Public Union Excesses

The Cost of Collective Bargaining and Public Sector Unions in Rhode Island

by Dennis P. Sheehan and Justin Katz

May 2019

Dennis P. Sheehan

Dennis Sheehan was born and raised in Newport, Rhode Island. He attended Thompson Junior High School, where his father taught, and graduated from Rogers High School. He earned a Bachelor's degree in Economics from Georgetown University in 1973 and received his Ph.D. in economics from the University of California at Berkeley in 1981.

Sheehan is Professor Emeritus at the Penn State University Smeal College of Business. He joined the faculty in 1992 as the Virginia and Louis Benzak Professor of Finance and became an emeritus professor in 2017. He previously taught in the business schools at Purdue University, the University of Chicago, and the University of Rochester.

Professor Sheehan's research and teaching interests are in finance and statistics. His research has been in corporate finance with papers on topics such as the extent and function of managerial stock ownership, the role of active shareholders in monitoring the firm, and the pricing of seasoned equity offerings by investment banks. His research has been published in journals such as the *Journal of Finance*, the *Journal of Financial Economics*, and the *Journal of Econometrics* and has also been written up in the *Wall Street Journal* and the *Journal of Applied Corporate Finance*.

At Penn State, Professor Sheehan taught at both the undergraduate and graduate levels in Finance. He has experience teaching executive development courses, having done so both in the United States and abroad for firms such as Chemical Bank, Citibank, and Xerox Corporation. In 2002, he helped start the Penn State Smeal Executive MBA program, and in 2005 he became the Associate Dean for MBA Programs; in 2009 he took on the role of Associate Dean for MBA and Executive Education. In June, 2011 he stepped down from his administrative position and returned to the Finance Department as a faculty member.

Upon retiring in 2017, Sheehan moved back home to Rhode Island to be closer to family. He lives in Middletown, where he is a volunteer for the Middletown Pension Fund Committee. He is also a volunteer tax preparer in the VITA/TCE program for low-income and elderly taxpayers. He is interested in researching policies that would help improve Rhode Island's economy.

Justin Katz

Justin Katz is the research director for the Rhode Island Center for Freedom & Prosperity as well as the managing editor of the Center's news and commentary Web site, the *Ocean State Current.*

With his eclectic interests and penchant for autodidactic do-it-yourselfism, Katz caught an early wave of blogging in 2002 with his nationally recognized site, *Dust in the Light,* which became known for its blend of philosophizing and data-driven research with a conservative perspective. In 2004, he turned his focus to Rhode Island, founding the group blog, *Anchor Rising.* He joined the Center in 2012.

As research director, Katz has become a leading analyst of the state's economy, budgets, and the legislation introduced in the Rhode Island General Assembly. His work on various subjects for the Center has ranged from development of an economic model to predict the enrollment and financial results of various school choice policies to parody songs and videos for the *Ocean State Current.*

His writing has been featured in the *Providence Journal, National Review,* and many other publications, including *Proud to Be Right: Voices of the Next Conservative Generation,* edited by Jonah Goldberg (Harper Collins, 2010). In 2017, the Roman Catholic Diocese of Providence presented Katz with its Lumen Gentium award for communications.

In his effort to improve governance in the Ocean State, Katz has been active in the civic life of Tiverton, where he lives with his wife and children. As a founding member of the Tiverton Taxpayers Association (TTA), Katz helped to replace the town's annual financial town meeting with a private-ballot referendum. In the past five years, he has developed and campaigned for lower-tax budgets both through individual elector petitions and as an elected member of the town's Budget Committee, winning four of those campaigns. In November 2018, the people of Tiverton elected him to the Town Council.

Interns

This report would not have been possible without the diligent and impressive work of **Demelza Hays,** working remotely from the libertarian redoubt of Liechtenstein, as well as **Marissa Marandola**, **Ben Strachman**, and **Paige Lafortune**. Through months of data collection and analysis, they carried the project along, sometimes with limited direction and always with care and insights exceeding our expectations.

Table of Contents

List of Tables

List of Figures

EXECUTIVE SUMMARY

Summary of Findings

Rhode Island taxpayers may be paying up to $1.1 billion too much for collectively bargained government services, which is the high-end estimate for the excess cost of our highly unionized public-sector workforce estimated in this report. Counting all state and local tax collections, even our "best estimate" suggests that Rhode Islanders pay 17% more than they might for services provided at private market rates.

In the third highest unionized state in the nation among government employees (66%), state and local public sector unions are driving up tax levies for Rhode Island taxpayers above and beyond what they should expect to pay.

While we all understand that public servants must be fairly compensated for their work, it is important that the general public has a clear sense of the collective bargaining terms under which contracts and budgets are developed. This report demonstrates how much Rhode Islanders have allowed state and local governments to negotiate in an imbalanced way, favoring the unions at taxpayer expense.

What Is the RI Setting?

According to the Bureau of Labor Statistics (BLS), Rhode Island is the seventh-most unionized state, as a percentage of total employed residents. Of all people working in the state, 16% are in unions. According to data compiled on Unionstats.com, government employees covered by union contracts are 66% of the total in Rhode Island, which is third highest in the country. The BLS reports 16,200 state employees and 33,500 local employees in Rhode Island. The estimated 32,900 of these employees who are unionized are covered under 473 distinctly certified labor groups.

Financial Costs. Based on our best estimate of the excess, Rhode Island residents could save 25% on their local property taxes, while state taxpayers could realize even further savings if public services in the Ocean State were provided at competitive market rates.

In total, Rhode Islanders may be doling-out up to $888 million per year in excessive cost for government functions subject to the public union collective bargaining process, as compared with equivalent services that could be obtained in the private sector. Of that amount:

- $589.5 million per year is overpaid by local taxpayers, while
- $298.7 million per year in excess costs is absorbed by state taxpayers

> *Rhode Island residents could save 25% on their local property taxes, while state taxpayers could realize even further savings if public services in the Ocean State were provided at competitive market rates.*

Modeled and written by a former Penn State University finance professor and adjunct scholar to the RI Center for Freedom & Prosperity, along with the Center's Research Director, the major findings from the *Union Excesses* report are supported by previous national studies that used different sources of data and various modeling strategies. A deep dive into actual contracts performed by the Center's research staff further confirms the conclusions when fleshed out for a median Rhode Island municipality.

Using data from the Census Bureau, the Bureau of Economic Analysis (BEA), the BLS, and various private sources of data, such as the Public Plans Database (PPD) from Boston College, a multitude of studies have sought to quantify the wage and total compensation "premium" for government services as compared with similar work in the private sector.

The contributing drivers for these excessive taxpayer-funded, union-driven costs include:

- High personnel wages
- Overtime abuse
- Costly pension and health care benefits
- Multiple arrangements that lend themselves to the abuse and circumvention of contract provisions — creating incentives, for example, for government workers not to work, to be paid more than they should be when they don't work, or to protect them if they underperform
- Provisions to cash-in unused vacation, personal, sick time, and other benefits

In 2012, the Center published a report analyzing the findings of a national study that showed that Rhode Islanders paid an extra 27% above and beyond competitive market rates for comparable state and local government services. This 2019 *Public Union Excesses* report reviewed that 2012 report and others. Research data fed into a regression formula, designed by former Penn State University finance

professor, Dennis Sheehan, looked specifically at Rhode Island data. We found a 5–10% "wage premium" for the average unionized state worker in the Ocean State's public sector and a 4–11% premium for the average local employee, which is consistent with multiple other credible studies that produced findings at or above this level when analyzing national data.

When it comes to "total compensation" results among these same reports begin to vary somewhat. Using a highly conservative methodology to place a fiscal value on the stated value of other benefits and collective bargaining provisions, Professor Sheehan concludes that today's total cost of public labor in Rhode Island is obtained at a minimum 6–12% total compensation premium as compared with comparable private-market services.

While findings vary from state to state, multiple previous and credible national studies more aggressively valued collective bargaining contract provisions and showed even greater public-sector total compensation premiums:

- Andrew Biggs and Jason Richwine, two economists at the American Enterprise Institute (AEI), produced a comprehensive report in April 2014 comparing public-sector to private-sector compensation and found that Rhode Island taxpayers dole out a 24% total compensation premium for government workers over the private sector.
- Maury Gittleman and Brooks Pierce, two economists at the BLS who studied all state and local workers in the United States in comparison with private-sector workers, concluded that a 9–18% total compensation premium exists.
- William Even and David MacPherson, two academic economists, produced reports on public-sector compensation for several states, including Rhode Island, using 2010 data. They found that a 27% total compensation premium exists for public-sector workers in the Ocean State.

To come to the most accurate number, this report incorporates these and other studies and performs a deeper dive into actual expenditures in Portsmouth, Rhode Island, a median town by population and tax levy. That different methodology empirically supports the results from these various statistical modeling methodologies.

NOTE: This report focuses primarily on personnel-related and overall-compensation costs and does not include an estimation of the costs of the many unfunded mandates that are imposed by state law or through collective bargaining.

The Heritage Foundation concluded that RI ranks as the ninth most favorable state for laws that benefit public union collective bargaining.

Why does this premium exist? The research reviewed in this report consistently shows that collective bargaining with public-sector unions excessively raises wages and government spending. The Heritage Foundation recently published a report on the effect of collective bargaining at the state and local level. It concluded that Rhode Island ranks as the ninth most favorable state for laws that benefit public union collective bargaining. As this *Union Excesses* report details, it is clear that union negotiators have consistently been able to capitalize on these advantages.

How Does the Premium Cost of Unionized Labor Manifest?

Of course, the most substantial ways in which government agencies secure higher compensation for their employees are direct premiums in pay and major benefits. As this report finds, Rhode Island's unionized government employees enjoy a significantly higher base salary than their private sector counterparts. Additionally, taxpayers who work in the private sector often marvel at the idea that government employees only pay 15–20% of the cost of their health insurance premiums.

However, the excesses in contracts don't only come from the direct increases in pay or larger benefit packages that are reported to the public. Very often, the costs are more hidden than that, so the reported salary rates and benefits appear lower than final compensation proves them to be, adding compensation for such items as the following:

- Overtime
- Time off the job (usually paid), including release time for union work, sick leave, personal days, and sabbaticals, as well as the financial liabilities that come with these absences
- Taxpayers' picking up the tab for such things as clothing allowances, continuing education, and health care buybacks
- Being paid again for doing the job, with additional pay for activities like mentoring, covering for co-

workers, and faculty meetings and professional development

- Increases based on workloads

For a sense of scale and validation, we chose the median RI town by population and tax levy, Portsmouth, to make some attempt to summarize the actual costs of these provisions. Inasmuch as possible, we took the numbers directly from budget documents and audits but often found it necessary to infer costs based on contract provisions, budget line items, and numbers of employees. The resulting analysis suggest that these extra pay items have a total cost around $4 million out of a total tax levy of $50 million. See the end of this section for a more-precise estimate for Portsmouth.

Collective bargaining also brings additional costs that are more difficult to quantify. Rigid schedules, impossible layoffs, and holding employees' spots while they take extended leaves (sometimes to try other jobs) all have implicit costs to government's ability to operate efficiently.

> *With more-accurate estimates of the value of retirement benefits, the Rhode Island total compensation premium is almost certainly in the 20–27% range.*

The above categories don't include still other costs of collective bargaining. Very often, the peculiarities of a union's long-term relationship with a government entity create unique provisions, such as temperature ranges during which they'll do certain work or extra holidays that aren't typically given as days off. Moreover, the costs of union bureaucracies, themselves, are ultimately borne by taxpayers when the public sector is involved.

Comparing Public and Private Sector Workers

There is a large body of research that compares the wages and total compensation of public and private workers. Not surprisingly, different researchers come to different conclusions. The differences in conclusions are largely due to the varying datasets used, the method of accounting for the value of retirement and health care benefits, and regression models estimated. The best, most comprehensive national research finds that both state and local workers – on average nationally – receive total compensation that is 3–19% higher than private-sector counterparts.

These public sector premiums vary substantially across states, ranging from small and negative to large and positive. The variation is likely due to differences in the extent of public-sector unionization and the use of collective bargaining. States such as Rhode Island, with extensive public-sector unionization and mandatory collective bargaining, have larger premiums in favor of public-sector workers.

Our own statistical analysis produces results for Rhode Island that are consistent with previous results. We use 2008–2017 data from both the American Community Survey (ACS) and the Current Population Survey (CPS) to estimate regression models that compare public- and private-sector wages and total compensation.

We find that, roughly, wages for public-sector workers are 5–10% higher than equivalent private sector workers. For total compensation, we find premiums in the 6–12% range. Both these figures vary by the dataset used, the regression models estimated, and the classification of workers into state versus local government employees. Nevertheless, our results are highly robust, consistently yielding wage premiums of 5–10%.

Our in-house estimates of the premium for total compensation are likely to be too low. Public-sector workers have access to defined-benefit pension plans at much higher rates than private-sector workers, approximately 80% versus 20%. In addition, public-sector workers receive retiree health benefits at much higher rates than in the private sector, approximately 70% versus 15%. The value of these two benefits is not accurately reflected in the data because local governments have underfunded contributions to these two benefits. With more-accurate estimates of the value of these benefits, the Rhode Island total compensation premium is almost certainly in the 20–27% range.

It should not be a surprise that we find substantial wage and compensation premiums for public-sector employees in Rhode Island. Unions try to obtain benefits for their members. Rhode Island has both mandatory collective bargaining in the public sector and one of the highest public-sector unionization rates in the United States. Our estimate of the total amount that is transferred from taxpayers to public-sector workers in the form of excess compensation ranges from $300 million to more than $1 billion per year, with a best estimate of $888 million per year. Both the state and local communities are increasingly going to struggle to meet the financial obligations created by public-sector unions and collective bargaining.

Combined Estimates for a Sample Community

Analyzing the contracts and budgets of the median community for population and tax levy gives us a way to flesh out our statistical estimates and check their reasonableness. It bears repeating that the numbers presented derive from multiple documents, often inferred, and applying various assumptions to multiple data sources. Again, the purpose is to check our estimates against something closer to actual data and to give the reader a sense of how reasonable, even conservative, our overall estimates are.

The total excess in Portsmouth produced by the line-item approach is $8.6 million. That represents $775,809 (8%) less than our "best estimate" through statistical methods. However, relatively small changes in methodology can easily make up the difference. In reviewing these comparisons, readers should note that our "best estimate" would be the statewide average. Possibly, therefore, Portsmouth has simply negotiated relatively good terms with its labor unions, compared with other cities and towns in the Ocean State.

For perspective, in fiscal year 2016, the line-item excess estimate amounts to 15% of the town's total budget. Again, however, it bears emphasizing that not all of the excess would be immediately available for other uses, such as infrastructure or tax cuts.

INTRODUCTION

This report analyzes the compensation of state and local public-sector employees in Rhode Island, examining the effects of collective bargaining and public-sector unionization. Our interest is in understanding the determinants of public-sector compensation and how Rhode Island compares with other states and the United States as a whole.

Although public-sector compensation is our focus, there is a broader story, here, about the economic climate in Rhode Island, of which public-sector compensation is just one part. We compete with other states for residents and economic activity. It's not a zero-sum competition; we can all be better off… or worse off. Rhode Island can grow its economy more quickly, just as other states can. States that grow more quickly are more attractive places for almost everyone. Economic

Table A: Estimated Excess of Collective Bargaining in Portsmouth, FY16

	Base ($)	Excess ($)	Excess (%)
Wages (not included in other rows)	29,733,521	1,668,072	6
Pension/retirement	2,659,882	1,571,780	59
Health care	4,891,147	1,402,147	29
Sick leave	1,500,527	881,645	59
Overtime	1,043,082	866,442	83
Other post-employment benefits (OPEB)	996,475	851,100	85
Compensated absence payouts	754,822	754,822	100
Holidays	1,249,229	543,499	44
Health care buyback	46,100	46,100	100
Personal days	152,992	25,811	17
Release time for union work	8,176	8,176	100
Line-item estimate	43,035,953	8,619,594	20
Low-end estimate	43,035,953	3,625,740	8
"Best estimate" excess for total comp	43,035,953	9,395,402	22
High-end estimate	43,035,953	13,141,654	31
"Best estimate" minus line-item estimate		775,809	
Remaining budget after compensation	15,280,532		
Total FY16 Budget	58,316,485	8,619,594	15

Source: See Appendix A for methodology.

growth can help solve myriad problems, ranging from poverty to state budget deficits to health care costs.

In order to help Rhode Island grow more quickly, we have to acknowledge tradeoffs: When we restrict economic activity through high tax rates or regulation, we reduce the attractiveness of the Ocean State for people and businesses. Taxes and regulations presumably have benefits, but they also have costs. Even if the current tradeoffs are working, we have to ask whether they are sustainable in the longer run.

Examining public-sector compensation is not done for the purpose of pointing fingers and blaming people. Rather, the intent is to provide Rhode Islanders with the information they need to make better choices. This is especially important in the public sector because of the lack of competition. When a private-sector firm is badly managed and overcharges consumers, overpays employees, or does not fulfill its contracts, consumers generally have the ability to use competitors. This creates an incentive for the firm to satisfy consumers at the lowest cost. Such incentives are lacking in most of the public sector. You can't easily decide to employ a different police firm or firefighting firm. There may be good reasons for the state and localities to provide police and fire departments, but it can come with a cost of inefficiency and perverse incentives. Research on the effects of those costs is one way to help combat the problems.

As an example of the costs that Rhode Island and other states confront, consider public-employee retirement expenditures. Figure 1 presents annual retirement expenditures by Rhode Island state and local governments over the last 38 years. These expenditures have risen from less than $200 million per year to over $1 billion now (in constant 2015 dollars).

The compound annual growth rate (CAGR) of the retirement expenditures has been about 5%, which has implied that the retirement contributions have gone from about 3.5% of Rhode Island budgets to 10.6%. In real per capita terms, each resident of Rhode Island contributed about $200 in 1977; by 2015, that figure had risen to about $1,100 per person. These increases cannot be sustained unless other categories of spending decrease. And indeed, if we look, for example, at the fraction of the state budget going to highways, it averaged 9.4% from 1977 through 1999 but only 7.4% from 2000 to 2015; meanwhile retirement expenditures as a percentage of the budget went from 4.6% in 1977–1999 to 9.2% in 2000–2015.

Why Should We Care?

The Rhode Island Center for Freedom and Prosperity has been scoring Rhode Island's economic climate for several years. The Center's Family Prosperity Index (FPI) report ranks Rhode Island in several areas, one of which is economic. The most recent report, covering 2017, ranked Rhode Island as number 43 nationally for economic climate, one of the bottom 10 states, and number 45 overall. Earlier surveys of Rhode Island's condition have shown little to no improvement over time in the state's economy relative to other states.

Figure 1

Rhode Island State and Local Government Retirement Expenditures ($ millions, 2015 dollars)

Source: State & Local Government Finance Data Query System. http://www.taxpolicycenter.org/slf-dqs/pages.cfm. The Urban Institute-Brookings Institution Tax Policy Center. Data from U.S. Census Bureau, Annual Survey of State and Local Government Finances, Government Finances, Volume 4, and Census of Governments
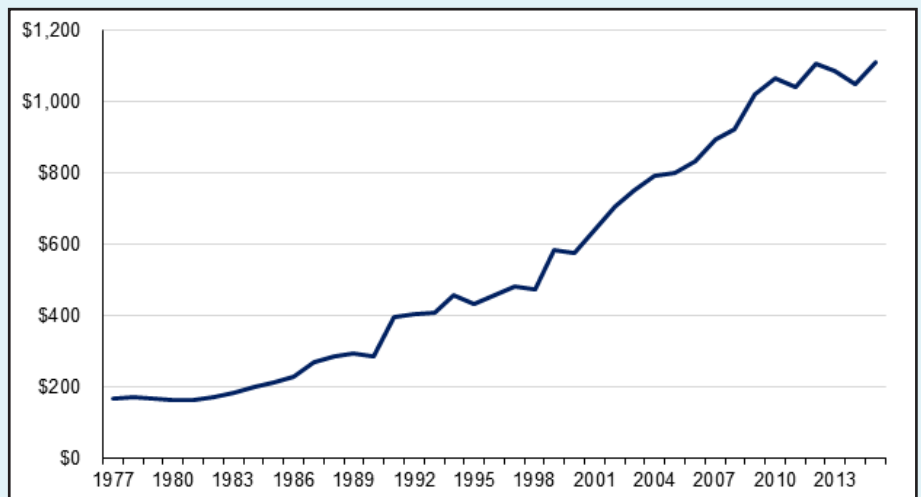
Perhaps the reader would like a second opinion. Here are some rankings of Rhode Island by other sources:

- *24/7 Wall St.* ranked Rhode Island 44th for business, largely owing to the state's high unionization in 2019.[1]
- According to the Bureau of Labor Statistics (BLS), Rhode Island had the worst job growth from February 2018 to February 2019 and was one of only two states to lose jobs over that period.[2]
- *WalletHub* ranked Rhode Island as the sixth worst state for tax burden.[3]
- The Tax Foundation puts Rhode Island at 12th worst for per capita state and local taxes[4] and eighth worst for property taxes.[5]
- CNBC ranked states on 60 measures of competitiveness from best to worst; RI was 45.[6]
- The Mercatus Center at George Mason University ranked RI's fiscal condition as 38 among the states.[7]

The Pew Charitable Trust tracks economic measures for each state.[8] Here are some sample RI rankings, from best (1) to worst (50):

- Total state government revenue as a share of total state government expenses: RI ranked 27th.
- Debt and unfunded retirement costs as a percentage of state income: RI ranked 34th.
- Change in the employment rate from 2007 to 2017: RI ranked 38th.
- Population growth rate, 2007 to 2017: RI ranked 46th.
- Growth rate of personal income from 2007 to 2017: RI ranked 46th.

Looking at all these unfavorable rankings, it would be difficult to make the case that Rhode Island is an attractive state in which to do business. As this state of affairs worsens, eventually everyone suffers. Unless more and better businesses create more and better jobs, more Rhode Islanders will not be able obtain better paying jobs.

What Are the Issues?

Public-sector unions and collective bargaining agreements could have many effects: higher compensation for workers, higher employment, and larger government budgets. These effects could be negatives from a taxpayer's point of view, but positive effects on quality, for instance, are also possible. This report will focus on the costs of unionization and collective bargaining because the costs may not be well understood, as neither the unions who advocate for cost increases nor the politicians who agree to them have any incentive to be fully transparent about such costs. By contrast, their incentive is high to use their many public-relations staffers to promote any and all positives.

