



# AN INTRODUCTION TO POLICE AND FIRE PENSIONS

*By Jean-Pierre Aubry and Kevin Wandrei\**

---

## INTRODUCTION

Local governments employ nearly all police officers and firefighters and, thus, are mainly responsible for their personnel costs. Pension and retiree health benefits (retirement benefits) for these public safety employees are designed to meet the challenges of a career in a physically demanding occupation, including lower-than-average retirement ages and an increased likelihood of workplace disability. But, news stories often present examples of public safety employees retiring with large pensions at relatively young ages alongside statistics of local government fiscal strains.<sup>1</sup> The prevalence of these stories suggests the need for a careful examination of the retirement benefits that public safety retirees receive and the fiscal stress these commitments put upon local governments.

This *brief* proceeds as follows. The first section documents that both pension and retiree health benefits for public safety workers are more costly than for other government workers, mainly because public safety workers retire earlier. The second section reports that, perhaps surprisingly, these public safety retirement benefits make up only a small share of total local government spending. The third section summarizes evidence suggesting that public safety employees could work longer, which may have implications for the design of their retirement benefits. The final section concludes that some local governments may decide to align public safety retirement benefits with employees' ability to work at later ages, but benefit reforms would have limited impact on government expenditures – particularly given that any cut to benefits might need to involve an increase in wages to ensure the recruitment and retention of quality workers.

LEARN MORE →

Search for other publications on this topic at:  
[crr.bc.edu](http://crr.bc.edu)

*\*Jean-Pierre Aubry is associate director of state and local research at the Center for Retirement Research at Boston College (CRR). Kevin Wandrei is a research associate at the CRR.*

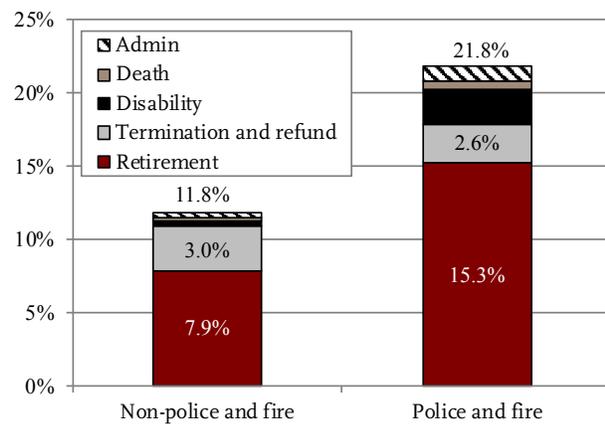
## COMPARING RETIREMENT BENEFITS AMONG LOCAL GOVERNMENT WORKERS

Local governments typically provide two major types of retirement benefits: defined benefit pensions and retiree health insurance. The following shows that the average costs of these benefits for public safety employees are much higher than those of other local government employees.<sup>2</sup>

### PENSIONS

Pension benefits for public safety workers are expensive relative to those for other government employees. The key metric here is the “normal cost,” which reflects the average expected cost of pension benefits earned by employees each year, as a percentage of employee payroll. The average normal cost for public safety pension benefits is nearly double that of all other government employees (see Figure 1).

FIGURE 1. PENSION PLAN NORMAL COSTS AS A PERCENTAGE OF PAYROLL, BY COST COMPONENT AND EMPLOYEE GROUP, 2016

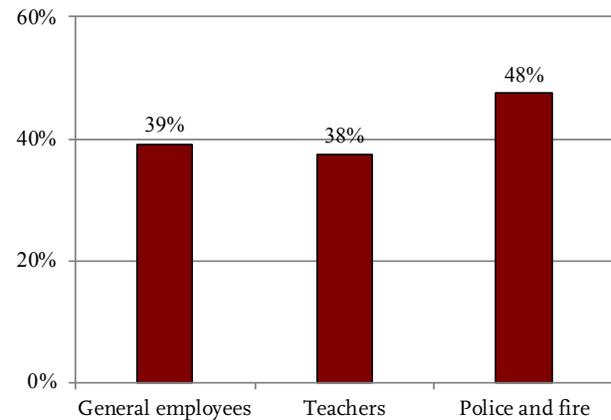


Note: Not all plans report normal costs by employee group.<sup>3</sup> Source: Authors’ calculations based on various pension actuarial valuations.

