



# Recent Changes in Pension Benefit Rules for State and Local Workers Not Covered by Social Security

*Erald Kolasi, Chantel Boyens, and Jack Smalligan*

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State and local governments have adopted many strategies to address underfunding in their pension plans, including reducing benefits for new hires through changes to critical plan rules and provisions. In this brief, we take a closer look at the size of these changes for the millions of state and local workers whose jobs are not covered by Social Security. For these noncovered workers, we analyze changes in plan provisions for new hires in 2008 and 2018. In general, we find that newly hired workers in 2018 face greater burdens financing their pensions than workers hired in 2008. Overall, state and local governments increased employee contribution rates about 8 percent, increased vesting periods 8 percent, and increased final average salary (FAS) periods 17 percent; they have also reduced multiplier rates just over 2 percent. Many plans also raised retirement ages. These changes are consistent with changes made to pension plans covering all state and local government workers. However, we find that on average, plans for noncovered workers made smaller reductions in benefit provisions for new hires.

## Introduction to State and Local Pensions

The 2008 financial crisis and the Great Recession took a huge toll on state and local budgets (Gordon 2012). The crisis both exacerbated issues caused by underfunding that some state and local pension systems had been experiencing well before 2008 and reduced tax revenue to state and local governments. Among state pension plans, for example, the median funded ratio fell from 92 percent in 2007 to 68 percent in 2016.<sup>1</sup> As part of the broader effort to cope with ballooning costs and liabilities, states across the country changed their pension plans' benefit rules and provisions (Brainard and Brown 2018, 1-2). These changes had the overall effect of reducing expected pension benefits for new hires and lessening the financial burden on state and local government employers.

About 75 percent of state and local workers, approximately 15 million people, are covered by defined-benefit (DB) plans,<sup>2</sup> though such plans have become far less common in the private sector. These plans guarantee a monthly annuity in retirement based on a predetermined formula,<sup>3</sup> and most employees must contribute a fixed percentage of their salary to the plan. In a typical DB plan, an employee's annual pension benefit is set as

$$\text{benefit} = \text{multiplier rate} \times \text{years of service} \times \text{final average salary}$$

The multiplier rate is a constant percentage established by legislation; a typical value is around 2 percent. The years of service is the length of the employee's career. The FAS is the average of the employee's most recent salaries. In the past, many plans took an average of an employee's last three annual salaries or used the last available salary, but newer plan provisions increasingly use an average of the last five annual salaries. Averaging over more salary years tends to produce a smaller FAS because salaries tend to increase with years of service. Per the formula above, this smaller average salary yields a reduced benefit.

Another major consequence of this formula is that workers must often wait until late in their careers to accumulate lifetime benefits that are greater than the contributions they make into the system (Johnson et al. 2014). This late-career benefit escalation happens largely because the FAS is based on a small set of high nominal salaries. When these nominal salaries rise, the size of the benefit swells along with them. For example, a worker with five years of service, a multiplier of 2 percent, and a FAS of \$50,000 from work in her mid-20s would receive an unadjusted monthly benefit of \$417 at retirement. By contrast, a worker with 35 years of service, the same multiplier, and a FAS in nominal terms of \$90,000 would receive an unadjusted monthly benefit of \$5,250 at retirement.

The actual benefit amount will depend on many factors besides these three. For example, virtually all pension plans have a vesting requirement, which is the amount of service an employee must perform before fully owning the value of his or her retirement account. Typical vesting periods are three to five years, but they can reach 10 years in some plans (Brainard and Brown 2018, 4). Employees who separate before completing the vesting period generally forfeit all or most of their pension.

Most plans also allow for early retirement. If employees retire early, their standard benefit is generally reduced to at least partly offset the additional pension checks they receive. Some plans also modify benefits through cost-of-living adjustments during retirement. However, cost-of-living adjustments are becoming less common as contributions are funneled more and more into financing expected normal benefits and paying down unfunded liabilities (Brainard and Brown 2018, 4).