This review concentrates on estimating the differences in compensation between public- and private-sector workers, with an emphasis on collective bargaining, itself. These dif-

1   Samuel Stebbins and Grant Suneson. "Best and Worst States for Business." *24/7 Wall St.* February, 21, 2019. 247wallst.com/special-report/2019/02/21/best-and-worst-states-for-business/ (Accessed 4/11/19.)
2   "Metropolitan Area Employment and Unemployment (Monthly) News Release." Table 3. Bureau of Labor Statistics. April 3, 2019. www.bls.gov/news.release/metro.htm (Accessed 4/11/19.)
3   Adam McCann. "2019's Tax Burden by State." *WalletHub.* April 2, 2019. wallethub.com/edu/states-with-highest-lowest-tax-burden/20494 (Accessed 4/11/19.)
4   Katherine Loughead. "How High Are State and local Tax Collections in Your State?" Tax Foundation. January 23, 2019. taxfoundation.org/state-local-tax-collections-per-capita-2019 (Accessed 4/11/19.)
5   Katherine Loughead. "Ranking Property Taxes on the 2019 State Business Tax Climate Index." Tax Foundation. October 24, 2018. taxfoundation.org/ranking-property-taxes-on-the-2019-state-business-tax-climate-index/ (Accessed 4/11/19.)
6   "America's Top State for Business 2018." CNBC. July 10, 2018. www.cnbc.com/2018/07/10/americas-top-states-for-business-2018.html (Accessed 4/11/19.)
7   Eileen Norcross. "State Fiscal Rankings: Ranking the States by Fiscal Condition 2018 Edition." Mercatus Center. October 9, 2018. www.mercatus.org/statefiscalrankings (Accessed 3/29/19.)
8   "Federal Share of State Revenue Rises for Third Year." Pew Charitable Trusts. March 11, 2019. www.pewtrusts.org/en/research-and-analysis/data-visualizations/2014/fiscal-50#ind1 (Accessed 3/29/19.)

Public-sector unions are lobbyists and voting blocs... the politicians who must approve collective bargaining agreements desire the votes and campaign contributions of the unions... and the politicians who approve higher compensation can push costs into the future.

ferences in compensation are due in part to the composition of the workforce but also to the ways in which public-sector workers are rewarded. There are good reasons to think that the public-sector bargaining process could impose additional costs on taxpayers.

First, public-sector unions are lobbyists and voting blocs. The unions lobby for additional government expenditures that benefit their members. A quick look at the Center for Responsive Politics Web site shows that the public sector and teachers unions contributed roughly $100 million in the 2016 election, with more than 90% going to one party.[9]

Second, the politicians who must approve collective bargaining agreements desire the votes and campaign contributions of the unions. The interests of the two groups are often in harmony — in contrast to the private sphere, where there can be a tension between labor and management.

Third, the ability of politicians to approve higher compensation for public-sector workers is enhanced by their ability to push costs into the future, when particular politicians may have moved on to other elected positions or have retired. Unlike in the private sector, there are no "claw-back" provisions in the public sector. Indeed, it can be quite difficult to punish politicians for being generous with taxpayer funds. The ballot box is at best a crude tool for holding politicians accountable because of the costs of information gathering for individual voters and the difficulty of consumers (voters) switching to another provider of the services. The work involved in the compilation of this report is an excellent example of the challenge of gathering the necessary information and explaining it to the public.

The private sector is certainly not perfect. It, too, can suffer from information problems and a lack of good alternatives. Indeed, an important next-extension to this study would look at the ways in which private-sector labor unions leverage the power of government to improve their standing and their competitive advantage. (Of course, when government isn't "management," both sides of the table have incentive to seek such leverage.)

Our interest in this report is in the observable costs of public-sector unionism and collective bargaining agreements. We will review a substantial body of research that has been done on several different topics:

- Comparing public-sector compensation to the private sector
- Estimating the effects of public-sector unionization

- Examining the effects of collective bargaining on outcomes wages, employment, and government expenditures.

After summarizing the results of this extensive literature, we will provide an analysis of Rhode Island in particular, trying to replicate some of the statistical models for the state. We will also explain and give examples of some of the ways in which unionization and labor contracts drive up costs, often leading to public scandal in the process.

What Is the RI Setting?

According to the Bureau of Labor Statistics (BLS), Rhode Island is the seventh-most unionized state, as a percentage of total employed residents. Of all people working in the state, 16% are in unions.[10] The rank and percentage climb when the pool is expanded to include employees who are represented by labor unions without being members, usually because they have no choice if they wish to keep their jobs (at least until the recent Supreme Court ruling in *Janus v. AFSCME*). Adding those employees brings the state to 17%, which is sixth highest.

A striking footnote to these rates is the great difference between the public and private sectors. Nationally, 34% of all government employees are unionized, while only 7% of private sector employees are.[11] Even that doesn't tell the whole story, however, because private-sector unionization is strongest in industries that often have close ties with government, such as utilities (23%), construction (14%), and educational services (11%).

In Rhode Island, according to data on Unionstats.com, government employees covered by union contracts are 66% of the total in Rhode Island, which is third highest in the country. Meanwhile, 9% of private-sector employees are covered by union contracts in the Ocean State, which is twelfth highest.

The BLS reports 16,200 state employees and 33,500 local employees in Rhode Island.[12] The estimated 32,900 of these

9   Center for Responsive Politics. www.opensecrets.org (Accessed 3/29/19.)

10   News release. "Union Members — 2018." Bureau of Labor Statistics. January 18, 2019. www.bls.gov/news.release/pdf/union2.pdf (Accessed 3/29/19.)

11   "Labor Force Statistics from the Current Population Survey: 42. Union Affiliation of Employed Wage and Salary Workers by Occupation and Industry." Bureau of Labor Statistics. January 18, 2019. www.bls.gov/cps/cpsaat42.htm (Accessed 3/29/19.)

12   "State and Metro Area Employment, Hours, & Earnings." Bureau of Labor Statistics. www.bls.gov/sae (Accessed 3/29/19.)
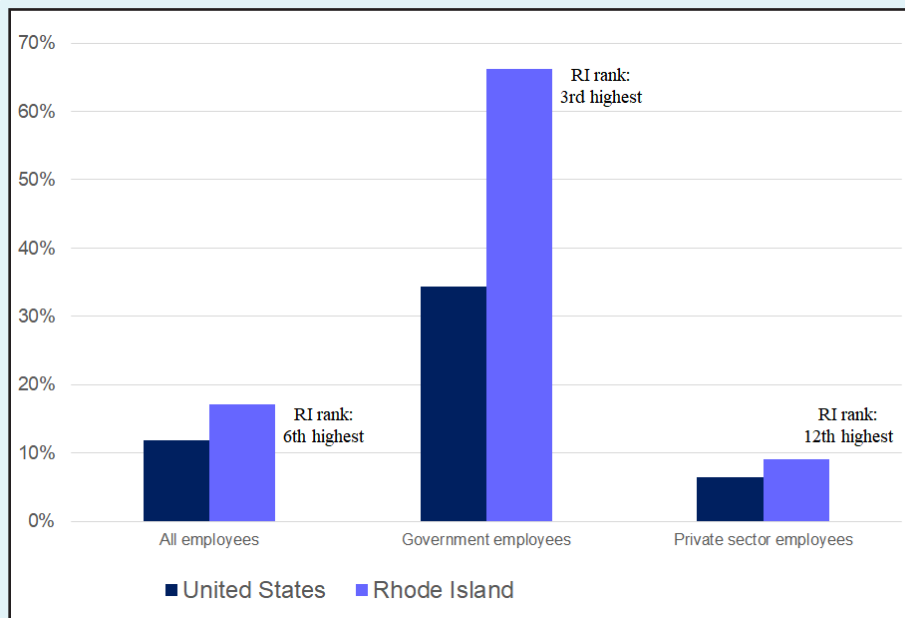
Figure 2

U.S. and RI Unionization by Sector, 2017 (%)

Sources: Bureau of Labor Statistics and UnionStats.com

unionized employees are covered under 473 distinctly certified labor groups, as follows:

- Firefighters: 38
- Police: 38
- Teachers: 44
- Cities and towns: 108
- Non-professional schools: 70
- Local authorities (e.g., housing authorities): 28
- State agencies: 141
- Others: 6

How Does the Premium Cost of Unionized Labor Manifest?

Our research finds that unions, particularly in the public sector, drive up the cost of labor and, therefore, taxes and the cost of doing business. Before we present that data, readers may benefit from a less-abstract illustration of some of the ways in which that premium is constructed.

Of course, the most substantial ways in which government agencies secure higher compensation for their employees are direct premiums in pay and major benefits. As this report finds, Rhode Island's unionized government employees see a significant boost in their salaries, which may not include categories like longevity. Additionally, taxpayers who work in the private sector often marvel at the idea that government employees only pay 15–20% of the cost of their health insurance premiums or nothing at all.

However, the excesses in contracts don't only come from the direct increases in pay or larger benefit packages that are reported to the public. Very often, the costs are more hidden than that, so top-line salary rates and benefits appear lower than final compensation proves them to be. (Defined-benefit pensions are the archetypal example.) The impression given by a review of public union contracts is of an entirely transactional relationship between employees and employers, negotiating every aspect of work and placing a price tag on each task an employee might undertake.

Employees should certainly be compensated for their work, and there is nothing wrong with handling an employment relationship as purely a financial exchange. However, lacking an accurate sense of the terms under which contracts and budgets are developed, Rhode Islanders have allowed state and local governments to negotiate in an imbalanced way favoring the unions, which has contributed to the large premium found in this report.

Note: The contract provisions cited in the following sections apply mostly to fiscal year 2016, which was the latest year for which near-total information was available at the time of writing, including both contracts and statistical data.

Overtime

An entire ancillary study could be devoted to an investigation of the ways in which government labor-union contracts create the conditions for abuse of overtime pay. Typically, overtime pay equals one-and-a-half times an employee's usual pay rate, but covering for higher-ranked employees or working on certain days can add to the actual pay.

As part of a running series on peculiarities of the state government's payroll in 2013,[13] the *Ocean State Current* (a publication of the RI Center for Freedom & Prosperity) learned that nurses in government hospitals can earn multiple overtime payments at the same time if they are technically covering multiple shifts, especially in a supervisory role, under minimum manning requirements. In some cases, nurses were earning a quarter-million dollars per year. Even hospital laundry workers salaried below $40,000 per year were taking home as much as $125,000, with overtime.[14]

Ken Block is a Rhode Island resident who founded the Moderate Party and later made a run for governor as a Republican. In recent years, the software engineer and data analyst has made a practice of reviewing municipal finances, discovering various ways in which taxpayers' bills grow suspiciously. Much of this work has focused on overtime abuse among firefighters.

In Warwick, for example, Block found that firefighters are working what amounts to a three-platoon system (generally one shift working 24 hours and then taking two days off), but with a four-platoon contract.[15] This creates both an extra platoon's worth of employees and a bonanza of overtime.

Leveraging language in the contract for overtime and the various mechanisms to take time off — from vacation days to sick days to days spent on detail shifts to "change of shift" agreements with other firefighters — firefighters build up their pay without overworking themselves. In East Greenwich, for example, Block noted that 40% of all overtime pay was given to firefighters when they had not yet worked their regular 42-hour workweek.[16]

Time Off the Job (Usually Paid)

Anybody who participates long in public debates related to school budgets will eventually hear complaints about low teacher pay, to which others will frequently point out that their work year consists of only 180 days (give or take), which is over 20% fewer days than the average employee in the private sector nationwide.[17] Even accepting the assertion that teacher salaries are lower compared with those of similarly credentialed professionals in the private sector, one would have to adjust for the fact that their pay applies to this smaller number of days.

This caveat doesn't only apply to teachers. According to the BLS, the average (mean) private-sector employee receives 30 paid holidays, sick days, and vacation days after five years of service, while the average state or local employee receives 38 — almost two extra workweeks off without losing pay. This is not only a valuable benefit, but it creates a requirement for more employees, particularly for 24/7 operations, if service levels are to be maintained for the community.

Even this doesn't tell the whole story, however.

Release Time for Union Work

Union employees of state and local governments often have the opportunity for paid days off to spend time on their union activities. The Johnston police contract, for example, allows four officers to take up to five paid days off for the National Convention of the International Brotherhood of Police Officers (IBPO), with another 10 days off for the union president to attend regional meetings and no limit

---

13 See, for example, Suzanne Bates. "Behavioral Healthcare Department Says Union Restrictions, Big Changes Increased Overtime." *Ocean State Current.* April 24, 2013. oceanstatecurrent.com/investigative-report/behavioral-healthcare-department-says-union-restrictions-big-changes-increased-overtime (Accessed 3/30/19.)

14 Justin Katz. "Laundering and Medicaid: State Operations Have Incentive to Be Inefficient." *Ocean State Current.* March 27, 2013. oceanstatecurrent.com/analysis/laundering-and-medicaid-state-operations-have-incentive-to-be-inefficient (Accessed 3/30/19.)

15 Walt Buteau. "Former candidate Block pushes 3-platoons for Warwick, other fire departments." WPRI. May 24, 2018. www.wpri.com/target-12/former-candidate-block-pushes-3-platoons-for-warwick-other-fire-departments/1183287836 (Accessed 3/30/19.)

16 Ken Block. Facebook. June 3, 2018. www.facebook.com/ken.block.56027/posts/2068289626744642 (Accessed 3/30/19.)

17 "Employee Benefits Survey." Bureau of Labor Statistics. www.bls.gov/ncs/ebs/benefits/2017/benefits_leave.htm (Accessed 3/30/19.)

> *In Warwick, Ken Block found that firefighters are working what amounts to a three-platoon system, but with a four-platoon contract. This creates both an extra platoon's worth of employees and a bonanza of overtime.*

on the time allowed for union officers to conduct official union business with the town itself.[18] Such provisions are common across municipalities and labor unions covering all types of employees.

In the case of teachers, the opportunities for union officials are often more explicit. The Providence teacher union contract, for instance, reduces the morning teaching program of the president of the local union to 3/5 of the normal workload, while also relieving him or her of all "non-teaching duties." Naturally, substitute teachers must be paid "whenever the Union President is not present during the school day."[19]

Another common perk for union officials among teachers is up to a year off to work with the union. While these years are not usually paid by the school district, the employees are guaranteed the ability to return to work, creating management challenges for the schools, especially when multiple teachers take such leaves at the same time.

Sick Leave

According to the BLS data cited above, private-sector employees with five years of service receive seven sick days per year, as a national average (see Figure 3). For state and local workers, the number is 11 days. Once again, however, a count of days doesn't capture the full picture.

For a majority of private-sector workers, nationally, the sick leave benefit is "use it or lose it." Fifty-five percent of such workers do not get to carry over their sick days from year to year (see Figure 4). Only 10% of Americans working in the private sector are able to accumulate an unlimited number of sick days, and the average limit for the remaining 36% is 50 days, total.

In state and local government, this scenario is much more than reversed. In fact, only 8% of such workers lose their unused sick days at the end of the year, and a large majority (60%) have no limit on their carryovers. When there is a limit, the maximum number of days they can accumulate is 137.

Very often, Rhode Island labor contracts allow employees not just to accumulate sick days for later use, but to cash them in. Barrington teachers, for example, receive credit for more than 12 sick days at the beginning of every school year (after their first), and they can accumulate up to 150.[20] When they hit their maximum, the district begins giving them half a day's pay (up to $50) for every unused sick day.

In Foster-Glocester, when teachers retire, they receive full pay for up to 50 of their accumulated sick days.[21] Moreover, that payment is heritable. Upon the death of a Foster-Glo-
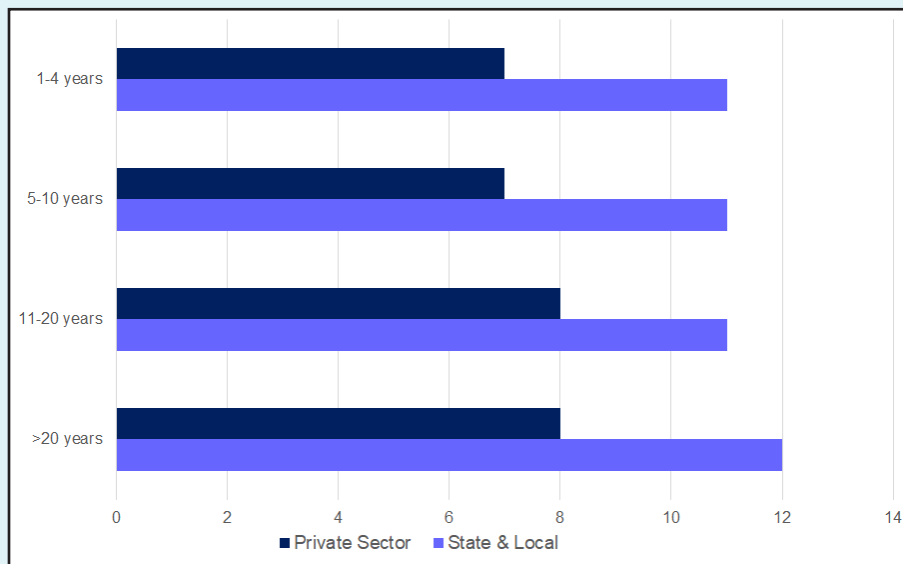
Figure 3

U.S. Public Sector and Private Sector Number of Sick Days by Years of Service, 2017

Source: "Employee Benefits Survey." Bureau of Labor Statistics. www.bls.gov/ncs/ebs/benefits/2017/benefits_leave.htm (Accessed 3/30/19.)

18 "Agreement Between International Brotherhood of Police Officers Local 307 and Town of Johnston." July 1, 2017–June 30, 2022. www.municipalfinance.ri.gov/documents/contracts/Johnston-Police-CBA-Exp-6-30-2022.pdf (Accessed 3/30/19.)

19 "Agreement Between the Providence Teachers Union AFT Local 958, AFL-CIO and the City of Providence. September 1, 2014–August 31, 2017. proteun.org/ptu/images/PTU/PDF/CBA-Sep012014-Aug312017-Final.pdf (Accessed 3/30/19.)

20 "Agreement Between the Barrington School Committee and NEA Barrington." September 1, 2016–August 31, 2019. www3.barringtonschools.org/businessoffice/Labor%20Contracts/NEA%20Barr%20Contract%209-16%20to%208-19%20signedv4.pdf (Accessed 3/30/19.)

21 "Agreement Between the Foster-Glocester Regional School Committee and NEA-Ponaganset." 2016–2019. www.fg.k12.ri.us/common/pages/DisplayFile.aspx?itemId=5632798 (Accessed 3/30/19.)

Figure 4

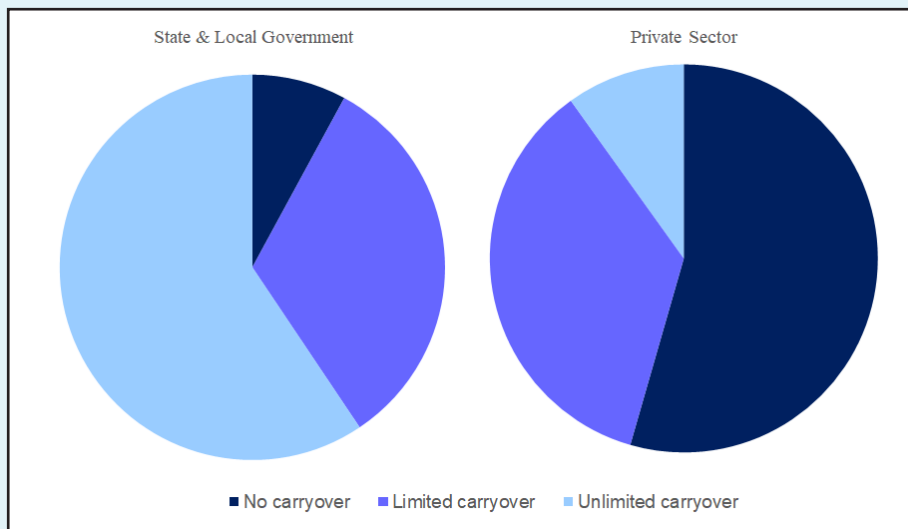*U.S. State and Local Government and Private-Sector Sick Time Carryover Benefits, 2017*

Source: "Employee Benefits Survey." Bureau of Labor Statistics. www.bls.gov/ncs/ebs/benefits/2017/benefits_leave.htm (Accessed 3/30/19.)

State & Local Government | Private Sector

■ No carryover ■ Limited carryover ■ Unlimited carryover

cester teacher, payment for unused sick leave is paid out to their heirs. This practice isn't just for teachers; employees of the state's largest labor union, Council 94, also enjoy heritable accumulated sick leave.[22]

The Tiverton police, meanwhile, can cash in up to 10 of their 17 sick days each year and accumulate up to 145.[23] When they retire, not only do Tiverton police receive full pay for each of those days, but they're paid at the highest rate of their careers. Thus, the 15 days of sick pay given under the 1992 contract to a new recruit would have been worth $1,395 at that time, but he or she would be paid around $3,917 upon retiring as a captain right now. A captain with the maximum accumulation, by the way, would retire with a $35,336 bonus.

A scandal in that town in 2016 shows just how sacrosanct these payments are. Lieutenant Timothy Panell (the second-highest-paid employee in town for years, thanks to overtime) was charged with 49 counts of "obtaining money under false pretenses" for time he spent at home while he was supposed to be working and for orchestrating shift-wide "quiet time" during which officers would sleep or otherwise do no work.[24] Nonetheless, under a settlement agreement to

avoid the expense of a legal fight with the union, the town allowed Panell to retire, including payment for unused sick time worth $15,784.[25]

A more-recent scandal among Warwick firefighters compounds the picture. In addition to compensation for days that they take off for work-related injuries or illnesses, these firefighters receive 20 days of sick leave per year, accumulating up to 140 days.[26] Upon the end of employment, firefighters receive 75% of the pay (at their current rate) for accumulated sick leave.

Beyond that, however, once a Warwick firefighter hits the maximum, he or she can begin collecting 75% of the pay for up to 15 unused sick days at the end of the year. But even more, a side deal signed by the city's solicitor, of which the then-mayor claims no knowledge, allowed the employees to carry forward the unpaid time for use the following year, instead of using their accumulated total. When city officials moved to end the practice, the union filed a grievance.

Personal Days

Returning to former Tiverton police Lieutenant Panell, in addition to his sick-leave payoff, he also collected $5,266 for unused vacation time and another $752 for unused

22 "Master Agreement Between State of Rhode Island and Rhode Island Council 94, AFSCME AFL-CIO." July 1, 2013–June 30, 2017. www.hr.ri.gov/documents/Contracts/Council%20 94%202013-2017%20CBA.pdf (Accessed 3/30/19.)

23 "Contract Between Town of Tiverton and IBPO Local #406 Tiverton Police Department." July 1, 2015–June 30, 2018. www.tiverton.ri.gov/documents/contracts/IBPO%20 Contract%20July%201%202015%20-%20June%2030%202018. pdf (Accessed 3/30/19.)

24 Tim White. "Veteran cop charged; accused of going home repeatedly during overnight shift." WPRI. September 15, 2016. www.wpri.com/news/crime/veteran-cop-charged-

accused-of-going-home-repeatedly-during-overnight-shi ft_20180314134735746/1044473009 (Accessed 3/30/19.)

25 Daily News staff. "Town to pay for health insurance for cop who was accused of sleeping while on duty." *Newport Daily News.* July 14, 2017. www.newportri.com/6930c675-c51b-5b46-9fcb-df990df7f48a.html (Accessed 3/30/19.)

