

---

## **MAINE'S STATE- AND LOCAL-GOVERNMENT PAYROLL AND EXPENDITURE**

Philip A. Trostel  
University of Maine  
Orono ME 04469  
[philip.trostel@maine.edu](mailto:philip.trostel@maine.edu)

A Background Paper Prepared for the  
Brookings Institution Metropolitan Policy Program in support of its larger project, "Charting Maine's  
Future: An Action Plan for Promoting Sustainable Prosperity and Quality Places"

October 2006

*Note: The views expressed in this paper do not necessarily reflect those of either the trustees, officers, or staff members of the Brookings Institution; GrowSmart Maine; the project's funders; or the project's steering committee. The paper has also not been subject to a formal peer review process.*

---

**ACKNOWLEDGEMENTS**

The author thanks Eric Olds for research assistance far beyond the call of duty.

**ABOUT THE AUTHOR**

Philip Trostel is a professor in the Department of Economics and the Margaret Chase Smith Center for Public Policy at the University of Maine.

**Copyright © 2006 The Brookings Institution**

## TABLE OF CONTENTS

EXECUTIVE SUMMARY .....	1
I. INTRODUCTION .....	4
II. FRAMEWORK	
COMPARISON STATES .....	6
REGIONS .....	8
MEASURES .....	8
DUPLICATION .....	11
COST DIFFERENTIALS.....	12
STATE AND LOCAL SERVICE CATEGORIES.....	13
III. AGGREGATE TOTALS .....	15
IV. LOCAL FUNCTIONS	
ELEMENTARY AND SECONDARY EDUCATION.....	17
POLICE PROTECTION.....	20
FIRE PROTECTION.....	22
PARKS AND RECREATION .....	23
SEWERAGE .....	24
HOUSING AND COMMUNITY DEVELOPMENT .....	25
SOLID-WASTE MANAGEMENT .....	27
LIBRARIES.....	28
V. STATE FUNCTIONS	
HIGHER EDUCATION .....	29
CORRECTIONS .....	32
NATURAL RESOURCES .....	34
SOCIAL-INSURANCE ADMINISTRATION.....	35
OTHER EDUCATION .....	36

VI.	MIXED FUNCTIONS	
	HIGHWAYS .....	38
	PUBLIC WELFARE .....	40
	FINANCIAL ADMINISTRATION .....	42
	OTHER GOVERNMENT ADMINISTRATION .....	43
	HEALTH .....	45
	JUDICIAL AND LEGAL .....	47
	GENERAL PUBLIC BUILDINGS .....	49
	OTHER AND UNALLOCABLE .....	49
VII.	DISCUSSION	
	RECAP OF FINDINGS	
	AGGREGATE TOTALS .....	52
	LOCAL FUNCTIONS .....	53
	STATE FUNCTIONS .....	55
	MIXED FUNCTIONS .....	56
	THE 800-POUND GORILLA .....	58
	REGIONAL DIFFERENCES .....	59
	EXTREME PRIORITIES .....	60
	ADMINISTRATIONLAND .....	61
	LARGE STATE GOVERNMENT .....	62
	BEING RURAL .....	62
	COST ADVANTAGES .....	63
	TABLES AND FIGURES .....	65

# MAINE'S STATE- AND LOCAL-GOVERNMENT PAYROLL AND EXPENDITURE

## EXECUTIVE SUMMARY

This report examines state- and local-government spending in Maine in comparison to other states. Growing criticism of Maine's much-publicized high tax burden is causing public spending in Maine to come under increasing scrutiny. But there has not been much information readily available about how Maine's governments spend tax revenues. Anecdotes and impressions hint at waste, but there is not much in the way of systematic analysis.

This report attempts to address this problem by systematically examining interstate data on payroll and expenditure in 21 categories of state- and local-government services. Some of the key findings from this analysis are:

### *Aggregates*

- After removing quasi-private enterprises, such as public hospitals and public utilities, from the data, Maine's aggregate state- and local-government expenditure less transfers from the federal government is high in comparison to the rest of the nation. Maine's aggregate net expenditure was 15.1 percent of the state's total personal income in FY2002. This is 13 percent higher than the national average.
- Maine's aggregate state- and local-government payroll is not particularly high in comparison to the rest of the nation. As a percentage of income, it was 1 percent above the national average in FY2002.
- There are sizable differences in aggregate local-government spending among regions within Maine. Local-government payrolls relative to income in Northern, Central, and Western Maine are more than 20 percent higher than in Down East, Mid-Coast, and Southern Maine.

### *Local Services*

- Primary and secondary education is by far the largest state- and local-government service category, and Maine's spending on K-12 education is high compared to the rest of the nation. Net expenditure per student in Maine is 8 percent higher than the national average, despite income that is well below the national average. Moreover, the relatively rural nature of Maine apparently is not the reason for its comparatively high expenditure on public education.
- There are large regional differences in the provision of public education. Primary and secondary education payroll as a percentage of income in Southern Maine is much lower than in all other regions, presumably because it is the state's wealthiest region. Education payroll relative to income is the highest in Central Maine, followed by Western Maine.
- Maine spends much less on police protection as a percentage of income than the rest of the nation. This, however, appears to be due to Maine's relatively low crime rate. Maine's police expenditure per crime is higher than in most other states.

- Maine's spending on fire protection is low compared to the rest of country, but this is true for most rural states. Indeed, Maine's fire expenditure relative to personal income is higher than in most other rural states.
- Parks and recreation spending relative to income is low in Maine compared to the rest of nation and to other rural states. Within the state, large differences exist in parks and recreation payroll relative to income. Northern, Southern, and Central Maine are much higher than Down East, Mid-Coast, and Western Maine
- Although some of the evidence is conflicting and puzzling, Maine's spending on solid-waste management may be high compared to the rest of the country.
- Spending on libraries in Maine is relatively low in comparison to other states. Libraries payroll relative to income is much lower in the state's less-urban regions.

#### *State Services*

- Public higher-education net expenditure in Maine is low in comparison to the rest of the nation. Maine's net state contribution for higher education as a percentage of income is 26 percent lower than the national average. Maine's net state contribution per student is 14 percent lower than the national average.
- Public higher education in Maine has unusually high non-instructional costs. Maine has the nation's highest non-instructional payroll relative to instructional payroll.
- Maine's corrections expenditure relative to income is well below the U.S. average, but Maine's relative number of prison inmates is even further below the U.S. average. Maine's estimated corrections expenditure per inmate is 119 percent above the national average. Moreover, Maine's relatively rural nature apparently is not the reason for its relatively high per-inmate expenditure on corrections.

#### *Mixed State and Local Services*

- Maine's spending on highways is high relative to income and relative to vehicle miles in comparison to the rest of the nation. This appears to be attributable to Maine's winter weather. Indeed, after taking weather into account, Maine's highway spending appears to be close to the national norm. Western Maine has an unusually high level of local highway payroll relative to income.
- Maine's spending on welfare benefits is high in comparison to the rest of the nation, but evidence on Maine's administration of welfare programs is mixed. It is unclear if Maine is unusually costly in administering welfare benefits.
- State-government spending on financial administration relative to income is high in Maine compared to the rest of the nation. Local-government financial administration payroll as a percentage of income is particularly high in Down East Maine.
- State-government spending on other administration is high in Maine in comparison to the rest of the country. The state's legislative expenditure relative to income is particularly high relative to other states.
- Maine's spending on public health appears to be very high compared to the rest of the nation, but the evidence is not consistent. The state's public-health payroll relative to income

is somewhat low compared to the rest of the country. But Maine's public-health net expenditure relative to income is 95 percent higher than the national average.

- In spending on judicial and legal services, Maine is low compared to most other states. Much, although not all, of this appears to be due to Maine's relatively low crime rate.
- In comparison to other states, Maine is high in its spending on state-government general public buildings.
- Maine's spending in the catch-all category "Other and Unallocable" appears to be high in comparison to other states, although the evidence is mixed. Maine's other and unallocable net expenditure as a percentage of income is 83 percent higher than the national average. Maine's payroll as a percentage of income, though, is lower than the national average.

It is important to emphasize that the above conclusions are only interstate comparisons of state and local payroll and expenditure data. They are not judgments about Maine's service levels. Nor can they prove excess costs in providing services. Expenditure levels in other states are not necessarily the most desirable levels for Maine. Moreover, the data do not account for many important factors such as differences in service quality. These comparisons simply reveal other possibilities for state- and local-government spending levels. The intention of these interstate comparisons is to provide relevant information that may help guide difficult decisions about state and local fiscal choices.

## I. INTRODUCTION

Pressure is mounting to do something about Maine's relatively high state and local tax burden. The November 2006 Taxpayer Bill of Rights referendum is just the latest manifestation of the so-called taxpayer revolt. Discontent over Maine's level of state and local taxes compared to other states is generating growing criticism of state and local spending practices. Indeed, there are increasing calls to constrain government spending. Many believe that Maine is rife with wasteful government spending. Although this perception may be overly cynical, there are legitimate reasons to believe that Maine may suffer from too much diffusion and proliferation in the delivery of local-government services.

Despite many important recent analyses of state and local fiscal issues in Maine,<sup>1</sup> there is no systematic and complete analysis of state- and local-government spending. This report attempts to help fill this analytical gap by examining recent data on state- and local-government employment, payroll, and spending in Maine in comparison to the rest of the nation. This project systematically examines 21 distinct state- and local-government service categories. Two subcategories for five of these state- and local-government functions are also examined. Altogether, 31 service categories and subcategories are examined. These public services are examined at both the local-government level and at the state-government level.

Particular emphasis is placed on possible excess costs and possible redundancy in providing state- and local-government services in Maine. The presence of possible excess costs is identified by comparing Maine's levels of payroll, employment, and expenditure to those in the rest of the nation and, particularly, to levels in other relatively rural states. Such a simplistic method clearly cannot prove the existence of waste in Maine's public services. Cost factors and service levels and quality can differ across states. Thus, this study only identifies the presence of *possible* excess costs. The intention is to suggest service areas that may deserve closer inspection.

