

# Fiscal Facts

Federal Reserve Bank of Boston

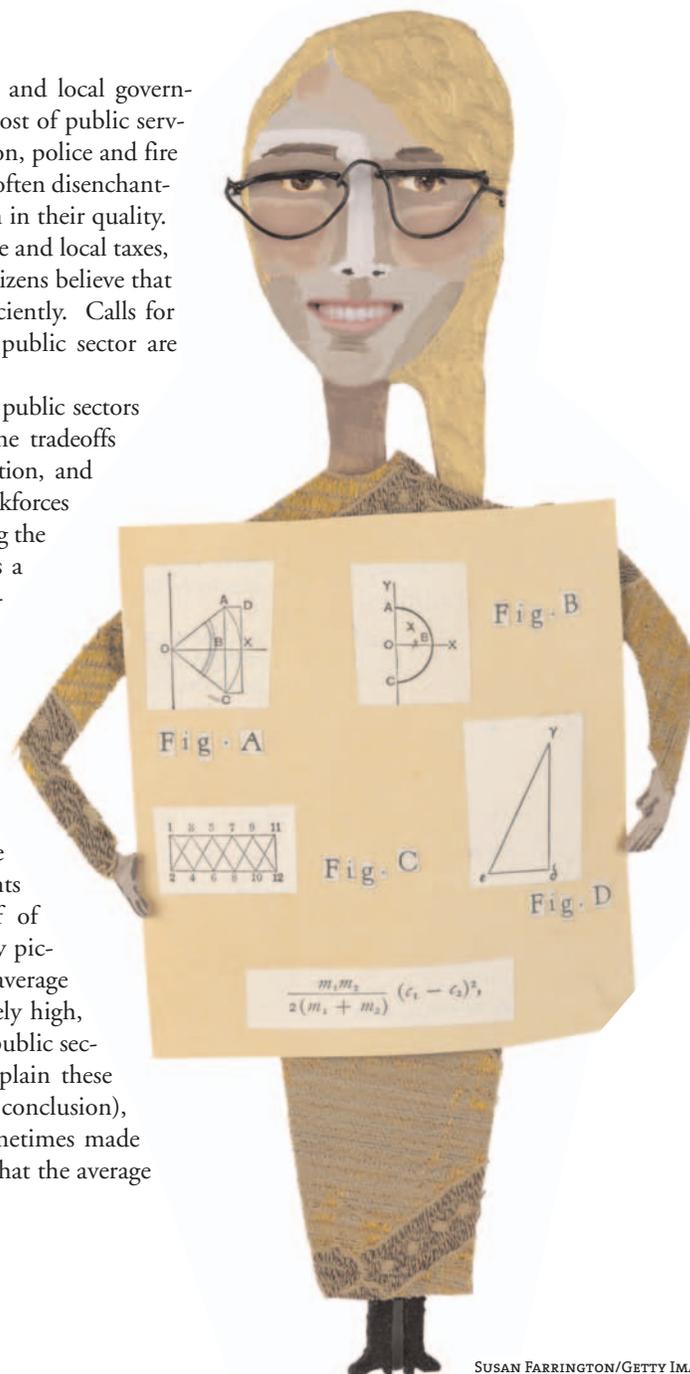
## Do New England State and Local Governments Have Too Many Employees, and Are They Overpaid?

by Nick Turner and E. Matthew Quigley

Americans tend to be ambivalent about their state and local governments. On the one hand, they desire – and receive – a host of public services from state and local governments, including education, police and fire protection, and the maintenance of roadways. Voters are often disenchanted by efforts to curtail these services or by a deterioration in their quality. On the other hand, many Americans think that their state and local taxes, especially local property taxes, are too high, and many citizens believe that their state and local tax dollars could be used more efficiently. Calls for streamlining government agencies and downsizing the public sector are commonplace across the nation.