26 "Agreement by and Between the City of Warwick and Local 2748, International Association of Fire Fighters." July 1, 2015–June 30, 2018. www.municipalfinance.ri.gov/documents/ contracts/Warwick_Fire.pdf (Accessed 3/30/19.)

personal days. Those other forms of time off don't appear to accumulate under the contract, but payment for their lack of use puts a spotlight on their generosity. Private-sector workers may wonder at the many forms of time-off that their public-sector neighbors enjoy: extra holidays, extra vacation days, extra sick days, and then personal days to fill any gaps that may remain.

In some situations, it appears that managers negotiated personal days as a method of avoiding other paid-time-off benefits that accumulate. East Greenwich police, for example, can take two days off for personal business, without carrying them over to the next year if unused.[27] Of course, this creates incentive for employees to use personal days when they might otherwise use sick days or vacation days.

This incentive has created a variety of rules designed to limit the benefits' abuse. Barrington teachers, for example, have to explain why they need personal days if they attempt to take them just before or just after a holiday or vacation.[28] In Scituate, teachers have to provide a reason for up to two personal days, but explicitly get one day for which no reason need be given.[29] Providence limits the number of teachers who can take personal leave on conspicuous days, such as the last week of school, to 35. However, teachers are entitled to two personal days, with the ability to request three more, as well as two more days when they get married and three days for religious observance.

Even with all this treatment of personal days as something different, it is not uncommon for government employees to be able to accumulate them. In Barrington, teachers keep them as regular sick days. Warwick teachers can take paid days off for a variety of reasons in addition to one day off per year for any reason, which accumulate toward a payoff of $100 per day upon retirement.[30]

With all of these opportunities to take time off, it isn't surprising that Rhode Island teachers had the third-highest absentee rate for the 2015–2016 school year, according to Education Week.[31] Counting sick and personal days, almost half of Rhode Island teachers (41%) missed more than 10 days of school.

Sabbatical

One time-off benefit that is generally limited to teachers is a sabbatical. The public is most familiar with the context of a sabbatical for college professors, as a benefit that allows them to spend extended time on research or other activities that (presumably) will expand their knowledge in a way that furthers the institution's academic mission. Why elementary, middle school, and high school teachers need such a benefit is not entirely clear.

Generally, sabbatical provisions limit the number of teachers who can take them at a time, and they often indicate that the reason must be pursuit of higher education or some other professional development. Sabbatical leaves also tend to limit pay to a half-year's salary for a year off, although other rates sometimes apply. In Central Falls, teachers can receive full pay if their sabbatical is only a half year,[32] and in East Providence, teachers with 10 years of service receive two-thirds of their pay during sabbaticals.[33]

The Liability for Absences

As the above sections describe, government employees often are able to accumulate their allotted days off and cash them in annually or upon retirement. This ability — which, again, is certainly not the rule in the private sector — creates a growing liability for Rhode Island's state and local govern-

27 "Town of East Greenwich, Rhode Island and International Brotherhood of Police Officers Local Number 472 Agreement." FY 2016–2019. municipalfinance.ri.gov/documents/contracts/EastGreenwich_Police.pdf (Accessed 3/30/19.)

28 "Agreement Between the Barrington School Committee and NEA Barrington." September 1, 2016–August 31, 2019. www3.barringtonschools.org/businessoffice/Labor%20Contracts/NEA%20Barr%20Contract%209-16%20to%208-19%20signedv4.pdf (Accessed 3/30/19.)

29 "Agreement Between the Scituate School Committee and the Scituate Teacher's Association." September 1, 2013–August 31, 2016. cc.bingj.com/cache.aspx?q=scituate+teachers+contract&d=4525617455500494&mkt=en-US&setlang=en-US&w=2sAeUyTE9eIKA3KB2D8jzbo3h651aCiG (Accessed 3/30/19.)

30 "Agreement Between the Warwick School Committee and the Warwick Teachers' Union." September 1, 2015–August

31, 2017. www.warwickschools.org/wp-content/uploads/sites/24/2018/06/WTU-WSC-9-1-2015-to-8-31-2017-Contract.pdf (Accessed 3/30/19.)

31 Linda Borg. "R.I. teacher absenteeism rate third-highest in nation, says education magazine ." *Providence Journal.* June 7, 2018. www.providencejournal.com/news/20180607/ri-teacher-absenteeism-rate-third-highest-in-nation-says-education-magazine (Accessed 3/30/19.)

32 "Contract Between the Central Falls Teachers' Union Local 1567 Rhode Island Federation of Teachers American Federation of Teachers AFL-CIO and the Central Falls School District." September 1, 2018–August 31, 2021. core-docs.s3.amazonaws.com/documents/asset/uploaded_file/236104/CF_CBA_18-21_FINAL_FORM.pdf (Accessed 3/30/19.)

33 "East Providence School Committee and East Providence Education Association Statement of Professional Relations." November 2017–October 2020. epschoolsri.org/wp-content/uploads/2019/01/EPEA-Contract-Nov-2017-Oct-2020.pdf (Accessed 3/30/19.)

ments. As Table 1 shows, the amount that state and local governments owed stood at just under $250 million at the end of fiscal year 2016, according to state and local audits.[34]

Table 1: State and Local Long-Term Liability for Compensated Absences, FY16

	Total Liability ($)
Total	**238,334,464**
State government	75,776,000
Barrington	620,207
Bristol	3,569,060
Burrillville	1,195,984
Central Falls	257,820
Charlestown	969,441
Coventry	3,814,958
Cranston	12,565,086
Cumberland	2,263,367
East Greenwich	925,744
East Providence	5,080,943
Exeter	75,443
Foster	355,092
Glocester	992,917
Hopkinton	133,349
Jamestown	801,182
Johnston	7,667,293
Lincoln	4,349,534
Little Compton	305,235
Middletown	2,663,798
Narragansett	3,961,962
New Shoreham	436,887
Newport	6,793,804
North Kingstown	2,524,208
North Providence	7,444,362
North Smithfield	947,369
Pawtucket	8,828,931
Portsmouth	2,011,457
Providence	34,896,000

Table 1 Continued

	Total Liability ($)
Richmond	189,651
Scituate	913,798
Smithfield	4,845,015
South Kingstown	5,262,047
Tiverton	1,127,028
Warren	1,691,477
Warwick	12,865,047
West Greenwich	341,115
West Warwick	6,831,926
Westerly	2,096,330
Woonsocket	9,943,597

Source: "Financial Reports." State of Rhode Island Office of Accounts and Control." controller.admin.ri.gov/Financial%20Reports/index.php and "Municipal Audits." 2016. municipalfinance.ri.gov/data/audits (Accessed 3/30/19.)

When the Boss Picks Up the Tab

Sometimes the extra cost of union labor in government comes in the form of things for which the employer (that is, the taxpayer) pays, but that the private sector might treat as employees' responsibility.

Clothing Allowance

One obvious example is the clothing allowance. West Warwick firefighters, for example, receive $1,420 per year as a clothing allowance, plus $375 as a "clothing maintenance allowance," even though the contract also requires the employer to provide various articles of clothing, like turn coats and work gloves.[35] The Town of West Warwick is also obligated to replace any clothing or accessories that are "damaged or destroyed" while the firefighter is doing his or her job, or traveling to or from a call.

Police officers are another typical recipient of clothing allowances. Charlestown police, for one, receive $1,250 for clothes, with the town also picking up the tab for cleaning the uni-

---

34 "Financial Reports." State of Rhode Island Office of Accounts and Control." controller.admin.ri.gov/Financial%20Reports/index.php and "Municipal Audits." 2016. municipalfinance.ri.gov/data/audits (Accessed 3/30/19.)

35 "Agreement by and Between the Town of West Warwick and Local 1104, International Association of Fire Fighters, AFL-CIO." July 1, 2014–June 30, 2019. www.municipalfinance.ri.gov/documents/contracts/WestWarwick_Fire.pdf (Accessed 3/30/19.)

forms.[36] Smithfield gives new recruits a full uniform, including seasonal gear, replacing anything that is damaged in the line of duty, and still gives officers a $700 clothing allowance plus a $1,000 cleaning and maintenance allowance.[37]

Given their line of work, and their need for specific uniforms, one can understand putting the burden of apparel on the employer for police and fire employees, but it isn't clear why the amount should vary from town to town. Indeed, the contract for West Warwick firefighters contains a provision specifically tying clothing allowances to the health of the pension fund, proving that clothing is another benefit that can go up or down irrespective of the actual cost of the purchases to employees.[38]

Although clothing allowances are less common for other types of government employees in Rhode Island, some employees do enjoy the benefit. In Johnston, "all clerks, floaters, receptionists, dispatchers and animal control officers in the fire or police departments receive $500 per year for clothing.[39] Employees for Middletown's department of public works are reimbursed for one pair of winter Carhartt overalls and up to $400 for a pair of steel-toed shoes during the contract term.[40] New Shoreham gives Highway Department workers and custodians $200 per year for clothing.[41]

Continuing Education

One area of government union member benefits that might seem foreign to private-sector workers in some industries is continuing education, both in reimbursement and in automatic pay increases. This applies most notably among teachers but can be found throughout all forms of government employment.

State employees in Council 94, for example, can apply for up to $600 in reimbursements per semester for approved courses that are work related — or are at least required components of degree programs that are work related, creating a broad net.[42] The contract insists that courses be taken outside of regular working hours, but it also provides all employees 32 hours of paid personal leave for which they "shall not be required to state the reason."

Employees of the City of Pawtucket who are members of Council 94, covering mainly clerical and public works employees, can be fully reimbursed for up to two courses per semester.[43] Moreover, the courses need only be "related to any position in the bargaining unit," even jobs that the employee does not currently hold.

Turning to teachers, Barrington pays 80% of the cost of continuing education courses broadly related to "the profession of education," minus financial aid available through other means, up to $2,250 annually per teacher.[44] Barrington teachers who use their half-pay sabbatical benefit to pursue higher education are not eligible for tuition reimbursement. That said, Barrington teachers receive four days of personal leave, and while this contract is silent on whether those must be taken in full-day increments, some districts, such as Chariho,[45] explicitly allow paid time off to be used in hourly or even half-hourly increments.

[36] "Collective Bargaining Agreement Between the Washington County Fraternal Order of Police Lodge #40 and the Town of Charlestown." July 1, 2015–June 30, 2018. www.municipalfinance.ri.gov/documents/contracts/Charlestown_Police.pdf (Accessed 3/30/19.)

[37] "Collective Bargaining Agreement Between the Town of Smithfield, Rhode Island and Smithfield Lodge No. 17, Fraternal Order of Police." July 1, 2016–June 30, 2019. www.municipalfinance.ri.gov/documents/contracts/Smithfield_Police.pdf (Accessed 3/30/19.)

[38] "Agreement by and Between the Town of West Warwick and Local 1104, International Association of Fire Fighters, AFL-CIO." July 1, 2014–June 30, 2019. watchdogri.org/docs/Fire%20Contract/West_Warwick_Fire_2019.pdf (Accessed 3/30/19.)

[39] "Agreement Between the Town of Johnston, Rhode Island and RI Council 94, AFSCME, AFL-CIO Local 1491. www.municipalfinance.ri.gov/documents/contracts/Johnston_GE.pdf (Accessed 3/30/19.)

[40] "Agreement Town of Middletown, Rhode Island and Teamsters Local Union No. 251 Public Works Department." July 1, 2014–June 30, 2017. www.municipalfinance.ri.gov/documents/contracts/Middletown-DPW-CBA-Exp-6-30-2019.pdf (Accessesd 3/30/19.)

[41] "RI Council 94, AFSCME, AFL-CIO Local 2855 New Shoreham Employees Association and the Town New Shoreham and the New Shoreham School Committee." July 1, 2016–June 30, 2019. www.municipalfinance.ri.gov/

documents/contracts/NewShoreham_GE.pdf (Accessed 3/30/19.)

[42] "Master Agreement Between State of Rhode Island and Rhode Island Council 94, AFSCME." July 1, 2013–June 30, 2017. www.hr.ri.gov/documents/Contracts/Council%2094%202013-2017%20CBA.pdf (Accessed 3/30/19.)

[43] "Contract Between R.I. Council 94, AFSCME, AFL-CIO Local 1012 and the City of Pawtucket, Rhode Island." July 1, 2014–June 30, 2017. www.municipalfinance.ri.gov/documents/contracts/Pawtucket_GE.pdf (Accessed 3/30/19.)

[44] "Agreement Between the Barrington School Committee and NEA Barrington." September 1, 2016–August 31, 2019. www3.barringtonschools.org/businessoffice/Labor%20Contracts/NEA%20Barr%20Contract%209-16%20to%208-19%20signedv4.pdf (Accessed 3/30/19.)

[45] "Contract Agreement Between NEA Chariho and Chariho Regional School District Committee." 2018–2021. www.

Not only will the government employer subsidize employees' continuing education and make time for its pursuit, but taxpayers will also often give an annual boost in pay once employees have acquired degrees (or even portions of degrees). Simplifying the math on the opportunity for Barrington teachers illustrates how this would play out: One graduate course at the University of Rhode Island costs about $2,205, so a Barrington teacher who takes one course per semester will pay around $4,410 per year, assuming no financial aid. The Barrington school district would potentially reimburse $2,250 of that.

After five years, at this rate, the teacher would have earned a $22,050 Masters degree, for which he or she would only have paid $10,800. The increase in pay for a Master's degree in Barrington is about $3,281, so the teacher will make up the cost of the degree in a little over three years.

Continuing on, the teacher would receive additional salary boosts for every five courses that he or she completes, up to a Masters plus 45 credits (which would typically be 15 courses). At this point, the total salary boost would be $5,669 per year, which would be factored in to the calculation of the teacher's base pension.

Health Care Buybacks

As the time-off provisions above illustrate, benefits in the private-sector tend to be "use it or lose it" offerings. In government employment, however, where negotiating unions put a dollar value on everything, employers don't tend to enjoy such savings.

Health care buybacks are a prime example. If an employee does not take the health insurance on offer from the employer for any reason — often because a spouse has equivalent or better coverage from another employer, even if the same agency — taxpayers provide some sort of cash payment instead. These numbers aren't readily available in easy-to-access form, but as shown in the Portsmouth example below, the school department reported $46,100 in payments "in lieu" of health insurance for fiscal year 2016. The contract for that year sets these payments at $1,000 for employees eligible for family plans and $500 for families eligible for individual plans.

Unions will often present this benefit as a savings, because otherwise employees would presumably take the health benefit, which is much more expensive. This would not be the case, however, if government employment in Rhode Island didn't so reliably come with top-of-the-line plans.

Paid Again for Doing Your Job

To the extent that contract negotiations actually become the subject of public debate, unions tend to focus on base pay, but that is hardly the whole story. In fact, taxpayers might be surprised at the extent to which government employees are paid extra for things that seem like they would be part of the job.

Mentoring

In Rhode Island, state law requires that government school districts have some "process for mentoring of new teachers,"[46] and the state may provide some funds, broadly, for professional development, which can include mentoring.[47] However, many school districts have made the activity another opportunity for additional pay or replacing teaching duties with non-teaching duties.

In Barrington, senior teachers can receive up to an additional $4,500 per year (based on their years of experience) for acting as mentors.[48] Some districts have created manage-

---

chariho.k12.ri.us/sites/default/files/2017-2020_certified_cba_for_posting_9.9.17_with_signatures_1.pdf (Accessed 3/30/19.)

[46] Rhode Island General Law Title 16, Chapter 16-7.1, Section 2. "Accountability for student performance." webserver.rilin.state.ri.us/Statutes/TITLE16/16-7.1/16-7.1-2.HTM (Accessed 3/30/19.)

[47] Rhode Island General Law Title 16, Chapter 16-7.1, Section 10. "Professional development investment fund." webserver.rilin.state.ri.us/Statutes/TITLE16/16-7.1/16-7.1-10.HTM (Accessed 3/30/19.)

[48] "Agreement Between the Barrington School Committee and NEA Barrington." September 1, 2016–August 31, 2019. www3.barringtonschools.org/businessoffice/Labor%20Contracts/NEA%20Barr%20Contract%209-16%20to%208-19%20signedv4.pdf (Accessed 3/30/19.)

rial opportunities for their mentorship programs. In West Warwick, a Teacher Mentor Coordinator collects 7.25% of the top pay step for managing the program (which includes two additional days in school), or around $4,965.[49]

Covering for Coworkers

In jobs for which state and local governments have cycling shifts of workers, such as police and fire, covering absentees produces overtime shifts. When it comes to teaching, however, there are no shifts, and sometimes a partial absence or lack of substitute teachers requires teachers to cover each other's classes. In Central Falls, the going rate for doing this is $40 per class.[50] In Cranston, if no subs or other teachers are available to cover for an absent teacher, the school department will distribute the students among other classrooms… and pay the teachers extra.[51]

Faculty Meetings and Professional Development

In addition to covering classes, Central Falls is notable for its list of hourly rates, listed in Section 12 of the contract. In general, activities not "regularly assigned" to a teacher pay $33 per hour. Offering a professional development presentation pays $50 per hour. "Professional services" outside of school hours for which students receive credit pay $45 per hour. "Common planning time" pays $35 per hour. Central Falls teachers can also add $1,500 to their annual salaries if they join a School-Based Team consisting of administrators, faculty, and student and community volunteers to discuss "teaching and learning."

Foster-Glocester teachers receive an extra $500 not included as part of their salaries for attending "common planning time, professional development, faculty and/or department meetings" of one hour or less, which are planned for each week that has five full school days.[52] Johnston teachers re-

ceive $780 total for four scheduled teacher meetings immediately after school, lasting no more than an hour, even if the meetings are not actually held.[53]

East Greenwich police officers who act as supervisors receive two hours at overtime rate to attend quarterly staff meetings if they aren't on duty.[54] Tiverton police officers attending a "mid-level management staff meeting" while off duty receive a full four hours' worth of pay for each.[55]

Workload-Related Increases

Extra pay for additional hours or workforce-related activities are not the only adjustments that unionized government employees expect, particularly among teachers. Often, for example, teacher contracts have thresholds for number of students, with additional pay for more. Class maximums in Narragansett range from 21 students in kindergarten to 25 students in high school, and teachers receive up to an additional $2,340 per student per class per year above that amount.[56] The Pawtucket school department extends this principle to paraprofessionals who work in areas like occupational therapy and speech-language pathology, paying proportionally for anything over 60 caseloads.[57]

[49] "Contract Between the West Warwick School Committee and the West Warwick Teachers' Alliance AFT Local #1017, AFL-CIO. September 1, 2014–August 31, 2019. drive.google.com/file/d/0B-LtcwJqag6SNmdkaFhrdk50NWM/view (Accessed 3/30/19.)

[50] "Contract Between the Central Falls Teachers' Union Local 1567 Rhode Island Federation of Teachers American Federation of Teachers AFL-CIO and the Central Falls School District." September 1, 2018–August 31, 2021. core-docs.s3.amazonaws.com/documents/asset/uploaded_file/236104/CF_CBA_18-21_FINAL_FORM.pdf (Accessed 3/30/19.)

[51] "Master Agreement Between the Cranston School Committee and the Cranston Teachers' Alliance Local 1704, AFT." September 1, 2014–August 31, 2017. www.cpsed.net/human/contract/teacher/teacher.pdf (Accessed 3/30/19.)

[52] "Agreement Between the Foster-Glocester Regional School Committee and NEA-Ponaganset." 2016–2019. www.fg.k12.

ri.us/common/pages/DisplayFile.aspx?itemId=5632798 (Accessed 3/30/19.)

[53] "Contractual Agreement Between the Johnston School Committee Johnston, Rhode Island and the Johnston Federation of Teachers Local 1702 American Federation of Teachers AFL-CIO." September 1, 2012–August 31, 2015.

[54] "Town of East Greenwich, Rhode Island and International Brotherhood of Police Officers Local Number 472 Agreement." FY 2016–2019. municipalfinance.ri.gov/documents/contracts/EastGreenwich_Police.pdf (Accessed 3/30/19.)

[55] "Contract Between Town of Tiverton and IBPO Local #406 Tiverton Police Department." July 1, 2015–June 30, 2018. www.tiverton.ri.gov/documents/contracts/IBPO%20Contract%20July%201%202015%20-%20June%2030%202018.pdf (Accessed 3/30/19.)

[56] "Agreement Between the Narragansett School Committee and the Narragansett Education Association." September 1, 2015–August 31, 2018. nssk12.org/UserFiles/Servers/Server_162655/File/Links%20for%20Faculty%20Staff/Teachers%20Contract%202015-18%20Final.pdf (Accessed 3/30/19.)

[57] "Contract Between the School Committee of the City of Pawtucket and the Pawtucket Teachers' Alliance Local #930 American Federation of Teachers American Federation of Labor Congress of Industrial Organization." September 1, 2017–August 31, 2020. pawtucket1.schooldesk.net/Portals/Pawtucket/District/docs/Business%20Office%20Forms/2017-2020%20Pawtucket%20Teachers%20Contract.pdf?ver=2017-08-17-131234-597 (Accessed 3/30/19.)

Yet, the contracts do not reduce pay for lighter workloads. In fact, Johnston's teacher contract specifically requires the district to pay a teacher for a class as long as seven students sign up for it.[58]

Additionally, teacher contracts provide pay boosts for extra-curricular activities, be they coaching, band directing, yearbook supervising, or any clubs. Sometimes each role has a stipend associated with it, and sometimes the boost is expressed as a percentage of pay. In Woonsocket, additional roles pay a percentage of the top step (which is just over $70,000 annually).[59] Department heads get an 8.35% boost, while "subject area supervisors" get 10%. High school guidance department heads can bump their salaries by 16.7%. For the varsity football coach, it's 11.9%, while for assistant coaches of all sports, it's 5.25%. Pay for other activities range from band director, at 11.9%, to the ski club, at 1.63%.

Sample Community

Tallying the actual costs to a specific community for these union extras is very difficult. Each union in each community looks for different avenues by which to drive up their members' compensation and benefits. Then, not only must the investigator study the contracts sufficiently to know what the provisions are (and what certain perks are called), but for all of their required transparency, local governments and school departments are not always enthusiastic about guiding the investigation.

For a sense of scale, we chose the median town by population and tax levy, Portsmouth, to make some attempt to summarize the costs of these provisions. Inasmuch as possible, we took the numbers directly from budget documents and audits but often found it necessary to infer costs based on contract provisions, budget line items, and numbers of employees. We also had to take averages and make assumptions about the actual employees covered under each collective bargaining agreement and their utilization of particular benefits at any given time. Moreover, some of the costs listed might be better characterized as the "value," inasmuch as not every sick day, for example, will be used.

Consequently, this table should be considered to be a rough illustration for perspective only. Readers interested in any specific cost should make an independent investigation.

The $4 million total cost listed in Table 2 would have been approximately 8% of the town's tax levy in fiscal year 2016.

Table 2: Cost of Select Portsmouth Union Contract Provisions, FY16

	Estimate ($)
Total	4,018,845
Overtime	1,043,082
Extra sick leave	1,027,458
Compensated absence payouts	754,822
Extra holidays	543,499
Extra curricular	208,744
Extra personal days	152,992
Clothing	143,682
Sabbatical	74,290
Health care buyback	46,100
Tuition	16,000
Release time for union work	8,176

Source: See the correspondending report text for explanations.