Several cost measures are examined to provide as clear a picture as possible of Maine's provision of state and local government services compared to the rest of the nation. For example, levels of state- and local-government payroll and expenditure as a percentage of state total personal income are presented. State- and local-government employment per capita is also shown. In some spending categories, such as public welfare, highways, and health, it is appropriate to calculate expenditure net of federal government transfers. Comparing various measures is important to ensure that the findings are consistent. Wherever possible, the analysis of each state- and local-

---

<sup>1</sup> Some of these are Charles Colgan, "Tax Reform" A Long Walk Home" *Choices*, 11(1), 2005; Josephine LaPlante, "A Property Tax Cap for Maine: Roots of Voter Discontent and Likely Impacts," *Maine Policy Review*, 5(2), 1996; Maine State Planning Office, "The Cost of Sprawl," 1997; Matthew N. Murray, "Tax Policy and Economic Development in Maine: A Survey of the Issues," Margaret Chase Smith Policy Center, 2002; New England Environmental Finance Center, "Analysis of Per Capita Expenditures of Suburbanizing Communities in Maine," 2005; Evan D. Richert, "Regionalism, New England Style," *Choices*, 9(4), 2003; Christopher St. John, "No Quick Fix for Maine's Budget and Taxes," *Choices*, 11(5), 2005; and Nick Turner and E. Matthew Quigley, "Do New England State and Local Governments Have Too Many Employees, and Are They Overpaid?" *New England Fiscal Facts*, 34, 2005.



government service attempts to control for potentially important confounding influences. For instance, when examining police payroll and expenditure, it is important to control for differences in crime rates across states. When examining primary and secondary education, it is important to control for the number of students in each state.

A systematic analysis of 31 state- and local-government service categories and subcategories is an ambitious undertaking. Indeed, it may be overly ambitious. There are numerous ways that this analysis provides only an incomplete picture of Maine's provision of specific public services. All potentially important issues simply cannot be addressed in one study. Thus, this report makes no claim that any specific government service in Maine is exhaustively examined.

In other words, this report cuts a wide, but shallow, path in analyzing Maine's public spending policies. Despite the obvious limitations of this approach, there are important advantages. As will hopefully become apparent in the following report, to adequately understand Maine's provision of public services it is crucial to examine individual governmental functions. There is limited value in just examining the aggregate totals. Moreover, examining specific state- and local-government services in isolation paints an incomplete picture of the difficult fiscal choices facing Maine.

## II. FRAMEWORK

### Comparison States

A major difficulty in evaluating levels of costs is finding appropriate benchmarks. For instance, one could compare current levels to past levels. Or one could compare Maine's levels to national averages. A norm for comparison is needed, but rarely is there an unambiguously ideal norm. Past levels are clearly problematic, because economic conditions are always changing. Levels in other states are better norms, but there are problems with this as well. For example, other states may not have ideal spending levels any more than Maine does (although the differences from "ideal" levels may average out across states).

Nonetheless, benchmarks must be chosen to evaluate levels of cost. The primary benchmarks emphasized in this report are national averages. This has the advantage of being a simple and obvious benchmark. But states clearly differ in many important dimensions.

Geography is one obvious way that Maine differs from most of the rest of the nation. Thus, it is almost standard practice to compare Maine to neighboring New England states. This study does not follow this approach, though. A comparison to the New England average is essentially a comparison to Massachusetts and Connecticut because 70 percent of New England's population lives in these two states (almost 46 percent of New Englanders live in Massachusetts alone). Moreover, these states bear little resemblance to Maine in terms of population density and income. According to the 2000 Census, 25 percent of Maine's population lives in urban areas, compared to 87 percent in Massachusetts and Connecticut together. Per capita income in Massachusetts and Connecticut is almost 47 percent higher than in Maine.

A potentially important dimension where Maine differs considerably from the rest of the nation is in its degree of urbanization. Moreover, this could be particularly important for the issue of possible unnecessary fragmentation and duplication in the provision of local-government services. Rural areas are likely to have more difficulty in capturing economies of scale. Indeed, this factor is sometimes blamed for Maine's perceived high costs of local government.

Maine is much more rural than most other states. As noted above and shown in Table 1, less than 25 percent of the state's population lives in areas classified as urban, making it the third most rural state in the nation.<sup>2</sup> In the rest of the country, almost 69 percent of the population lives in urban areas. Thus, in addition to comparing Maine to national averages, this study compares Maine

---

<sup>2</sup> The Census Bureau has two measures of urban. This study uses their "urban area" measure, which consists of densely settled territory (at least 1,000 people per square mile) with 50,000 or more people. The other Census Bureau measure consists of densely settled territory with 2,500 or more people. As a dividing line for small-scale service delivery, the first measure seems more relevant. The Census Bureau also has a metropolitan/non-metropolitan measure. This measure, however, applies a different standard to New England than it does to the rest of the country. Hence, this measure seems questionable for this analysis.

to states that are the most rural: Vermont, Mississippi, Wyoming, South Dakota, Montana, West Virginia, Arkansas, North Dakota, and Iowa.<sup>3</sup>

Table 1 shows population density as well. In this measure, Maine is most similar to Oregon, Colorado, and Arizona. Total state population is also included in Table 1, showing Maine's general similarity to the rural comparison states. Vermont, Wyoming, South Dakota, and North Dakota are somewhat smaller than Maine; while Mississippi, West Virginia, Arkansas, and Iowa are somewhat larger.

Per capita income is also shown in Table 1. Maine's income per capita in 2000 was 13 percent below the national average. Five of the rural comparison states are similar to Maine in per capita income. But four of the states, Mississippi, Montana, West Virginia, and Arkansas, have noticeably lower per capita incomes than Maine. Thus, average income among the nine comparison states is 10 percent below Maine's.

Maine is also frequently compared to its neighboring state, New Hampshire. As shown in Table 1, except for per capita income, New Hampshire is much like Maine. New Hampshire is rural, although not as rural as Maine. New Hampshire has about the same population as Maine. Per capita income, however, is 29 percent higher in New Hampshire. Thus, New Hampshire's statistics are included in subsequent tables, but are not emphasized in comparison to Maine.

Clearly there is plenty of room to legitimately argue over the choice of comparison states. Per capita income could be particularly important, thus perhaps the poorest states should not be in the comparison group. Or population density might matter more than urban percentage, hence the low-density Western states should be excluded from the comparison group. The problem is that there is no simple way to devise a true comparison group. States differ in countless potentially important dimensions.

Rather than use some combination of ad hoc rules, this study uses just one simple, objective dividing line between the comparison states and non-comparison states: the 10 states with the lowest urban percentages. The comparison group that it creates is obviously debatable. But a more complicated criterion (say, states ranked between 31<sup>st</sup> and 40<sup>th</sup> in per capita income), or group of criteria would not solve this problem.

It is important, though, to keep in mind the problematic nature of any comparison group. No two states are ever truly equal in any important dimension. For this reason, data for each of the rural comparison states are presented in the following tables rather than just their average. This provides the opportunity for the reader to choose among the rural states for comparison.

---

<sup>3</sup> The list would be similar if the other urban measure (at least 2,500 people) were used. In this case Wyoming and Iowa would be replaced by Alabama and Kentucky, and Maine is 49<sup>th</sup> (instead of 48<sup>th</sup>). The list would also be similar if the metropolitan percentage were used. In this case, Arkansas and Iowa would be replaced by Idaho and Alaska, and Maine is 45<sup>th</sup>.

## Regions

Regional differences in local public-service provision are examined by breaking Maine up into six regions. The regional boundaries follow the framework of the other parts of the Brookings GrowSmart Maine project. Northern Maine consists of Aroostook, Penobscot, and Piscataquis Counties. Down East Maine is Hancock and Washington Counties. Mid-Coast Maine is Knox, Lincoln, Sagadahoc, and Waldo Counties. Southern Maine is Cumberland and York Counties. Western Maine is Androscoggin, Franklin, and Oxford Counties. And Central Maine is Kennebec and Somerset Counties.

Table 2 presents demographic and income data for the six regions in the year 2000. The Southern Maine region is clearly different from the others. Southern Maine is far less rural than the other regions. Its population density is more than four times higher than the next most densely populated region (Mid-Coast Maine), and almost 15 times greater than the least densely populated area (Northern Maine). Per capita income in Southern Maine is more than 19 percent higher than in the next highest region (Mid-Coast Maine), and 34 percent higher than in the lowest income region (Northern Maine). The differences between the other five regions are much smaller than their differences with Southern Maine.

As in the choice of comparison states, there is plenty of room to debate these regional dividing lines. Particularly problematic are the inclusion of the Bangor area in Northern Maine, Mount Desert Island and Ellsworth in Down East Maine, and Lewiston and Auburn in Western Maine. The problem stems from having to follow county boundary lines, which is the only feasible alternative within the timeframe of this study.

## Measures

Understanding relative levels of state- and local-government services and costs is made more difficult by the many legitimate ways of presenting the results. There is no single measure that is unambiguously the best way to examine the data. For example, some studies examine state and local governments combined, while other studies only examine local governments. Some emphasize government spending per capita, while others emphasize government spending per dollar of state income. Still others emphasize government employment, while some emphasize government expenditure. Moreover, reasonable arguments usually can be made for each of these measures.

To the extent possible, this study uses a consistent framework to examine each category of state- and local-government employment and spending. A consistent analytical framework is applied to each government service category for three important reasons. First, a consistent methodology is easier to understand and follow than a changing one. Second, a consistent framework facilitates comparison across categories. Third, by eliminating the choice of measure to emphasize, the potential for subjectivity is reduced. Thus, the choice of measures is guided

primarily by the ability to apply them consistently across states and across categories of government services.

For various reasons, though, it is inappropriate to only apply a uniform framework to every government service category. Services often differ in important dimensions. Thus, some extensions to the basic framework are necessary to best illuminate how the service is being provided. For example, the availability of data allows examination of subcategories of services in some instances, but not in others. Some services are provided exclusively by local governments or state government, while others services are provided at both levels.

Also, for some services, there are obvious ways to improve the measures of services and costs. Indeed, an ideal measure would be the cost per unit of output. Moreover, an ideal measure such as this would also account for differences in service quality and differences in prices across states. Such data do not exist, which is part of the reason why there are various (imperfect) measures of government costs. In some instances, however, data are available to construct rough measures of cost per unit of output. For instance, in education, data are available to examine cost per student. In corrections, one can examine cost per inmate. In highways, one can examine cost per mile of roads.<sup>4</sup>

Except for the handful of cases where there are obvious better measures, such as those above, this study emphasizes three measures of state- and local-government costs: payroll as a percentage of total state personal income, full-time equivalent (FTE) employment per capita, and net expenditure<sup>5</sup> as a percentage of total state personal income. Fortunately, these measures usually yield a fairly consistent picture. However, there are some important exceptions.