Some state and local workers participate in defined-contribution (DC), cash-balance, and hybrid plans. In a DC plan, beneficiaries are not guaranteed a monthly annuity in retirement; instead, they make regular contributions to an individual investment account that they can withdraw in retirement (with certain tax and withdrawal rules). The final value of the account depends on the market performance of its various assets.<sup>4</sup> In a cash-balance plan, beneficiaries make contributions to an account that grows with a fixed interest rate regardless of market fluctuations. At retirement, the

employee is entitled to the full value of the account, just like with a DC plan. Some cash-balance plans also allow their workers to convert their account balance into a stream of annuity payments.<sup>5</sup> Finally, some hybrid plans blend features of DB and DC plans. Workers split their contributions between a DB account and a DC account. In retirement, they receive a monthly annuity from the DB account and are entitled to the full balance saved in the DC account.

## Analysis of Changes in Pension Plan Rules for Workers Not Covered by Social Security

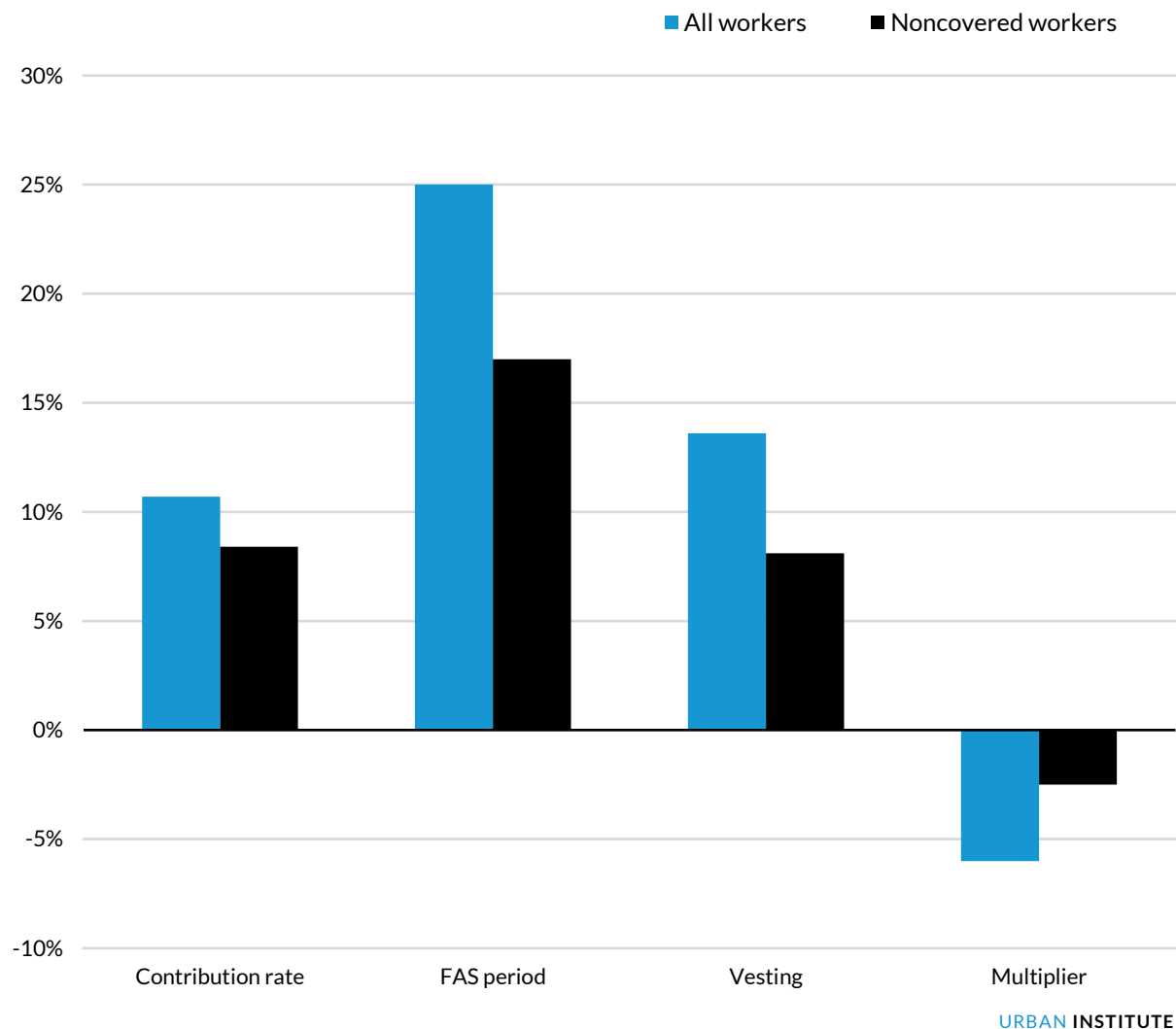
Just over six million state and local government workers are in positions that are not covered by Social Security (Nuschler, Shelton, and Topoleski 2011). These noncovered workers rely on government pension plans for their retirement, and the plans are required to provide benefits that are at least equivalent to those offered under Social Security. However, research suggests that many of these plans do not provide benefits that are truly equivalent to Social Security (Quinby, Aubry, and Munnell 2018). Moreover, some of these employees will work in noncovered employment for their entire careers, but others will switch jobs and spend a portion of their working lives in employment covered by Social Security. Those who leave noncovered employment before completing 20 years of service may receive pension benefits that are worth less than their contributions (Johnson et al. 2014).