Health Care

Health care presents a unique difficulty in the presentation of this report. The benefit represents a massive part of the premium that government employees enjoy, because they tend to receive better plans at lower cost to themselves than in the private sector. This reality makes it a topic of central importance for our objectives.

Yet, the benefit does vary significantly from agency to agency, municipality to municipality, and union to union, necessitating a detailed review of all state and local contracts and budgets. We therefore rely on the statistical analysis of total compensation below to account for health care benefits, on average. The one exception, however, is our sample community of Portsmouth, whose health care expense — and the "excess" embedded in it — we estimate in Table 19 at the end of this report.

---

[58] "Contractual Agreement Between the Johnston School Committee Johnston, Rhode Island and the Johnston Federation of Teachers Local 1702 American Federation of Teachers AFL-CIO." September 1, 2012–August 31, 2015.

[59] "Contract Between the Education Department of the City of Woonsocket, RI and the Woonsocket Teachers' Guild Local #951 American Federation of Teachers AFL-CIO." July 1, 2013–June 30, 2018. watchdogri.org/docs/Teacher%20 Contract/Woonsocket_Teacher_2018.pdf (Accessed 3/30/19.)

Management Challenges

Of course, the compensation of employees isn't the only way that collective bargaining agreements drive up costs. They also limit organizations' ability to manage efficiently, as the workload restrictions mentioned above illustrate. With these provisions set in contracts, no particular employees can make ad hoc agreements with administrators to address specific challenges in a way that is satisfactory to everybody involved. Everything has to be defined in contract and is subject to the risk of grievances.

Rigid Schedules

Rigid daily schedules also illustrate this point. The rules for Cranston elementary schools are illustrative:

4. Elementary classroom teachers, excluding kindergarten teachers, shall be allowed 350 minutes for planning and education related activities for each ten day cycle. Such time shall be exclusive of lunch and the time before and after the beginning and end of the student's school day.

a. Elementary itinerant teachers shall be allowed 350 minutes for planning and education related activities for each 10 day cycle. Such time shall be exclusive of lunch. The time before and/or after school shall be excluded only if the itinerant has been assigned duties during that time, such as bus duty or morning duty. The administration agrees to make a good faith effort to equitably assign duties to all elementary teachers.

b. Kindergarten teachers shall be allowed a 55 minute block of time between A.M. and P.M. sessions, inclusive of lunch and travel. Effective in the 2015-2016 school year, kindergarten teachers shall be allowed a 45 minute block of time between A.M. and P.M. sessions, inclusive of lunch and travel.

c. In addition to the 350 minutes for planning and education related activities for each ten (10) day cycle, the school administration shall make a good faith effort to provide a thirty (30) minute block of common planning time per week, organized around improvement of student learning, to elementary teachers scheduled to teach inclusion classes.

d. Effective in the 2015-2016 school year, for elementary teachers, the normal instructional cycle based on the 35-minute itinerant educator periods will include:

1. One (1) daily unassigned period

2. One (1) weekly common planning time

3. One (1) daily thirty (30) minute lunch period

4. Fifteen (15) minutes before school non-instructional time (in Title 1 schools, the teacher will be responsible to supervise the Breakfast in the Classroom Program)

5. Fifteen (15) minutes after school non-instructional time

e. Elementary teachers shall be scheduled to participate in one sixty (60) minute period of common planning time meeting per week excluding weeks in which teachers are scheduled to attend meetings pursuant to Article VIII, Section B.1 only for the 2014 – 2015 school year. These meetings will begin as soon as the student day ends. Attendance at common planning time activities is mandatory unless excused by the building principal.

5. The first ten (10) day cycle shall commence on the Monday of the first week of the school year and each succeeding cycle shall follow the first, unaffected by interruptions in the school year, such as holidays, vacations, and snow days.

6. Notwithstanding other language in this agreement to the contrary, each elementary classroom teacher shall receive at least ten (10) thirty minute time blocks during a ten day cycle, excepting art which shall be forty (40) minutes. Effective in the 2015-2016 school year, each elementary classroom teacher shall receive at least ten (10) thirty-five minute time blocks during a ten day cycle.[60]

Any deviation from this scheme requires additional expense or — if, say, a teacher and administrator wanted to experiment with something — renegotiation of the contract.

Impossible Layoffs

The inability to adjust to the actual circumstances facing government agencies is another source of expense and difficulty. Contract provisions as well as state law make layoffs unnecessarily disruptive and inefficient in Rhode Island.

Rhode Island General Law Chapter 16-13 requires districts to notify teachers of potential layoffs — for reasons of budget, enrollment, or otherwise — in March of the prior school year, when budgets are not yet known and enrollment can only be guessed.[61] For this reason, when facing budgetary problems in 2014, the City of Providence was forced to issue layoff notices to all 2,000 of its teachers.[62] These regular

---

[60] Master Agreement Between the Cranston School Committee and the Cranston Teachers' Alliance Local 1704, AFT." September 1, 2014–August 31, 2017. www.cpsed.net/human/contract/teacher/teacher.pdf (Accessed 3/30/19.)

[61] Rhode Island General Law Title 16, Chapter 13. "Teachers' Tenure." webserver.rilin.state.ri.us/Statutes/TITLE16/16-13/INDEX.HTM (Accessed 3/30/19.)

[62] "Rhode Island City Issues Layoff Notices to All Teachers." Associated Press. February 23, 2011. www.foxnews.com/

events frighten communities and could inspire teachers unnecessarily to look for work elsewhere.

Moreover, the fact that layoffs must begin with teachers of lower seniority means that star teachers must often be let go before mediocre ones if they were hired later. And when the reason for layoffs is budgetary, seniority rules may mean that a larger number of junior teachers must be let go in order to preserve the jobs of fewer senior teachers. In 2007, the Middletown school district laid off its teacher of the year for budgetary reasons.[63] Contracts take this matter further. Cranston is limited to laying off no more than 3% of teachers and cannot hire new people until all laid off teachers are offered the jobs.[64]

Of course, budgets and enrollment aren't the only reasons employees might lose their jobs, and the difficulty of the process, even when the agency has good cause, puts government employers in the position of looking for easy ways out, like forced retirement. One rationale that the Town Council gave for the Tiverton police lieutenant's graceful retirement described above was the prospect of an expensive legal battle with the police union. The same town followed this pattern with a maintenance foreman filmed by an investigative reporter using town resources and time to work on his own rental properties, a town administrator who fired a whistleblower in that case, and a firefighter accused of sick leave abuse.[65]

A union-backed law in Rhode Island known as the "Police Officer's Bill of Rights" has raised multiple recent examples of officers' appearing to get off light for various offenses.[66] Even when they aren't permitted to retire, government employees continue to draw taxpayer-funded checks well after they would in the private sector. A Rhode Island College theatre manager arrested in October 2016 for requesting checks to pay vendors and taking the money[67] managed to collect 78% of his $75,000 salary during that fiscal year, according to the state's transparency portal.[68] (October is about 25–30% of the way into the fiscal year.)

In 2017, journalists found 51 state employees under the Dept. of Administration who were on paid administrative leave for some reason.[69] Some of them had been collecting pay without working for years.

Holding Employees' Spots

Another high-profile scandal arising out of Rhode Island College was that of Frank Montanaro, Jr. — scion of a local labor union leader.[70] The sharp edge of the scandal was that Montanaro managed to procure nearly $50,000 in tuition subsidies for his children at the college even though he had moved on from his job there to a higher-paying one in the state legislature. He managed this feat by claiming "leave-to-protect" status, which allows employees to move on to other jobs without fully giving up their claims to the ones they're leaving.

Montanaro's case was particularly objectionable because he held this status for three years and received a monetary benefit from it, but even when that is not the case, the practice can be disruptive to management. The school department in Barrington allows teachers to take up to two years off to try other non-K–12 jobs every five years.[71] These long-term leaves are not paid, although teachers can keep health and dental benefits if they pay the full cost and return with their employment status and accumulated sick days intact. The more-disruptive aspect, however, is the effect on staffing. If

us/rhode-island-city-issues-layoff-notices-to-all-teachers (Accessed 3/30/19.)

[63] "Middletown teacher recalled to school part time." *Newport Daily News.* 8/24/07.

[64] Master Agreement Between the Cranston School Committee and the Cranston Teachers' Alliance Local 1704, AFT." September 1, 2014–August 31, 2017. www.cpsed.net/human/contract/teacher/teacher.pdf (Accessed 3/30/19.)

[65] Justin Katz. "Weak Leadership Has Made Tiverton a Mark for Abuse." *Tiverton Fact Check.* February 14, 2017. tivertonfactcheck.org/blog/2017/02/14/weak-leadership-has-made-tiverton-a-mark-for-abuse (Accessed 3/30/19.)

[66] Parker Gavigan. "Bill of rights protects officers accused of crimes." WJAR. turnto10.com/archive/bill-of-rights-protects-officers-accused-of-crimes (Accessed 3/30/19.)

[67] Margo Sullivan. "State Police Say Rhode Island College Theater Director Took $60,000." *Patch.* October 18, 2016. patch.com/rhode-island/johnston/state-police-say-rhode-island-college-theatre-director-took-60-000 (Accessed 3/30/19.)

[68] State of Rhode Island Transparency Portal. www.transparency.ri.gov/payroll (Accessed 3/30/19.)

[69] Patricia Resende. "State employees placed on leave with pay for months, years." WJAR. May 15, 2017. turnto10.com/i-team/nbc-10-i-team-state-employees-placed-on-leave-with-pay-for-months-years (Accessed 3/30/19.)

[70] Ted Nesi. "Top Mattiello aide got $50K in free tuition after taking State House job." WPRI. July 10, 2018. www.wpri.com/news/eyewitness-news-investigates/top-mattiello-aide-got-50k-in-free-tuition-after-taking-state-house-job_20180314125825208/1044263254 (Accessed 3/30/19.)

[71] "Agreement Between the Barrington School Committee and NEA Barrington." September 1, 2016–August 31, 2019. www3.barringtonschools.org/businessoffice/Labor%20Contracts/NEA%20Barr%20Contract%209-16%20to%208-19%20signedv4.pdf (Accessed 3/30/19.)

a teacher takes such a leave after three years of work, what should the district do with his or her replacement, who may have worked for the district for two full years?

Other Costs

Bargaining Unit-Specific Costs

This remains a somewhat cursory review. Contract provisions can evolve in ways very specific to a particular agency, requiring extensive analysis to understand how the sections interact with each other. Indeed, one of the structural imbalances of collective bargaining in the public sector is that no outside actor can be presumed to have the incentive or the resources to investigate contracts as comprehensively in search of savings as the labor unions have for their pursuit of increased spending.

In the rural Harrisville Fire Department, for example, firefighters are explicitly permitted to sleep through the night while on duty if no calls come in.[72] They also cannot be required "to perform outdoor maintenance or training" if the temperature is not between 35 and 90 degrees Fahrenheit. Who would have the incentive to investigate this activity? Among the 15 holidays for which Cranston firefighters receive almost one-third of a week's pay (in addition to the full week's pay) is 9/11.[73] What group would have sufficient incentive to make a public case about that emotional day?

In 2011, investigative reporter Tim White observed a Department of Transportation employee represented by Council 94 spending hours a day in his car.[74] When confronted, the man simply repeated the phrase, "I'm parked on the job." He remains on the job, according to the state's transparency site,[75] and even White, one of the state's top reporters, could not overcome the state's efforts to obscure the meaning of that phrase.

The Cost of Unions

Finally, taxpayers should remember that all of the assets and employees of the labor union bureaucracy ultimately come

from the public budget (which can include another layer of union organizations that represent the union organizers themselves). The overlap of the unions, which are private organizations, with government operations is visible in the contract requirements detailed above, paying government employees to engage in union activities, as well as the very common provisions granting unions the use of offices, storage space, bulletin boards, mailboxes, and so on in government buildings.

It would go beyond the scope of this report to explore the legal implications of these provisions, but readers may find it of interest to know that state law appears to prohibit some of the activities above. Under the state Labor Relations Act, Rhode Island General Law 28-7-13 states that "it shall be an unfair labor practice for an employer to" give preference to "any employee organization":

> By compensating any employee or individual for services performed in behalf of any employee organization or association, agency or plan, or by donating free services, equipment, materials, office or meeting space, or any thing else of value for the use of any employee organization or association, agency, or plan; provided that an employer shall not be prohibited from permitting employees to confer with him or her during working hours without loss of time or pay.

The language ought to cover the resources within government buildings just mentioned as well as release time or — in the case of teachers — paid periods each day for the conduct of union business.

ESTIMATING THE COST TO RHODE ISLANDERS

Literature Review

A significant amount of research has been done on public-sector compensation and the effects of collective bargaining and public-sector unions. Researchers have analyzed the differences between private- and public-sector compensation; they have estimated union wage premiums for public-sector workers; and they have analyzed the effects of collective bargaining on wages, employment, and government budgets. In what follows, we will survey some of this literature, summarizing the conclusions and looking for ways to apply them to Rhode Island in particular. We will discuss the methodologies of the research to point out areas of disagreement that can lead to different conclusions.

There are multiple strands of the research literature. The main topics that have been studied include whether pub-

---

72 "Collective Bargaining Agreement by and Between the Harrisville Fire District and Harrisville Firefighters Association, Local 4910, International Association of Firefighters, AFL-CIO." September 1, 2014–August 31, 2017.

73 "Agreement Between City of Cranston and Local 1363, International Association of Firefighters AFL-CIO." July 1, 2016–June 30, 2019. www.municipalfinance.ri.gov/documents/contracts/Cranston_Fire.pdf (Accessed 3/30/19.)

74 Tim White. "The DOT DoZZZer." May 4, 2011. www.youtube.com/watch?v=WwkZMhl8yoE (Accessed 3/30/19.)

75 State of Rhode Island Transparency Portal. www.transparency.ri.gov/payroll (Accessed 3/30/19.)

lic-sector workers are paid similar wages and benefits to private-sector workers, whether unionized workers in the public sector earn wage and benefit premiums versus non-unionized workers in the public sector, and whether public-sector collective bargaining leads to increases in wages and benefits, employment, and government spending. We will discuss each of these in turn.

Before turning to the discussion, however, it is worth recognizing that the topic of public-sector pay is often viewed as a political statement, with conservative organizations claiming that public-sector pay is too high and progressive organizations claiming that it is not. The purpose of this review is not to make a political statement but to try to summarize the research that has been done.

Not surprisingly, the research does not reach uniform conclusions. Sorting through it requires some judgement about the best approach, and people can reasonably differ in those judgements. We will point out where the judgements affect the results to allow readers to judge for themselves what they think is most reasonable.

Issues in Analyzing Public Sector Versus Private Sector

One might think that comparing public-sector and private-sector pay would be easy. One would be wrong. Even a simple comparison of pay is difficult, because of the many dimensions of compensation: wages, hours worked, health benefits, pension and retirement benefits, post-retirement health care, and other fringe benefits. In particular, measuring the value of benefits is an exercise in making assumptions about their value.

The difficulty of comparing compensation components is compounded by a lack of data. At the national level, there are good data sources for making comparisons, but going down to the local level is virtually impossible due to the costs of collecting local data. Consequently, the most disaggregated comparisons have only been done down to the state level, and only by making significant assumptions.

There is no single, comprehensive data source for comparing public and private pay. Researchers have used data from the Census Bureau, the Bureau of Economic Analysis (BEA), the Bureau of Labor Statistics (BLS), and various private sources of data, such as the Public Plans Database (PPD) from Boston College.[76]

The public data sources differ along several dimensions. First, some data — the BEA data for instance — are aggregate, able to give only national or state-level averages and totals. Second, the data sources differ in what they include. For example, the Current Population Survey Annual Social and Economic Supplement (CPS-ASEC or CPS-ASE) does not include estimates of benefits like retiree health insurance or the value of a defined-benefit pension plan. Researchers are therefore forced to estimate the value of benefits using other data sources and assume those sources accurately measure the benefits to the survey respondents in (say) the CPS.

The research that has been done has focused on two variables: wages and total compensation. The difference between the two is the value of the benefits package offered to employees. The two major benefits are health insurance, which could include retiree health coverage, and retirement benefits. Wages and hours worked are the most straightforward to measure, and researchers have not disagreed about their measurement. Benefits, however, are much more difficult to measure. In particular, valuing a defined-benefit pension plan requires an assumption about the rate at which the liabilities should be discounted (that is, translated into their current value). Valuing retirement health care benefits is difficult because employers have generally not directly contributed to those benefits while the person is working.

Public-sector workers have access to both defined-benefit pensions and retirement health care at much greater rates than do private-sector workers. As Table 3 shows, the difference in coverage is dramatic, even comparing government with other large organizations.

There are significant challenges in valuing these two benefits, in particular. With regard to defined-benefit pensions, the value to the employee should be calculated as the value right now of the stream of benefits the employee will earn upon retirement. Actuaries calculate this figure for a particular plan using assumptions about mortality, cost of living increases, and interest rates. In principle, an employer should contribute each year the present value of the future benefits the employee earned by working that year; this is the so-called normal cost. Put differently, each year, the employer should add to the contributions that the employee is required to make whatever is necessary to cover the benefits the employee earns that year. Unfortunately, state and local governments have substantial leeway to make their contributions what they want. We cannot simply rely on the employer's normal cost contribution to accurately reflect the value of a defined-benefit pension.

---

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

Table 3: Workers Benefit Access by Company Size, 2017 (%)

	All employees	All employees in New England	100–499 workers	500 or more workers
Private industry workers, percentage with access to a defined-benefit pension	18	19	20	43
State and local government workers, percentage with access to a defined-benefit pension	86	78	87	87
Private industry workers, percentage with access to retiree health benefits age 65 and over	13	12	14	32
State and local government workers, percentage with access to retiree health benefits age 65 and over	63	72	57	73
Private industry workers, percentage with access to retiree health benefits under age 65	15	13	16	38
State and local government workers, percentage with access to retiree health benefits under age 65	68	70	62	75

Source: Bureau of Labor Statistics National Compensation Survey

Currently, many state and local governments use a discount rate in the 7–8% range. This rate often derives from the predicted return on the plan's assets. The return on the assets is not, however, the correct rate at which to discount the liabilities. Those liabilities have a risk profile similar to a state or local government bond, which means the discount rate should be much smaller. As of mid-2018, Treasury bond rates were 3–4%; state bonds have slightly higher yields, but certainly nothing like 7–8%. Discounting the direct-benefit pension liability at the correct rate dramatically increases the present value of the liabilities (because direct contributions have to make up for lower expected returns) and, therefore, the benefit obtained by the employee.

As an example, economists Andrew Biggs and Jason Richwine examine plans in which the actuaries perform an analysis using lower interest (i.e., discount) rates, usually 1% less than the assumed rate. The actuaries estimate that a 1% decrease in the rate will increase the normal cost by about 36%. Clearly, going from say a 7.5% rate to a 4.5% rate could double or triple the size of the liability. Rhode Island saw the repercussions of this adjustment some years ago when then-treasurer Gina Raimondo led the state retirement board in a reduction of the return assumption from 8% to 7.5%, creating a budget crisis that pension reform purported to resolve.

With respect to Rhode Island in particular, the Auditor General publishes an annual report on the various retirement systems for state and local government employees. In that report, there is a sensitivity analysis of the present value of the liabilities to lowering the discount rate from its current assumed 7% to 6%. For the five largest employee pension funds (which comprise 99% of the total), Table 4 shows the effect of that 1% decrease.

Table 4: Rhode Island Pension Liability Change per 1% Discount Rate Change, FY17

	Liabilities using current 7% ($ millions)	Liabilities using 6% ($ millions)	Increase (%)
Employee Retirement System — Teachers	3,147	3,955	26
Employee Retirement System — State employees	2,255	2,808	25
Municipal Employee Retirement System — General employees	266	410	54
Municipal Employee Retirement System — Police and fire	171	249	46
State Police Retirement Fund Trust	160	181	13

Source: "Audit Reports." Rhode Island Office of the Auditor General. www.oag.ri.gov/reports.html (Accessed 3/30/19.)

These percentage increases are in the range of the figure Biggs and Richwine calculate and indicate that the current valuation of liabilities is an underestimate of the benefits that are likely to be paid out. In other words, the pension benefits of public-sector employees are much more valuable than they appear.

Benefits are usually measured as a percentage of salary. For instance, the RI fiscal 2018 employer contributions for the two largest funds are 23% for teachers and 25% for state employees. The contribution figure, however, includes a portion devoted to amortizing the unfunded liability. According to the actuaries, the two largest Rhode Island pension funds are only about 50% funded; hence, the unfunded liability continues to be large. Using the percentage of salary then suffers from two opposing errors. First, it underestimates the benefit to the current employee by using too low a discount rate. Second, it overestimates the benefit to the current employee because of the part devoted to amortization.[77] Researchers have attempted to address both these issues.

When it comes to valuing retiree *health benefits,* the difficulty is that employers are generally not contributing to those benefits, or contributing very little, while the person is working. One might say that they are treating the present value of the future costs as next to zero.

The State of Rhode Island, however, does contribute to Other Post-Employment Benefit (OPEB) funds, which are meant to pay for future health care benefits to retirees. For the Employee Retirement System (ERS), the state contributes 6.7% of payroll. Once again, this figure is the sum of the normal cost and the amortization of the unfunded liability. In the actuarial report dated June 2017, the 6.7% figure for the ERS is split into a 2.4% normal cost part and a 4.3% amortization part. The discount rate used in 2017 was a more realistic 5% to calculate the liabilities, so the 2.4% normal cost is a somewhat more reasonable estimate of the employer cost, here, than it is for the defined-benefit pension plan.

Once the basic data issues are addressed, the challenge of comparing the public to the private sector remains. Simple comparisons based on (say) average wages and compensation are not fully illuminating because of the differences in workforce characteristics between the public and private sectors. Public-sector workers are often older, more experienced, and have higher educational levels than private-sector workers. Researchers attempt to adjust for these differences

in statistical analyses, but this requires the specification of a regression model that is assumed to quantify all differences.

There are two approaches to estimating these regression models: the "people approach" and the "positions approach." The *people* approach tries to control for characteristics of people such as education and experience to compare equivalent individuals. The *positions* approach tries to control for characteristics of the job so as to compare equivalent jobs.

The people approach estimates a "human capital" model in which an individual's compensation is based on characteristics such as age, education, race, gender, and geography. Such models have been used for many years by economists, and they are well accepted. The chief point of disagreement is which variables to include. Within the research being discussed, there have been disagreements about including organization size and union status.

Peter Linneman and Michael Wachter (1990) remind us that the point of the people approach is to control for skill traits that are specific to the person.[78] Measuring these is difficult, and researchers must use proxy variables such as education and experience to control for person-specific skills. Linneman and Wachter describe another set of variables as "job-descriptive"; these are variables associated not with a person but with a job. The people approach should control for skill variables but not job-descriptive variables. This implies leaving out variables such as firm size and union status from the regression model.