Although their costs are nearly double, annual retirement benefits for public safety employees are not twice as generous. A review of 2016 plan documents suggests that the replacement rate – the annual retirement benefit as a percentage of the pre-retirement salary – for newly hired public safety employees is about 25 percent greater than for teachers and other

government employees (see Figure 2). Importantly, the higher replacement rate could be compensating for the fact that public safety employees are less likely to be covered by Social Security and, therefore, must rely more heavily on the state or local government pension for income in retirement.<sup>4</sup>

FIGURE 2. AVERAGE REPLACEMENT RATES AFTER 20-YEAR TENURE IN GOVERNMENT, BY EMPLOYEE GROUP, 2016



Source: Authors’ calculations based on various pension actuarial valuations.

The remaining difference in the normal cost is due to the length of time over which public safety workers receive their annual pension benefits relative to other government employee groups. Public safety employees are eligible for their benefits at younger ages than other groups (see Table 1), even though the average expected lifespans at retirement are similar.<sup>5</sup>

TABLE 1. AVERAGE EARLIEST NORMAL RETIREMENT AGE FOR NEW HIRES, BY EMPLOYEE GROUP, 2016

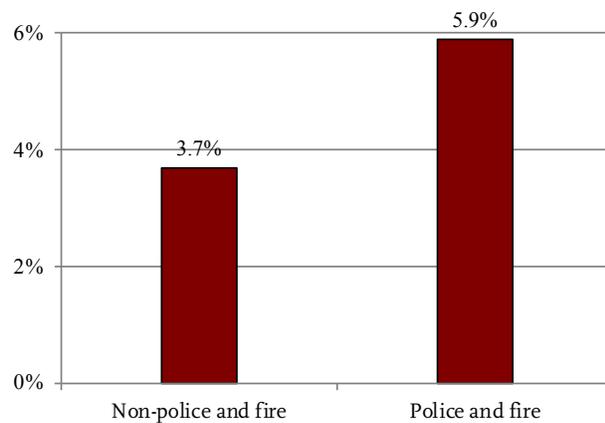
Entry age	Earliest Normal Retirement Age		
	General employees	Teachers	Police and fire
25	60	61	52
35	63	63	56
45	64	64	59

Source: Authors’ calculations based on various pension actuarial valuations.

## RETIREE HEALTH CARE

In addition to pension benefits, most local governments provide employees with government health insurance after they retire. Figure 3 shows that – similar to pensions – the average normal cost of these benefits for public safety retirees is substantially higher than that of other government employees.<sup>6</sup>

FIGURE 3. RETIREE HEALTH PLAN NORMAL COSTS AS A PERCENTAGE OF PAYROLL, BY EMPLOYEE GROUP, 2016



Note: Most local governments do not report normal costs for retiree health by employee group.<sup>8</sup>

Source: Authors' calculations based on a small sample of various OPEB actuarial valuations.

While some of this difference may be due to differences in the cost of insurance provided or the generosity of the premium subsidy, earlier retirement ages also play a role by creating longer periods of coverage under the government's health insurance before the retiree begins Medicare.<sup>7</sup>

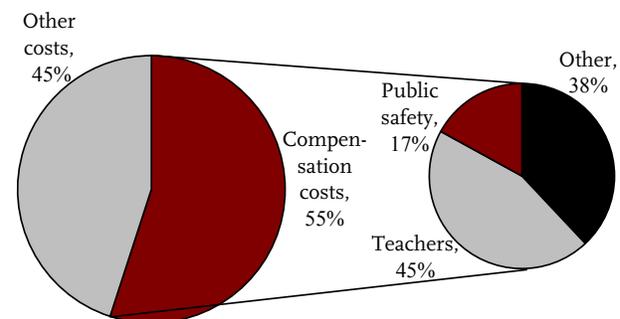
Overall, taking into account both pensions and retiree health programs, retirement benefits for public safety employees are significantly more expensive than those for other government employees.