Previous studies have analyzed changes in provisions and benefit levels for state and local government workers, but they did not focus on noncovered workers or, if they did, the results are now dated given significant legislative changes (Kolasi and Johnson, forthcoming; Aubry and Crawford 2017; Brown et al. 2014). We use data from the Urban Institute's 2019 State and Local Employee Pension Plan Database to focus on changes to pension plans for noncovered workers. We analyze changes in four key provisions for workers in noncovered systems: vesting periods, mandatory employee contribution rates, FAS periods, and multiplier rates. We present these results for the overall group as well as by major employment category (i.e., teachers, police officers, firefighters, and other state and local workers, including administrative employees). We focus on DB plans because they cover most workers in this group and to simplify the analysis.<sup>6</sup> Finally, we discuss the implications of our findings for the broader debate over making Social Security coverage truly universal.

We begin our analysis by comparing how benefit provisions have changed for all newly hired state and local government workers versus for newly hired noncovered workers only. Figure 1 shows that from 2008 to 2018, on average, plans became less generous for all newly hired state and local government workers. Noncovered workers also saw their benefits decrease, but the reductions were somewhat smaller than for all government workers. This pattern is observed across every provision we compared: employee contribution rates, multiplier rates, FAS periods, and vesting periods.

FIGURE 1

Percent Change in Various Provisions from 2008 to 2018 Applying to New Hires in Each Year