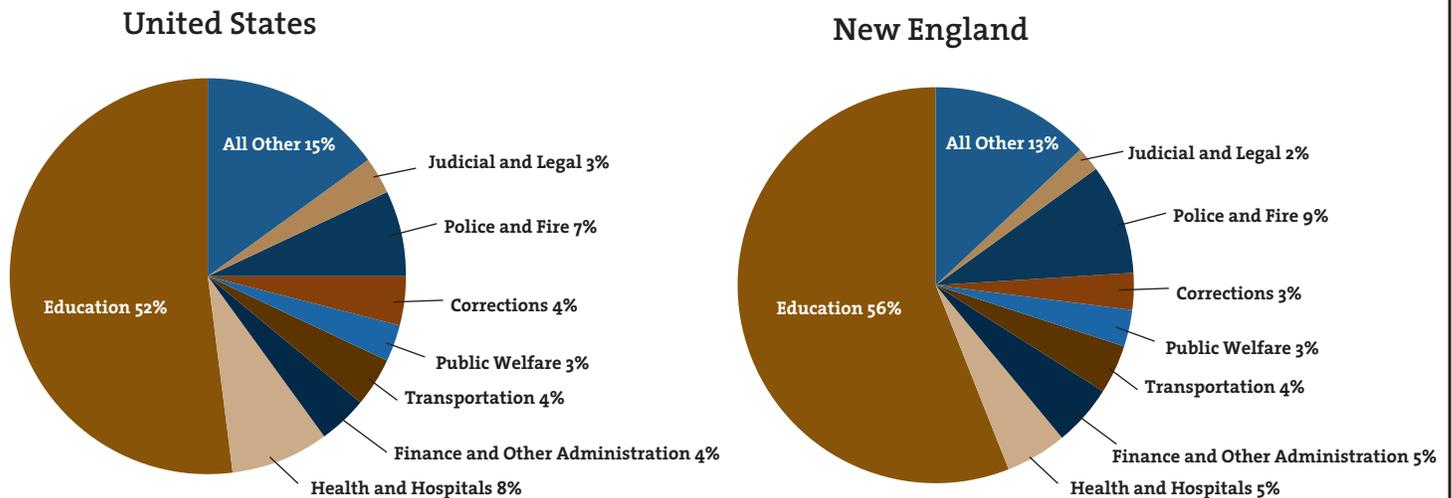
To assess the efficiency of the region’s state and local public sectors and to help New England policymakers grapple with the tradeoffs involved, this article examines the relative size, composition, and compensation of New England’s state and local public workforces using the latest Census data. Comparisons are made among the New England states, the entire region, and the nation as a whole. Throughout the article, the term “public employees” refers to state and local public employees; federal-government employees are not included in this analysis.

A key finding is that New England employs relatively fewer public employees per capita than the nation. Although the region has more public employees per capita at the state level, this is more than made up for by a “leaner” per capita local public sector workforce. This result is somewhat surprising, since New England has a greater number of local governments per capita, limiting the region’s ability to avail itself of economies of scale in public service provision. The salary picture similarly does not show major excesses. While the average salary of the region’s state and local employees is relatively high, as a percentage of personal income New England’s total public sector payroll is low. While a number of factors could explain these salary and employment findings (some are offered in the conclusion), they are hard to reconcile with the characterization sometimes made that the region’s public sector is too large or bloated, or that the average state or local public employee is overpaid.



## Chart 1: Employment by Sector in New England and the Nation

As of March 2003



### Public Employment in New England

From 1982 to 2003, state and local public employment in New England grew at an average annual rate of 1.1 percent. This was just 0.2 percentage points slower than growth in total private nonagricultural employment over the same period. The growth in public employment was not even from year to year. Governments tended to add workers most rapidly when the economy, and therefore tax revenues, were growing robustly. In New England, employment in state and local government increased at roughly 2 percent per year during the boom years of 1985 to 1988. Conversely, during the 1981 to 1982 recession, state and local public employment in New England contracted by slightly more than 3 percent, and in the recessionary period of the early 1990s, it contracted by just over 1 percent. More recently, during the boom years of the late 1990s, state and local public employment in the region increased by about 2 percent per year.