## THE FISCAL BURDEN OF PUBLIC SAFETY RETIREMENT BENEFITS

Although public safety retirement benefits are expensive, the overall impact of these costs on local finances – the combined expenditures of cities, counties, and

school districts – is smaller than one might expect for three reasons. First, compensation costs (i.e., wages, health insurance, and contributions for government-sponsored retirement benefits and Social Security) account for only 55 percent of total local government expenditures (see first pie chart in Figure 4).<sup>9</sup> The other 45 percent goes towards purchasing everyday goods (such as concrete and stoplights for roads) and services (such as mechanics for fixing snowplows).<sup>10</sup> Second, public safety workers account for only 17 percent of total local government compensation costs (see second pie chart in Figure 4).<sup>11</sup> Teachers and the various other divisions (e.g., health, utilities, justice, penal, transit, and social services) make up the remaining 83 percent.

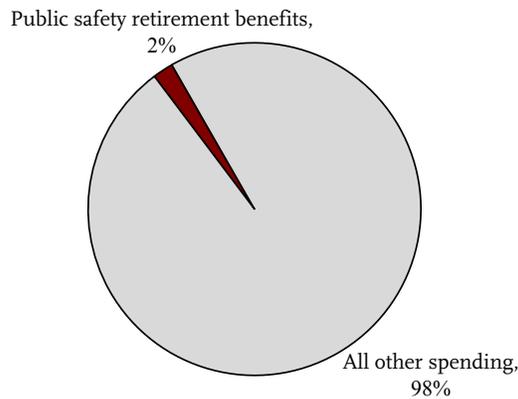
FIGURE 4. BREAKDOWN OF TOTAL LOCAL GOVERNMENT EXPENDITURES AND COMPENSATION COSTS, 2016



Source: Authors' calculations based on U.S. Census Bureau, *Census of Governments* (2016).

Finally, retirement contributions are only a fraction of government compensation costs, as wages account for the lion's share. Assuming governments pay the full actuarially determined contribution rate for their pension plans and the pay-as-you-go amount for retiree health, government retirement contributions account for about 25 percent of total compensation. Therefore, as a share of aggregate local government spending, contributions for public safety retirement benefits are very small – just 2 percent.<sup>12</sup> The simple calculation is 55 percent (compensation share of total budget) x 17 percent (public safety share of total compensation) x 25 percent (public safety retirement share of public safety compensation) = 2 percent (see Figure 5 on the next page).

FIGURE 5. LOCAL GOVERNMENT CONTRIBUTIONS FOR PUBLIC SAFETY RETIREMENT BENEFITS AS SHARE OF TOTAL LOCAL GOVERNMENT EXPENDITURES, 2016



Sources: Authors' calculations based on *Census of Governments* (2016); and various pension actuarial valuations.

Even if one focuses on the jurisdictions in which public safety costs are most significant – the city and county levels – the burden is still small. Specifically, public safety retirement costs average only 4.9 percent of aggregate spending for cities and just 1.9 percent for counties.<sup>13</sup>

Given that public safety retirement benefits are generally a small expenditure item, plan design considerations – rather than cost concerns – may end up driving any reforms. The question is whether later retirement ages are reasonable due to changes in job conditions or employees' health and ability to work longer.

## CAN PUBLIC SAFETY EMPLOYEES WORK LONGER?

The main rationale for earlier normal retirement ages is that police and firefighters are unable to work longer in their physically demanding jobs. But some evidence suggests that such a rationale may be increasingly outdated. For example, a number of local governments hoping to retain experienced employees have used a Deferred Retirement Option Plan (DROP), which allow employees to claim pensions while continuing to work.<sup>14</sup>

A 2017 CRR analysis of Philadelphia's DROP found that over 90 percent of employees enrolled in the program, with public safety employees working about five years longer than they otherwise would have (compared with just two years longer for other employees).<sup>15</sup> The high participation rate and additional work years suggest that public safety employees are able to stay on the job until later ages.<sup>16</sup> Another sign that government employees with physically demanding jobs can work longer is the U.S. Army's decision to raise its maximum enlistment age from 34 to 39 and its mandatory retirement age for active duty soldiers from 55 to 62.<sup>17</sup>

The ability to work longer is likely tied to better job conditions, such as the use of technology to ease the physical burdens of public safety jobs, and improvements in employees' health and fitness. As a result, some local governments may decide to change their pension and retiree health benefits to reflect improvements in the workability of older public safety workers. Any shift in the retirement age, however, would reduce total employee compensation, which could negatively affect the recruitment and retention of public safety workers at a time when hiring them is already becoming increasingly difficult.<sup>18</sup> As such, any shift in the retirement age might need to involve an increase in wages to maintain total compensation for public safety workers.