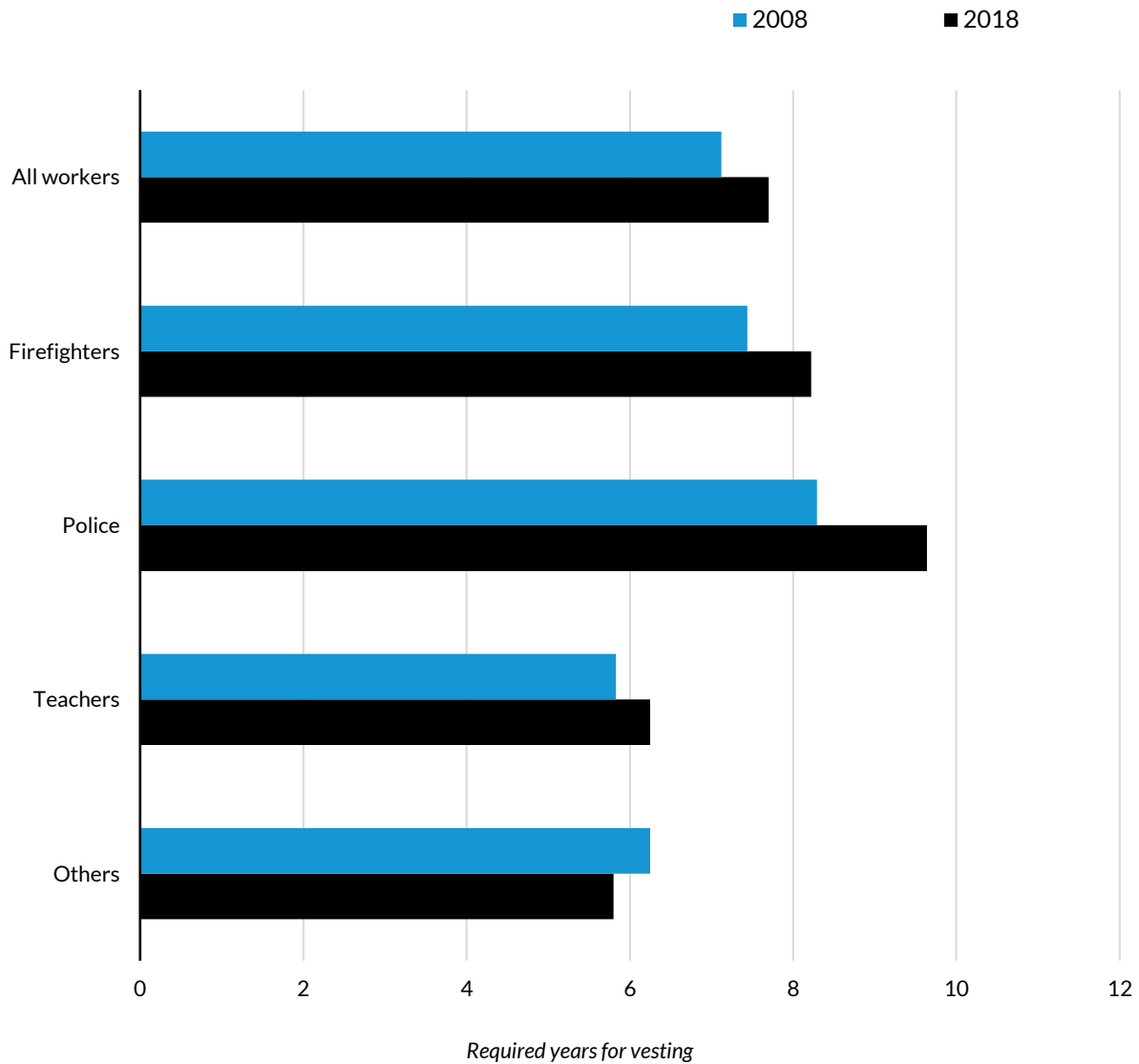


Source: Authors' calculations using the Urban Institute State and Local Employee Pension Plan Database.

Notes: FAS = final average salary. Results show percent changes of average provisions by plan.

Figures 2 through 5 compare key plan provisions for new hires in 2008 and 2018 by occupation followed by the percentage change in each category. In figure 2, we see that average vesting periods for all noncovered new hires in 2018 have increased 8 percent relative to the vesting periods of new hires in 2008. There is some variability