There is clear reason to emphasize expenditure. Expenditure is the bottom line contribution to the tax burden. There are a few potential problems with just looking at expenditure, though. Cost can vary for reasons other than inefficiency. First, state differences in the cost of living clearly can create differences in service cost. Labor and land are clearly more expensive in Connecticut than in New Mexico. Similarly, one would think that Maine winters create higher costs of maintaining highways than winters in Florida. Second, some expenditure categories include transfer payments, such as welfare programs and college scholarships. Although transfer payments obviously contribute to the tax burden, they do not indicate possible inefficiency in providing government services. Third, some expenditure categories include federal programs administered through states, such as Medicaid. Federal programs administered through states also do not indicate possible inefficiency in providing state and local services.

---

<sup>4</sup> This is essentially the same as the notion of “fiscal need.” The literature on fiscal need quantifies the measures in much more detail than can be done in this report. For more information on this topic see Robert W. Rafuse, Jr., “Representative Expenditure: Addressing the Neglected Dimension of Fiscal Capacity,” Advisory Commission on Intergovernmental Relations, 1990; Robert Tannenwald, “Interstate Fiscal Disparity in 1997,” *New England Economic Review*, 2002; and Robert Tannenwald and Nicholas Turner, “Interstate Fiscal Disparity in State Fiscal Year 1999,” Federal Reserve Bank of Boston, 2004.

<sup>5</sup> To be specific, net direct expenditure is examined in the case of state governments. That is, state grants to local governments are not included.

We do, however, attempt to remove the influence of federal programs by reporting expenditure net of intergovernmental transfers from the federal government.<sup>6</sup> We also attempt to remove some of the influence of cost-of-living differences by reporting net expenditure as a percentage of total state personal income. All else the same, income is higher in higher-cost regions. A second reason for emphasizing expenditure as a percentage of income, as opposed to per capita, is that economic choices depend to a large degree on income.<sup>7</sup> To emphasize only net expenditure per capita is like assuming every family has the same quality of housing regardless of income.

FTE employment, however, is reported per capita rather than per dollar of state income because wage rates differ considerably across states. FTE employment has both important advantages and disadvantages. It has the advantage of being the closest thing to a physical measure of inputs into the production of government services. Thus, relative FTE employment provides a somewhat direct indication of possible redundancy and excess costs in service provision. It also avoids the problem of transfer payments that are included in expenditures. However, FTE employment has potential problems. Real wages differ across states; thus, it may be rational, not inefficient, for low-wage states to employ relatively more workers in state and local government (similarly, in some instances, such as fire protection in rural areas, some employment is essentially volunteer labor). On the other hand, though, not all workers are equally productive. A FTE employee with an advanced degree is not the same as one without; for example, this appears to be particularly important for teachers.

For these reasons, payroll as a percentage of total state personal income receives the most emphasis in this study, particularly in measuring possible redundancy.<sup>8</sup> This measure at least partly accounts for state differences in the cost of living, real wages, and worker qualifications. It also does not, for the most part, include transfer payments and federal intergovernmental transfers.<sup>9</sup>

This study also puts the most emphasis on combined state- and local-government payroll, employment, and net expenditure. State- and local-government costs are also examined separately. However, the distribution of expenditure between the state and local levels is not generally emphasized, because there are some important instances of variation in the jurisdiction of services. For example, elementary and secondary education is typically provided at the local level. In Hawaii, however, it is provided at the state level. Thus, if one only looks at local-government expenditure,

---

<sup>6</sup> In several instances there are notable discrepancies between gross and net expenditure. In these cases, both measures are reported.

<sup>7</sup> This study follows the Census Bureau's approach of using state personal income to normalize state spending levels. Arguments could be made for using other measures of income such as gross state product. To confine the analysis to a reasonable dimension, only the most standard approach is followed.

<sup>8</sup> Payroll data are collected in March only. To conform to income data, the payroll data are converted into annual amounts.

<sup>9</sup> Another advantage of the employment and payroll measures is that there are data for all governments in FY2002. Although 2002 is a census year rather than a sample year, the expenditure data (but not the employment and payroll data) are missing for a significant fraction of local governments.

then Hawaii appears to have by far the leanest public education system in the country. But this clearly would be a silly conclusion. Although, this is an extreme example, there are numerous instances of these types of jurisdictional differences.

## Duplication

As discussed in the introduction, a reason to suspect that there could be excess costs in providing public services in Maine is its seemingly fragmented nature of local government. Too much fragmentation can cause unnecessary duplication in providing services.

This idea is often referred to in terms of economies of scale, which means that cost per unit decreases as the number of units increases. Clearly it would be prohibitively costly to have a fire station on every city block. There would be too much duplication of fire-protection services. Economies of scale only occur up to a point, though. At some level, duplication is desirable. Clearly it would be incredibly ineffective to have only one fire station for the whole state. Thus, some fragmentation of government is desirable. Indeed, this is why there are local governments, rather than just state governments. But too much fragmentation can create costs that are higher than necessary.

There are two important problems in trying to identify unnecessary duplication of services. First, the desirable level of fragmentation certainly will vary depending on the service in question. There are clearly greater economies of scale, and, hence, a lower desirable level of duplication, in providing postsecondary education than in providing elementary education. Thus, evidence of excess costs from unnecessary duplication of services in one category does not necessarily imply excess duplication and costs in another service category.

Second, there often is no straightforward measure of the degree of duplication. The number of governments may seem like an obvious measure of duplication. It might not yield an accurate measure of duplication, though, because government sizes obviously vary considerably. For example, nine very small town governments and one large county government (ten governments) could provide a given level of services more effectively than, say, five somewhat small town governments and one very small county government (six governments), even if there are sizable economies of scale. The reverse could also be true. It depends on the nature of the service in question.

Thus, with limited data, inferring the degree of duplication is problematic. This study uses two imperfect measures to try to quantify duplication in providing local-government services. The number of local governments providing a particular service is examined.<sup>10</sup> As discussed in the preceding paragraph, this measure is far from ideal. This study also uses differences in payroll as a percentage of personal income as a rough measure of the degree of duplication. This measure

---

<sup>10</sup> A local government is counted as providing service in a category if, according to the Census Bureau data, it has payroll in that category.

quantifies the value of the labor used to provide the service. Obviously this is not an ideal measure either. Payroll relative to income can vary for reasons other than duplication of efforts.

## **Cost Differentials**

One of the goals of this report is to identify state- and local-government service areas where there may be higher costs than necessary. Another goal is to identify the possible magnitudes of the higher-than-necessary costs. This study identifies the possible presence of excess costs by comparing net expenditures in Maine to those in the rest of the nation and also the other rural states. Obviously a crude method such as this cannot prove the existence of waste in the provision of public services. Cost factors differ across states. The quantity and quality of services can also vary. Thus, it must be emphasized that the study identifies the presence of, and estimates the magnitudes of, *possible* excess costs. There is no claim that these estimates are precise or necessarily imply waste. The intention is only to suggest service areas that may deserve closer inspection.

It also should be emphasized that this study is looking for possible cost savings in the provision of public services in Maine. That is, this report focuses on what governments in Maine may be doing wrong, not on what they may be doing right. In other words, this study is admittedly one-sided in its focus. The only reason for this one-sided approach is to try to keep the project manageable. This focus should not be taken to imply that waste in Maine government is a forgone conclusion.

It would be desirable to apply a uniform method to identify and quantify possible excess costs, but this is not really feasible. Services are not alike. As will become apparent, the appropriate benchmark varies among services. In some service categories a comparison to rural states is clearly more appropriate than a comparison to the national average. That is, for some services, cost levels appear to differ systematically with the degree of urbanization. For other services, it does not, in which case it is probably better to compare to the national average. Moreover, the appropriate measure also varies among services. Rough measures of cost per unit of output (e.g., corrections expenditure per inmate) are available for only some of the services. In these cases, these measures are likely to give a truer indication of possible excess costs than net expenditure relative to state income.

Thus, this report identifies possible excess costs using a consistent simple general framework, but the specific details vary depending on the service in question. The general framework is to calculate the difference in cost if Maine had the same level of some measure as the appropriate benchmark. Net expenditure per unit of output is used when available. Otherwise, net expenditure relative to state income is used. The national average is used as the benchmark unless net expenditure levels appear to depend on being relatively rural. The average of the other rural states is used if being a rural state appears to affect net expenditure. When there is some doubt if being rural matters, the norm that yields a more conservative (i.e., smaller) estimate of the potential cost savings is used. Given the interstate variation in state/local jurisdictions, combined state- and



local-government levels are used. In some instances, though, the cost differentials are separated into the separate state and local components.

There are a number of ways to try to increase the precision of the estimates of possible excess costs. Given the magnitude of the uncertainty about the appropriate measure and the appropriate norm, to attempt to increase the precision over this very simple method probably does not make sense. That is, when one measure suggests a 10% difference and another suggests 20%, and when one benchmark indicates a 5% difference while another indicates at 25% difference, attempts to increase precision are not worthwhile.

### **State and Local Service Categories**

The categories and subcategories of state- and local-government services are dictated by the availability of comparable cross-state data. The U.S. Census Bureau, Governments Division provides employment and payroll data for 41 categories and subcategories of services (31 categories and 10 subcategories). They provide direct expenditure data for 38 categories and subcategories (26 categories and 12 subcategories). Altogether, there are data for 49 categories and subcategories (31 categories and 18 subcategories).<sup>11</sup>

Many of these 49 separate categories and subcategories are likely to provide a misleading picture of relative state- and local-government costs. For example, one of the larger categories is Hospitals, but states differ widely in their public/private mix of hospital services. Moreover, well over half of the costs of public hospitals are covered by direct charges. Considerably more than half the costs of public utilities (water, sewerage, electricity, gas) and air and sea transportation are financed through user charges as well. Moreover, there are also significant differences in their public/private mix across states. Thus, the following categories are not examined in this report: Hospitals; Air and Water Transportation; Water, Electricity, and Gas Utilities, Transit; and State Liquor Stores.

To confine the scope of this analysis to a manageable dimension, several additional categories and subcategories are not examined. The purpose of this report is to scrutinize the Maine's provision of public services. Thus, social-insurance benefits and subcategories of Public Welfare expenditures are not examined. Public-employee pensions are not examined either, because they are not assigned to specific public services. Interest on debt is not studied. Nor does this report examine current operations versus capital outlays as subcategories of expenditures.

Just about all other state- and local-government costs are studied in this report. The 21 categories of state- and local-government services examined are listed in Table 3. These account for 96.5 percent of total state- and local-government employment in Maine, and 90.3 percent of total state- and local-government employment nationwide. The primary category excluded in Table 3 is Hospitals. Public hospital payroll is 8.8 percent of total state- and local-government payroll

---

<sup>11</sup> The Census Bureau's state- and local-government data are sorted by service category, not by government agency.

nationally, and 3.3 percent in Maine. The other nontrivial exclusion is Public Utilities, which is 1.2 percent of the national total.