## CONCLUSION

Public safety pension and retiree health benefits are substantially more expensive than those for other local government employees due largely to earlier retirement ages. From a plan design standpoint, governments may choose to pursue reforms to ensure that retirement benefits align with employees' workability at later ages. But any reforms would have limited impact on government finances because public safety retirement costs represent only 2 percent of total local government expenditures.

## ENDNOTES

1 See, for example, Dolan (2018), Hunn (2012), and Williams Walsh and Schoenfeld (2010).

2 The overview of pension benefits is based on a sample from the *Public Plans Database* (PPD) plus a supplemental sample of police and fire plans that – combined with the PPD – include all state-run municipal public safety plans and the largest locally run public safety plan in each state. The supplemented PPD sample covers about 95 percent of local government employees. Most of the remaining 5 percent are covered by locally administered plans in Massachusetts, Pennsylvania, and Florida, where a significant share of the local governments run their own pension plans. For retiree health insurance, the analysis relies on data reported for a sample of 70 major cities constructed to include at least one large city from each state.

3 In total, we obtained 32 instances of normal cost for police and fire, 16 for teachers, and 30 for other employees. The average normal costs for teachers and other employees were both approximately 12 percent, with a similar breakdown for the components: administration, death, disability, termination, and retirement.

4 See Munnell, Quinby, and Aubry (2018).

5 Based on the mortality assumptions reported in plan actuarial reports in 2015, average life expectancy at age 60 for police and firefighters was 24 years for men and 26 years for women. For non-police and fire, the comparable figures were 25 years for men and 27 years for women. See Munnell (2014).

6 Pension and retiree health plans use very different assumptions to estimate the cost of benefits. Using similar assumptions, the normal costs for retiree health benefits would be only one-seventh that of pensions.

7 When a retiree goes on Medicare, the employer's retiree health plan becomes the secondary payer.

8 Of the 70 major cities that were reviewed, nine reported health insurance costs only for public safety retirees and six reported retiree health costs that clearly excluded public safety retirees.

9 McNichol (2012).

10 In aggregate, debt service represents less than 5 percent of local government spending.

11 Payrolls and employee counts for each employee group are obtained from the U.S. Census Bureau's *Government Employment & Payroll* data. Employee groups in each local government are assigned to a pension plan in the: 1) PPD; 2) CRR police and fire plan supplement; or 3) Census's *Survey of of Public Pensions: State & Local* data. Pension contributions are estimated by multiplying payrolls for each employee group by the contribution rate of the assigned plan. Social Security contributions equal 6 percent of payrolls – unless the employee group is known to be out of Social Security (based on pension plan details). Government contributions towards employee health insurance are based on the average per-employee health cost paid by state and local government employers reported in the *Medical Expenditure Panel Survey* (adjusted for localities in each state based on state-level differences in private employer health costs). Government contributions towards retiree health insurance are based on the average for 70 large cities in 2016 and scaled to each government based on total city employment.

12 The CRR's measure of government spending begins with spending on current operations (i.e., excluding capital outlays) and debt service payments reported in the U.S. Census Bureau's Government Finance data. The Census data captures current operations and debt service across all government funds – not just the general fund. To produce CRR's measure of government spending, estimates of government health insurance costs (for active employees and retirees) and government contributions to pension plans that it self-administers are added to the initial Census spending numbers.

13 City costs range from an average of 0.3 percent for the lowest decile to 10.6 percent for the highest decile, while county costs range from an average of 0.1 to 5.0 percent.

14 Specifically, while the employee continues to work, benefit payments are deposited into a notional account that earns interest.

15 Center for Retirement Research at Boston College (2017).

16 Unfortunately, the DROP did not reduce Philadelphia's pension costs because DROP enrollees who worked longer also claimed their pension benefits a bit earlier. For example, a public safety employee planning to retire and receive benefits at age 57 instead enrolled in the DROP at age 56 and retired at age 62. Ultimately, employees must delay receiving benefits to reduce pension costs.

17 Powers (2018).

18 See Center for State and Local Government Excellence (2019) and Police Executive Research Forum (2019).

## REFERENCES

Center for Retirement Research at Boston College. 2017. "Update on the City of Philadelphia's DROP Program." Philadelphia, PA: Pennsylvania Intergovernmental Cooperation Authority.