within the employment categories. Since 2008, vesting periods increased 16.3 percent for police officers, increased 10.5 percent for firefighters, increased 7.2 percent for teachers, and declined 7.2 percent for all other workers. The average change for all workers was an 8.1 percent increase.

**FIGURE 2**  
**Mean Vesting Periods by Type of Noncovered Worker**



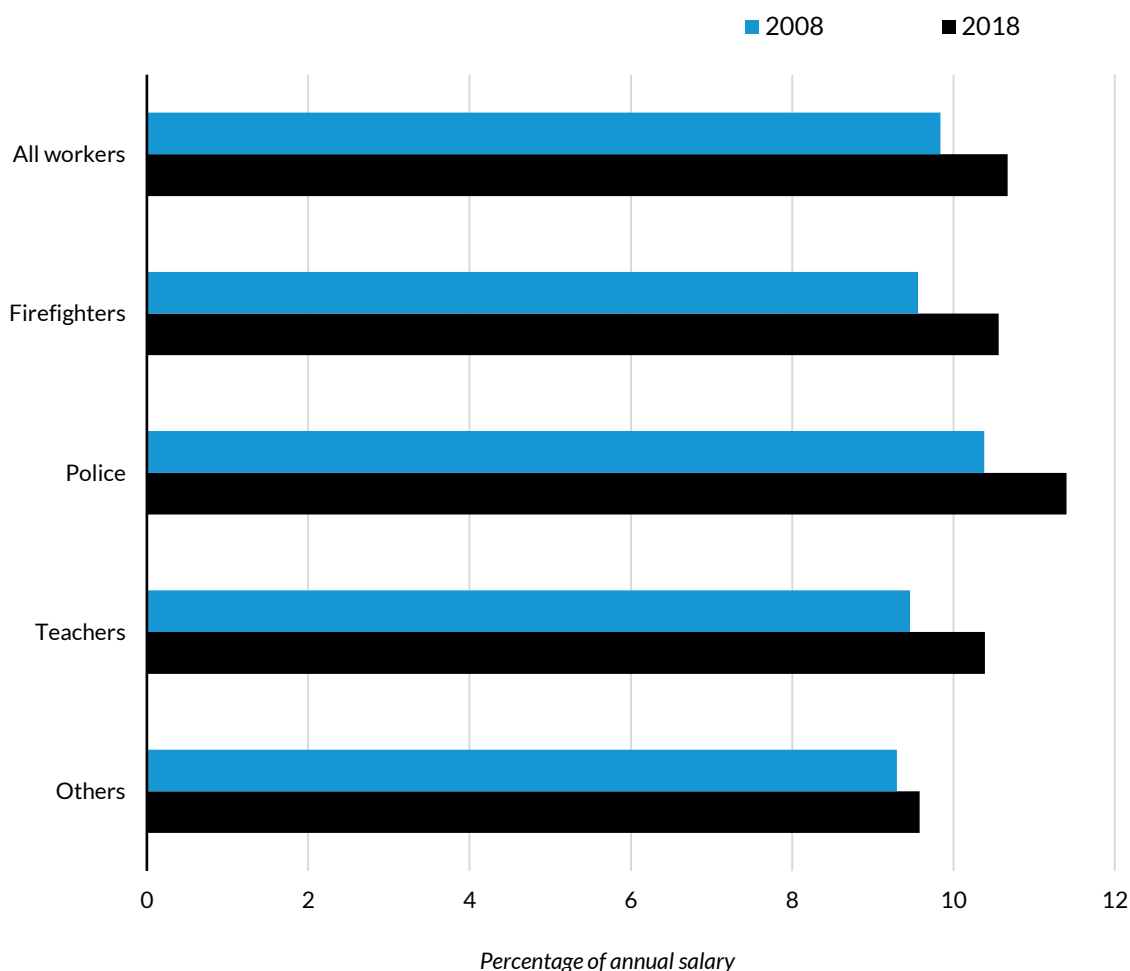
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**Source:** Authors’ calculations using the [Urban Institute State and Local Employee Pension Plan Database](#).