Firm size, in particular, is controversial. Firm or organizational size appears to have a substantial effect on compensation. For reasons that are not well understood, larger firms offer better compensation. Public-sector workers are more often employed by larger organizations. If we only compare public-sector workers to larger firms, that will reduce the differences between the two groups. The argument for including organization size as a skill variable has to rest on the assumption that there is an unmeasured skill that larger organizations are capable of detecting and hiring for and for which they pay a premium. If this is the case, then including size is correct. Other reasons that larger organizations pay more, such as splitting monopoly rents with workers or an efficiency wage argument, do not support including size as a variable in the regression.

Including size as a variable in the regression model would compare workers in equally sized organizations. For com-

[77] We should note that "overestimation," in this case, applies to an individual employee. The portion of the contribution going toward amortization is essentially making up for underestimation of employees' benefits in the past.

[78] Peter D. Linneman and Michael L. Wachter. "The Economics of Federal Compensation." *Industrial Relations.* 29(1), 1990, 58–76.

parisons of employee compensation, however, that implicitly assumes that public-sector workers would be employed in the largest firms if they were in the private sector. Given that only about 40% of private-sector workers are employed in firms larger than 1,000 employees, it is unlikely that public-sector workers would all do so. Nationally, about 64% of private-sector employees work for firms with more than 100 employees, so a straightforward comparison of public to private is not unreasonable at that level.

Linneman and Wachter advocate against including size but acknowledge that researchers may differ about what is a skill variable and what is a job variable. They present estimates for federal workers both with and without organizational size. The estimates without size reveal a substantially larger wage premium for federal workers. In the research discussed below, several papers explicitly include size as a variable; several explicitly exclude it; and finally, several offer estimates with size included and excluded.

Most of the more recent research uses the people approach described above. In part, this is because most research uses some form of the CPS data — specifically, the Outgoing Research Group (CPS-ORG or CPS-MORG) or the Public Use Microdata Sample (PUMS). The CPS data contains information on personal characteristics, but not on job positions.

The alternative to the people approach is the positions approach, in which researchers attempt to compare similar jobs across the public and private sectors. The Employer Cost for Employee Compensation (ECEC) data from the National Compensation Survey (NCS) is a jobs-based dataset, constructed by surveying firms, not individuals. In the ECEC data, jobs are classified by 15 work levels, where the level depends on the skills, knowledge, and duties of an occupation. Equal work levels should presumably lead to equal pay. In the research discussed below, only Maury Gittleman and Brooks Pierce (2009) use the ECEC microlevel data and work levels to try to compare equal job positions. [79]

One final issue with such models is that the normal practice of estimating a semi-log model and then exponentiating the coefficient to recover a percentage difference is not statistically valid. That procedure is not accurate because public-sector wages are less variable than private-sector ones. See McKinley Blackburn's work (2007).[80] Both advanced statistical techniques and more *ad hoc* adjustments exist to make

the estimates more reliable, and the process of adjustment lowers the difference between public- and private-sector wages. But except for two of the research efforts below, none of the authors makes any adjustments to the estimates. Biggs and Richwine acknowledge the problem and briefly discuss the sensitivity of their estimates to different techniques; Gittleman and Pierce also acknowledge the issue and present estimates that are adjusted for the variance of the wage distribution; they try several techniques and find little difference between them.

Comparing Public-Sector Workers to Private-Sector Workers

Andrew Biggs and Jason Richwine, two economists at the American Enterprise Institute (AEI), produced a comprehensive report in April 2014 comparing public-sector to private-sector compensation.[81] Their study provides data for every state, but they study only state employees in non–public safety positions.

They estimate each component of compensation in a systematic way, adjusting the survey data to produce more-accurate estimates of compensation. In particular, they expend considerable effort to estimate defined-benefit pension benefits accurately and to account for retiree health benefits. They also implicitly control for organizational size by estimating a firm-size wage premium and then adjusting public-sector wages downward by that premium; the premiums vary by state and average –6% for the whole United States.

Using a standard human capital model for each state, Biggs and Richwine find that wage differentials go from 2% in favor of state workers to –21%. Rhode Island's estimate of the wage premium is 0%. For total compensation, the differentials by state go from 42% to –6%. For RI, their estimate is that state workers enjoy a 24% premium over the private sector.

Maury Gittleman and Brooks Pierce, two economists at the BLS study all state and local workers in the United States in comparison with private-sector workers. They use both the CPS data and the ECEC data from the NCS. The former is a survey of individuals; the latter is a survey of employers. They were the first to analyze the microdata from the NCS, which has better estimates of benefits than does the CPS data. The authors do not adjust the pension benefits and do not include retiree health care; hence, they underestimate the extent of public-sector compensation.

[79] Maury Gittleman and Brooks Pierce. "Compensation for State and Local Government Workers." *Journal of Economic Perspectives.* 26(1), (2011): 217–242.

[80] McKinley Blackburn. "Estimating Wage Differentials Without Logarithms." *Labour Economics.* vol. 14, July 2007, 73–99.

[81] Andrew Biggs and Jason Richwine. *Overpaid or Underpaid? A State-by-State Ranking of Public-Employee Compensation.* April 2014, AEI Economic Policy Working Paper 2014–04.

Gittleman and Pierce report an unadjusted average differential of about 0.5% in favor of state and local workers for weekly earnings (not including benefits) from the CPS data; the NCS estimate of the unadjusted differential is much larger, at 16% and 20% for state and local workers, respectively. These estimates do not adjust for differences in characteristics of people or of jobs, and the data clearly show that government workers have disproportionately higher education.

If we look at unadjusted estimates for total compensation, the data from Table 2 of Gittleman and Pierce are displayed below in Table 5.

The unadjusted premiums are quite large in favor of public-sector compensation, particularly with regard to benefits. The differentials in favor of the public sector are reduced when Gittleman and Pierce remove contract hours workers, for whom hourly pay is difficult to estimate. Teachers, for example, have contracted hours but often work more outside the classroom. Their total hours are not reflected in the ECEC data because it is employer based. Even with those contract hours removed from the data (for both public and private), the unadjusted premium for state government is 31% and for local government is 26%.

Gittleman and Pierce go on to estimate multiple regression models that control for person or job characteristics. They adjust the percentage differentials to account for the statistical issue discussed above (see Table 6).

Excluding contract workers changes the results, but the percentages are almost all within 1–2 percentage points of the estimates in the table. As the table shows, the models estimated with the NCS data show substantial premiums in favor of public-sector workers, certainly with respect to compensation.

Gittleman and Pierce also use the CPS wage data that other researchers have used to estimate a usual "people approach" model. They find results that are in line with previous research in which the standard personal characteristic variables lead to the conclusion that state and local government workers make less than their private-sector equivalents. Comparing the CPS results with the NCS ones above demonstrates that, in every category, the CPS estimates are less

Table 5: Employer Costs per Hour Worked, 2009

	Private ($)	State Government ($)	State Government Premium over Private (%)	Local government ($)	Local government premium over Private (%)
Wages	20.37	25.79	27	26.38	30
Benefits	8.08	14.18	75	13.50	67
Total	28.45	39.97	40	39.88	40

Source: Gittleman and Pierce Table 2, National Compensation Survey

Table 6: Public Pay Premiums Adjusted for Worker and Job Characteristics, 2009 (%)

	NCS weekly wage	NCS weekly compensation
State government		
Raw differential	13.7	21.8
Standard control variables	−8.1	3.2
Adding major occupation	−1.3	10.1
Adding detailed occupation	−2.3	8.7
Local government		
Raw differential	16.8	23.0
Standard control variables	2.5	10.5
Adding major occupation	9.6	18.5
Adding detailed occupation	9.2	17.6

Source: Gittleman and Pierce Table 3, National Compensation Survey

than and often opposite in sign to the NCS public-sector premiums. The authors do not discuss this pattern at any length, except to note that they "believe the National Compensation Survey likely contains more accurate data on wages, industry, occupation, and sector than does the Current Population Survey."

Gittleman and Pierce conclude that ". . . public sector workers, especially local government ones, on average, receive greater remuneration than observably similar private sector workers. Overturning this result would require, we think, strong arguments for particular model specifications, or different data."

William Even and David MacPherson, two academic economists, produced reports on public-sector compensation for several states, including Rhode Island, using 2010 data.[82] The Rhode Island iteration of their work was published in cooperation with the RI Center for Freedom & Prosperity. Similarly to Biggs and Richwine, they use several data sources to arrive at better estimates of compensation. They adjust both private and public defined-benefit pension figures using a 4% discount rate and estimate the value of retiree health benefits for both public- and private-sector workers.

After estimating a standard human capital model, Even and MacPherson find that public-sector workers in Rhode Island earn both higher wages and higher total compensation than equivalent private-sector workers. They estimate that wages are about 10% higher for public-sector workers in the Ocean State, and total compensation is about 27% higher. For the United States as a whole, public-sector wages are 1.5% lower than the private sector and total compensation is 15% higher. Rhode Island appears to be one of the few states where public-sector workers enjoy a premium for both wages and compensation.

The studies cited above consistently find a compensation premium in favor of state and local government workers. Not surprisingly, those findings are disputed by others. Several studies find negative premiums for state and local government workers. Research by Bender and Heywood (2010), Keefe (2010), and Schmitt (2010) all find that government workers are paid less than private-sector workers.

John Schmitt, an economist at the Center for Economic and Policy Research (CEPP; 2010), studies only wages using the CPS data for 2009. He finds an unadjusted premium in favor of state and local government workers of about 13%. This premium is reversed, however, once he controls for age, education, gender, race, and region. The adjusted wage premium becomes about –4%. Given that he studies only wages and not total compensation, the study is less useful for addressing the issue of whether public-sector workers are compensated more than their private-sector counterparts.

Jeffrey Keefe produced a briefing paper for the Economic Policy Institute (EPI) that looks at total compensation.[83] Keefe uses the CPS data and the ECEC data for 2009 to estimate total compensation. He does not try to adjust the defined-benefit pension figures or to estimate the retiree health benefits, which causes him to underestimate total compensation. He does not present unadjusted estimates, and his model includes controls for education, experience, organizational size, gender, race, disability, and year. He finds that state government workers have a –8% premium and local government workers have a –2% premium for total compensation.

One of the major differences between Keefe and Gittleman and Pierce is that the former controls for organization size. Keefe also uses the CPS data for wages and estimates benefits with the ECEC data; Gittleman and Pierce use the ECEC data for both wages and benefits. Gittleman and Pierce get estimates similar to Keefe when they use the CPS wage only; when they adjust for firm size, this reduces the premium in favor of public-sector workers but does not make it negative, as Keefe finds. Perhaps the different data sources account for this discrepancy.

> *William Even and David MacPherson estimate that wages are about 10% higher for public-sector workers in the Ocean State, and total compensation is about 27% higher. For the United States as a whole, public-sector wages are 1.5% lower than the private sector and total compensation is 15% higher.*

[82] William Even, David MacPherson, and Justin Katz. "RI Public and Private Sector Compensation Comparison." Rhode Island Center for Freedom and Prosperity, 2012.

[83] Jeffrey Keefe. "Debunking the Myth of the Overcompensated Public Employee," Economic Policy Institute Briefing Paper No. 276. September 15, 2010.

Keith Bender and John Heywood, two academic economists, compared public and private compensation in a 2010 report for the Center for State and Local Government Excellence (CSLGE) and the National Institute on Retirement Security (NIRS).[84] They use the CPS data from 1983 to 2008, analyzing private-public differentials in each year and for several states. They estimate the usual human capital model but include union status; they find public premiums in the range of –11 to –12% — that is, public-sector wages were significantly less over the whole time-period studied.

The authors go on to study total compensation in both sectors by combining estimates from the CPS and ECEC data. They use the ratio of earnings to total compensation in each sector to adjust wages. This has the advantage of being simple but is methodologically debatable, as they admit. Given that they find only a small difference in the ratio of earnings to compensation of 71% and 67% in the private and public sectors, respectively, their estimate of total compensation still reveals a –7 to –10% differential for the public sector.

Alicia Munnell, Jean-Pierre Aubry, Josh Hurwitz, and Laura Quinby, all at the Center for Retirement Research (CRR) at Boston College, produced a report in 2010 whose estimates fall in between the two competing groups above.[85] They use the CPS data plus their own Public Plans Database (PPD) to analyze both wages and total compensation.

They estimate a human capital model with the usual variables, concluding that state and local workers are paid about 10% less when considering wages alone. The authors make a good faith effort to estimate the value of benefits, adjusting the defined-benefit pension figure and adding in retiree health benefits. Their adjustments for these are smaller than the Biggs and Richwine adjustments. As a result of this choice (and others), Munnell et. al. conclude that total compensation levels are "roughly equal" across sectors. They are one of the few papers to present sensitivity analysis of including organizational size in the model. If size is omitted, public sector workers make approximately 5% more than equivalent private sector workers.

Although our interest is with state and local government employees, we also mention that there has been extensive research devoted to analyzing federal workers versus private-sector workers. This research goes back to the 1980s.

Two of the more-recent papers in this area were released by the Congressional Budget Office (CBO) in 2012 and authored by Justin Falk, an economist for the organization.[86] Falk carefully analyzes both wages and compensation in two papers. He adjusts for the statistical issue discussed above and provides a sensitivity analysis of including organizational size; he estimates a true value of the defined-benefit pension plans and also adds in the value of retiree health care benefits.

For wages, Falk finds that the federal worker premium is about 2%; for total compensation, the federal worker premium rises to about 16%. Echoing several other researchers, Falk's results vary substantially by educational attainment. Workers with high school or less education have a 36% premium in compensation; this premium falls steadily with increasing education all the way to a –18% premium for workers with professional or doctoral degrees.

This brief summary of the research on public-private compensation differentials shows that it is possible to find research that supports diametrically opposed conclusions. Some might be inclined to write it all off in the category of statistics' being able to prove anything, but there are differences in the research that should be acknowledged. Some conclusions comparing public- and private-sector workers:

- Using wages alone is not fully informative.
- Systematic estimates of benefits is difficult, but doable. Benefits should not be estimated in *ad hoc* ways, but by trying to fully account for their true value.
- The specification of the regression model can have a large effect on the estimates. Organizational size, union status, and occupational control variables can cause the estimated public-sector premiums to change magnitude and even sign.
- The data set used also appears to affect the estimates, with the CPS data leading to more-negative differentials of public-private wages while the NCS data produce zero or positive differentials.
- There is substantial variation by state in premiums accruing to public-sector workers.
- There is a robust pattern to the premiums by educational level, with workers at the lower end receiving larger premiums and those at the higher end receiving much lower, or even negative, premiums.

[84] Keith A. Bender and John S. Heywood, "Out of Balance? Comparing Public and Private Sector Compensation over 20 Years," Center for State & Local Government Excellence (CSLGE), National Institute on Retirement Security, April 2010.

[85] Alicia Munnell, Jean-Pierre Aubry, Josh Hurwitz, and Laura Quinby. "Comparing Compensation: State-Local Versus Public Sector Workers." Center for Retirement Research, Boston College. September 2011.

[86] Justin Falk. "Comparing Benefits and Total Compensation in the Federal Government and the Private Sector." Congressional Budget Office Working Paper 2012–4, 2012.

The Gittleman and Pierce study comes close to a thorough and comprehensive analysis of state and local versus private compensation. In addition, it would be difficult to accuse the authors of partisan bias; their research comes from the BLS, not a progressive or conservative think tank. Finally, their paper met the standards of a publishable article in one of the very best peer-reviewed economics journals, the Journal of Economic Perspectives. The standards for publishing in such a journal are very high indeed; the editor of the journal, Timothy Taylor, has a long and distinguished history of publishing top-quality research.

Given these advantages, it seems reasonable to accord more weight to their estimates. For state employees, by their estimate, total compensation is 3–10% higher depending on the model used. For local government employees, total compensation is 11–19% higher than in the private sector.

Comparing Union Versus Non-Union Public-Sector Employees

There is a long history of economists trying to understand the effects of unions. Researchers have analyzed, among other things, the effects of unions on wages, employment, job tenure and satisfaction, wage inequality, work rules, and job outcomes. Much of this work dates back to the 1980s and is confined to the private sector. The effects of unions may be less relevant now that private-sector union membership has significantly declined over the past 50 years. It has fallen from more than 30% of workers belonging to a union in the 1950s to about 7% in 2017. Public-sector union membership, on the other hand, is about five times higher, at roughly 35%, and has been stable for many years.

Public-sector unions share some of the same goals as private-sector unions, but they are different in at least one important aspect: their ability to influence the demand for workers and restraints on employers by directly lobbying politicians. Politicians, in turn, may welcome the support of unions to increase campaign contributions and the probability of being reelected. Eileen Norcross, of the Mercatus Center, provides a useful summary of public-sector unionism.[87] Researchers have studied the effects of public-sector unions on wages, employment, and government expenditures.

One effect about which there is substantial agreement is the wage premium attached to belonging to a union, including in research that the Center published in 2012.[88] Generally,

economists have examined wages and have almost universally agreed that belonging to a union raises wages by 10–20% versus nonunionized jobs. The flavor of these results can be seen in Table 7 which presents 2017 median earnings for the private sector and state and local government by union status from the BLS.[89]

Table 7: U.S. Full-Time Wage and Salary Workers Median Weekly Earnings by Union Status, 2017

	Represented by unions ($)	Non-union ($)	Union premium (%)
Private sector	971	816	19
State government	1,050	907	16
Local government	1,106	832	33

Source: Bureau of Labor Statistics

The union earnings premium is in the usual range for both the private and state government sectors, but it is much higher for local government workers. Once again, the simple averages or medians do not tell the whole story due to differences in characteristics of workers.

The unadjusted medians presented in Table 7 do not, of course, adjust for worker characteristics. Union status is positively correlated with educational levels, given that most teachers belong to unions. As with the public-private comparison, however, it is necessary to try to control for worker characteristics to isolate the effect of unionization. We discuss several papers that try to do exactly that.

A paper by David Blanchflower and Alex Bryson (2004) is a good example of that effort.[90] They examine both private and public unions, updating some of the classic work by

---

[87] Eileen Norcross. "Public Sector Unionism: A Review," George Mason University, Mercatus Center Working Paper No. 11-26, May 2011.

[88] Justin Katz. "RI Public and Private Sector Compensation Comparison." November 2012. rifreedom.org/wp-content/

uploads/ricfp-publicprivate.pdf (Accessed 3/30/19.)

[89] "Economic News Release. Table 4. Median weekly earnings of full-time wage and salary workers by union affiliation, Occupation, and industry, 2017–2018 annual averages." January 18, 2019. www.bls.gov/news.release/union2.t04.htm (Accessed 3/30/19.)

[90] David Blanchflower and Alex Bryson, What Effect Do Unions Have on Wages Now and Would Freeman and Medoff Be Surprised?, Journal of Labor Research, Summer 2004, 383–414.

Richard Freeman and James Medoff (1984).[91] Blanchflower and Bryson analyze two time periods: 1983–1988 and 1996–2001. They use CPS data to estimate a human capital model and find state government union wage premiums of 9–10% and local government union premiums of 16–20%. Their estimated premiums decline with education, ranging from 18–26% for less than high school to 8–11% for college or post-graduate work.

Two more-recent papers by Bahman Bahrami John Bitzan, and Jay Leitch (2009)[92] and Bitzan and Bahrami (2010)[93] study the union wage effect for public-sector unions specifically. In the first paper, the three authors use the CPS-MORG data to estimate separate models for union versus nonunion workers. They have two sample periods: 1998–1999 and 2000–2004. For brevity, we report only on the latter period.

They estimate a union wage premium of 11% for state workers and 15% for local government workers, decomposing this premium into two parts. One part, often called the explained part, corresponds to differences in characteristics between union and nonunion workers. For instance, union workers may be better educated than nonunion workers. The second part, the unexplained part, is the difference in wages due to the difference in how union workers are rewarded as opposed to nonunion workers. They conclude that about 40–50% of the wage premium is due to differences in characteristics and about 50–60% is because union workers are rewarded differently.

The second paper, by Bitzan and Bahrami, follows a similar approach but examines wage premiums by occupation. For 36 of their 41 occupations, they find a positive union wage premium, but the premiums vary from –6 to +61%. They also compare public- to private-sector workers and find that the private-sector union premiums are larger than public-sector ones. This suggests that much of the difference between the sectors is due to the way in which workers are rewarded rather than differences in worker characteristics. Indeed, when the authors decompose the premium into its two parts, for most occupations a majority of the difference is explained by how governments reward workers as opposed to differences in the worker characteristics.

Although the union wage premium has been consistently estimated to be positive, the effects of public-sector unions on employment and government spending, are more varied. In a review article written more than 30 years ago, Richard Freeman (1986) reviews scores of studies on wages, the composition of compensation, employment and budgets, productivity, personnel practices, and dispute resolution.[94] Except for the first two issues, Freeman reports mixed results with no clear patterns emerging. For wages, the studies Freeman reviews generally found small wage increases for unions in the 1960s and 1970s, but increasing over time; for composition of compensation, the studies reviewed show that public-sector unions raise benefits by more than wages.

There have been many later studies — too many to review — but even these are often 20 or more years old. Jaffrey Zax and Casey Ichniowski (1988) found higher employment in unionized bargaining units, but this was offset by lower employment in nonunionized bargaining units.[95] William Hunter and Carol Rankin (1988) propose that public-employee unions provide "political services" to politicians in return for increased compensation.[96] Political services are efforts such as candidate endorsements and get out the vote efforts. Politicians value these services and in return may be able to reward union members with increased compensation, particularly extra benefits that are less visible.

Their regression models suggest that more government workers raises the compensation of individual workers, but the results are neither strong nor robust. Kevin O'Brien's results (1994) are not much stronger.[97] He tries to explicitly measure police and fire union political activities with an index variable and finds evidence that political activities raise police and fire department expenditures. They increase the total wage bill through higher employment (creating more union members and potential activists), but not higher wages. Finally, he finds no effect of political activities on total expenditures, revenue, and taxes.

[91] Richard B. Freeman and James L. Medoff, *What Do Unions Do?* New York: Basic Books, 1984.

[92] Bahman Bahrami, John D. Bitzan, and Jay A. Leitch, "Union Worker Wage Effect in the Public Sector." *Journal of Labor Research*. Vol 30, 2009, 35-51.

[93] Bitzan, John D. and Bahman Bahrami, "The Effect of Unions on Wages by Occupation in the Public Sector." *International Business & Economics Research Journal*. Vol. 9 No. 8, July 2010.

[94] Richard B. Freeman. "Unionism Comes to the Public Sector," *Journal of Economic Literature*. Vol. 24, March 1986, pp. 41-86.

[95] Jaffrey Zax and Casey Ichniowski. "The Effects of Public Sector Unionism on Pay, Employment, Department Budgets, and Municipal Expenditures," in *When Public Sector Workers Unionize*. Richard B. Freeman and Casey Ichniowski eds., University of Chicago Press, 1988, 323-364.

[96] William Hunter and Carol Rankin, "The Composition of Public Sector Compensation: The Effects of Unionization and Bureaucratic Size." *Journal of Labor Research*. Winter 1988, 29–42.

[97] Kevin O'Brien. "The Impact of Political Union Activities on Public-Sector Pay, Employment, and Budgets." *Industrial Relations*. July 1994, 322–345.