The 21 categories of services are divided into three types of service functions: those provided primarily by local governments, those provided primarily by state government, and those provided by both levels of government.

There are eight “local functions” in this report. For these categories, at least three-fourths of combined state- and local-government payroll is local both nationally and in Maine. These eight functions, in decreasing order of importance are Elementary and Secondary Education, Police Protection, Fire Protection, Parks and Recreation, Sewerage, Housing and Community Development, Solid-Waste Management, and Libraries. Altogether, these local functions account for 56.6 percent of total state- and local-government payroll in Maine, and 51.5 percent across the country.

Five of the service categories are classified as “state functions.” These five functions, in decreasing order of importance (in Maine) are Higher Education, Corrections, Natural Resources, Social-Insurance Administration, and Other Education. With the exception of Corrections, at the national level, at least three-fourths of combined state- and local-government payroll is state for these service categories. Together, these state functions account for 17.5 percent of the total government payroll in Maine, and 19.3 percent nationally.

The remaining eight service categories are “mixed functions.” In either Maine or across the nation, at least one-third and no more than two-thirds of the combined state- and local-government payroll is local. These functions, in decreasing order of importance (in Maine) are Highways, Public Welfare, Financial Administration, Other Government Administration, Health, Judicial and Legal, and General Public Buildings. The catch-all category “Other and Unallocable” is presented last. Most of these functions are predominately state in Maine. Nationally, however, most of these categories are distinctly mixed state and local functions.

Overall, Maine provides these public services somewhat more at the state level than the rest of the nation. 65.5 percent of the combined payroll in these 21 service categories is at the local level, compared to the national average of 72 percent.

Table 3 reports data from fiscal year 2001-02—the latest year for which all local-government data are readily available. It is also the last census year for local-government data. Information from all local governments is collected only every five years. Data for intervening years are based on samples of local governments. As a result, in some instances, there is considerable year-to-year variation in the numbers, and clearly much of this variation does not measure real changes.

### III. AGGREGATE TOTALS

Table 4 shows total state- and local-government payroll as a percentage of total personal income, FTE employment per capita, net expenditure as a percentage of total personal income, and the number of local general-purpose governments per 10,000 people. The Census Bureau data indicate that there were 505 local general-purpose governments in Maine in FY 2002: 16 counties, 22 cities, and 467 towns. Maine also has 222 special districts and 99 independent school districts. Maine has about 2.9 times as many general-purpose governments per person as in the rest of the country. But, this is less than in some of the other rural states. Maine ranks seventh among states in general-purpose governments per capita.

Maine ranks near the middle of states in total state- and local-government payroll, employment, and net expenditure. Maine's levels are slightly below the U.S. average. Maine's payroll relative to income is 6 percent below the national average, employment per capita is 4 percent above the national average, and net expenditure relative to income is 3 percent below the national average.

Government payroll and employment in Maine are also below most of the other non-urban states. Payroll in Maine is 12 percent below the average of the other non-urban states. Maine government employment is 5 percent lower than the average of the rural states. Net state- and local-government expenditure in Maine is in the middle of the other rural states, and is 1 percent below their average.

Table 5 shows local-government payroll and state-government payroll as a percentage of total personal income separately. Compared to other states, Maine provides relatively more public services through the state government than through local governments. Local-government payroll in Maine is 14 percent below the national average, while state-government payroll is 16 percent above the national average. In this respect, Maine is similar to most other rural states. Although Maine's state-government payroll is above the U.S. average, it is below all but one of the other rural states. Maine's local payroll is 7 percent below the average of the other rural states, and its state payroll is 18 percent below the average of the other rural states.

Figure 1 reveals significant differences within Maine in local-government payroll as a percentage of personal income.<sup>12</sup> Local-government payroll in Northern Maine and Central Maine are almost 24 percent higher than in Southern Maine. Local payroll in Western Maine is just below that in Northern Maine and Central Maine. Payroll in Mid-Coast Maine and Down East Maine is only slightly above that in Southern Maine.

Maine's levels of payroll and expenditure relative to the rest of the country may be surprising given Maine's well-known high tax burden (Maine typically is second-highest in state tax rankings).

---

<sup>12</sup> It would be informative to examine regional differences in net expenditure as well. However, expenditure data are missing for many local governments, thus a regional analysis of net expenditure would be problematic.

A large part of this apparent discrepancy is due to public services that are largely self-financing. That is, the totals shown in Tables 4 and 5 include public hospitals, public utilities, transportation facilities, and state liquor stores; and these services contribute to the tax burden to a much smaller extent than their expenditure levels. Moreover, Maine is relatively low in the provision of these quasi-private goods. Recall from Table 3 that 96.5 percent of Maine's state- and local-government payroll is in services other than these quasi-private goods, compared to only 90.3 percent for national state and local payroll.

A different picture emerges if only the public-service categories shown in Table 3 are considered (that is, only the services that contribute to the tax burden on a near dollar-for-dollar basis). Tables 6 and 7 present the state- and local-government spending totals when excluding categories with quasi-private enterprises such as public hospitals, public utilities, public transit, and state liquor stores).

As shown in Table 6, after making this necessary adjustment, Maine has the 26<sup>th</sup> (instead of 35<sup>th</sup>) highest state- and local-government payroll as a percentage of personal income, and is 1 percent above (instead of 6 percent below) the national average. In this measure, Maine is 5 percent (instead of 12 percent) below the average of the other rural states. Maine has the 9<sup>th</sup> (instead of 21<sup>st</sup>) highest FTE employment per capita, is 11 percent (rather than 4 percent) above the U.S. average, and is 2 percent above (rather than 5 percent below) the rural average. The difference is especially pronounced for net expenditure as a percentage of personal income. Maine has the 8<sup>th</sup> (instead of 35<sup>th</sup>) highest net expenditure, is 13 percent above (instead of 6 percent below) the national average, and is 12 percent above (rather than 12 percent below) the average of the other non-urban states. Moreover, Maine's net expenditure of 15.1 percent of state personal income is the highest of the 10 most rural states.

Table 7 shows the local and state payroll separately after removing the quasi-private service categories. The conclusions from the data are the same as those from Table 5. Compared to the national average, Maine provides relatively more public services through the state government than through local governments. This is characteristic of most rural states. Local-government payroll in Maine is 9 percent (instead of 14 percent) below the national average, and state-government payroll is 24 percent (rather than 16 percent) above the U.S. average. Maine's local payroll is 1 percent (instead of 7 percent) lower than the average of the other rural states, and its state payroll is 13 percent (rather than 18 percent) lower than the rural average. Although Maine's state-government payroll as a percentage of income is well above the U.S. average, it is below all but one of the other rural states.

There is considerable variation in Maine's relative levels of providing specific public services. That is, Maine's net expenditure as a percentage of income is not 13 percent above the national average in all service categories. Indeed, far from it. In some services, Maine is well above the national and rural averages. In others, Maine is well below the national and rural norms. Thus, to obtain a clear picture of Maine's provision of public services it is essential to examine the individual functions.

## IV. LOCAL FUNCTIONS

### Elementary and Secondary Education<sup>13</sup>

Elementary and secondary education accounts for the largest share of state- and local-government payroll by far. Its share of total payroll is 45.9 percent in Maine and 37.8 percent nationally. Practically all of this government function is provided at the local level, both in Maine and nationally. In fact, Maine is one of only nine state governments that report any payroll in this category. The Census Bureau data indicate that 265 governments in Maine had payroll in this category in FY2002: 165 cities and towns, 99 independent school districts, and the state. As shown in Table 8, the per capita number of Maine local governments with education payroll is 4.1 times the national average. Most of the other rural states also have a relatively high number of local governments in the service category.

As shown in Table 8, public elementary and secondary education net expenditure is 4.5 percent of state income in Maine. This is 10 percent above the national average, and the seventh highest in the nation. This is higher than in any of the other rural states, and is 18 percent above their average. In payroll as a percentage of state income, Maine is 14 percent above the U.S. average, and 6 percent above the average of the other rural states. However, several of the rural states have higher payrolls than Maine. In FTE employment per capita, Maine is 30 percent above the national average, and 16 percent above the rural average. The discrepancy between relative payroll and employment is due to public-education salaries being low in Maine compared to the rest of country.<sup>14</sup>

Although Trostel and Reilly (2005) present strong evidence that Maine's relatively high cost of providing education is largely due to having many very small school districts and the consequent unrealized economies of scale, the other rural states do not appear to have a cost disadvantage in providing public education. Indeed, the average net expenditure of other rural states is almost 7 percent below the U.S. average. Moreover, the number of local governments per capita is not correlated with net expenditure relative to income. Although Vermont has the most local governments per capita and somewhat high expenditure, Montana, North Dakota, and South Dakota have very high numbers of governments per capita but lower-than-average expenditures. In other words, Maine's sizable unrealized economies of scale in providing primary and secondary education are not solely due to Maine's rural character.

Primary and secondary education payroll and employment data are separated into the subcategories Instructional and Other. The Instructional category includes not only teachers, but

---

<sup>13</sup> For a much more thorough analysis of the provision of public education in Maine, see Philip Trostel and Catherine Reilly, "Improving Educational Resource Allocation in Maine: A Study of School District Size," Margaret Chase Smith Policy Center, 2005.

<sup>14</sup> As noted in Trostel and Reilly (2005), this is at least partly due to relatively fewer Maine teachers having advanced degrees.

also principals, guidance councilors, and librarians. The Other subcategory includes any employees who are not teachers, such as administrative personnel, cafeteria workers, custodians, bus drivers, etc. Instructional employees account for nearly four fifths of elementary and secondary education payroll. As shown in Table 9, Maine's instructional payroll as a percentage of personal income is 16 percent above the national average, and 8 percent above the average of the other rural states. For other educational employees, Maine is 7 percent above the U.S. average and the same as the rural average (although it is higher than all but two of the rural states).

Figure 2 shows that there are large differences in Maine's public education payroll across regions. Local-government payroll for education as a percentage of personal income in Central Maine is 46 percent higher than in Southern Maine. Indeed, education payroll relative to income in Southern Maine is more than 19 percent lower than in any of the other five regions.

Part of the large regional discrepancy in primary and secondary education payroll as a percentage of personal income is probably due to regional differences in income. That is, at least part of the reason why Southern Maine is relatively low in this measure is that its education payroll is supported by a relatively high income. This is clearly not the whole story, though. Central Maine is the highest in education payroll relative to income, but it does not have the lowest per capita income.

