Board of Governors of the Federal Reserve. (2018, 2019, 2020). Survey of Household Economics and Decisionmaking 2017, 2018, and 2019. Washington, DC: Fed and Board of Governors of the Federal Reserve. (2011, 2014, 2017, 2020). Survey of Consumer Finance, 2010, 2013, 2016 and 2019. Washington, DC: Fed and Sabelhaus, John, and Alice Henriques Volz (2019). "Are Disappearing Employer Pensions Contributing to Rising Wealth Inequality?," FEDS Notes. Washington: Board of Governors of the Federal Reserve System, February 1, 2019, https://doi.org/10.17016/2380-7172.2308.

SHED, are based on ordered logit models since those data are reported as asset categories. The parameter estimate is again an odds ratio, but in this case, it indicates how much more likely public employees are to be in a higher asset category than their private sector counterparts.

Table A4 shows the parameter estimates for public employees for a range of models. The basic models based on the SCF and SHED are designed to compare the parameter estimates between the two data sets. The expanded model based on the SCF accounts for a number of additional relevant variables that do not exist in the SHED. Public employees are systematically more likely to be homeowners, for example, although the results are not entirely robust. The estimates between the two data sets range from no statistically significant differences in homeownership in the expanded model based on the SCF to about 30% in the other models (Table A4). Moreover, the results indicate that public employees are vastly more likely to have DB pensions, as they are between 230% and 570% (or 2-6 times) more likely to have a DB pension than is the case for their private sector counterparts (Table A4). In a similar vein, the results for IRAs are generally statistically insignificant (Table A8). A reasonable interpretation of these non-robust results is that public employees are as likely to have 401(k) type accounts and IRAs as private sector employees, but that the specific differences can vary between employer size and occupations such as education and public administration. Moreover, the results based on the expanded SCF models show that public employees have larger 401(k) account balances – by about 36.9% (Table A4). The bottom line is that public employees have more savings than private sector employees, and that those results largely stem from having more DB pensions and

from having more money in 401(k) accounts. Put a different way, the key to public employees' financial security through savings comes from employment-based retirement accounts, not primarily from non-employment-based savings.

A4. Simulation Details

The discussion shows retirement plan contributions, fees, and retirement plan balances for hypothetical state and local government employees. The basic models assume that people enter the labor force at age 25 in 2024 and leave the labor force at age 65. The simulations start with an age earnings profile for hypothetical workers. Those earnings are then multiplied with contribution rates to arrive at total contributions over a career. The contributions to 401(k) type plans and to IRAs grow at a predetermined rate of return until age 65. Typical fees are applied to those account balances to calculate the total amount of fees paid. For DB pensions, a standard retirement benefit formula is applied to calculate expected retirement benefits paid out over an average life expectancy. And fees in DB pensions are converted into annual contribution rates relative to earnings to arrive at total fees paid.

The underlying assumptions and calculations to arrive at age-earnings profiles, contributions, account balances, DB pension benefits, and fees are detailed in this appendix.

Age-Earnings Profiles

Age-earnings profiles for state and local government employees are calculated based on the Bureau of Labor Statistics' Current Population Survey (CPS) (Flood et al., 2021). A model of the natural log of hourly earnings for state and local government employees in 2021 is specifically estimated with age and age-squared as the correlates.[28] The parameter estimates are then used to arrive at predicted logged earnings. To calculate nominal hourly earnings, the exponential value of these logged earnings is taken. This age-earnings profile is calculated to match the observed wages by age in the CPS for state and local government employees in 2021.

Next, a predicted age-earnings profile over the entire 40-year time span from age 25 in 2024 to age 64 – the year before retirement – in 2064 is created. To do so, wages are allowed to grow at the predicted rate associated with age and age-squared plus an additional 1% increase for productivity and an additional 2.4% for the assumed inflation rate, following the Social Security trustees (SSA, 2021). That is, wages grow with age plus an additional 3.4% to account for economy-wide productivity and inflation.