In summary, the research clearly demonstrates a positive wage premium for unionized workers in the public sector. The estimates are in the range of 10–20% for the average worker — somewhat higher for less-educated employees and somewhat lower for more highly educated employees. These premiums are reasonably close to those discussed in the public-private wage and compensation studies. Other effects of public-sector unions are less clear.

Assessing the Effects of Collective Bargaining in the Public Sector

Public-sector unions and collective bargaining are highly positively correlated with each other. Still, there are substantial differences across states with respect to the legal environment in which a union must operate. Virginia and North Carolina, for instance, prohibit all collective bargaining but still have public employee unions. Other states, such as Colorado, are a mixture of laws that vary by sector; Colorado has compulsory collective bargaining for state workers, no law for police, firefighters, and local government, and optional collective bargaining for teachers.

Finally, there are many states, with Rhode Island as an example, in which collective bargaining is compulsory for state and local governments, police, firefighters, and teachers. This last category tends to include states with high union density, so parceling out the effects of unions versus collective bargaining is quite difficult. In coming years, given that states like Wisconsin, Michigan, and Illinois joined the right-to-work contingent more research may be forthcoming. Nevertheless, there are many studies on the effects of collective bargaining.

Freeman's work is among the first and most prominent in this area. An early paper by Freeman and Robert Valletta (1988) constructs an index by state on the favorableness of the legal environment for collective bargaining.[98] The index ranges in value from 1 (least favorable to collective bargaining) to 9 (most favorable). Unionization plus a favorable legal environment most often leads to more coverage under collective bargaining agreements. In turn, collective bargaining is found to have "sizeable impacts" on wages of about 6–16%, depending which data set the authors use. They also find evidence that collective bargaining increases employment, thereby avoiding the usual higher wages–lower employment tradeoff. As they conclude, these results are: "consistent with models of public sector unionism that stress the lobbying and political activities of unions designed to increase demand for public services produced by members."

A more-recent article by Freeman and Eunice Han (2012) — perhaps prompted by the financial crisis of 2008 — analyzes the effects of collective bargaining and union density on state budget deficits.[99] They find that collective bargaining and union density lead to larger state budget deficits, but the results are small and unreliable. They do confirm previous results, however, of the effect of collective bargaining and union density on hourly earnings of state and local employees. Union membership leads to about a 10% increase in earnings with a further roughly 3% increase in states with full collective bargaining like Rhode Island.

Terry Moe, a political scientist at Stanford University, has been more critical of public-sector unions and collective bargaining. Moe and coauthor Sarah Anzia of the University of California, Berkeley, recently published a paper analyzing public-sector unions as a major interest group in U.S. politics.[100] They focus on the effect of unions and collective bargaining on the costs of government and find that, in the 1972–1987 period, the unionization of police and fire departments led to both higher wages and higher employment. They also collect a sample of municipalities from 1992 to 2010 and are able to analyze salaries and health benefits for police and fire departments.

The results here are more dramatic than in the earlier research, with Anzia and Moe finding that collective bargaining increases fire department salaries by about 9% and health benefits by 25%. For police departments, wages increase by about 10% and benefits by about 20%. For fire departments, the increase in compensation does not come at the expense of fewer employees, while for police departments, it does. Anzia and Moe go on to test whether one form of union political activity — candidate endorsement — has any effect on wages, health benefits, or employment. And indeed, for fire departments, the simple act of endorsing a candidate is associated with higher wages, benefits, and employment. For police, the results are more mixed, with only employment being statistically positively associated with candidate endorsement.

[98] Richard B. Freeman and Robert G. Valletta, "The Effects of Public Sector Labor Laws on Labor Market Institutions and Outcomes" in *When Public Sector Workers Unionize,* Richard B. Freeman and Casey Ichniowski eds. University of Chicago Press, 1988, 81-106. (Out of print but all papers in this volume available at: papers.nber.org/books/free88-1)

[99] Richard B. Freeman and Eunice Han. "The War Against Public Sector Collective Bargaining in the US." *Journal of Industrial Relations.* Vol. 24, March 1986, pp. 41-86.

[100] Sarah F. Anzia and Terry M. Moe, "Public Sector Unions and the Costs of Government." *The Journal of Politics,* Vol 77, 2015, 114–127.

The Heritage Foundation recently published a report authored by Geoffrey Lawrence, James Sherk, Kevin Dayaratna, and Cameron Belt (2016) on the effect of collective bargaining at the state and local level.[101] The report is a comprehensive study of the effects of collective bargaining on state and local finances for which the authors undertook a massive data collection effort to construct a panel data set for all 50 states, running from 1957 to 2011. They use data from the Census Bureau's Annual Survey of State and Local Government Finance and the older Census of Governments, economic data from the BEA, and data from the National Bureau of Economic Research (NBER) on the strength of collective bargaining in each state. In addition, they use several novel statistical techniques to analyze the effects of collective bargaining.

The Heritage Foundation report is not easy to summarize because it is so comprehensive: They have a large panel data set; they perform separate analyses on state workers, police, fire, local education, and other municipal workers; they have multiple dependent variables and test for the effect of two independent variables; and they use multiple regression models as a sensitivity test. Using one of their simplest models, ordinary least squares with state fixed effects, Table 8 shows a small sample of their results. For the two largest categories of state employees and state and local employees, the Heritage researchers conclude that both monthly wages and government spending on a per capita basis are increased when states have mandatory collective bargaining laws. Note that this additional spending does not come with a decrease in employment, but rather an increase.

Table 8: Public Sector Workers Effect of Mandatory Collective Bargaining

	Monthly Pay Increase ($)	Spending per Capita Increase ($)	Full-time Equivalent Positions per Capita Increase
State employees	144	501	0.0005
All state and local employees	76	573	0.0003

Source: Heritage Foundation

There are scores of similar estimates in the report, most of which tell a similar story: Mandatory collective bargaining, in particular, leads to higher wages and higher government spending.

The Heritage report constructs a variable they call Labor Law Environment (LLE) to measure the strength of collective bargaining in each state. The LLE variable is constructed from the NBER collective bargaining index, whether a state has a right-to-work law, the dispute resolution mechanism, the legality of strikes by public-sector workers, and the proportion of workers covered by a union contract. The index runs from 0 to 1, with zero indicating little coercive power from collective bargaining and 1 indicating that the state has awarded significant coercive powers to unions through collective bargaining.

The LLE scores for states range from 0.013 for Virginia to 0.898 for Pennsylvania. Rhode Island ranks ninth for laws favoring unions, with a score of 0.863. The Heritage researchers estimate that Rhode Island's state and local spending in 2014 was about $400 to $800 million higher than it would have been without the collective bargaining laws the state has. In rough terms, that is about $400 to $800 annually for every person in Rhode Island.

There is much more research on collective bargaining, especially as it relates to public school education. We don't cover this research because it focuses more on educational outcomes and not costs.

Conclusions

The research reviewed here consistently shows that public sector unions and collective bargaining raise wages and government spending. This should not be a surprise. Unions are in the business of obtaining benefits for their members. Mandatory collective bargaining helps them produce that outcome. In many cases, the combination of unions plus collective bargaining, aided by state law and politics, appears to lead to compensation for public-sector workers that is well above what similar private-sector workers would earn. It also leads to more state and local spending generally as higher compensation is not fully offset by lower employment.

Empirical Results of a Compensation Premium

Unadjusted Averages of Compensation, United States and Rhode Island

Although we want to adjust for differences in the characteristics of the workforce, it can be helpful to present some data on public and private compensation in the United States

[101] Geoffrey Lawrence, James Sherk, Kevin D. Dayaratna, and Cameron Belt. "How Government Unions Affect State and Local Finances: An Empirical 50-State Review." Heritage Foundation Special Report, April 2016.

and in Rhode Island, specifically. The BLS collects data in the NCS; these data are establishment based, not person-based, and are referred to as the ECEC.

The NCS collects data on the components of total compensation, including wages and salaries, insurance benefits (which is almost all health care insurance), and total benefits. Figure 5 graphs cost per hour worked for private-sector full-time workers and state and local government workers. The data are inflation adjusted using the Personal Consumption Deflator (PCE) to 2009 dollars. Clearly, the average state and local worker makes considerably more per hour than the average full-time worker in the private sector.

Using the same data source, we can also examine the components of compensation. Figure 6 plots the ratio of the state and local compensation component to that of private-sector full-time workers. The graph shows that state and local government wages and salaries exceed those in the private sector by approximately 15% in recent years. This raw figure is clearly in the ballpark of the more sophisticated estimates we discussed earlier.

The figure also shows the dramatic difference in benefits and, in particular, insurance benefits between state and local workers and private-sector workers. These figures are not meant to be definitive comparisons, but they do point out the large gaps between the two sectors. It would be surprising if the difference in worker characteristics were able to fully explain such gaps.

Figure 7 plots benefits as a percentage of wages and salaries for private-industry, full-time employees at firms with 500 or more employees and state and local government employ-ees. For all groups, benefit costs as a percentage of wages and salaries have risen over time. The graph also shows a persistent difference between private employers and state and local governments; the difference is consistent with all the previous discussion.

The disadvantage of the data from the NCS is that it is not available at the state level. The published data, in fact, do not even permit a comparison based on Census regions for state and local workers. The BEA collects data on a state-by-state basis — in particular, compensation data. The wage and salary data come from the Quarterly Census of Employment and Wages which, in turn, depends on each state's unemployment insurance program. Pension data are collected from a sample of state actuarial reports that are used to calculate the normal cost for employers. As we discussed above, this will understate the cost of the pension benefits both because of the discount rate used and because the normal cost is based on an Accumulated Benefit Obligation, not a Projected Benefit Obligation. Health care benefits also do not include retiree health care. These underestimates of benefits will be larger for state and local workers than private workers for reasons discussed earlier.

For Rhode Island specifically, Figure 8 plots the average compensation for the private-sector and state and local governments from 1998 to 2017. Similar to the national figures, the advantage for Rhode Island state and local workers is consistently large. Figure 9 plots the ratio of these two series over the same time period. The size of the premium for state and local workers has consistently been 70 and 80% for the last 10 years in Rhode Island.
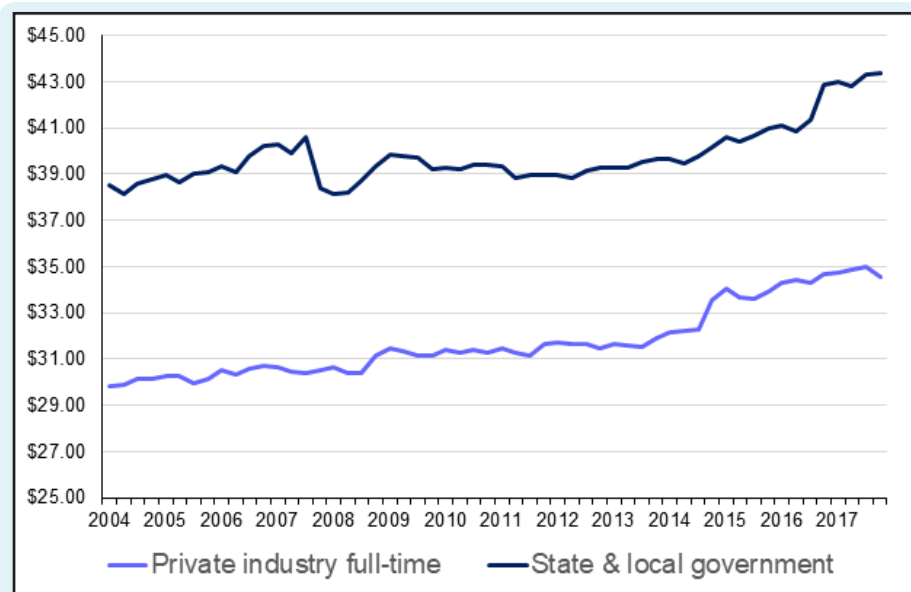
Figure 5

U.S. Private-Sector Full-Time Workers and State and Local Government Workers Cost per Hour Worked (2009 Dollars)

Source: Bureau of Labor Statistics Employer Cost of Employee Compensation quarterly data

Figure 6

U.S. Ratio of Compensation Components for State and Local Government Workers to Private-Sector Full-Time Workers

Source: Bureau of Labor Statistics Employer Costs of Employee Compensation
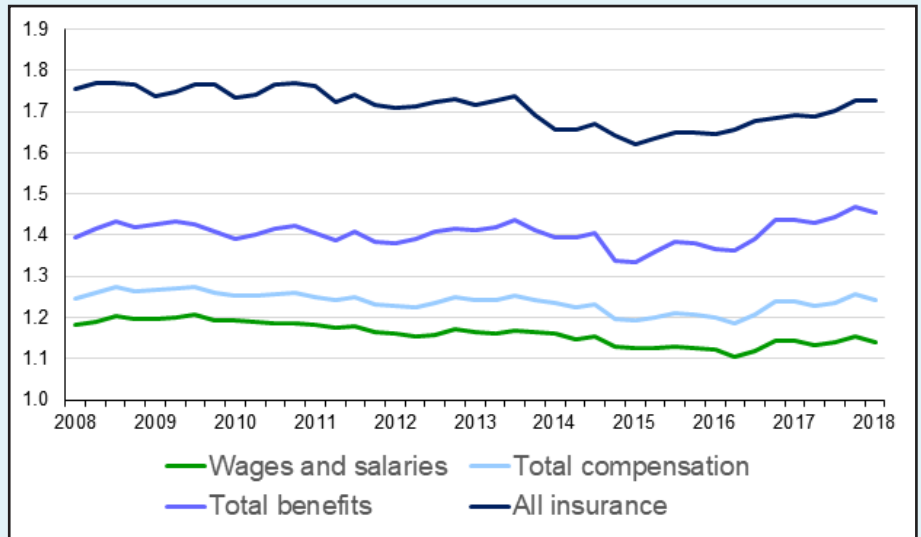

Figure 7

U.S. Private Industry and State and Local Government Total Benefits as a Percentage of Wages and Salaries

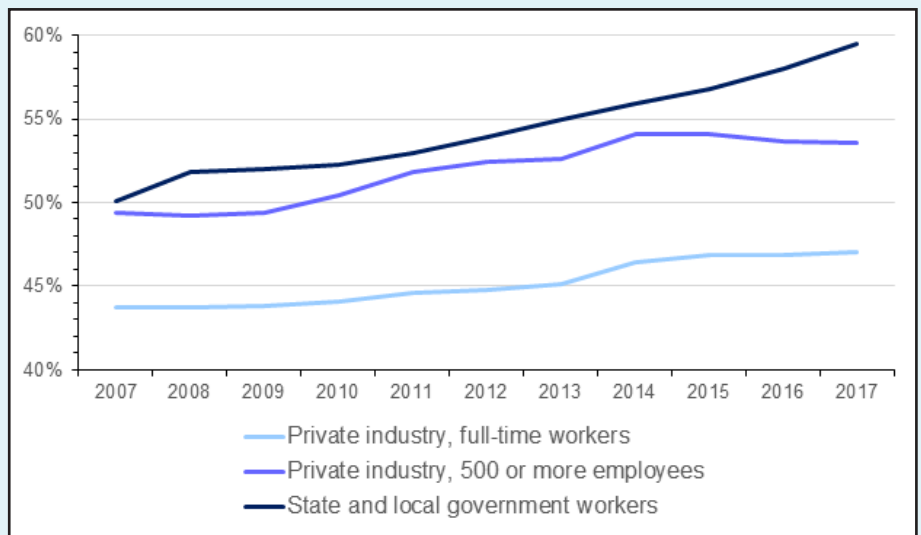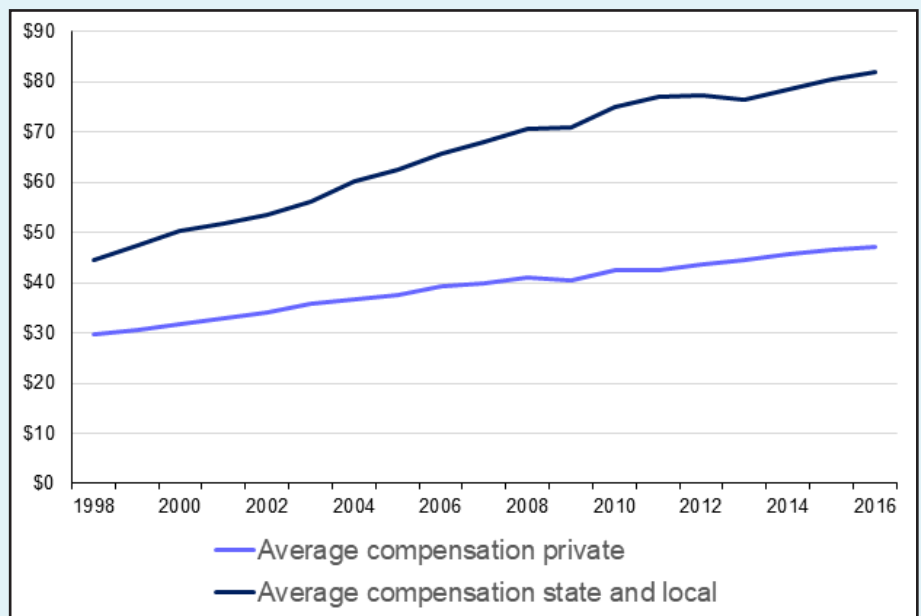**Source:** Bureau of Labor Statistics Employer Costs of Employee Compensation

Figure 8

Rhode Island Private Employers and State and Local Governments Average Annual Total Compensation ($000)

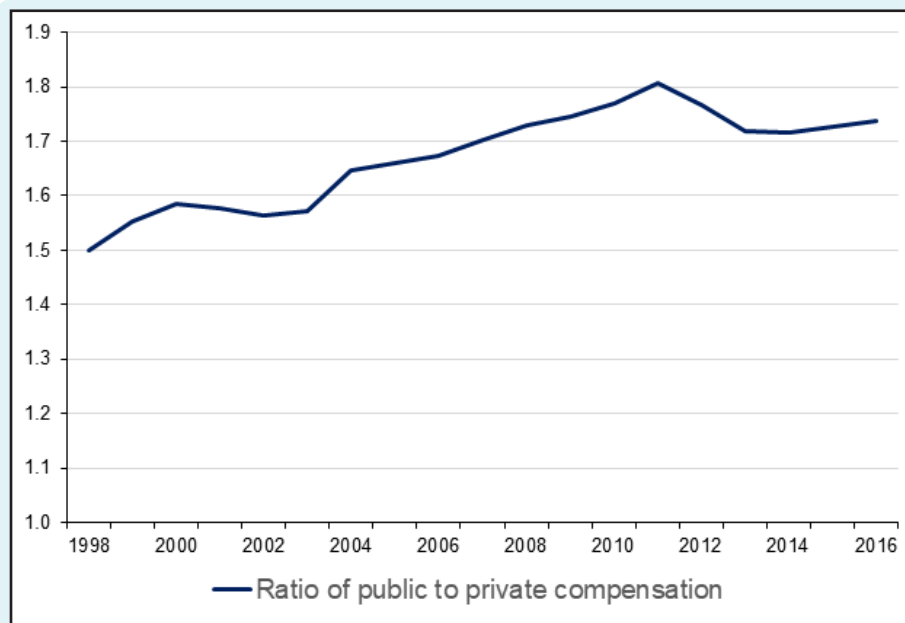**Source:** Bureau of Economic Analysis

Figure 9

Rhode Island Ratio of Average Total Compensation for State and Local Governments to Private, Non-Farm Employers

Source: Bureau of Economic Analysis

The raw data demonstrate that differences in worker characteristics will have to be very large to explain all the difference between the two sectors. We turn now to estimating the adjusted wage and compensation gaps for Rhode Island.

Adjusted Estimates for Rhode Island

Census Bureau, American Community Survey Data

We downloaded survey data from the Census Bureau's American Community Survey (ACS) available through the IPUMS-USA Web site.[102] See Ruggles et. al. for complete information.[103] IPUMS puts considerable effort into harmonizing data across years and making it easily retrievable. We used two of the five-year ACS datasets, 2007–2011 and 2012–2016; the latter is the most recent five-year sample available. Each sample was for Rhode Island only.

We restrict the sample to full-time workers, age 18–65. Using their class of worker variable, we keep only workers identified as private for-profit (sample size = 30,182), state employees (sample size = 2,035), and local government employees (sample size = 3,211).

We recode the education variable to be approximate years of education, assuming for instance that all high school graduates have 12 years of education, associate degree graduates have 14 years, and college graduates have 16 years. We cre-

ate a work experience variable as age minus years of education minus four. Negative experience values are set to zero (n= 14), and experience greater than 50 years is set to 50 (n= 193).[104]

For each five-year sample, the Census Bureau inflates the income variables using the CPI-U-RS so that they are all in dollars of the final year. Thus the 2017–2011 data are in 2011 dollars and the 2012–2016 data are in 2016 dollars. The Census recommends inflating the earlier data by 1.06686838 to convert it to 2016 dollars.

The income variable we use is wage and salary income for the previous 12 months, which includes wages, salaries, commissions, bonuses, tips, and any other money income received from an employer. The Census topcodes this variable; for 2007–2016, the topcode is the 99.5th percentile of income in the state. We adjust this figure by multiplying by 1.5; this is a crude but common adjustment in the literature.

After adjusting for topcoding, there are still several other data issues. First, some figures are improbably low: About 13% of the private workforce has an implied hourly wage less than the Rhode Island minimum wage and about 6–7% of the state and local workers are also below the minimum.

[102] "U.S. Census Data for Social, Economic, and Health Research." IPUMS USA. usa.ipums.org/usa (Accessed 3/30/19.)

[103] Steven Ruggles, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas, and Matthew Sobek. IPUMS USA: Version 8.0 [dataset]. Minneapolis, MN: IPUMS, 2018. doi. org/10.18128/D010.V8.0

[104] In a broader view of the results of our analysis, readers should note, as this report details elsewhere, that public-sector employers often subsidize higher education and offer a direct pay premium for it, with only loose restrictions on the relevance to employment. A government employee with an employer-subsidized Master's degree may receive higher pay on that basis, but not because he or she is any more valuable as an employee.

We later perform some sensitivity analysis to see the effect of dropping these observations. Second, the data quality flag for the income variable indicates that about 19% of the values have been allocated by the Census Bureau. The Census uses statistical procedures to find similar households and uses those similar households to impute missing values. We also perform sensitivity analysis on the allocated values of income.

For income, we need to account for differences in hours worked per week and weeks worked per year. The Census includes data on number of hours per week that the person usually worked. The variable is topcoded at 99, but there are only 17 such cases, so they have essentially no effect on the results. Weeks worked is only available on an intervalled basis, with the following week intervals: 1–13, 14–26, 27–39, 40–47, 48–49, and 50–52. We create a variable that is equal to the midpoint of each interval to enable the calculation of an hourly wage variable. We also create dummy variables to represent the intervals. Using either the midpoint variable or the dummies leads to similar results.

The usual hours worked per week variable and the weeks worked per year variable also allow us to estimate an hourly wage by dividing the annual wage and salary income variable by the product of hours worked per week and number of weeks worked per year.