Measures per student are probably better than measures per capita or relative to income. Indeed the correlation coefficients<sup>15</sup> between the number of students in each state and education payroll, FTE employment, and net expenditure in each state are 0.97, 0.98, and 0.96, respectively.<sup>16</sup> Table 10 shows payroll and net expenditure per student. The Census Bureau data indicate that Maine's FY2002 net expenditure is just under \$8,000 per student. This is 8 percent above the national average, compared to 10 percent above the national average as percentage of income. Maine's payroll per student is 11 percent above the national average, compared to 14 percent higher than the national average as a percentage of income. Maine ranks 10<sup>th</sup> and 11<sup>th</sup> in these per-student measures, despite having the 35<sup>th</sup> highest personal income, which is 13 percent below the national average.<sup>17</sup>

Although the per-student measures and the per-income measures yield a similar comparison of Maine to the rest of the nation, they yield quite different comparisons of Maine to the other rural states. Maine's K–12 payroll per student exceeds the rural average by 25 percent, compared to a 6 percent differential in payroll relative to income. Maine's net expenditure per student exceeds the

---

<sup>15</sup> A correlation coefficient measures the strength of the relationship between two variables. A value of 1.0 indicates a perfect linear correlation; a value of -1.0 indicates a perfect inverse relationship; and a value of 0.0 indicates no correlation between the variables. Unless otherwise noted, all correlation coefficients reported in this study are statistically different from zero with at least 99 percent confidence.

<sup>16</sup> Observations from Alaska are not included when computing the correlation coefficients in this report. Alaska is clearly an outlier in terms of state- and local-government spending, presumably because of its high level of revenues from petroleum royalties.

<sup>17</sup> There is a strong correlation between states' per capita income and net expenditure per student; the correlation coefficient between them is 0.78. Thus, Maine is an outlier in terms of expenditure per student and income.

rural average by 39 percent, versus 18 percent in net expenditure relative to income. Indeed, Maine's net expenditure per student exceeds that in every other rural state by at least 20 percent except for Vermont, which it exceeds by 4 percent, and it is essentially the same as New Hampshire's. This evidence provides further confirmation that being a rural state does not necessarily cause sizable unrealized economies of scale and excess costs in providing K–12 education.

Although the magnitude is unclear, the data indicate that Maine spends a relatively high amount on primary and secondary education. Although this does not prove the existence of waste in Maine's school systems, it does suggest that the costs of providing this service merit more in-depth scrutiny. Since K–12 education is such a large part of state- and local-government spending, even just a percentage point of cost savings translates into a large amount. In FY2002, Maine's net expenditure on K–12 education was more than \$1.6 billion. If Maine's net expenditure per student were the same as the national average—or 8 percent less—there would be \$151.7 million in annual cost savings. This is 2.25 percent of Maine's total state- and local-government net expenditure. Moreover, an 8 percent cost reduction to reach the national average is a conservative figure because Maine's income is well below the national average. Maine's K–12 spending as a percentage of income would still exceed the U.S. average. Maine's spending on public education would also still be well above that in other rural states.

Indeed, a basic multivariate regression analysis<sup>18</sup> that simultaneously controls for urban percentage and per capita income suggests that Maine's net expenditure per student exceeds the interstate norm by almost 20 percent.<sup>19</sup> Thus, the cost differential calculated above appears to be quite conservative. Moreover, the regression analysis confirms that the interstate data do not support the notion that Maine's education spending has to be relatively high because Maine is so rural.

It is worth keeping in mind, though, that the (conservative) \$152 million cost differential is not an estimate of waste in Maine's public education. A much more in-depth analysis would be required to properly estimate excess costs.

---

<sup>18</sup> Multivariate regression analysis is the standard statistical procedure to quantify effects simultaneously. It is often important to estimate effects simultaneously to try to overcome the problem of spurious correlation. Consider the case of public education. By itself, urban percentage appears to have a significant positive effect on cost per student. But what is actually driving this spurious correlation is the correlation between urban percentage and income per capita. It is the higher per capita income in urban states that has a positive effect on cost per student. The regression analysis indicates that the independent effect of urban percentage on cost per student is not significant.

<sup>19</sup> As in the case of the correlation coefficients, data from Alaska are not included in the multiple regression analyses in this report.

## Police Protection

Police Protection is the fourth largest state- and local-government payroll category in Maine, and the third largest nationally. The Census Bureau data indicate that police services in Maine are provided by 186 governmental units: 169 cities and towns, all 16 counties, and the state.

Spending and employment for police are relatively low in Maine. As shown in Table 11, Maine ranks in the lowest quintile of states for police payroll, FTE employment, and expenditure. Maine's police payroll and expenditure as a proportion of state personal income are below the national averages by 30 percent and 32 percent, respectively.

Police spending and payroll are relatively low in most of the non-urban states and New Hampshire, though. Police payroll and employment in Maine are similar to the average of the other rural states. In terms of expenditure, however, Maine is 17 percent below the average of the other non-urban states. Maine is also similar to the other rural states in having a relatively high number of local governments per capita providing police protection.

Police protection is divided into the subcategories Police with Power of Arrest (police officers) and Other, which includes support personnel such as dispatchers. As shown in Table 12, the ratio of police officer payroll to support personnel payroll in Maine is in line with the rest of the nation. In Maine, the payroll ratio is 4.17 police officers per support personnel. The national average is 4.24. Most other non-urban states, however, have lower payroll for officers relative to support staff. The average of the other rural states is 3.73. The ratio in New Hampshire, though, is 5.02 to 1.

Although most police protection is provided at the local level, it is also provided at the state level in all states except Hawaii. State police protection is relatively high in Maine, as shown in Table 13. State police payroll in Maine exceeds the national average by 30 percent and the rural average by 16 percent, while local police payroll in Maine is lower than the national average by 38 percent and the rural average by 4 percent.

Moreover, it is not immediately obvious why state police expenditure in Maine needs to be relatively high. Although per capita interstate highway miles in Maine are higher than the national average (283 per million people in Maine compared to 162 nationally), it is lower than in most non-urban states (their average is 462 per million people). Evidently, the need to police freeways does not explain why Maine is relatively high in state police protection. Perhaps a better possible explanation is the weak system of county government in Maine (and in New England generally). It could be the case that, in Maine, state police perform duties that are done by county police in most other states.

As illustrated in Figure 3, there are considerable differences within Maine in the level of local police protection. Local police payroll as a percentage of personal income is about 65 percent higher in Southern Maine than in Down East Maine. Comparing Figure 3 to Table 2 reveals an



obvious explanation for much of the difference. Police spending is highest in the most urban areas. Southern Maine is by far the most urban region, followed by Western Maine and Northern Maine. Local police payroll follows the same pattern.

An obvious reason why Maine has relatively low police payroll and expenditure is that the crime rate is relatively low. In 2001-02, Maine was 45<sup>th</sup> in crimes per capita, 36 percent below the national average and 23 percent below the average of the other rural states. Moreover, there is a very strong correlation between police payroll and expenditure and the crime rate. The correlation coefficient between the number of crimes and police payroll in each state is 0.82, and 0.90 between crimes and expenditures.<sup>20</sup>

Hence, in terms of police payroll and expenditure per crime, Maine is not significantly lower than the rest of the country, as is shown in Table 14. Moreover, in this measure, Maine is noticeably higher than most other rural states. Police payroll and expenditure per crime in Maine are, respectively, 46 percent and 20 percent above the average of the other rural states. New Hampshire, however, with the nation's lowest crime rate, has a significantly higher payroll and expenditure per crime.

At least part of the reason that Maine is considerably higher in police protection than the average of the other rural states is that Maine's per capita income is 10 percent higher than the average of the other rural states. This may also, at least partly, explain why police expenditure in Maine is 29 percent lower than in New Hampshire, where per capita income is 29 percent higher. States' police protection per crime is highly correlated with their per capita incomes. The correlation coefficients between states' per capita income and police payroll and expenditure per crime are 0.69 and 0.66, respectively. Evidently, greater police protection is demanded where incomes are higher.

Thus, the evidence on Maine's spending for police protection relative to other states does not point to a definitive conclusion. Maine certainly spends less on police than most other states, but it is not clear to what extent this is due to better cost performance in Maine, lower crime in Maine, lower crime in rural states generally, or lower income in Maine. Being rural appears to matter even after controlling for crime rates. Thus, the most appropriate measure and norm for police protection is average expenditure per crime in the other rural states. Maine is 20 percent higher than this benchmark. In FY2002, Maine's police expenditure was \$180.8 million. This figure would be \$30.2 million lower if Maine was at the benchmark level. But, as discussed above, much of this cost differential is probably due to differences in income. In fact, a basic multivariate regression analysis that simultaneously controls for urban percentage and per capita income suggests that Maine's police expenditure per crime is only 3 percent higher than the interstate norm. This suggests a cost differential of \$5.7 million.

---

<sup>20</sup> Moreover, these very strong positive correlations are observed despite the deterrent effect of police protection on crime. That is, causation runs both ways between spending on police and crime, although in opposite directions. Thus, to the extent that police protection deters crime, the causal effect of crime on police spending is even greater than suggested by the observed correlation coefficients.

Inspection of the interstate data also suggests that Maine's spending on state police could be higher than necessary. State police payroll as a proportion of personal income in Maine is 16 percent higher than the average of other rural states. In FY2002, Maine spent \$59.2 million on state Police Protection. Reducing this figure by 16 percent would create about \$8.1 million annual cost savings. However, some, or even all, of this cost differential could be due to Maine state police performing more duties that are done by local police in other states. Moreover, the usual caveat that cost differentials do not necessarily imply differences in cost effectiveness applies.

## **Fire Protection**

Of the 19 service categories with payroll (not counting Other and Unallocable), Fire Protection is the 11<sup>th</sup> largest state- and local-government payroll category in Maine, and 8<sup>th</sup> largest nationally. The Census Bureau data indicate that fire services in Maine are provided by 212 governmental units—211 cities and towns and one county. As shown in Table 15, Maine has the nation's highest number of per capita governments providing fire protection.

Fire payroll and expenditure are relatively low in Maine, while FTE employment is relatively high. This is shown in Table 15. Maine's fire payroll and expenditure as a proportion of state personal income are below the national averages by 26 percent and 21 percent, respectively. Maine's FTE employment per capita, however, is 7 percent above the national average. Evidently, at least some fire "employment" in Maine is really quasi-volunteer labor. Hence, despite having a relatively high number of fire departments, fire protection does not appear to be relatively costly in Maine.