Six separate age-earnings profiles are calculated. In particular, age-earnings profiles are calculated for people with and those without a college degree for all state and local government employees, for state government employees, and for local government employees.

Retirement Plan Contributions

Employees' earnings are multiplied using fixed contribution rates. The data show little variation in DC plan contributions by age, and DB pension contributions are typically fixed across a group of employees.

401(k) contributions are based on rates on the SCF. The data show an average total contribution rate of 10.9% for people without a college degree and 12.2% for people with a college degree from 2010 to 2019. The contribution rates vary slightly by firm size. Employees with a college degree working for small employers had an average contribution rate of 12.1% and those working for large employers had an average contribution rate of 12.4%. For employees without a college degree, the average contribution rates were 10.6% and 11.5%, respectively. Higher contribution rates in local governments can reflect higher benefits – for example, for public safety employees – but also more underfunding of DB pension plans and thus greater catchup contributions.

Average annual IRA contributions, for those who contribute, did not vary much by employer size and amounted to approximately $4,000 (in 2022 dollars). This is roughly equivalent to an annual contribution rate of 8% for those with a college degree and 10% for those without a college degree, both in state and local government employment.

Annual contributions to DB pensions are based on the **Public Plans Database** (2022). The data show an average combined contribution rate for state and local government plans of 13.8% in 2019 and 2020 (PPD, 2022). The average for state plans was 12.6% and that for local plans was 17.7% (PPD, 2022).

It is assumed that public employees contribute to all three types of retirement benefits – DB pensions, 401(k) type plans, and IRAs -- while they work for state and local governments, but not if they work elsewhere.[29] It is assumed that those with a college degree start working at age 30 and then leave public employment at age 62. For employees without a college degree, it is assumed that they start to work in the public sector at age 25, interrupt their service at age 35 for five years, and leave public employment also at age 62. The data on tenure from the SCF show that those without a college degree start their public employment careers earlier, but tenure length equalizes around age 40. In the simulation, both groups then have worked for state

and local governments for ten years. In the simulations, public employees contribute the average contribution rates for their respective groups – state or local government, with or without college degree – during their employment in state or local government.

DB pensions also offer several implicit insurance protections, for which participants do not explicitly pay extra contributions. Most notably, they offer longevity risk insurance as benefits are paid out as long as the beneficiaries are alive and they provide intergenerational market risk insurance as gains and losses are shared between generations of participants, at least to some degree. Put differently, DB pension contributions pay for additional benefits that are not available in DC accounts (Doonan and Fornia, 2021). To allow for a comparison between DC accounts and DB pensions, DB pension contributions are deflated, so that only 69.7% of employee contributions are counted toward comparable retirement benefits.[30] This deflation accounts for the implicit insurance value that DB pensions provide and that are not available in DC accounts.

Retirement Assets

Retirement assets are calculated as follows. For DC accounts – 401(k) accounts and IRAs – it is assumed that account balances grow by a nominal rate of return equal to 6% each year minus fees, discussed in more detail below. For DB pensions, annual expected retirement benefits for each year over their remaining life expectancy at age 65 are calculated.[31] It is assumed that employees receive a benefit equal to 1.5% of the average of their three years with the highest earnings for each year of service for state government employees and 1.75% for local government employees. These differences in multipliers reflect higher benefits for public safety employees in local governments and potentially more widespread use of early retirement incentives, for example, in public education. It is further assumed that post-retirement benefits grow at half of the rate of inflation or 1.2% per year. This accounts for the fact that cost-of-living adjustments (COLA) to benefits that are tied to inflation are the most common form of COLAs, but that many public employees receive such adjustments based on other factors (NASRA, 2021). All of these COLAs can be limited. Moreover, it is assumed that the average life expectancy at age 65 in 2064 is 22 years, based on SSA (2021). The net present value of expected retirement income streams back to age 65 years is then calculated.