We create a dummy variable for sex (1 = female, 0 otherwise); we also create dummy variables for race: black (1 = black, 0 otherwise), Asian (1 = Asian, 0 otherwise), and other (1 = all other races except white, black, and Asian, 0 otherwise). Finally, we create a dummy variable for public employees (1 = state or local government employee, 0 otherwise) and separate dummies for state employees (1 = state employee, 0 otherwise) and local government employees (1 = local government employee, 0 otherwise).

The basic regression model takes the natural log of annual wage and salary income and regresses it on years of education, experience, the square of experience, a dummy for sex, dummies for race, dummies for state and local employee, usual hours worked per week, and weeks worked last year. If the log of hourly wage is the dependent variable, we exclude the hours worked and weeks worked variables.

In all regressions, we use the person weighting variable (perwt) as suggested by the Census and IPUMS. The person weight variable indicates how many persons each observation represents in the U.S. population. If weighting variables are used, Stata automatically produces Huber-White robust standard errors.

It is possible to be even more precise about the standard errors by using the Stata command svy. Because the ACS data are from a complicated stratified sample, the IPUMS dataset has both a clustering and a stratification variable. The clustering and stratification variables allow Stata to take into account more precise information about the persons being sampled. We estimated some of the results below using both the standard weighted estimates in Stata and the more-accurate survey standard errors; the differences in standard errors between the two sets of estimates was in the fourth decimal place, too small to have any effect.

As an example, using Stata we estimate a model for the log of annual wage and salary income, with the results shown in Table 9.

We are interested in the coefficients on the state and local dummy variables, which give an estimate of the difference between a privately employed person versus a state or local government employed person. We estimate the percentage difference following the usual practice of exponentiating the coefficient and subtracting one. Table 10 shows the percentage premiums estimated for government employees under several different regression specifications.

As one can see from the table, the overall public premium is in the 6–10% range, with the state employee premium in the 4–7% range, and the local government employee premium in the 5–11% range. These state and local estimates are slightly smaller than the 10.4% premium for wages and salaries that Even and Macpherson estimated for Rhode Island state and local government employees. It should be remembered that Even and Macpherson used a different dataset, so the similarity of our results suggests the Rhode Island government employee premium is not a statistical aberration.

Current Population Survey, Merged Outgoing Rotation Group Data

As a check on the ACS data, we also downloaded the CPS-MORG data from the National Bureau of Economic Research (NBER) Web site for the years 2008–2017.[105] These data have been used many times for labor studies. The data are part of the CPS. Households are interviewed for four months in a row, then left out for eight months, and then interviewed again for four months. In their fourth and eighth interview, households are asked about income. With new households entering the survey each month, the Census rotates one fourth of the sample out to create the

---

[105] "CPS Merged Outgoing Rotation Groups." The National Bureau of Economic Research. www.nber.org/data/morg.html (Accessed 3/30/19.)

Table 9: Log of Annual Wage and Salary Income Model by Variable

	Coefficient	Robust standard error	t-statistic	P>|t|
Year of education	0.0907	0.0018	51.0	0.00
Experience	0.0529	0.0013	39.4	0.00
Experience squared	−0.0008	0.0000	−28.1	0.00
Dummy (1 = female)	−0.1629	0.0083	−19.5	0.00
Dummy (1 = Black)	−0.1499	0.0205	−7.3	0.00
Dummy (1 = Asian)	0.0251	0.0280	0.9	0.37
Dummy (1 = other nonwhite)	−0.1507	0.0175	−8.6	0.00
Dummy (1 = state employee)	0.0673	0.0156	4.3	0.00
Dummy (1 = local govt employee)	0.1014	0.0138	7.4	0.00
Usual hours per week	0.0373	0.0006	64.5	0.00
Weeks worked per year	0.0402	0.0006	63.0	0.00
Intercept	5.1740	0.0387	133.6	0.00
Number of observations: 35,428				
R-squared: 0.65				

Source: Original Stata research

Table 10: Rhode Island State and Local Government Employee Wage and Salary Premiums from Regression Models (%)

	State and local	State only	Local only
Annual wages and salaries			
With topcoding adjustment	9.2	7.0	10.7
Delete persons with Census allocated income	7.0	5.7	7.9
Delete persons with wages below RI minimum	7.3	4.9	8.7
Without topcoding adjustment	10.0	7.7	11.4
Hourly wage			
With topcoding adjustment	7.4	6.2	8.2
Delete persons with Census allocated income	5.6	4.7	5.0
Delete persons with wages below RI minimum	5.6	4.3	6.6
Without topcoding adjustment	8.8	7.0	8.9

Source: Original research using U.S. Census American Community Survey

Outgoing Rotation Groups (ORGs). The ORG samples are then merged to create one year of data.

We restrict the sample to Rhode Island full-time workers, age 18–65. Using their class of worker variable, we keep only workers identified as private for profit (sample size = 11,786), state employees (sample size = 723), and local gov-

ernment employees (sample size = 1,151). The total sample size is thus 13,660.

As with the ACS data, we recode the education variable to be approximate years of education, assuming for instance that all high school graduates have 12 years of education, associate degree graduates have 14 years, and college gradu-

ates have 16 years. We create a work experience variable as age minus years of education minus 4. Negative experience values are set to zero (n= 2), and experience greater than 50 years is set to 50 (n= 64).

The income variable we use is the one recommended by the NBER: weekly earnings divided by usual hours worked. Weekly earnings include overtime, tips, and commissions. The Census topcodes this variable; for 2007–2016, the top-code for Rhode Island is $2,884. As before, we adjust this figure by multiplying by 1.5. Once again, there are several other data issues. First, about 1–2% of workers are below the minimum wage. We later perform some sensitivity analysis to see the effect of dropping these observations. Second, there are several data allocation flags that are relevant. The first is for usual hours worked; only 2% of the sample has an allocated value here. The second is for earnings per hour for those paid hourly; here, there are many more allocated values, with about 44% of the sample having some component of hourly earnings allocated. The third is for weekly earnings, where about 40% of the sample has an allocated value. We also perform sensitivity analysis on these allocated values of earnings.

One drawback of the CPS-MORG data is that they do not allow us to account for differences in weeks worked per year, which would be relevant for seasonal and contract workers. It is difficult to identify all such workers in the data.

We create a dummy variable for sex (1 = female, 0 otherwise); we also create dummy variables for race: Black (1 = black, 0 otherwise), Asian (1 = Asian, 0 otherwise), and Other (1 = all other races except White, Black, and Asian, 0 otherwise). Finally, we create a dummy variable for public employees (1 = state or local government employee, 0 otherwise) and separate dummies for state employees (1 = state employee, 0 otherwise) and local government employees (1 = local government employee, 0 otherwise).

The basic regression model takes the natural log of the hourly wage and regresses it on years of education, experience, the square of experience, a dummy for sex, dummies for race, and dummies for state and local employee.

In all regressions, we use the earnings weighting variable (earnwt) as suggested by the Census and NBER. The earnings weight variable is a measure of how many persons each observation represents in the U.S. population. If weighting variables are used, Stata automatically produces Huber-White robust standard errors.

As an example, using Stata we estimate a model for the log of hourly wages, with the results shown in Table 11.

We are interested in the coefficients on the state and local dummy variables, which give an estimate of the difference between a privately employed person versus a state or local government employed person. We estimate the percentage difference following the usual practice of exponentiating the coefficient and subtracting one.

Table 11: Log of Hourly Wages Model by Variable

	Coefficient	Robust standard error	t-statistic	P>|t|
Years of education	0.1026	0.0020	51.9	0.00
Experience	0.0346	0.0015	22.7	0.00
Experience squared	-0.0005	0.0000	-15.7	0.00
Dummy (1 = female)	-0.1863	0.0090	-20.7	0.00
Dummy (1 = Black)	-0.1762	0.0202	-8.7	0.00
Dummy (1 = Asian)	-0.0274	0.0256	-1.1	0.29
Dummy (1 = other nonwhite)	-0.1528	0.0349	-4.4	0.00
Dummy (1 = state employee)	0.0474	0.0197	2.4	0.02
Dummy (1 = local govt employee)	0.0437	0.0156	2.8	0.01
Intercept	1.2584	0.0340	37.1	0.00
Number of observations: 12,848				
R-squared: 0.32				

Source: Original Stata research

Table 12 shows the percentage premiums estimated for Rhode Island government employees under several different regression specifications.

As one can see from the table, the overall public wage and salary premium is in the 4–8% range, with the state employee premium in the 5–10% range, and the local government employee premium in the 4–6% range. Once again, these state and local estimates are slightly smaller than the 10.4% premium for wages and salaries that Even and Macpherson estimated for Rhode Island.

Overall, our results for wages and compensation are very robust. They are of the same sign and magnitude as several of the previous research efforts documented above. They are also very consistent across the two quite different data sets we use, the ACS and the CPS-MORG. Echoing Gittleman and Pierce, our age and salary premiums for RI state and local government employees would be difficult to overturn.

Total Compensation

The results above are only for wages and salaries. Analyzing total compensation is the essential final step for our purposes because it is intrinsic to the cost of collective bargaining and, with respect to comparisons, because there are substantial differences across sectors in the availability and generosity of benefits. Unfortunately, it is difficult to get good estimates of total compensation, especially at the state level.

The ACS and CPS data we used in order to estimate the wage regressions contain almost no information on benefits. The ECEC data are almost the only source for compensation, but the publicly available data are only at the national level for state and local government employees. Several of the researchers reviewed above had access to unpublished data,

which would help to arrive at more-accurate estimates. Still, even those researchers were forced to use data from several different sources to obtain estimates of defined-benefit pensions and retiree health care.

Given that we do not have access to all their data sources, we have to fall back on crude approximations. We therefore have gone through the steps for an estimate of our own, but to set our final range of estimates for the public-sector-union premium, we will turn to a prior estimate that we consider to have been more accurate.

One approach to a crude solution is to use the ECEC data to estimate the magnitude of benefits as a percentage of wages and salaries. At the national level, it is possible to do this by year and by type of employer. We could then use that number to increase wages for private versus state and local government employees. As an example, Table 13 contains total benefits as a percentage of wages and salaries for different categories of employers.

Other categories are also possible, such as private, full-time workers or private workers at firms with 100 or more employees, or state and local government, management and professional workers. But the two categories given are roughly the closest ones in terms of benefit percentages. For all private employers that are smaller, benefits are less; for private, full-time workers, benefits are less. For all occupational categories of state and local workers such as management and professional employees, service employees, and sales and office occupations, benefits are larger than for all employees. Thus, our choice of what to compare will likely underestimate the benefit difference between private and state and local employees. To confirm this, we estimate several models for sensitivity analysis.

Table 12: Rhode Island State and Local Government Employee Wage and Salary Premiums from Regression Models (%)

	State and local	State only	Local only
Hourly wage			
With topcoding adjustment	4.6	4.9	4.5
Delete persons with wages below RI minimum	4.2	4.9	3.7
Delete persons with allocated hours	4.7	4.8	4.6
Delete persons with allocated hourly earnings	4.0	4.7	3.6
Delete persons with allocated weekly earnings	7.5	10.1	5.9
Delete persons with any allocated value	7.5	10.3	5.9
Without topcoding adjustment	5.9	6.3	5.6

Source: Original research using Current Population Survey Outgoing Research Group

Table 13: Rhode Island Hourly Wages, Benefits, and Benefits as a Percentage of Wages by Year

	Private Employers,500 or More Employees			State and Local Government Employers, All Employees		
	Hourly Wage ($)	Benefits per Hour ($)	Benefits as a Percentage of Wages (%)	Hourly Wage ($)	Benefits per Hour ($)	Benefits as a Percentage of Wages (%)
2007	24.54	12.11	49	25.73	12.89	50
2008	25.38	12.50	49	25.45	13.20	52
2009	25.95	12.82	49	26.08	13.57	52
2010	26.48	13.36	50	26.26	13.72	52
2011	26.94	13.97	52	26.57	14.08	53
2012	27.93	14.64	52	26.93	14.52	54
2013	28.33	14.91	53	27.37	15.04	55
2014	29.00	15.69	54	27.85	15.58	56
2015	30.00	16.24	54	28.41	16.12	57
2016	30.86	16.57	54	29.14	16.90	58
2017	31.76	17.02	54	30.45	18.12	59

Source: Bureau of Labor Statistics

We will apply the benefit percentages to the person-level data we have from the CPS-MORG dataset. Using the above figures by year and by category of worker, we estimate total compensation for each person as follows: person's hourly wage x (1 + benefit percentage).

After estimating the same regression models, but now with the natural log of estimated compensation as the dependent variable, we can calculate the percentage premiums for total compensation of various private employers versus state and local government employers. The results are given in Table 14. Depending on the basis of comparison, RI state and local government employees make 6–12% more than equivalent private-sector workers in total compensation.

The estimated premiums for total compensation are much less than previous estimates. Biggs and Richwine estimated a 24% premium for Rhode Island government employees, and Even and MacPherson estimated a 27% premium. Those authors were much more precise in their estimates of the value of benefits, particularly with regard to defined-benefit retirement plans and retiree health care, which we were unable to duplicate.

The ECEC data can dramatically underestimate the value of those two benefits, so it is not surprising that our premium calculations are so much lower. We have proven to our satisfaction that, at the very least, prior estimates finding a negative premium in the public sector must have been missing something important.

Table 14: Rhode Island State and Local Government Employee Total Compensation Premiums from Regression Models (%)

	State and local	State only	Local only
Hourly wage			
Private, 500 or more employees versus all S&L	6.3	6.6	6.1
Private, 100 or more employees versus all S&L	9.3	9.7	9.2
Private, full-time versus all S&L	11.3	11.7	11.1

Source: Original research using Current Population Survey Outgoing Research Group and Employer Cost of Employee Compensation

Estimating the Budgetary Impact

The final step in our analysis involves using estimated premiums to calculate statewide totals for the additional wages and compensation paid to state and local government employees. To do that, we calculate the difference between actual wages and wages without the estimated premiums; we do the same for total compensation. We provide a low and a high estimate of wage and total compensation premiums as a total of state and local employment and for each separately.

A range for the wage premium is more straightforward, because the underlying data is more complete and less subject to interpretation. For low and high estimates, we simply take the lowest and highest premium percentages for state and local workers from our two approaches to those numbers (see Tables 10 and 12). This gives us a range of 4.7 to 10.3% for state employees and 3.6 to 11.4% for local employees.

Determining a range for total compensation is more of a challenge. As explained above, our own analysis is necessarily rough and likely to be dramatically understated. We therefore use that analysis for our low end of total compensation. For state government we use the comparison with firms of 500 employees or more in Table 14. Local governments vary in how they are structured, but generally Rhode Island municipalities are essentially distinct in their management from the school districts, which would make each side more comparable to firms with 100–499 employees, on average. This gives us low-end total compensation premium estimates of 6.6% for state employees and 9.2% for local employees.

Given the wide range of estimates available in the literature — of varying methodology and relevance to our focus on Rhode Island — it would be somewhat arbitrary simply to pick one. The two most directly applicable for our inquiry are Biggs and Richwine, at 24%, and Even and MacPherson, at 26.5%. We are persuaded that Biggs and Richwine's analysis of benefits was the most comprehensive, given their assumptions and available data. Unfortunately, that analysis applies only to some state employees, and the consensus is that local employees tend to have larger premiums. Biggs and Richwine would therefore understate the premium cost for about two-thirds of employee compensation in our total. That might be fine for a broad estimate, but not for a high end. Even and MacPherson's estimate, by contrast, applies to both state and local workers but doesn't differentiate them.

For our high-end estimate, therefore, we begin with Biggs and Richwine as the premium for state employees. To find a premium for local employees, we turn to Gittleman and Pierce, to whose estimates we accorded extra weight above, albeit at the national level. Taking the high ends of their state

and local premium ranges puts the local premium at 1.8 times the size of the state premium. To be sure, this implies a local premium at 43.9% for total compensation in our calculation, which may appear unreasonable. We note, however, not only that Biggs and Richwine did find premiums as high as 42% in some states and Gittleman and Pierce found a 40% premium for local workers before adjusting their numbers, but also that our objective is to set *an upper boundary*.

That reminder, however, does imply an opportunity to find a number within our range on which we might settle as a "best estimate." For this purpose, we again begin with Biggs and Richwine for our state-employee premium. Rather than generalize the two categories of employees, however, we turn to Even and MacPherson for the statewide average premium including both state and local. Applying the percentage of total payroll attributable distinctly to each group, we arrive at a local employee premium of 27.9%.

For a "best estimate" of wages only, we took the ACS data used for Table 10 and gave preference to annual wage data. Thus, the state employee wage premium is 7.0%, while the local employee wage premium is 10.7%.

Tables 15 through 18 present the results of those calculations, in total, for municipalities, for school districts, and for fire districts. The "excess" total compensation ranges from $323 million to $1.1 billion per year, with a "best estimate" of $888 million, based on our analysis of actual state and local budgets for fiscal year 2016.[106] In nominal dollar terms, the figure would of course rise over time. For comparison, recall that the Heritage Foundation report discussed above estimated that Rhode Island spent $400–800 million more per year due to collective bargaining and public unions. However, that estimate refers to *total spending,* which could include not only an increase in government employment, but also any other additional spending. A government labor union might, for example, push the government into new areas of activity to increase the number of unionized employees, but that would also increase costs that aren't directly attributable to labor (e.g., equipment, workspace, and supplies). By contrast, our estimate is for the actual compensation of employees, assuming the same count and no change in services.

These tables apply the same premium calculation to municipalities, school departments, and fire districts, but readers should note that another tier of accuracy has not been

---

[106] Note that this analysis represents our best efforts. Given the many separate entities within the public sector, it is possible that we missed some. In a few cases, we were only able to find slightly older budgets. Any such deficiencies almost certainly make our estimates more conservative.

applied to differentiate the very-different dynamics at play. In school departments, for example, advanced degrees are likely more common than in municipal operations, which might imply a lower premium. On the other hand, a targeted estimate for teachers would have to take into account the abbreviated length of their work year and other considerations.

Readers should keep in mind another practical implication of these numbers if they seek to use these results in order to make policy arguments. Especially with the high-end estimates, the "excess" in total compensation is not all available for immediate savings — even ignoring contractual, legal,

and political challenges. A significant portion of the total compensation, for instance, is the present value of future pension payments. If that portion of the "excess" were to be reclaimed, so to speak, it could only be in the form of reduced pension liabilities.

That said, some perspective on the numbers can be understood by noting that our best estimate for total compensation is $888 million, based on a $4.2 billion total. This excess would amount to 17% of total state and local tax collections of $5.3 billion.[107]

Table 15: Rhode Island State and Local Government Employees "Excess" Wages and Total Compensation, 2016 ($000)

	Total wages	Wage Excess			Total Compensation	Total Compensation Excess		
		Low End	High End	Best Estimate		Low End	High End	Best Estimate
Total	2,756,134	106,044	273,157	235,036	4,243,759	323,062	1,123,325	888,253
State	1,008,227	45,259	94,150	65,959	1,543,319	95,553	298,707	298,707
Local	1,747,906	60,784	179,007	169,077	2,700,440	227,510	824,618	589,546

Source: Original research from analysis of line-item budgets for fiscal year 2016 or the nearest equivalent.

Table 16: Rhode Island Municipal Government Employees "Excess" Wages and Total Compensation, 2016 ($000)

	Total wages	Wage Excess			Total Compensation	Total Compensation Excess		
		Low End	High End	Best Estimate		Low End	High End	Best Estimate
Municipalities	581,006	20,189	59,457	56,159	1,044,211	87,974	318,865	227,967
Barrington	8,333	290	853	805	12,683	1,069	3,873	2,769
Bristol	9,697	337	992	937	16,567	1,396	5,059	3,617
Burrillville	4,714	164	482	456	6,935	584	2,118	1,514
Central Falls	7,550	262	773	730	12,266	1,033	3,746	2,678
Charleston	4,642	161	475	449	6,854	577	2,093	1,496
Coventry	12,075	420	1,236	1,167	21,351	1,799	6,520	4,661
Cranston	48,472	1,684	4,960	4,685	90,692	7,641	27,694	19,799
Cumberland	8,953	311	916	865	16,543	1,394	5,052	3,612
East Greenwich	9,798	340	1,003	947	15,534	1,309	4,743	3,391

107 "State of Rhode Island and Providence Plantations Fiscal Year 2018 Budget Executive Summary Appendix A: Schedules." Audited FY 2016 taxes. www.omb.ri.gov/documents/Prior%20Year%20Budgets/Operating%20Budget%202018/ExecutiveSummary/8_Appendix%20A%20Schedules.pdf (Accessed 3/30/19.) and "FY 2016 Statewide Tax Levy by Class of Property." www.municipalfinance.ri.gov/documents/data/assessedvalues-levies/Statewide-Tax-Levy-by-Class-of-Property-12.31.16-FINAL.pdf (Accessed 3/30/19.

Table 16 (Municipalities) Continued

	Total wages	Wage Excess			Total Compensation	Total Compensation Excess		
		Low End	High End	Best Estimate		Low End	High End	Best Estimate
East Providence	33,162	1,152	3,394	3,205	52,878	4,455	16,147	11,544
Exeter	1,117	39	114	108	1,619	136	494	353
Foster	1,728	60	177	167	2,561	216	782	559
Glocester	3,454	120	353	334	4,982	420	1,521	1,088
Hopkinton	3,224	112	330	312	4,480	377	1,368	978
Jamestown	4,012	139	411	388	5,802	489	1,772	1,267
Johnston	17,540	610	1,795	1,695	33,086	2,787	10,103	7,223
Lincoln	9,489	330	971	917	15,769	1,329	4,815	3,443
Little Compton	2,257	78	231	218	3,540	298	1,081	773
Middletown	8,839	307	905	854	17,137	1,444	5,233	3,741
Narragansett	13,978	486	1,430	1,351	22,378	1,885	6,833	4,885
New Shoreham	2,270	79	232	219	3,356	283	1,025	733
Newport	21,350	742	2,185	2,064	41,331	3,482	12,621	9,023
North Kingstown	17,326	602	1,773	1,675	24,962	2,103	7,623	5,450
North Providence	18,410	640	1,884	1,780	29,871	2,517	9,122	6,521
North Smithfield	3,754	130	384	363	5,597	472	1,709	1,222
Pawtucket	34,719	1,206	3,553	3,356	68,039	5,732	20,777	14,854
Portsmouth	10,383	361	1,063	1,004	16,823	1,417	5,137	3,673
Providence	117,026	4,067	11,976	11,311	230,293	19,402	70,323	50,276
Richmond	2,267	79	232	219	3,153	266	963	688
Scituate	3,382	118	346	327	5,648	476	1,725	1,233
Smithfield	13,317	463	1,363	1,287	21,792	1,836	6,654	4,757
South Kingstown	11,646	405	1,192	1,126	16,564	1,396	5,058	3,616
Tiverton	6,921	241	708	669	11,201	944	3,420	2,445
Warren	4,539	158	465	439	7,072	596	2,159	1,544
Warwick	54,302	1,887	5,557	5,249	111,836	9,422	34,151	24,415
West Greenwich	2,448	85	251	237	3,735	315	1,140	815
West Warwick	12,891	448	1,319	1,246	26,807	2,259	8,186	5,852
Westerly	9,062	315	927	876	14,825	1,249	4,527	3,237
Woonsocket	21,956	763	2,247	2,122	37,649	3,172	11,497	8,219

Source: Original research from analysis of line-item budgets for fiscal year 2016 or the nearest equivalent.