On the other hand, fire payroll, employment, and expenditure are relatively low in most rural states. Fire payroll, FTE employment, and expenditure in Maine exceed the average of the other non-urban states by 25 percent, 48 percent, and 10 percent, respectively. Hence, despite the considerable help of volunteer firefighters, fire protection in Maine is costly relative to most of the comparison states. Moreover, differences in income do not appear to explain why Maine has relatively high fire expenditure. The correlation between per capita income and fire expenditure relative to income is not statistically different from zero.

Comparison to the other rural states also reveals that the number of fire departments per capita does not appear to have an important influence on the cost of fire protection. North Dakota and Montana, for example, have a relatively high number of fire departments, while maintaining relatively low costs.

Fire Protection is divided into the subcategories Firefighters and Other, which includes administrative and support personnel. This is shown in Table 16. The ratio of firefighter payroll to support-personnel payroll in Maine is higher than the national average, but lower than in most other rural states. In Maine, the payroll ratio is 19.2 firefighters per support person, compared to a national average of 13.5. The average of the other non-urban states is 29.5 to 1.

There are huge differences within Maine in the level of fire protection, as illustrated in Figure 4. Fire payroll as a percentage of personal income is almost three times higher in Southern Maine than in Down East Maine. As in the case of Police Protection, comparing Figure 4 to Table 2 reveals an obvious explanation for much of the difference. Fire payroll is higher in the more urban areas.

Also as in the case of Police Protection, the evidence on Maine's spending for fire protection relative to other states does not point to a definitive conclusion. Maine spends less on fire protection than most other states, but it is not clear if this is due to greater cost effectiveness in Maine, or lower need for fire protection in non-urban states. Expenditure on fire protection as a proportion of personal income in Maine is 10 percent higher than the rural average (and there is a larger difference in payroll).<sup>21</sup> In FY2002, Maine spent \$84.4 million on fire protection. This figure would be \$7.4 million lower if Maine had the same expenditure relative to income as the average of the other rural states. Moreover, this cost differential appears to be on the conservative side. Again, it is important to keep in mind that an estimate of the cost differential is not an estimate of wasteful spending.

## **Parks and Recreation**

The category Parks and Recreation covers expenditure and employment related to public parks and other public recreational and cultural-scientific facilities. This includes zoos, marinas, museums, and convention centers. Parks and Recreation is the 13<sup>th</sup> largest state- and local-government payroll category in Maine, and 12<sup>th</sup> largest in the rest of the country. The Census Bureau data indicate that parks and recreation in Maine is provided by 100 governmental units: 99 cities and towns and the state. As shown in Table 17, Maine has the nation's second highest number of per capita governments providing parks and recreation services.

Parks and recreation payroll and employment as a percentage of personal income are relatively low in Maine. They are each 25 percent below the national average. Maine's parks and recreation expenditure is even lower in comparison to the rest of the nation—55 percent below the national average.<sup>22</sup> Maine has the nation's third lowest parks and recreation expenditure relative to income. Having a relatively high number of governments evidently does not cause high costs for this service. Naturally it is possible, however, that the low costs in Maine are more of an indication of less provision of these amenities than cost effectiveness.

Parks and recreation expenditure in Maine is also well below that in many of the rural states. Maine's parks and recreation expenditure is 51 percent below the average of the other non-urban states. Indeed, some of the Western rural states (North Dakota, South Dakota, and Wyoming) are

---

<sup>21</sup> A basic multivariate regression analysis that simultaneously controls for urban percentage and per capita income suggests that Maine's fire expenditure relative to income is 22 percent above the interstate norm.

<sup>22</sup> Moreover, Maine is relatively more reliant on parks and recreation charges than the national and rural averages. Thus, the differences are even larger in terms of net state- and local-government contributions to parks and recreation.

well above the national average in parks and recreation expenditure. Given that Maine is well known for its tourism industry, one might expect that Maine would be similar in this respect.

Although most parks and recreation are provided at the local level, they are also provided at the state level to some extent in all states. Table 18 shows how parks and recreation payroll is split between state and local government. Compared to the rest of the nation, Maine provides more of these services at the state level, and less at the local level. Maine's state parks and recreation payroll is 17 percent higher than the national average, and its local parks and recreation payroll is 33 percent below the national average. Most of the other non-urban states are similar in having relatively high state payrolls, and relatively low local payrolls. Maine's state payroll is 11 percent below the average of the other rural states, and its local payroll is 3 percent below their average.

In this service category, there again are huge differences within Maine, as is illustrated in Figure 5. Local parks and recreation payroll as a percentage of personal income is 3.4 times higher in Southern Maine than in Down East Maine. Once again, local payroll in this service category is relatively high in Southern and Northern Maine, and relatively low in Down East and Mid-Coast Maine. Unlike police protection and fire protection, though, parks and recreation payroll is relatively low in Western Maine and relatively high in Central Maine.

There is no strong evidence that Maine has abnormally high costs in parks and recreation. In fact, Maine is abnormally low in this service category, both in comparison to the national average and in comparison to other rural states. At the state level, Maine parks and recreation payroll is higher than the national average, but it is slightly lower than in most other rural states. Moreover, state expenditure on parks and recreation in FY2002 was only \$11.4 million; thus, there is not much potential for significant cost savings.

## **Sewerage**

Sewerage is the collection and treatment of sewage and other water pollution control. Of the 19 service categories with payroll (not counting Other and Unallocable), Sewerage is the 14<sup>th</sup> largest state- and local-government payroll category nationally and in Maine. Sewerage services in Maine are provided by 119 governmental units: 61 cities and towns and 58 special districts.

Sewerage payroll, employment, and net expenditure in Maine are roughly similar to the rest of the nation, as the data in Table 19 demonstrate. Maine's payroll as a percentage of income is practically the same as the national average, FTE employment per capita is 11 percent above the national average, but net expenditure as a percentage of income is 17 percent below the national average.<sup>23</sup> The relatively high number of local governments providing this service in Maine and other rural states=, does not appear to create a noticeable cost disadvantage.

---

<sup>23</sup> Part of the reason that Maine's net expenditure for sewerage is relatively low is that Maine receives a relatively high amount of federal aid in this service category (24 states do not receive any federal money for sewerage). Maine's gross expenditure for sewerage is 10 percent below the national average.

Sewerage employment and net expenditure in Maine are well above those in most of the other non-urban states, though. Maine's sewerage payroll, employment, and net expenditure exceed the average of the other rural states by 31 percent, 33 percent, and 7 percent, respectively. The difference is even greater in comparison to Maine's closest neighbor with similar geography and weather. Sewerage payroll, employment, and net expenditure exceed those in New Hampshire by 110 percent, 100 percent, and 73 percent, respectively.<sup>24</sup>

Large differences exist across Maine's regions in providing of sewerage services, as is illustrated in Figure 6. Sewerage payroll as a percentage of personal income is 2.4 times higher in Central Maine than in Down East Maine. In this instance, the degree of urbanization within the state does not appear to explain most of the regional differences.

As in the case of police and fire, the evidence on Maine's spending for sewerage is mixed. Maine's sewerage net expenditure as a percentage of personal income is 10 percent lower than the national average, but it is 7 percent higher than the average of the other rural states. In FY2002, Maine's net expenditure on sewerage was \$105.7 million. If Maine had the same net expenditure as a percentage of income as the average of the other rural states, \$6.7 million would be saved. This cost differential from the benchmark, again, does not necessarily represent the amount of waste in the provision of sewerage in Maine.

## **Housing and Community Development**

The category Housing and Community Development includes all construction, operation, and support of public and private housing developments, as well as community development. This is one of the smaller state- and local-government payroll categories (17<sup>th</sup> largest in Maine and 15<sup>th</sup> largest nationally). Housing and community development is supported primarily by federal programs administered through local governments. Federal funding is 72 percent of the national total in the category. In Maine, 82 percent of the housing and community development expenditure is federally funded. In the other rural states, 90 percent of the total is funded federally.

Housing and community development in Maine is provided by 48 governmental units: 26 cities and towns and 22 special districts. Maine's number of local governments per capita in this service category is almost twice the national average, and is 18 percent above the rural average. Maine ranks eight highest in this measure.

Table 20 shows housing and community development payroll, FTE employment, net expenditure, and gross expenditure. Gross expenditure (i.e., inclusive of federal transfers) is included in this case because, unlike most other cases, there are substantial differences between gross and net expenditure.

---

<sup>24</sup> Maine's sewerage gross expenditure exceeds the average of the non-urban states by 18 percent, and New Hampshire's by 91 percent.

Housing and community development payroll, employment, net expenditure and gross expenditure in Maine are lower than the national averages, although Maine's state rankings are near the middle. Compared to the national averages, Maine is 20 percent lower in payroll as a percentage of income, 10 percent lower in FTE employment per capita, 37 percent lower in net expenditure as a percentage of income, and 1 percent lower in gross expenditure. The large discrepancy between gross and net expenditure is due to the fact that Maine receives relatively more federal funding for housing and community development than the U.S. average.

Compared to the other non-urban states, however, housing and community development is relatively high in Maine. Almost all of the rural states are low in this service category. Housing and community development is generally a service offered in urban areas.<sup>25</sup> Maine's payroll, employment, net expenditure, and gross expenditure are, respectively, 29 percent, 27 percent, 154 percent, and 44 percent above the average of the comparison rural states. The large discrepancy between gross and net expenditure in this case is due to the fact some of the other rural states receive relatively more federal funding than Maine. Differences in per capita income appear to drive the differences in federal funding, with the poorer states generally receiving relatively greater federal support.<sup>26</sup>

There are huge differences across regions in Maine in providing housing and community development, as is illustrated in Figure 7. Housing and community development payroll as a percentage of personal income is 6.8 times higher in Northern Maine than in Mid-Coast Maine. In this instance, the degree of urbanization appears to explain much of the regional differences. The three regions with urban areas have the three highest levels of this service. Differences in per capita income also appear to explain some of the regional differences, as relatively poorer regions appear to have higher levels than their urban percentages alone would suggest.

As with most of the other local service categories, the evidence on Maine's spending for housing and community development is mixed. Maine's housing and community development employment and spending are lower than the national averages, but are noticeably higher than most of the other non-urban states. Maine's net expenditure in this service category exceeds the average of the other non-urban states by 154 percent, although much of this large difference is probably due to differences in per capita income. Indeed, a basic multivariate regression analysis that simultaneously controls for urban percentage and per capita income suggests that Maine's net expenditure exceeds the interstate norm by 22 percent. In FY2002, Maine's net expenditure on housing and community development was \$23.2 million. Reducing this to the interstate norm estimated through regression analysis would save about \$4.2 million per year. Again, this does not prove that there is waste in this service category in Maine. Moreover, given the large federal role in providing this service, it is not clear how much of the 22 percent difference is due to performance and choices within states.