**Notes:** Results show plan averages by category of workers. The category “Others” includes a mix of all state and local workers that were not classified into the other three categories. The police and firefighter categories include both state and local workers of each group.

Figure 3 shows the average employee contribution rates. Since 2008, vesting periods increased 9.8 percent for police officers, 10.5 percent for firefighters, 9.8 percent for teachers, and 3 percent for all other workers. The average change for all workers was an 8.4 percent increase.

**FIGURE 3**  
**Mean Contribution Rates by Type of Noncovered Worker**



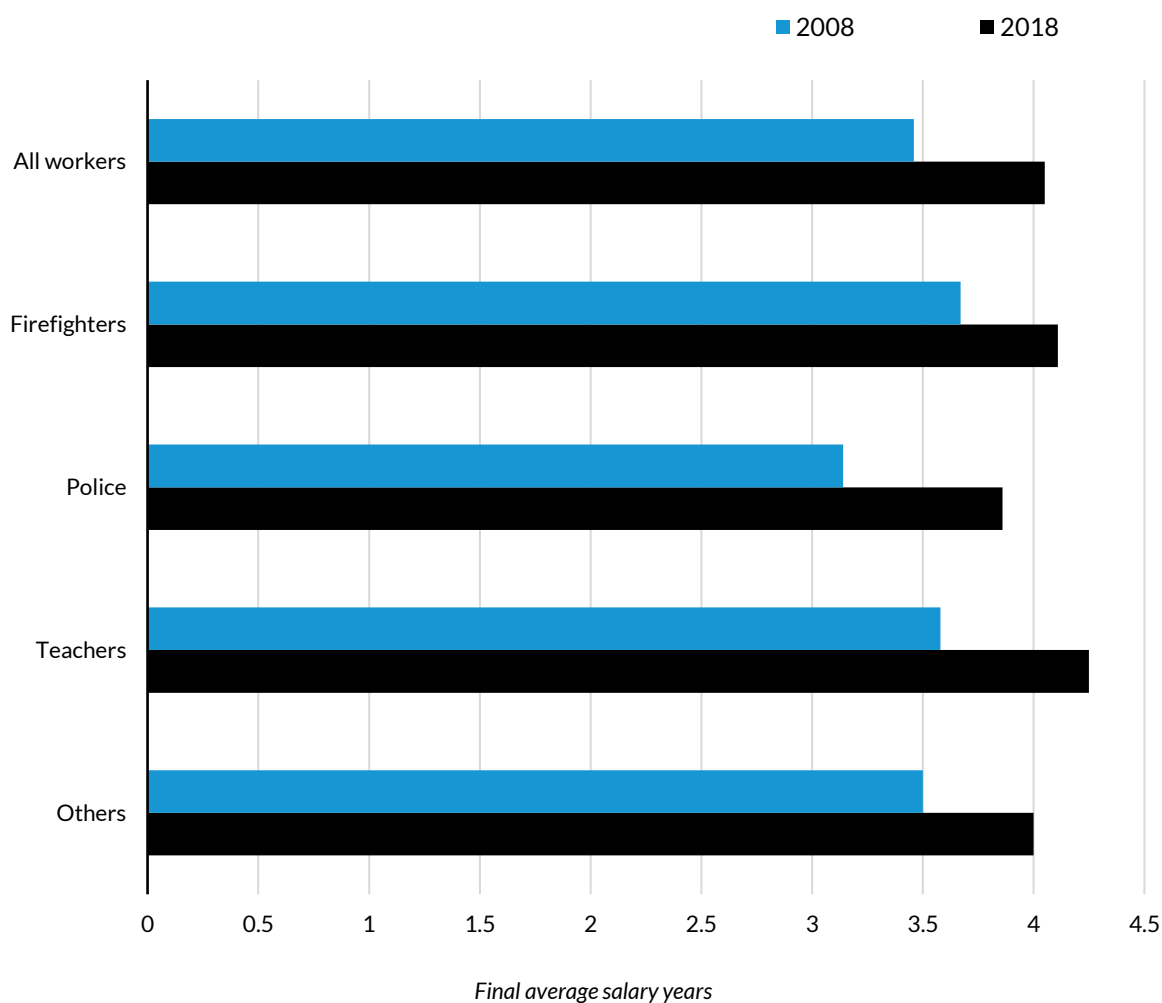
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**Source:** Authors' calculations using the [Urban Institute State and Local Employee Pension Plan Database](#).