Table 17: Rhode Island School District Government Employees "Excess" Wages and Total Compensation, 2016 ($000)

		Wage Excess				Total Compensation Excess		
	Total wages	**Low End**	**High End**	**Best Estimate**	**Total Compensation**	**Low End**	**High End**	**Best Estimate**
School districts	1,154,024	40,101	118,096	111,545	1,635,932	137,826	499,556	357,148
Barrington	29,795	1,035	3,049	2,880	40,523	3,414	12,374	8,847
Bristol-Warren	29,625	1,029	3,032	2,863	43,185	3,638	13,187	9,428
Burrillville	17,882	621	1,830	1,728	24,718	2,082	7,548	5,396
Central Falls	21,550	749	2,205	2,083	30,761	2,592	9,393	6,716
Chariho	32,382	1,125	3,314	3,130	44,616	3,759	13,624	9,740
Coventry	42,373	1,472	4,336	4,096	57,274	4,825	17,489	12,504
Cranston	90,168	3,133	9,227	8,715	124,693	10,505	38,077	27,222
Cumberland	35,578	1,236	3,641	3,439	48,624	4,097	14,848	10,615
East Greenwich	20,967	729	2,146	2,027	28,382	2,391	8,667	6,196
East Providence	41,418	1,439	4,238	4,003	58,280	4,910	17,797	12,723
Exeter-West Greenwich	16,859	586	1,725	1,630	23,836	2,008	7,279	5,204
Foster-Glocester	11,134	387	1,139	1,076	15,189	1,280	4,638	3,316
Foster	2,371	82	243	229	3,262	275	996	712
Glocester	5,114	178	523	494	7,323	617	2,236	1,599
Jamestown	5,511	191	564	533	7,757	654	2,369	1,694
Johnston	26,490	920	2,711	2,560	39,022	3,288	11,916	8,519
Lincoln	29,612	1,029	3,030	2,862	40,956	3,450	12,506	8,941
Little Compton	2,862	99	293	277	3,924	331	1,198	857
Middletown	21,096	733	2,159	2,039	28,870	2,432	8,816	6,303
Narragansett	16,541	575	1,693	1,599	23,687	1,996	7,233	5,171
New Shoreham	2,735	95	280	264	3,805	321	1,162	831
Newport	20,008	695	2,047	1,934	30,427	2,563	9,291	6,643
North Kingstown	36,399	1,265	3,725	3,518	50,406	4,247	15,392	11,004
North Providence	27,431	953	2,807	2,651	39,058	3,291	11,927	8,527
North Smithfield	14,524	505	1,486	1,404	19,833	1,671	6,056	4,330
Pawtucket	65,797	2,286	6,733	6,360	96,683	8,145	29,524	21,107
Portsmouth	21,804	758	2,231	2,108	30,120	2,538	9,198	6,576
Providence	180,919	6,287	18,514	17,487	271,657	22,887	82,954	59,307
Scituate	13,294	462	1,360	1,285	17,687	1,490	5,401	3,861
Smithfield	21,587	750	2,209	2,087	29,294	2,468	8,945	6,395
South Kingstown	33,902	1,178	3,469	3,277	47,590	4,009	14,532	10,390
Tiverton	16,734	581	1,712	1,617	22,844	1,925	6,976	4,987
Warwick	96,492	3,353	9,874	9,327	135,157	11,387	41,272	29,507
West Warwick	30,243	1,051	3,095	2,923	44,837	3,777	13,692	9,789
Westerly	33,716	1,172	3,450	3,259	46,160	3,889	14,096	10,077
Woonsocket	39,112	1,359	4,002	3,780	55,494	4,675	16,946	12,115

Source: Original research from analysis of line-item budgets for fiscal year 2016 or the nearest equivalent.

Table 18: Rhode Island Fire District Government Employees "Excess" Wages and Total Compensation, 2016 ($000)

		Wage Excess				Total Compensation Excess		
	Total wages	Low End	High End	Best Estimate	Total Compensation	Low End	High End	Best Estimate
Fire districts	12,876	494	1,454	1,373	20,297	1,710	6,198	4,431
Albion	576	20	59	56	703	59	215	153
Block Island	23	1	2	2	23	2	7	5
Central Coventry	2,504	87	256	242	3,675	310	1,122	802
Chepachet	231	8	24	22	254	21	78	56
Cumberland	4,034	140	413	390	6,201	522	1,894	1,354
Dunn's Corner	227	8	23	22	304	26	93	66
Exeter	705	24	72	68	813	68	248	177
Harmony	275	10	28	27	395	33	121	86
Harrisville	591	21	60	57	775	65	237	169
Hope Valley	245	8	25	24	352	30	107	77
Hopkins Hill	884	31	90	85	1,050	88	321	229
Lime Rock	927	32	95	90	1,545	130	472	337
Lonsdale	218	8	22	21	364	31	111	79
Manville	175	6	18	17	291	25	89	64
Misquamicut	22	1	2	2	22	2	7	5
Oakland-Mapleville	238	8	24	23	256	22	78	56
Pascoag	576	20	59	56	794	67	242	173
Quinnville	33	1	3	3	33	3	10	7
Quonochontaug Central	13	0	1	1	13	1	4	3
Saylesville	158	5	16	15	338	28	103	74
Shelter Harbor	81	3	8	8	98	8	30	21
Union	645	22	66	62	917	77	280	200
Watch Hill	180	6	18	17	204	17	62	45
Westerly	355	12	36	34	535	45	163	117
Western Coventry	295	10	30	29	343	29	105	75

Source: Original research from analysis of line-item budgets for fiscal year 2016 or the nearest equivalent.

Combined Estimates for a Sample Community

The tables above allow us to illustrate the principles explained throughout this report for the sample community in Table 2, Portsmouth. The exercise can also provide a check on our range of estimates by generating a corresponding number by another, more-practical methodology. We chose Portsmouth as the median for population and tax levy.

To provide a more-concrete comparison of the estimates using Portsmouth as an example, Table 19 represents an attempt to quantify total excess expenditures deriving from labor union contracts. Figure 10 provides a relative comparison of our different estimates of excess, while Figure 11 illustrates how much of the town's budget each excess estimate would represent. It bears repeating that the numbers presented derive from multiple documents, often inferred, and applying various assumptions to multiple data sources. A detailed methodology for this table can be found in Appendix A.

Again, the purpose is to check our estimates against something closer to actual data and to give the reader a sense of how reasonable our overall estimates are. Figure 10 shows our four estimates relative to each other.

The total excess produced by the line-item approach is $8.6 million. That represents $775,809 (8%) less than our "best estimate" through statistical methods. However, relatively small changes in our methodology could easily make up this difference.

In reviewing these comparisons, readers should note that our "best estimate" would be the statewide average. It's possible, therefore, that Portsmouth has simply negotiated relatively good terms with its labor unions, compared with other cities and towns.

For perspective, in fiscal year 2016, the line-item excess estimate amounts to 15% of the town's total budget. Again, however, it bears emphasizing that not all of the excess would be immediately available for other uses, such as infrastructure or tax cuts.

Table 19: Estimated Excess of Collective Bargaining in Portsmouth, FY16

	Base ($)	Excess ($)	Excess (%)
Wages (not included in other rows)	29,733,521	1,668,072	6
Pension/retirement	2,659,882	1,571,780	59
Health care	4,891,147	1,402,147	29
Sick leave	1,500,527	881,645	59
Overtime	1,043,082	866,442	83
Other post-employment benefits (OPEB)	996,475	851,100	85
Compensated absence payouts	754,822	754,822	100
Holidays	1,249,229	543,499	44
Health care buyback	46,100	46,100	100
Personal days	152,992	25,811	17
Release time for union work	8,176	8,176	100
Line-item estimate	43,035,953	8,619,594	20
Low-end estimate	43,035,953	3,625,740	8
"Best estimate" excess for total comp	43,035,953	9,395,402	22
High-end estimate	43,035,953	13,141,654	31
"Best estimate" minus line-item estimate		775,809	
Remaining budget after compensation	15,280,532		
Total FY16 Budget	58,316,485	8,619,594	15

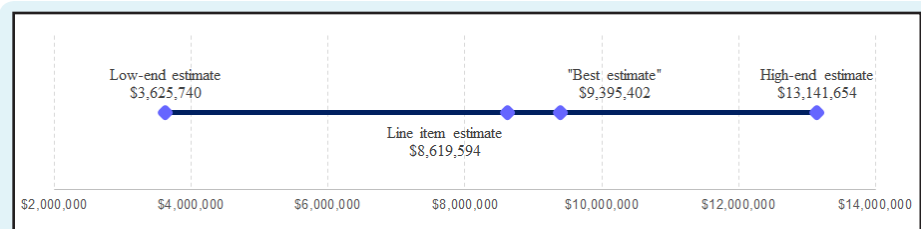**Source:** See Appendix A for methodology.

Figure 10

*Portsmouth Range of Total
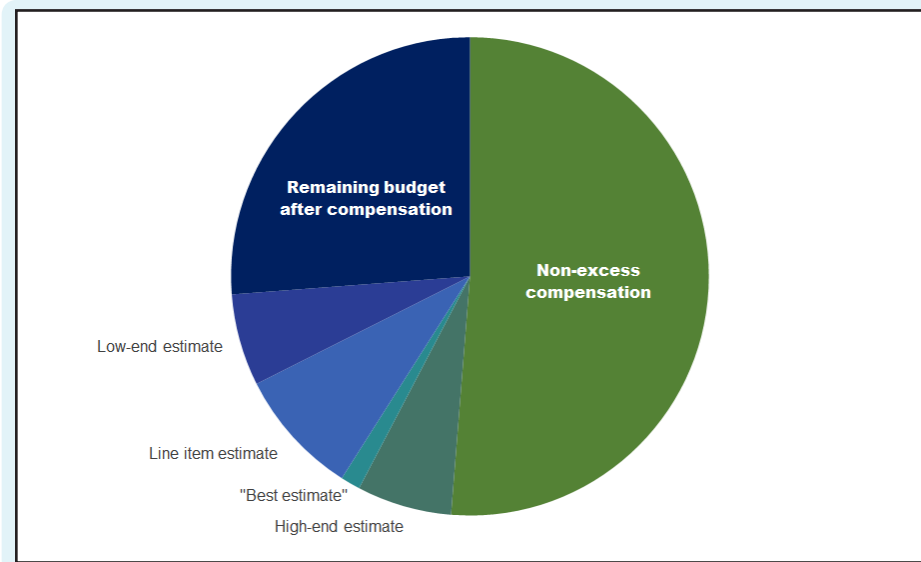Compensation Excess
Estimates, FY16*

Figure 11

*Portsmouth Total Compensa-
tion Excess Estimates Portion
of Budget, FY16*

The "remaining budget" is what the
town currently has to spend after
compensation. The low-end estimate
is most likely to be excess and there-
fore available for other purposes,
while the high-end estimate is least
likely to be excess and therefore
needed for compensation.

Conclusion

The existing research reviewed above makes a strong case
that public-sector employees have higher compensation
than equivalent private-sector workers. Although this may
not be true in all 50 states, the research suggests that Rhode
Island likely belongs to the set of states that have higher
compensation for government employees. Our own analy-
sis of Rhode Island–specific data also demonstrates robust
evidence in favor of the claim.

Conservatively, the state of Rhode Island and its local com-
munities spend $323 million to $888 million extra per year
on compensating public sector employees. The fact that the
Heritage Foundation study comes up with a similar range
through a very different route reinforces its plausibility.

For reasons cited above, it is likely that these figures will
continue to increase. At some point, however, Rhode Island
residents will balk. As the well-known economist Herb Stein
once said: "If something cannot go on forever, it will stop."
We should be thinking now about how to fix the problem.

APPENDIX A:
TABLE 19 METHODOLOGY

In some ways, Table 19 represents the culmination of our
research, both as a check on our statistical analysis and as
the combination of the two major components of this re-
port: The review of excessive contract provisions and the
estimation of the total compensation premium for Rhode
Island's public sector. Inasmuch as the methodology for the
second component is extensive and embedded within the
text, we here provide a more detailed explanation of how we
arrived at the numbers for Table 19.

Note that, to the extent that it counts as a check of our "best
estimate" for the sample community, Portsmouth, the con-
nection is necessarily only loose. Even if the two numbers
could be expected to be identical, the premium estimated
through statistical means is an average for the whole state,
while the premium estimated through a review of line items
is specific to the town. In other words, one or the other es-
timate could be off by 8 or 9%, or Portsmouth could simply
be 8 or 9% more efficient in squeezing out excesses than the
state average, or some combination of the two possibilities
could be the case.

Wages

The wage estimates in Table 19 begin with the total wages reported for Portsmouth in Tables 16 (municipal) and 17 (schools), and the statistical "best estimate" of a 10.7% premium. From these numbers, we subtracted the line items presented in the Sample Community section and Table 2 when listing them separately would be double counting.

Thus, we subtracted from both the base and excess columns for wages: overtime, holidays, personal days, and release time. Because all of these categories have premiums that are higher than 10.7%, it isn't surprising that removing them from the total wages would drop the premium for what remains below 10.7%.

Note that some of the line items cited in Table 2 do not appear in Table 19. With the exception of clothing, these categories are included in our statistical wage estimate, and we were not confident in our ability to parse out the excess, given the paucity of data on private-sector comparisons.

Pension/Retirement

The base for our pension/retirement calculation is the combined normal cost for all of the town's defined-benefit pension plans plus its payments into defined-contribution plans. This amounts to about 41% of Portsmouth's total pension payments for the year, using its annual required contribution (ARC) instead of its normal cost.

We decided to use the normal cost for two reasons. First, incomplete information about whether our private-sector comparison includes any sort of amortization makes the normal cost the more-conservative option, because normal cost does not include such payments. Second, the numbers in Table 2 and in our total compensation estimates are geared more toward the premium in value that employees receive, while Table 19 turns more toward actual costs to Portsmouth taxpayers. Differences in discount rates are therefore less of a concern.

For a private-sector comparison and, therefore, the excess calculation, we began with the BLS's hourly cost of retirement benefits for private-sector employees in New England ($1.54) multiplied by an eight-hour day and 230 mean days worked in private industry. We multiplied this number by 384 employees in Portsmouth. Note that the New England data is for organizations of all sizes, whereas federal data is available by different size segments.

As explained in the sections above, analyses of this sort of data commonly compare government agencies to larger companies. However, one could argue that any given mu-

nicipality or state government isn't so much a single large employer as a grouping of smaller employers. By this approach, at the very least, Portsmouth would be a 103-employee municipality combined with a 281-employee school district. Additionally, the federal number for the private sector is significantly lower, making our use of the New England data the more conservative option.

Other Post-Employment Benefits (OPEB)

For the OPEB base, we used Portsmouth's actual payments toward this expense for fiscal year 2016. As with pensions, our decision here had two essential considerations. First, OPEB liabilities are in a period of transition, with most government entities' moving from a pay-as-you-go approach that simply covered the benefits as they were due to a forward-looking approach that strives to save and invest the money for an employee's retirement while that employee is still actively working. Thus, utilizing the town's much higher ARC might better capture the value to employees, but is less relevant to the cost to taxpayers.

Second, our private-sector comparison derives from Biggs & Richwine's research finding that private-sector organizations in Rhode Island spend approximately 0.5% of total wages on OPEB. Thus, we arrived at our estimate of excess by applying 0.5% to the town's total wages, adjusted for our "best estimate" of the wage premium.

Health Care

The health care estimate is the sum expended for all departments reported in Portsmouth budget documents compared with a private-sector equivalent. As with OPEB, we started with Biggs & Richwine's estimate that private RI businesses pay 12% of wages for health benefits, further adjusted to account for our "best estimate" of the town's wage premium.

Sick Leave and Compensated Absences

With sick leave, we emphasized the value of the benefit to employees rather than the immediate cost to taxpayers. Contrary to pensions and OPEB, sick leave is immediately available, so whether acknowledged or not, the value is implicitly part of a budget. We calculated the value of contractually permitted sick days for each union based on its number of employees times a theoretical average daily wage as if they worked a standard five-day week for 52 weeks per year.

Because some of this value is captured, in fact, as payments for compensated absences upon retirement or other separation from employment, we adjusted the value of sick leave down to account for those payments. To do so, we took the actual payments for compensated absences in FY16 and cal-

culated the implied value of the corresponding sick time. (Compensated absences are paid at 12–50% of full value, depending on the union). We then divided this value by an assumed 27 years of service.

Other Line Items

The other areas of compensation listed in Table 19 begin with actual expenses, where available, or the implied value of days (following the approach used for sick leave). The excesses compare each union's contractual benefit with private-sector equivalents as reported by the BLS.

Estimate Comparisons and Totals

As is implicit in the methodology for Table 19, the line items that we used for our estimate by this approach do not fit precisely with the total compensation numbers used for our statistical estimates in Tables 16 and 17. The treatment of pension estimates, for example, is a significant factor creating the difference between the various estimates because the value isn't necessarily reflected in the budget or may not be seen as a cost of current employees. To resolve this problem for our Portsmouth comparison, we've applied the percentages of estimates from our statistical research to the compensation total derived from our line-item analysis.

Although we have not performed a thorough analysis of the difference between these numbers, we note that our decision to use the normal cost for pensions in Table 19 accounts almost precisely for the discrepancy. The line item number that we used for pensions is $3,887,745 less than the number would have been had we used the ARC. That total is almost identical to the difference between the total compensation shown in Tables 16 and 17 and the total compensation shown in Table 19.

As stated elsewhere, these calculations are based on various estimates deriving from methodologies that shouldn't be expected to correspond directly with each other and are offered for estimation and illustration purposes, primarily for the benefit of the general public. However, it would be reasonable to reconcile the estimates in this case by suggesting that the difference (the cost of amortization) appears in Table 19 as part of the remaining budget after compensation.

In other words, for our statistical estimates in Tables 16 through 18, the amortization payments that are included in pension ARCs, but not pension normal costs, are considered to be part of the compensation excess. However, for the purposes of Table 19, amortization would not be considered a cost of compensation, but rather a legacy liability for which government decisions, not collective bargaining agreements, are to blame.

How Many "Side Deals" Exist in State and Local Government? — *Justin Katz,* October 20, 2018

The sobering realization that should dawn on those who read Mark Reynolds's article about Warwick fire fighters' special sick-time deal is that these sorts of arrangements must exist across state and local government:[1]

> Under an agreement never approved by Warwick's City Council, the Fire Department changed the sick-time benefits given to firefighters, granting eligible firefighters an extra amount of unused sick time each month, City Solicitor Peter Ruggiero confirmed Friday.
>
> The unapproved "side agreement" was struck in 2013, between then-Fire Chief Edmund Armstrong III and then-firefighters union president William Lloyd. …
>
> A copy of the 2013 agreement, obtained by The Journal late Friday, bears [City Solicitor Peter] Ruggiero's signature.

Think of what had to go into the discovery of this arrangement. Resident Rob Cote had to become so incensed about taxes and town government that he made himself a target of Warwick's insiders for years to collect all the necessary data and understand how everything is supposed to work. (Believe me, it isn't easy to sort through all the numbers and contract language.) Then Ken Block had to come in with a deep analysis of the numbers and be willing to make himself a target, as well, including a surprise fire inspection of his business.[2] Then, finally, statewide journalists became interested, and something came of the investigation.

This is for one relatively small "side deal" on one form of employee compensation for one union in one city. By my count, there are 473 union locals across 39 cities and towns, a larger number of school districts and individual schools, as well as some fire districts and other distinct government or quasi-government entities.

At first glance, each of the many benefits of these unions looks like a relatively small expense, and to investigate them and raise red flags, residents would have to spend copious time and accept public attacks on their integrity. By my experience, local journalists will tend to accept that characterization of trouble-making residents until the intrepid good-government activists find some issue that cannot be denied and somehow manage to make it controversial despite a "nothing to see here" PR push from the insiders.

Finally, when everything comes to light, the union members never have to give anything back. If any of them have broken any laws, they'll typically be permitted to retire gracefully (keeping whatever sick-time or vacation payments they've accumulated). In the case of the administrators who accepted it, they'll at worst be replaced and shuffle off to some other community or take one of the many jobs in or out of government that insiders keep open for their own.

By plain logic, we should expect that Warwick's sick time deal is replicated in one form or another throughout Rhode Island government. This is a big reason that government employees should not be unionized. If they were all independent employees, they'd have incentive to keep an eye on the deals being offered to others. When they are unionized, rather than being part of a system of checks and balances, they all become complicit.

"I Followed the Process Afforded to Me Under My Contract." — *Justin Katz,* June 8, 2017

The phrase quoted in the title of this post ought to make Rhode Islanders' blood boil. It's the excuse rolled out for government employees' abuse of taxpayers on a small scale, and it's the central complaint of those who fear that the impossibly generous pension system will ultimately not pay out as well as they'd hoped.

As Ted Nesi and Tim White report, in this case, it's the statement of former Democrat Representative Frank Montanaro Jr. of Cranston, son of labor union poobah Frank Montanaro, Sr., as he addresses questions about his own sweet little deal.[3] Under the aforementioned contract, he was able to leave his lucrative job with Rhode Island College (RIC) and try out an even more lucrative job working for the General Assembly while RIC held his job open for him for three years — which is long enough perhaps to act as insurance if your political patron loses office in the next election.

As a technical, though not active, employee of RIC, Montanaro kept (under his contract) the benefit of free tuition for his son and somebody else whom he's calling "a guardian." Nesi and White peg the value to the Montanaros of that benefit at just under $50,000.

To some extent, Montanaro's got a point. What's he supposed to be — a saint who refuses this $50,000 gift despite the $73,000 raise he secured by moving from RIC to the Joint Committee on Legislative Services?

On the other hand, as with pensions, Montanaro may be the poster child for how labor unions abuse our government in order to negotiate these deals for themselves, their families, and their cronies. In that light, it looks more than a little like a racketeering scheme out of Crimetown.

1   Mark Reynolds. "Sick-time deal: Warwick firefighters could take cash, preserve time." *Providence Journal.* October 19, 2018. www.providencejournal.com/news/20181019/sick-time-deal-warwick-firefighters-could-take-cash-preserve-time (Accessed 4/13/19.)

2   Mark Reynolds. "Warwick Fire Department conducts inspection of critic's business." *Providence Journal.* October 18, 2018. www.providencejournal.com/news/20181018/warwick-fire-department-conducts-inspection-of-critics-business (Accessed 4/13/19.)

3   Ted Nesi and Tim White. "Top Mattiello aide got $50K in free tuition after taking State House job." WPRI. July 10, 2018. www.wpri.com/news/eyewitness-news-investigates/top-mattiello-aide-got-50k-in-free-tuition-after-taking-state-house-job_20180314125825208/1044263254 (Accessed 4/13/19.)