---

<sup>25</sup> The correlation coefficient between state urban percentage and housing, and community development payroll relative to income is 0.43, and 0.39 between urban percentage and net expenditure relative to income.

<sup>26</sup> Indeed, the correlation coefficients between state per capita income and payroll, and net expenditure relative to income are 0.37 and 0.39, respectively.

## Solid-Waste Management

Solid-waste management is the collection and disposal of garbage and other solid wastes, as well as street cleaning. This is one of the smallest state- and local-government payroll categories examined in this report. Solid-waste management in Maine is provided by 198 governmental units: 193 cities and towns, one county, and four special districts. On a per-capita basis, this is by far the highest number of governments providing this service of all the states.

The data on solid-waste management in Maine relative to the rest of the nation are puzzling. Solid-waste management payroll and employment in Maine are not much different than the national averages, as is shown in Table 21. In payroll relative to personal income, Maine is 14 percent below the national average. In FTE employment per capita, Maine is similar to the national average. Maine is also not much different than the average of the other rural states in these measures, although there is considerable variation among these states. Maine is 3 percent below the rural average in payroll, and 6 percent below the rural average in employment. Yet, expenditure on solid-waste management in Maine is well above both the national and rural averages. Maine's solid-waste management expenditure exceeds the national average by 32 percent and the non-urban average by 50 percent.

The discrepancy between Maine's relative expenditure and relative payroll is puzzling. Perhaps the puzzle is due to Maine providing relatively more solid-waste-management services through private contractors (thus creating local-government expenditure but not payroll) than in most other states. Unfortunately, we have not found data to examine this possibility.

Figure 8 suggests that there are huge differences across regions in Maine in the provision of solid-waste management. Solid-waste management payroll as a percentage of personal income is 4.8 times higher in Western Maine than in Down East Maine. Differences of this magnitude are also puzzling. Perhaps it is due to regional variation in the division between public and private provision of these services.

The interstate evidence on Maine's provision of solid-waste management services is conflicting. Maine has the nation's highest number of local governments providing this amenity, suggesting that there could be unnecessary duplication. The payroll and employment data, however, do not suggest excess costs or unnecessary duplication. On the other hand, the expenditure data indicate that solid-waste management is particularly costly in Maine. Maine's expenditure in this service category exceeds the national average by 32 percent, and exceeds the average in the rural states by even more. In FY2002, Maine's expenditure on solid-waste management was \$103.6 million. If Maine had the same expenditure as a percentage of income as the national average, it would save \$24.9 million. Given the magnitude of this cost differential, and the puzzles in the data, solid-waste management appears to be a category that deserves closer inspection

## Libraries

Libraries are the smallest state- and local-government payroll category in Maine. Public libraries are provided by 109 cities and towns in Maine. On a per-capita basis, Maine has the sixth-highest number of local governments with libraries, as is shown in Table 22.

Local-government spending on libraries is relatively low in Maine. Payroll as a percentage of income, FTE employment per capita, and expenditure as a percentage of income are 38 percent, 33 percent, and 26 percent below the national average, respectively. Maine ranks 40<sup>th</sup> or lower in each of these measures. Evidently, having a relatively high number of governments providing this service does not lead to high costs for this service. As in the case of parks and recreation, however, it is possible that the low costs in Maine are more of an indication of less provision of this amenity than cost effectiveness.

Most other rural states are also relatively low in providing library services. Maine, however, is lower in spending on libraries than most of the rural states. Maine's payroll, employment, and expenditure are, respectively, 15 percent, 14 percent, and 22 percent below the average of the other non-urban states.

In this service category, there are again large differences within Maine, as is illustrated in Figure 9. Libraries payroll as a percentage of personal income is 2.3 times higher in Western Maine than in Mid-Coast Maine. Libraries payroll relative to income is the lowest in Maine's regions with no urban areas, and the highest in the regions with urban areas (although not in the same order as urban percentage).

These data do not reveal any evidence that Maine has higher-than-necessary costs in libraries. Indeed, Maine has relatively low costs in this service category. Moreover, this is a small category of state and local services. In FY2002, Maine's expenditure on libraries was \$25.4 million.



## V. STATE FUNCTIONS

### Higher Education<sup>27</sup>

Higher Education is the second-largest category of state- and local-government payroll both nationally and in Maine.<sup>28</sup> It is easily the largest category of state-government payroll. In Maine, public higher education is provided solely by the state government. Nationally, it is provided mostly by state governments, although there is some local provision of community colleges and vocational and technical colleges, typically through counties and special districts.

Maine is low in comparison to the rest of the nation in providing public higher education, as is shown in Table 23. Maine is in the bottom quintile of states in higher education in all three measures. In payroll relative to income, FTE employment per capita, and net expenditure relative to income Maine is below the U.S. averages by 20 percent, 14 percent, and 14 percent, respectively.

Table 23 also shows, for lack of a better term, the net state contribution for higher education as a percentage of personal income. A significant fraction of public higher education is financed through charges, such as tuition, fees, room and board, etc.<sup>29</sup> Nationally, states finance 59 percent of total higher education direct expenditure. In Maine, the state government supports 51 percent of the total cost. Most of the rest comes from direct charges (the federal government contributes a little over 1 percent of the total). In net state contribution relative to income, Maine's standing is similar to the other three measures; the state is in the bottom quintile, and is 26 percent below the U.S. average.

Most of the other rural states, however, exceed the national average in providing higher education. Thus, Maine's provision of public higher education is particularly low in comparison to the other rural states. Indeed, in all four measures, Maine is lower than all of the other rural states. However, Maine is slightly higher than New Hampshire in payroll, net expenditure, and net state contribution relative to income. Maine's payroll, employment, net expenditure, and net state contribution are below the averages of the other rural states by 45 percent, 34 percent, 39 percent, and 45 percent, respectively.

Higher education payroll and employment data are separated into the subcategories Instructional and Other. The Instructional subcategory includes personnel engaged in teaching and related academic research. The Other subcategory includes everything else, such as

---

<sup>27</sup> For a more in-depth examination of higher education in Maine, see Thomas D. Duchesneau and David F. Wihry, "Financing Public Higher Education in Maine" Patterns and Trends," Maine Center for Economic Policy, 1996.

<sup>28</sup> In direct expenditure, Higher Education in Maine is the fourth-largest category behind Primary and Secondary Education, Public Welfare, and Highways. Nationally, it is the third largest (ahead of Highways). In expenditure net of federal transfers, Higher Education is the third largest nationally and in Maine (ahead of Highways).

<sup>29</sup> In net state contribution, Higher Education is the fourth largest category (behind Highways) in Maine and the third largest nationally.

administration, facilities maintenance, and support personnel. Instructional employees account for 32 percent of higher-education payroll in Maine. Nationally, however, instructional payroll is 47 percent of the total.

Maine's instructional payroll as a percentage of personal income is the second-lowest in the nation, and is 46 percent lower than the national average, as shown in Table 24,. Moreover, every rural comparison state is higher than the national average. Maine's instructional payroll relative to income is 48 percent lower than the lowest rural comparison state (Vermont). New Hampshire, though, is only 4 percent higher than Maine. Instructional payroll relative to income in Maine is 66 percent lower than the average of the other rural states.

In higher education "Other" payroll relative to income, though, Maine is 4 percent above the national average. All but one of the rural comparison states are above the national average in this subcategory as well. Maine's Other payroll relative to income is 24 percent less than the average of the other rural states.

Comparison of these higher-education subcategories reveals that Maine has the nation's highest ratio of other-to-instructional payroll, by a considerable margin. That is, Maine's 32 percent of higher education payroll going to instruction is America's lowest. Put another way, for every \$1 going to instructional payroll in Maine, \$2.13 goes to other payroll. Nationally, for every \$1 of instructional payroll, \$1.11 goes to other payroll. New Hampshire has the nation's second-highest ratio of \$1.92 of other payroll per dollar of instructional payroll. Every rural comparison state, though, has a lower other-to-instructional ratio than the national average. The average of the other rural states is \$0.96 of other payroll per dollar of instructional payroll. In percentage terms, Maine's other-to-instructional ratio exceeds the national average by 91 percent, and the rural average by 122 percent.

Measures per student are probably preferable to measures relative to income or population. Despite the fact that universities have research and service missions beyond just teaching students, the correlation coefficients between the number of FTE students in public higher education payroll, FTE employment, net expenditure, and net state contribution are all 0.99. Table 25 shows higher education payroll, net expenditure, and net state contribution per FTE student.

Maine's higher-education measures per FTE student are much closer to the rest of the country than the measures relative to income. Payroll per FTE student in Maine is 6 percent below both the national average and rural average. Net expenditure per FTE student in Maine is 1 percent above the national average and 4 percent above the average of the other rural states. Net state contribution per FTE student is 14 percent below the national average, and 5 percent below the rural average.

The reason why Maine's relative per-student measures differ considerably from its relative per-income measures is that Maine has a relatively low number of students in public higher education. In Maine, 2.36 percent of the population is in public higher education on a full-time-

equivalent basis. This is 21 percent less than the national proportion of 3 percent. It is 65 percent less than the rural average of 3.63 percent. All of the rural comparison states have higher proportions than Maine, and all but one (Vermont) have relatively larger student proportions than the national average. New Hampshire, however, has a slightly lower student proportion than Maine.

Several factors combine to give Maine a relatively low number of students in public higher education. Maine has a relatively small college-age population, because the state has a relatively old population. Relatively more college students from Maine attend private colleges. Maine's college-attendance rate is relatively low. And, most importantly, Maine is a large net exporter of college students, as many more students from Maine attend out-of-states colleges than students from other states attend Maine public colleges.<sup>30</sup>

Maine's relatively low college-student population and the considerable differences in the two types of measures raise an interesting question of causation. Is Maine's relatively low state support for higher education as a percentage of income due to having a relatively low number of college students, or is the relatively low number of college students due to Maine's relatively low state support for higher education? Relatively low state support leads to high tuition relative to college quality, which can affect three of the four factors driving Maine's relatively low number of public college students. Causality probably runs in both directions, and it is unclear which is more important. This is an important unresolved question in this context, because the choice of which set of measures to emphasize depends on which effect is more important. If the more important effect is state support being low because there are few students, then the per-student measures should be emphasized. If the more important effect is the number of students is low because state support is low, then it is appropriate to emphasize the per-income measures.