**Notes:** Results show plan averages by category of workers. The category "others" includes a mix of all state and local workers that were not classified into the other three categories. The police and firefighter categories include both state and local workers from each group.

Figure 4 shows the differences in periods used to calculate a worker's FAS. Recall that including more salary years in the calculation tends to lead to lower benefits because doing so increases the likelihood of capturing years with lower salaries, thereby lowering the average. The average FAS period for all workers jumped roughly 17 percent, from 3.5 years in 2008 to 4 years in 2018. All employment categories saw a substantial increase in the average FAS period, indicating that lawmakers made broad use of this option for tweaking future benefit levels. Since 2008, firefighters saw a 12 percent increase, police saw a 23 percent increase, teachers saw an 18.7 percent increase, and all other workers saw a 14.3 percent increase.

**FIGURE 4**  
**Mean Final Average Salary Periods by Type of Noncovered Worker**



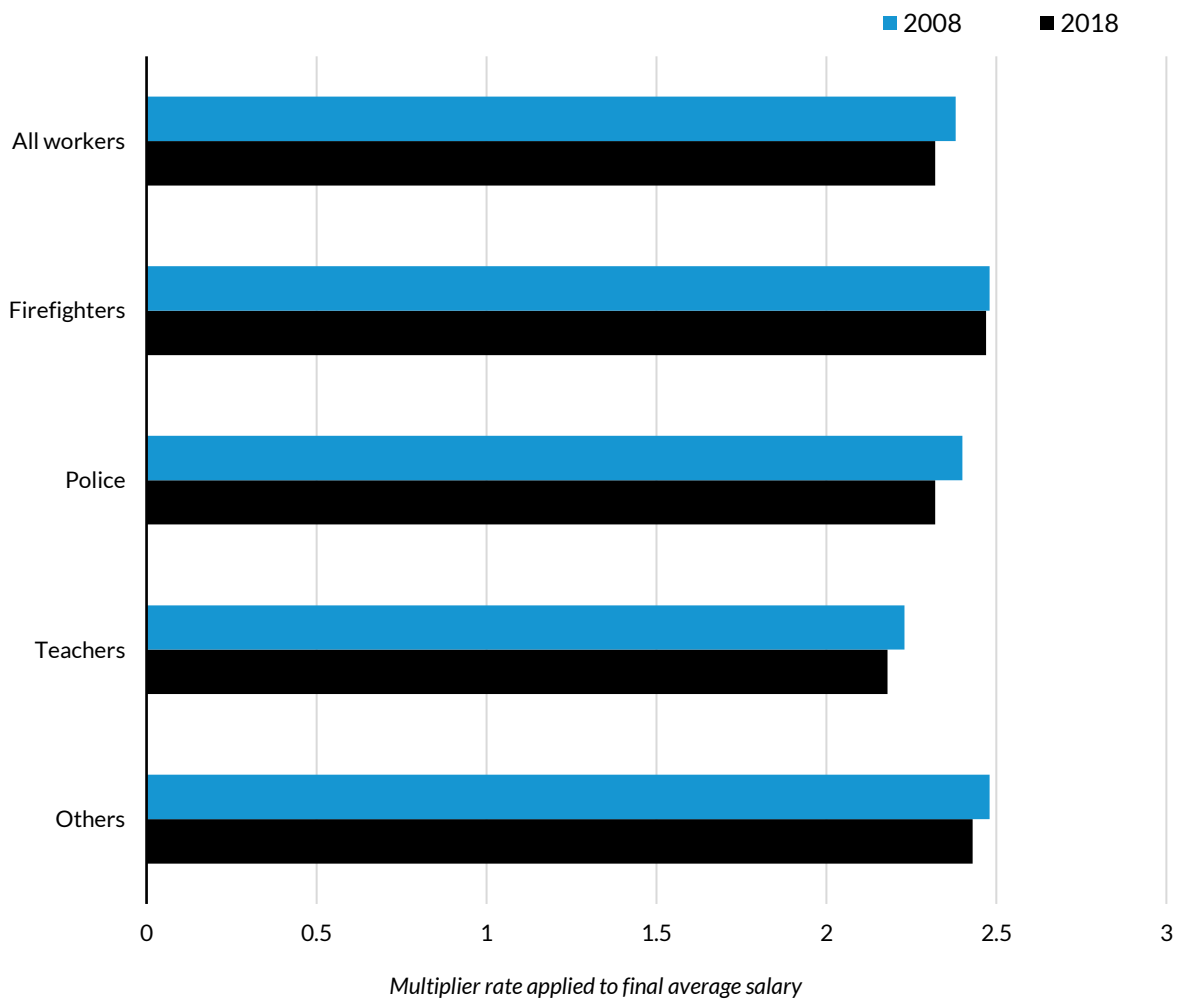
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**Source:** Authors’ calculations using the [Urban Institute State and Local Employee Pension Plan Database](#).

**Notes:** Results show plan averages by category of workers. The category “others” includes a mix of all state and local workers that were not classified into the other three categories. The police and firefighter categories include both state and local workers from each group.

Figure 5 shows the average multiplier rates. To properly interpret these results, remember that all else equal, a lower multiplier rate produces a lower benefit. In the previous charts, a higher average roughly corresponded to fewer benefits for the workers, but the opposite is true now. For all noncovered workers, the average multiplier declined about 2.5 percent. Since 2008, the average multiplier rate did not change significantly for firefighters and declined 3.3 percent for police, 2.2 percent for teachers, and 2 percent for all other workers.

**FIGURE 5**  
**Mean Multiplier Rates by Type of Noncovered Worker**



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**Source:** Authors’ calculations using the [Urban Institute State and Local Employee Pension Plan Database](#).

**Notes:** Results show plan averages by category of workers. The category “others” includes a mix of all state and local workers that were not classified into the other three categories. The police and firefighter categories include both state and local workers from each group.

In addition to changing the provisions of the standard benefit formula, states with noncovered workers have raised the eligibility age at which workers can begin claiming retirement benefits. Plans in at least eight states (California, Texas, Ohio, Illinois, Hawaii, Massachusetts, Louisiana, and New Hampshire, which hold most of the noncovered workers in the country) have seen an increase in retirement eligibility ages since 2008. We tracked changes in both early and normal retirement provisions.<sup>2</sup> Other changes for state and local pensions included efforts by lawmakers to convert some DB plans into hybrid plans, DC plans, and cash-balance plans. However, among states that offer pensions to noncovered workers, only Kentucky converted plans for new employees to cash-balance plans.