Evidence suggests that the historical pattern observed in the slowdowns of 1981 and 1991 held true for the most recent slowdown, which began in 2001. In response to collapsing revenues and the ensuing fiscal crisis in 2001, many states began to enact hiring freezes. Layoffs followed as conditions deteriorated into 2002.<sup>1</sup> Continuing weakness in revenue collections and spending pressures from programs such as Medicaid coupled to make workforce reductions an ongoing target of budget officials. Between 2002 and 2003, state and local public employment contracted by slightly more than 1 percent in the region.

Despite these ebbs and flows, by many measures the relative size of public employment overall has remained largely unchanged in New England. In 1981, 1991, and 2003, total state and local public employment accounted for 10 percent of the region's total nonagricultural employment. The mix of public employment between state and local governments fluctuated slightly. In 1981, 33 percent of all public employees in New England worked at the state level. A decade later, this share had grown to 36 percent, and then by 2003 it had dropped back to 32 percent. The state share declined because demographic changes induced accelerated hiring in local education, while state hospitals cut their staffing levels.<sup>2</sup>

### The Composition of Public Employment in New England

The most current data on public employment at the state and local levels comes from the U.S. Census count as of March 2003. Nationally, of the roughly 16 million full time equivalent (FTE<sup>3</sup>) employees of state and local governments, 27 percent were state employees, and 73 percent were local employees. In New England, of the 734,000 FTEs, a slightly higher 31 percent worked for state governments, while 69 percent worked at the local level. Within the region, Rhode Island employed the highest proportion of workers in state government, 36 percent, while Massachusetts employed the lowest share, 28 percent.

Within both the nation and New England, the largest employer by far was the Education sector, accounting for 52 percent of total state and local employment nationally and 56 percent in New England (see Chart 1). All six New England states employed a larger share of total state and local workers in Education than the national average.

Other large categories of public employment nationally were Health and Hospitals (8 percent of FTE), Police and Fire (7 percent), Corrections, Transportation, and Financial and Other Administration (all at 4 percent). Employment shares were slightly different in the New England region. Police and Fire (9 percent) and Finance and Other Administration (5 percent) both had higher shares in the region than in the nation.

On the other hand, several sectors had smaller shares of total public employment in New England than nationally. Health and Hospitals (5 percent), Corrections (3 percent), Judicial and Legal (2 percent), and All Other (13 percent) are cases in point. Two sectors — Public Welfare (3 percent) and Transportation (4 percent) — had equal percentages of state and local public employment in New England and the United States.

From state to state, sector shares varied considerably. Education ranged from 65 percent of total public employment in Vermont to 54 percent in Massachusetts and Rhode Island. Police and Fire employment ranged from 11 percent of FTEs in Massachusetts and Rhode Island to 4 percent in Vermont. Health and Hospitals employed 8 percent of state and local workers in Connecticut, but just 2 percent in Vermont. Public Welfare employment ranged from 6 percent in New Hampshire to 3 percent in each of the other New England states. Shares of other major sectors exhibited less variance across states.

Overall, New England's public employment *per capita* in 2003 was significantly less than the national average. In fact, at 518 FTE employees per 10,000 residents, New England employed 4 percent fewer public workers per capita than the nation. Within the region, this ratio exhibited a wide range of values, from a high of 625 workers per 10,000 in population in Vermont to a low of 498 workers per 10,000 in population in Massachusetts (see Table 1).

## State Government Workers

While *total* public employment per capita in New England was significantly less than the national average, public employment per capita in *state government* was significantly greater in New England than in the nation as a whole. In fact, five of the six New England states had relatively more state workers per capita than their peers nationwide, bringing the region's aggregate state employment per capita to a level more than 11 percent higher than the national average. This regional average, however, masks large interstate differences across New England. At 142 FTEs per 10,000 residents, Massachusetts' state employment was just one percent less than the nation's. Vermont's state employment, by contrast, was 218 FTEs per 10,000 residents, over 51 percent more than the national average.

For all six New England states, state employment per capita was especially high in the non-Education sectors. Overall, the region had 108 non-Education workers per 10,000 in population, 24 percent more than the national average. Within this broad amalgam, state-paid employment was especially high in five sectors: Finance and Other Administration, Judicial and Legal, Police and Fire, Public Welfare, and Health and Hospitals.