Center for State and Local Government Excellence, International Public Management Association for Human Resources, and National Association of State Personnel Executives. 2019 *State and Local Government Workforce Survey*, 2019. Washington, DC.

Dolan, Jack. 2018. "Some L.A. Pensions Are So Huge They Exceed IRS Limits, Costing Taxpayers Millions Extra." (December 16). Los Angeles, CA: *The Los Angeles Times*.

Hunn, David. 2012. "St. Louis Leaders Added to Firefighter Pensions for Years." (February 12). St. Louis, MO: *St. Louis Post-Dispatch*.

McNichol, Elizabeth. 2012. "Some Basic Facts on State and Local Government Workers." Washington, DC: Center for Budget and Policy Priorities.

Munnell, Alicia H., Laura D. Quinby, and Jean-Pierre Aubry. 2018. "Spillovers from State and Local Pensions to Social Security: Do Benefits for Uncovered Workers Meet Federal Standards?" Working Paper 2018-9. Chestnut Hill, MA: Center for Retirement Research at Boston College.

Munnell, Alicia H. 2014. "Do Police and Firefighters Die Young?" Blog Post. (July 31). New York, NY: *Market Watch*.

Police Executive Research Forum. 2019 "The Workforce Crisis, and What Police Agencies Are Doing About It." Washington, DC.

Powers, Rod. 2018. "Army Ups Mandatory Retirement Age." (November 27). *The Balance Careers*.

*Public Plans Database*. 2016. Center for Retirement Research at Boston College, Center for State and Local Government Excellence, and National Association of State Retirement Administrators.

U.S. Agency for Healthcare Research and Quality. *Medical Expenditure Panel Survey Insurance Component*, 2016. Washington, DC.

U.S. Census Bureau. *Annual Survey of State and Local Government Finances*, 2016. Washington, DC.

U.S. Census Bureau. *Census of Governments*, 2016. Washington, DC.

U.S. Census Bureau. *Survey of Public Pensions: State & Local Data*, 2016. Washington, DC. Available at: <https://www.census.gov/govs/retire/>

Williams Walsh, Mary and Amy Schoenfeld. 2010. "Padded Pensions Add to New York Fiscal Woes." (May 20). New York, New York: *The New York Times*.

## ABOUT THE CENTER

The mission of the Center for Retirement Research at Boston College is to produce first-class research and educational tools and forge a strong link between the academic community and decision-makers in the public and private sectors around an issue of critical importance to the nation's future. To achieve this mission, the Center conducts a wide variety of research projects, transmits new findings to a broad audience, trains new scholars, and broadens access to valuable data sources. Since its inception in 1998, the Center has established a reputation as an authoritative source of information on all major aspects of the retirement income debate.

## AFFILIATED INSTITUTIONS

The Brookings Institution  
Mathematica – Center for Studying Disability Policy  
Syracuse University  
Urban Institute

## CONTACT INFORMATION

Center for Retirement Research  
Boston College  
Hovey House  
140 Commonwealth Avenue  
Chestnut Hill, MA 02467-3808  
Phone: (617) 552-1762  
Fax: (617) 552-0191  
E-mail: [crr@bc.edu](mailto:crr@bc.edu)  
Website: <https://crr.bc.edu>

Visit the:

The logo for the Public Plans Data Website features a stylized 'P' icon on the left, followed by the text 'PUBLIC PLANS DATA WEBSITE' in a bold, sans-serif font. The word 'DATA' is highlighted in a larger, blue font.

An orange arrow points from the 'DATA' portion of the logo to the website URL below.

[publicplansdata.org](https://publicplansdata.org)

---

© 2020, by Trustees of Boston College, Center for Retirement Research. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that the authors are identified and full credit, including copyright notice, is given to Trustees of Boston College, Center for Retirement Research.

The CRR gratefully acknowledges the Center for State and Local Government Excellence for its support of this research. The Center for State and Local Government Excellence (<https://www.slge.org/>) is a proud partner in seeking retirement security for public sector employees, part of its mission to attract and retain talented individuals to public service. The opinions and conclusions expressed in this *brief* are solely those of the authors and do not represent the opinions or policy of Boston College, the CRR, or the Center for State and Local Government Excellence.