# Implications of Recent Trends for Social Security

Over the past decade, state and local governments have made their pension plans less generous to improve plan finances. To avoid reductions in benefits promised to current employees, these measures have been primarily focused on newly hired workers. As state and local pensions continue to be underfunded, states will likely continue to change their pension plans. These changes have particular implications for state and local workers who are not covered by Social Security. Unlike other state and local government workers who are also covered by Social Security, noncovered workers may face greater risks to their retirement security if they change jobs and spend less than 20 years in the same pension plan (Johnson et al. 2014; Boyens, Kolasi, and Smalligan 2019; Gale, Holmes, and John 2015, 18). They may also lack valuable protections the Social Security program provides (Gale, Holmes, and John 2015, 16-18). Consequently, recent efforts to improve pension plan finances could leave newly hired workers increasingly vulnerable in retirement.

Our brief highlights many opportunities for future analysis. The plan averages that we compute here are unweighted, meaning they do not consider the number of workers in each plan who would be affected by these changes. Additional research is also needed to analyze the impact of recent plan changes on the expected lifetime benefits of new hires in 2018 relative to those hired in 2008. Such an analysis should also compare how noncovered workers have fared relative to their peers in positions covered by Social Security. Knowing how plan provisions have changed is important, but estimating those provisions' impact on benefits and replacement rates would yield more valuable insight into the retirement prospects of noncovered workers relative to the overall population of state and local workers. This would provide important data with which to evaluate proposals to make Social Security coverage truly universal as part of a broader package of Social Security reforms.

## Notes

- <sup>1</sup> Karen Pierog and Daniel Bases, "Battered by Great Recession, Underfunded Public Pensions to Persist," *Reuters*, March 26, 2018, <https://www.reuters.com/article/us-financial-crisis2008-municipals-pensi/battered-by-great-recession-underfunded-public-pensions-to-persist-idUSKBN1H20EG>.
- <sup>2</sup> Bureau of Labor Statistics, "Three Quarters of State and Local Government Workers Were in Defined Benefit Pension Plans in 2016," *Economics Daily*, May 3, 2017, <https://www.bls.gov/opub/ted/2017/three-quarters-of-state-and-local-government-workers-were-in-defined-benefit-pension-plans-in-2016.htm>.
- <sup>3</sup> "Types of Retirement Plans," US Department of Labor, accessed October 21, 2019, <https://www.dol.gov/general/topic/retirement/typesofplans>.
- <sup>4</sup> "Types of Retirement Plans," US Department of Labor, accessed October 21, 2019.
- <sup>5</sup> "Types of Retirement Plans," US Department of Labor, accessed October 21, 2019.
- <sup>6</sup> We omit DC plans from this analysis because those plans contain provisions that are not easily comparable to the provisions of DB plans.
- <sup>2</sup> Most pension plans have several retirement conditions, making it difficult to aggregate the results. For example, a worker might be eligible for normal retirement at age 65 with 5 years of service or at age 60 with 25 years of service. Some plans might have up to three or more conditions for normal retirement at a given point, but a wider reform package might change those rules so that only two conditions apply to future hires. Thus, we decided to only report using data from states where the retirement age increased in at least one of the conditions.

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## About the Authors

**Erald Kolasi** is a research associate in the Income and Benefits Policy Center at the Urban Institute. He develops computer models and simulations designed to study the effects of different economic policies. His research interests include state and local pensions, Social Security, and the federal budget. Kolasi received his BA in physics and history from the University of Virginia and earned his MS and PhD from George Mason University, both in physics.

**Chantel Boyens** is a principal policy associate in the Income and Benefits Policy Center. Her current work focuses on interactions between Social Security programs and retirement, pensions, disability and paid leave policy. Prior to joining Urban, Ms. Boyens served as Acting Branch Chief and Senior Program Examiner in the Income Maintenance Branch of the Office of Management and Budget for nine years and across two Administrations. At the Office of Management and Budget, she led a team of analysts in developing policy and funding recommendations for the annual president's budget related to Social Security and low-income assistance programs. Boyens received a master's degree in public policy from American University.

**Jack Smalligan** is a senior policy fellow in the Income and Benefits Policy Center at the Urban Institute and is the principal investigator for the Social Security for Tomorrow's Workforce project. He analyzes the interactions across disability, retirement, and paid leave policy. Previously, he was deputy associate director at the Office of Management and Budget. Serving five administrations since 1990, Smalligan developed policies that have been incorporated into many pieces of legislation. In 2012, he was a visiting fellow at the Brookings Institute where he analyzed the Social Security Disability Insurance Program. Smalligan received a master's degree in public policy from the University of Michigan.

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