In Education, the New England states employed 9 percent fewer state workers per capita than nationwide — 52 workers per 10,000 residents versus 57 nationally. Nearly half of this difference is attributable to the fact that far fewer state employees were involved in educational *instruction* in New England than nationwide; however, New England's per capita state-paid employment in *non-instructional* education also lagged the nation's. New England's per capita state employment in non-instructional *higher education* was especially low relative to the nation's.

**Table 1. State and Local Government Employment Per 10,000 Population**

March 2003 Full-time Equivalent Employees

	U.S. Average	New England Average	CT	ME	MA	NH	RI	VT
<b>State</b>								
Education	57	52	52	58	43	59	63	82
Non-Education	87	108	120	109	99	99	123	136
Total	144	160	172	167	142	158	186	218
<b>Local</b>								
Education	231	240	230	291	228	252	220	325
Non-Education	167	117	104	116	128	119	114	80
Total	398	357	334	407	356	371	334	405
<b>State &amp; Local</b>								
Education	288	292	282	349	271	311	283	408
Non-Education	254	226	224	225	227	218	237	217
Total	542	518	506	574	498	529	520	625

Source: U.S. Bureau of the Census, *Public Employment and Payroll in 2003*.

Note: Columns may not add because of rounding.

**Table 2. State and Local Government Payroll per \$1,000 of State Personal Income**

Full-time Equivalent Employees as of March 2003 (dollars)

State	United States	New England	CT	ME	MA	NH	RI	VT
<b>State</b>								
Education	0.69	0.54	0.58	0.67	0.42	0.63	0.71	0.96
Non-Education	1.00	1.17	1.21	1.29	1.06	0.88	1.69	1.61
Total	1.69	1.70	1.79	1.96	1.49	1.51	2.40	2.57
<b>Local</b>								
Education	2.42	2.25	2.12	2.71	2.14	2.14	2.85	2.94
Non-Education	1.97	1.19	0.99	1.10	1.34	1.13	1.36	0.75
Total	4.39	3.44	3.12	3.81	3.48	3.26	4.21	3.69
<b>State &amp; Local</b>								
Education	3.11	2.79	2.70	3.38	2.56	2.77	3.56	3.91
Non-Education	2.97	2.36	2.21	2.42	2.40	2.00	3.05	2.35
Total	6.08	5.14	4.91	5.80	4.96	4.77	6.61	6.26

Source: U.S. Bureau of the Census, *Public Employment and Payroll in 2003*.

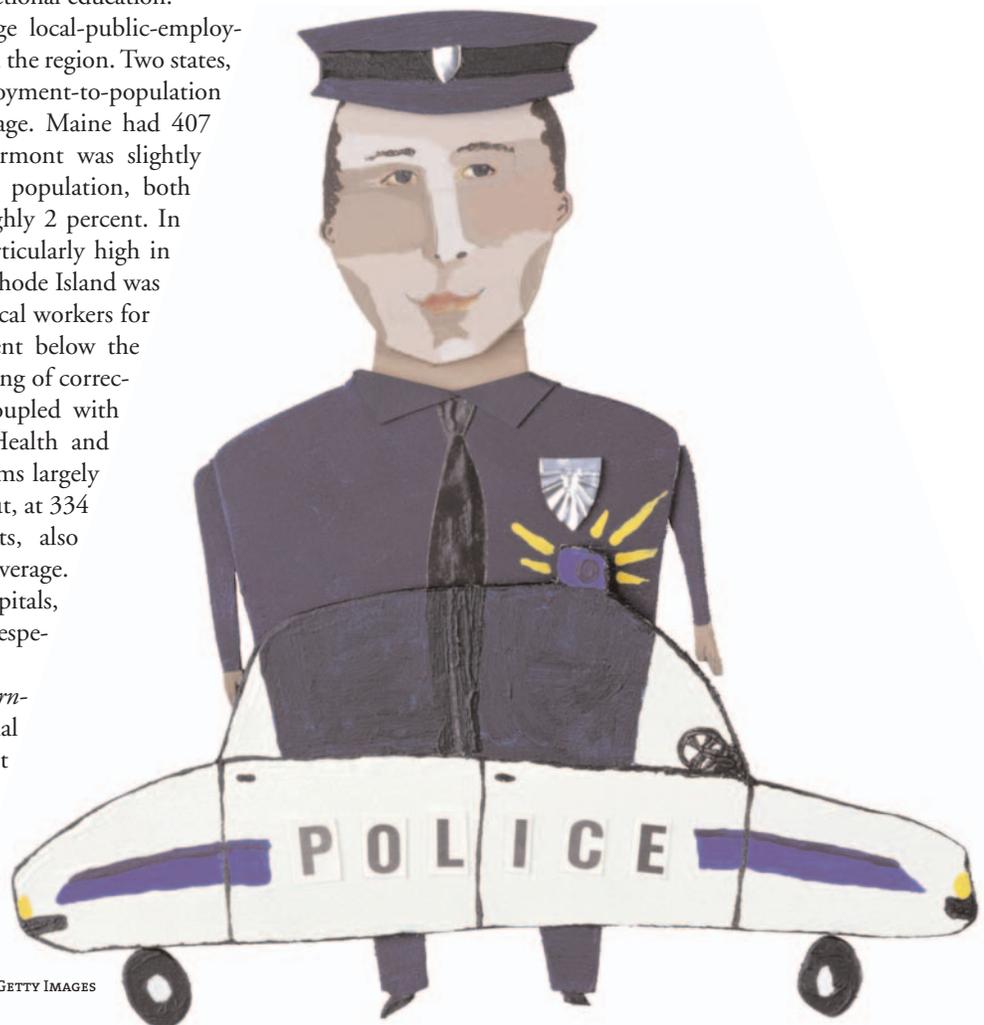
Note: Columns may not add because of rounding.