Fees for Retirement Assets

Administrative and investment fees – often expressed as expense ratios, the share of fees out of total assets – can either reduce the rate of return that savers receive or lower the impact of their contributions as less money goes to build retirement assets (Doonan and Fornia, 2021). Fees equal to 0.4% of assets for 401(k) type plans are assumed. These are typical of state-sponsored 403(b) plans (CalStrs, 2022; Pew, 2017) and of 401(k) plans (ICI, 2021), reflecting the large buying power of public employee plans. It is further assumed that those with a college degree (a proxy for higher earnings and therefore higher accumulated account balances) have IRA fees equal to 0.6% of assets and those without a college degree (who have lower average earnings and lower average accumulated account balances) have average fees equal to 0.8%. These differences in fees mirror the observed differences between small and large 401(k) plans, equal to about 0.2 percentage points (NAPA, 2022).

Finally, an average expense ratio of 0.4% for DB pension plans is assumed (Aubry et al., 2018; Pew, 2017). Because there are no individual account balances and because benefits are not directly related to the rate of return in DB pensions, this expense ratio is converted to a share of earnings, so that employees contribute more to their DB plans rather than seeing lower rates of return as is the case with DC accounts. To do this, the net present value of the accumulating fees over the coming 20 years is taken. This calculation converts future reductions in the rate of return to a share of earnings and thus DB pension contributions. It is specifically assumed that DB fees are equal to 5% of annual contributions to DB pension plans.

Inflation and Calculating Real Values

All dollar values are expressed in 2022 dollars. A constant annual inflation rate of 2.4% from 2022 to 2086 is assumed – the last year, during which expected DB retirement benefits will be paid to DB pension beneficiaries with the average life expectancy. All contributions and fees during employees' careers are adjusted to 2022 dollars. DC account balances and the net present value of DB pensions at age 65 to 2022 dollars are converted by deflating by the commensurate inflation index.

Population Averages

Population averages also are shown for contributions, fees, and balances in addition to the calculations for hypothetical public employees, who have 401(k)s, IRAs, and DB pensions. In this case, the relevant numbers are multiplied by the average population shares during people's careers with the specified type of retirement plan. The likelihood of participating in a 401(k) plan, contributing to an IRA, or being covered by a DB pension varies only to small degrees with age. In this case, the calculations show the average contributions, fees, and balances across the entire population, regardless of whether they had the specified retirement benefit or not.

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Endnotes

1. See text for more details. The calculations only focus on the years before the pandemic to avoid noise in the data associated with the health and economic turmoil of the pandemic. The report combines multiple years or months of data, depending on the data set, to ensure sufficiently large sample sizes. The choice of combined years does not impact the conclusions.

2. Source: **Inflation, Market Volatility, and Retirement: How Employer Benefits Can Help Public Sector Worker Anxiety Over Current Economy**, MissionSquare Research Institute, 2022c.

3. The appendix provides a discussion of the definitions of public employees in the various data sets used in this report. See Table A1 and the accompanying text.

4. See the appendix for additional details on the key data sets used in this report.

5. Public employees in education are the largest government employee group and they are concentrated in state and local government. The SHED does not allow for a more granular analysis of government employees.

6. The next section of this report presents illustrative simulations that show the link between savings, fees, and retirement wealth in different retirement vehicles to demonstrate the cost effectiveness of public employee benefits.

7. The appendix provides additional information on household wealth broken down further into households where one spouse works in public employment and both spouses work in public service (Table A6). The summary data indicate that the employment sector of the primary earner is the key correlate for differences in retirement assets.

8. Two caveats on this comparison are in order. First, total assets do not include DB pensions and thus provide only limited insights into the overall financial picture for public employees. Second, the relevant data set, the Federal Reserve's Survey of Household Economics and Decisionmaking (SHED), only provides categories of total assets and of retirement savings, not continuous values of either asset type. This obscures distributions within categories.

9. Authors' calculations based on Board of Governors of the Federal Reserve. Various Years. Survey of Household Economics and Decisionmaking. Washington, DC: Fed. Details available upon request.