## Local Government Workers

As noted earlier in this article, per capita *local* government employment in New England is low relative to that of the nation. Nationally, local governments employed an average of 398 workers for every 10,000 residents. Regionally, local governments employed an average of 357 workers per 10,000 in population, 9 percent less than the national average. Non-Education employment accounts for this difference. Across the region, New England localities employed only 117 non-Education workers per 10,000 residents, a full 30 percent less than the national average. Within the non-Education grouping, sectors where per capita local employment was significantly lower than the nation's include Health and Hospitals, Judicial and Legal, and Public Welfare. In Education, where the region's per capita local employment exceeded the nation's, the number of workers per capita was greater in primary and secondary instructional education.

As with state employment, average local-public-employment-to-population ratios varied within the region. Two states, Maine and Vermont, had local-employment-to-population ratios that exceeded the national average. Maine had 407 FTEs per 10,000 residents, while Vermont was slightly lower, with 405 FTEs per 10,000 in population, both exceeding the national average by roughly 2 percent. In these states, local employment was particularly high in school staffing, especially instructors. Rhode Island was at the other extreme, employing 333 local workers for every 10,000 in population, 16 percent below the national average. The lack of local staffing of correctional facilities in the Ocean State coupled with strongly centralized Public Welfare, Health and Hospitals, and Judicial and Legal systems largely accounts for this difference. Connecticut, at 334 local employees per 10,000 residents, also lagged 16 percent behind the national average. Local employment in Health and Hospitals, Corrections, and Public Welfare was especially low the Nutmeg State.

In short, at the level of *state government*, New England exceeded national average per capita staffing levels in almost all categories. But at the level of *local government*, per capita employment was on the low side, especially in health care and non-instructional elemen-



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**Table 2. (Revised) State and Local Government Payroll per \$1,000 of State Personal Income  
March 2003 Full-time Equivalents**

	United States	New England	CT	ME	MA	NH	RI	VT
<b>State</b>								
Education	8.23	6.45	6.90	8.06	5.08	7.56	8.54	11.56
Non-Education	11.99	13.98	14.53	15.47	12.75	10.53	20.28	19.27
Total	20.22	20.43	21.43	23.53	17.83	18.10	28.82	30.83
<b>Local</b>								
Education	29.08	26.99	25.49	32.56	25.70	25.66	34.16	35.32
Non-Education	23.64	14.30	11.93	13.22	16.06	13.50	16.37	8.99
Total	52.72	41.29	37.43	45.77	41.76	39.16	50.53	44.32
<b>State &amp; Local</b>								
Education	37.31	33.44	32.39	40.61	30.78	33.22	42.70	46.88
Non-Education	35.63	28.28	26.55	29.01	28.76	24.04	36.65	28.26
Total	72.94	61.72	58.94	69.62	59.54	57.26	79.35	75.14

Source: U.S. Bureau of the Census, Public Employment and Payroll in 2003; Bureau of Economic Analysis, Personal Income in 2003  
Note: Annual salary equals March 2003 salary times 12.

### Error described:

Figures originally published in Table 2 of this article were found by taking the monthly March payroll for 2003 and dividing it by the annual state personal income (in 1,000 dollars). This statistic is misleading because it takes a monthly value for payroll and divides it by an annual payroll for state personal income. The values in the corrected graph were found by first multiplying the monthly March payroll for 2003 by 12, to get the annual figure, and then dividing by state personal income (in 1,000 dollars).

tary and secondary schooling. However, New England had a greater than average number of local-government teachers per capita.

## Wages and Salaries

U.S. state and local public sector payrolls totaled roughly \$55 billion in 2003 – \$3 billion of which was paid in New England. Put another way, out of every \$1,000 of personal income earned by Americans in 2003, \$6.08 went to meet state and local government payroll obligations. In New England, this amount was \$5.14 per \$1,000 of personal income (see Table 2). Within New England, taxpayers in Rhode Island and Vermont put a higher than average share of personal income toward state and local payroll costs, while Connecticut, Maine, Massachusetts, and New Hampshire all had shares that were below the national average.

At the level of state government, payroll costs relative to personal income were almost identical in New England and the United States as a whole. State payrolls cost all Americans on average \$1.69 per \$1,000 of personal income; the comparable figure for all New Englanders was less than 1 percent more. The experience across New England was mixed. Vermont, at \$2.57 per \$1,000, and Rhode Island, at \$2.40 per \$1,000, had the highest state “payroll burdens,” exceeding the national average by 52 percent and 42 percent, respectively. Conversely, Massachusetts, at \$1.49 per \$1,000, and New Hampshire, at \$1.51 per \$1,000, had state payroll burdens that were below the national average by 12 percent and 11 percent, respectively.

Local-government payrolls cost Americans \$4.39 per \$1,000 of personal income, on average. In New England, local-government salaries were 22 percent less costly, averaging \$3.44 per \$1,000 of personal income. In Connecticut, local payrolls cost a mere \$3.12 per \$1,000, nearly 40 percent below the national average. Even in Rhode Island, the state with the highest local-government payroll burden in the region, local payrolls per \$1,000 of personal income were still 4 percent below the national average.

## Average Salaries for State and Local Employees

Wages and salaries paid per worker by state and local governments were, on average, 8 percent higher in New England than in nation as a whole. State governments in New England paid an average salary in 2003 of \$47,904 – 11 percent more than the national average (see Table 3).<sup>4</sup> Connecticut had the highest average state-paid salary, \$52,920 – 22 percent above the national average. Three New England states, New Hampshire, Maine, and Vermont, had average state-paid salaries below the national average.

At the local level, New England’s public employees earned an average salary of \$43,284, 6 percent greater than the comparable national figure. Once again, Connecticut was the regional leader, with a salary of \$47,580, 16 percent more than the national average. Also mirroring the performance of their state salaries, local salaries in Maine, New Hampshire, and Vermont were all lower than the national average.

## Education Salaries

Across both state and local government, employees working in New England in the Education sector earned roughly 7 percent more than their national peers in 2003. Both non-instructional and instructional workers had higher earnings in New England. State education workers across New England earned 5 percent more than the national average. Among educational instructors, the higher state pay in New England was