10. **Continued Impact of COVID-19 on Public Employee Job and Financial Outlook, Satisfaction, and Retention**, MissionSquare Research Institute, 2022b.

11. The appendix provides additional information on the link between public sector employment and savings. Wealth is a household measure, but it is shown that more retirement wealth, which can be linked to individual spouses or partners in a couple, is indeed associated with public employment. Considering that the data do not show an offset between employment-based wealth such as retirement benefits and non-employment-based benefits, more retirement savings then also correlate with more total savings. See Tables A6 and A7 as well as the associated discussion in the appendix.

12. The largest reasons for 401(k) loans are homeownership and health care. Almost one-third of public employees with a 401(k) loan – 32.2% – used their loans to buy or repair a house from 2010 to 2019. And 15.1% of public employees used their loans for health care or educational expenses. Authors' calculations based on the Federal Reserve's Survey of Consumer Finances.

13. For example, the median tenure length for public sector employees 45 to 54 years old was 15 years, compared to seven years for private sector employees of the same age. Twenty-five percent of employees in this age group in the public sector had worked for 23 years for their employer, while the corresponding tenure length for private sector employees was 15 years. Those additional years of employment with an employer translate into greater job stability and faster wealth accumulation due to a higher chance of vesting and more employer contributions. Greater job stability provides employees with some peace of mind that also increases their chance of saving in general, for instance, in non-retirement assets. See Weller and Newman (2020) for a review of the related literature. Authors' calculations of tenure based on Federal Reserve data (various years).

14. DC account balances are net of fees and DB contributions include fees to allow for comparisons between the two forms of retirement savings.

15. The simulations do not separately model public employees who have a DB pension or DC plan from those who have both plans. The point of the simulations, after all, is to show the cost efficiency of individual benefits.

16. This assumes that the ongoing contributions are at least sufficient to fully fund the assumed benefit.

17. The definitions of these groupings of characteristics in demographics, income, and employment stability and benefits have no bearing on the overall conclusions. The underlying individual factors all either point in the same direction or are statistically insignificant.

18. The explained difference can be greater than 100% since parameter estimates can be negative, thus leading to a subtraction in the unexplained difference.

19. Authors' calculations based on Fed (2021).

20. See Francis and Weller (2022) for more details on the link between borrowing money from friends and family and financial insecurity.

21. The SHED does not contain information on the gender of a spouse or partner, so it is impossible to break out financial security by gender among married couples.

22. Smaller gender differences appear in the Federal Reserve's Survey of Consumer Finances. About three-quarters of single men in public service – 75.4% – indicated that their retirement savings will range from "enough to maintain living standards" to "very satisfactory" from 2010 to 2019. This was the case for 75.6% of single women in public employment. Authors' calculations based on the Federal Reserve's Survey of Consumer Finances.

23. The median retirement wealth for single men was $137,800 and it amounted to $116,838 for single women – a smaller but still substantial gap of 17,9%. Authors' calculations, not shown here, based on Federal Reserve's Survey of Consumer Finances.

24. For more details, see the discussion in Madowitz, Price, and Weller (2021).

25. Additional analyses broken down by age, specifically at age 50 years, yield similar conclusions for households younger than 50 years and those 50 years and older.

26. Additional information by race and ethnicity is not provided since the SCF does not collect racial and ethnic information for spouses or partners.

27. The decomposition results already highlighted the main pathways by which public employment may assist people to save more money for their future.

28. The results do not change if pool data for several years are pooled.

29. This assumption overstates the total amounts that people contribute and will receive in wealth before retirement, but the ratio between total account balances and contributions, for example, is not affected by this assumption.

30. This is the ratio of DB pension plan contributions and those for an ideal DC plan (Doonan and Fornia, 2021).

31. Because contribution rates cannot be directly matched with DB wealth at age 65, the simulations provide an approximation of the link between contributions and retirement benefits.

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