**Table 3. Average Annual Salary Paid by State and Local Governments** (dollars)

	United States	New England	CT	ME	MA	NH	RI	VT
<b>State</b>								
Education	44,580	47,028	56,124	39,636	45,876	43,380	42,504	43,548
Non-Education	42,432	48,312	51,528	40,788	50,328	37,308	51,156	42,060
Total	43,284	47,904	52,920	40,380	48,984	39,588	48,216	42,624
<b>Local</b>								
Education	38,856	42,108	47,148	31,692	43,776	35,292	48,876	32,544
Non-Education	43,656	45,694	48,528	33,144	48,744	38,844	45,093	35,568
Total	40,872	43,284	47,580	32,100	45,564	36,432	47,580	33,144
<b>State &amp; Local</b>								
Education	39,996	42,972	48,072	33,012	44,112	36,828	47,448	34,764
Non-Education	43,236	46,956	50,136	36,840	49,440	38,148	48,240	39,648
Total	41,508	44,712	49,392	34,512	46,536	37,380	47,808	36,468

Source: U.S. Bureau of the Census, *Public Employment and Payroll in 2003*.  
Note: Annual salary equals March 2003 salary times 12.

entirely attributable to instruction at the primary and secondary levels, where instructors earned 6 percent more than the national average. State-paid higher-education instructors actually earned 2 percent less than the comparable national average. Non-instructional state employees at all educational levels earned more in New England than in the nation as a whole.

Within the region at the state level, Connecticut had the highest average education salary, \$56,124 – 26 percent more than the national average, although the Connecticut figure includes only higher-education employees. Among the states with education workers at primary and secondary schools as well as at higher-education institutions, Massachusetts had the highest average salary, \$45,876 – 3 percent more than the national average. Maine, which paid its state education employees an average of only \$39,636 in 2003, had the region's lowest average salary for state education workers.

Education salaries paid by local governments in New England were just over 8 percent higher than education salaries paid by local governments nationwide, although salaries differed dramatically by employment type. Higher-education instructors were paid 37 percent *less* by local governments in New England compared with the nation. In contrast, both instructional and non-instructional employees at the primary and secondary levels earned more in local-government employment regionally than nationally. At \$48,876, Rhode Island's average local education salary, which includes only primary and secondary employees, was the highest in the region, 26 percent greater than the national average. At \$31,692, Maine's average local education salary, which also includes only primary and secondary employees, was the lowest in the region, 18 percent lower than the comparable national figure. Massachusetts was the only state in the region that, like the United States as a whole, had education employees at the primary and secondary as well as the higher education levels. Massachusetts also had higher educational salaries than the comparable national averages in most categories.

## Non-Education Salaries

In non-Education sectors – Health and Hospitals, Finance and Other Administration, Transportation, Public Welfare, Corrections, Police and Fire, Judicial and Legal, and All Other – the New England region had consistently higher average salaries than the United States average. The largest gaps were in Corrections (18 percent more) and Transportation (17 percent more). Smaller gaps were in Finance and Other Administration (1 percent more) and Police and Fire (3 percent more).

Across the non-Education sectors *at the state level*, the New England salaries were higher than the national average in every category except Judicial and Legal. The largest gaps were observed in Public Welfare (25 percent), Corrections (22 percent), and Health and Hospitals (19 percent). Disparities were especially large in several New England states. In Connecticut, state salaries exceeded the national average by 55 percent in Public Welfare and by 40 percent in Health and Hospitals. Likewise, in Massachusetts and Rhode Island, state Corrections salaries outpaced the national average salary by 30 percent and 41 percent, respectively. Some non-Education state-paid salaries *did* lag the national average. New Hampshire trailed the national average in every non-Education category; Maine, in five categories; and Vermont, in four.

Local non-Education salaries for New England were nearly 5 percent higher than the national average, led by higher salaries in Transportation (8 percent) and Corrections (6 percent). Despite having high local non-Education salaries overall, the region trailed the nation in several categories, including Public Welfare (14 percent) and Judicial and Legal (6 percent). The regional average masks substantial intra-regional variation. In Maine, local salaries averaged less than the comparable national salaries in every non-Education category, ranging from 38 percent less in Judicial and Legal to 16 percent less in Health and Hospitals. Meanwhile, local salaries in Massachusetts surpassed the national average in all non-Education categories except Public Welfare, where the average pay was 11 percent below the national average.

In summary, public sector salaries were generally higher in New England than in the nation as a whole. This is true for both state and local employees and is constant across education and non-education jobs. However, when these salaries are evaluated relative to the personal income earned by New England residents, who pay a large portion of New England's state and local taxes, the region's public sector payrolls do not appear burdensome. State salaries represent a slightly larger share of personal income than the national average in New England, 1 penny more per \$1,000 of personal income. However, local employee salaries are significantly lower in the region than in the nation, nearly one dollar less per \$1,000 of personal income.

## Conclusion

The picture that emerges from these statistics is one of a relatively lean and competitive public sector workforce in New England. Compared with the nation, New England employs fewer public workers per capita, and the salaries of these workers represent a smaller share of the personal income of state residents. The relative mix of employment type may be partially responsible for these differences. New England employs comparatively more education workers, who earn, on average, less than non-education public employees. The avail-

*continued on page 12*

<sup>5</sup>Capitalization occurs when the government or a business converts a future revenue stream into capital that can currently be used. Revenue bonding is a common form of capitalization.

<sup>6</sup><http://www.dor.state.ma.us/pressreleases/2005/march05revenues.htm>

<sup>7</sup>Due to Act 68. For a fuller description, see Turner, "Across the Region: Six State Review," Federal Reserve Bank of Boston, *Fiscal Facts*, Winter 2004/2005.

<sup>8</sup>This represents only non-property-tax revenues, which in FY05 made up 13 percent of the total education fund. Property taxes accounted for 64 percent; the transfer from the general fund, 22 percent; and other sources, 1 percent.

<sup>9</sup>Medicaid projections from "Saving Medicaid: The Douglas Administration's Plan for Saving the Vermont Medicaid System," prepared by the Office of the Secretary of Administration and the Office of the Secretary of Human Services. <http://www.ovha.state.vt.us/docs/savingmedicaid.pdf>.

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## State and Local Employees, continued from page 6.

ability of private sector providers of services may also help to explain the region's small per capita state and local work force and low ratio of public payroll to personal income. It is likely that the New England states allocate relatively smaller shares of their state and local public outlays to institutions of higher education and health in part because the region has relatively more extensive networks of private colleges, universities, and hospitals.<sup>5</sup>

<sup>1</sup> Most notably, 3,000 Connecticut state employees received layoff notices in December 2002.

<sup>2</sup>In 1992, New England state governments employed 32,764 full-time equivalents (FTEs) in the hospital sector. By 2001, this number had decreased to 22,285. This represents a decrease of 32 percent largely attributable to the closure of many state-run mental hospitals in the 1990s. Over the same period, local governments increased the number of FTEs employed in the Education sector by 29 percent. This change coincides with an increase in the school age population (5- to 17-year-olds) from 16 percent of the total population in 1992 to 18 percent in 2001.

<sup>3</sup>Full-time equivalent employment is a computed statistic that represents the number of full-time employees that could have been employed if the reported number of hours worked by part-time employees had been worked by full-time employees. This statistic is calculated by dividing the "part-time hours paid" by the standard number of hours for full-time employees in the particular government and then adding the resulting quotient to the number of full-time employees.

<sup>4</sup>Average annual salary is estimated by multiplying average monthly salary in March 2003 by 12.

<sup>5</sup>For a more detailed discussion of the region's mix of public services, see Tannenwald 1990.

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**NOTE:** This is the last issue of *Fiscal Facts*. The New England Public Policy Center, at the Federal Reserve Bank of Boston, will resume reporting on fiscal developments and conditions in New England after a comprehensive redesign of existing publications. Thank you for your helpful comments and insights over the years.

Robert Tannenwald  
Editor

### Editors

Robert Tannenwald  
E. Matthew Quigley  
Nick Turner

### Designer

Heidi Furse

### State Budget Timetables

#### Annual Budgets

Massachusetts  
Rhode Island  
Vermont  
FY05: July 1, 2004  
to June 30, 2005  
FY06: July 1, 2005  
to June 30, 2006

#### Biennial Budgets

Connecticut  
Maine  
New Hampshire  
FY04-05: July 1, 2003  
to June 30, 2005  
FY06-07: July 1, 2005  
to June 30, 2007

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## New England Fiscal Facts

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