In any event, neither set of measures suggests unusually high costs in providing higher-education services in Maine. However, examining the Instructional and Other subcategories of higher-education payroll suggests that there could be excess costs in non-instructional areas. In other payroll relative to state income, Maine exceeds the national average by 4 percent and the average of the other rural states by 24 percent. Moreover, the Other subcategory is a large part of a large category of state- and local-government services. Applying the payroll percentages (that is, the Other payroll differential is 4 percent, and 68 percent of higher-education payroll is in Other) to Maine's FY2002 net expenditure on higher education of \$552.1 million yields a cost differential of \$13.7 million. The data do not allow one to inspect the composition of non-instructional payroll. However, Maine having 15 separate public colleges and universities serving only 30,611 FTE students (42,425 total students) creates the suspicion that there may be excess duplication and costs in the state's administration of higher education.

---

<sup>30</sup> For further information on this issue see Philip Trostel, "Economic Prosperity in Maine: Held Back by the Lack of Higher Education," *Maine Policy Review*, 11(2), 2002.

## Corrections

Corrections covers prisons, jails, and other detention centers, as well as probation officers and parole boards. It is one of the larger categories of state and local spending. Nationally, it is the fourth-largest payroll category, but it is the sixth-largest category in Maine.

Corrections are mostly provided by the state government, although a significant fraction is provided at the local-government level. As reported in Table 3, Maine provides a higher proportion of correctional services at the state level than the rest of the nation (77.5 percent of Maine's corrections payroll is in state government, compared to 64.6 percent nationally). Eighteen governments in Maine report payroll in this category: the state, all 16 counties, and one town. Maine has somewhat more governments per capita providing corrections than the rest of the nation. But Maine has far fewer governments per capita than most of the other rural states. Maine state government operates eight adult correctional facilities, according to the U.S. Justice Department, Bureau of Justice Statistics. In terms of state adult prisons per capita, Maine is a little higher than the national average, but somewhat lower than most of the other rural states.

Maine's relative payroll, employment, and expenditure for corrections are far below the national averages, as is shown in Table 26. Maine's payroll per dollar of income is 32 percent below the national average. FTE employment per capita in Maine is 39 percent less than the national average. Corrections expenditure per dollar of income in Maine is 36 percent below the national average. In each of these measures Maine ranks 40<sup>th</sup> or lower among all states.

Most of the rural states are also very low in corrections payroll, employment, and expenditure. Maine's numbers are much closer to the averages of the other rural states than the national averages. Corrections payroll in Maine exceeds the rural average by 2 percent. Maine's employment and expenditure are below the averages in the other rural states by 20 percent and 18 percent, respectively.

Although rural states have more governments per capita and more correctional facilities per capita, it does not appear to cause a cost disadvantage. Indeed, rural states appear to have a significant cost advantage in this service category. As will be discussed below, rural states generally have relatively fewer prison inmates.

Maine's local-government payroll for corrections is particularly low relative to the rest of the nation, as Table 27 shows. Maine's local-government corrections payroll relative to income is 57 percent below the national average. Maine's state-government payroll for corrections is also lower than the national average, but not by as much as for local government. State-government payroll in Maine is 18 percent below the national average for states. In this respect, Maine is like other rural states. Local-government payroll for corrections in Maine is the same as the average of the other rural states. State-government corrections payroll in Maine is 3 percent above the rural average.

Large regional differences exist in Maine's local-government provision of corrections, as Figure 10 reveals. Local-government corrections payroll as a percentage of income is 3.8 times higher in Down East Maine than in Southern Maine.

The reason why Maine's spending on corrections is far below the national average is that Maine has a relatively small prison population. Although precise numbers of prison inmates are not available, U.S. Department of Justice, Bureau of Justice Statistics estimates of state-government prison populations for 2000 suggest that Maine has the nation's smallest number of prison inmates per capita—1.4 inmates under state detention per 1,000 people. Maine's proportion is only 32 percent of the national average of 4.16 state inmates per 1,000 people. Moreover, relatively more of Maine's correctional services are provided through state government than in the rest of the country. Applying the state proportions of corrections payroll to the numbers of state-government prison inmates provides a reasonable extrapolation for the total number of state and local prison inmates (i.e., estimated total inmates = state inmates ÷ state payroll share). This suggests that Maine has about 1.80 inmates per 1,000 people ( $1.40 \div 0.775$ ), which is only 27 percent of the national average of 6.67 per 1,000 ( $4.16 \div 0.646$ ). The next-lowest state (West Virginia) has about 1.95 per 1,000 people. Most of the other rural states also have relatively low prison populations. The average inmate population in the other rural states is 4.64 per 1,000 people.

Measuring corrections payroll, employment, and expenditure on a per-inmate basis<sup>31</sup> reveals a very different picture from the low-cost story presented above. Given that Maine's relative inmate population is about 73 percent below the national average, it could be argued that Maine's corrections payroll and expenditure should be more than 32 percent and 36 percent below the national averages. The size of the inmate population is clearly a driver of corrections cost. The correlation coefficients between the estimated number of inmates and corrections payroll and expenditure are 0.92 and 0.94, respectively.<sup>32</sup> Table 28 indicates that Maine has the nation's second-highest estimated cost per prisoner.<sup>33</sup> Maine's estimated corrections payroll and expenditure per inmate are 2.2 times the national averages.

Maine's estimated corrections cost per inmate is also substantially higher than in most of the other non-urban states. Compared to the average of the other rural states, Maine is more than 2.5 times higher in payroll per inmate and almost 2.4 times higher in expenditure per inmate.

---

<sup>31</sup> Corrections measures per crime were also considered, but the correlations between the corrections measures and the number of crimes were not as strong as their correlations with the estimated number of state and local inmates.

<sup>32</sup> These high correlation coefficients suggest that the estimated numbers of total state and local prison inmates are fairly precise.

<sup>33</sup> Many states have some privately operated prisons. The costs of these private facilities are counted as state and local expenditure, but not payroll. Thus, the payroll measure is per inmate in public facilities, and the expenditure measure is per inmate in public and private facilities. Inmates in private facilities make up 4.2 percent of the total; thus, it does not make much difference which inmate number is used.

Moreover, Maine's corrections cost per inmate is surprisingly high even without comparing it to other states. An estimated annual cost of more than \$62,000 per inmate is 2.4 times the state's per capita income.

On average, the other rural states have somewhat lower costs per inmate than the rest of the country. Evidently, being rural does not create a cost disadvantage in providing corrections. Since most rural states have relatively small prison populations, rural states generally have a distinct cost advantage in providing correctional services.

Once again, the evidence on Maine's costs is conflicting. Relative to income or to the population, Maine's costs are low in providing corrections services. But Maine evidently has the nation's lowest proportion of prison inmates. Relative to the estimated number of inmates, Maine's costs are very high in providing corrections. Maine's estimated expenditure per inmate is 119 percent greater than the national average. Moreover, this cost differential does not appear to come from excess duplication or from being rural.<sup>34</sup> Maine's corrections expenditure in FY2002 was \$145.6 million. If Maine had the same estimated expenditure per inmate as the national average (i.e., more than halving it), \$79 million in annual savings would be achieved. This does not prove \$79 million in wasteful spending in corrections in Maine. Moreover, there is additional uncertainty about the magnitude of this cost differential, because it is based on estimates of the numbers of prison inmates. However, this does suggest that this service category deserves closer scrutiny.<sup>35 36</sup>

## Natural Resources

The category Natural Resources includes conservation, regulation, promotion of natural-resource industries, and inspection of agricultural products. Natural Resources embraces a long list of services, including irrigation; drainage; flood control; soil conservation and reclamation; wetlands and watershed management; geological surveying and mapping; regulation of mineral resources, including oil and gas drilling; dam and reservoir safety; public education and technical assistance related to the above activities; support and promotion of agricultural associations and fairs; agricultural boards; agricultural extension services; agricultural research; promotion, improvement,

---

<sup>34</sup> The cost differential does not appear to be the result of a one-time spike in capital expenditure either. Maine's capital expenditure as a percentage of total corrections expenditure in FY2002 was not historically high, and was lower than the U.S. average.

<sup>35</sup> It has been suggested that the cost differential may be due to the Maine's Department of Corrections having more responsibilities than the average state. For example, the Maine Department of Corrections is responsible for juvenile corrections, whereas some states assign this responsibility to a different agency. The Census Bureau, however, classifies expenditure and payroll by function, not by agency. In other words, spending on juvenile probation, for example, is supposed to be classified as corrections expenditure whether it is made by a child-welfare agency or a state department of corrections.

<sup>36</sup> It appears that a partial reason for Maine's unusually high corrections cost per inmate may be that Maine has a relatively high proportion of juvenile inmates, and juvenile inmates may be disproportionately expensive. Although Maine has fewer juvenile inmates per capita than the national average, 10.1 percent of Maine's estimated prison population are juveniles, which is the fourth-highest percentage in the country and 2.7 times higher than the U.S. average of 3.7 percent. Moreover, there are positive correlations between the percentage of juvenile prisoners and payroll and expenditure per inmate. The correlation coefficients are 0.17 (not statistically significant) and 0.27 (statistically different from zero with 94 percent confidence), respectively.

and control of livestock and dairy products; promotion of improved methods to store, pack, and label farm products; regulation of quality and safety of agricultural products; and protection of crops and livestock from natural hazards, including predators.

Natural Resources is the 10<sup>th</sup>-largest state- and local-government payroll category in Maine, and the 13<sup>th</sup>-largest nationally. In Maine, this category is 2.2 percent of total state- and local-government payroll, and nationally, it is 1.2 percent of the total. This is mostly a state function throughout the United States, and it is almost exclusively a state function in Maine.

Maine's natural-resource payroll relative to income, FTE employment per capita, and net expenditure relative to income are much higher than the national averages. Respectively, they exceed the national averages by 73 percent, 57 percent, and 49 percent (62 percent in gross expenditure), as is shown in Table 29. Maine's Fish and Game expenditure subcategory is particularly high compared to the rest of the nation. Surprisingly, given the state's extensive woodlands, Maine is lower than the rest of the country in the Forestry expenditure subcategory.

Not surprisingly, the rural states generally spend relatively more on natural resources than the rest of the country. Natural-resources payroll relative to income, per capita FTE employment, and net expenditure relative to income in Maine are slightly below the averages of other rural states. Respectively, they are below the rural averages by 8 percent, 15 percent, and 6 percent (13 percent in gross expenditure). These differences arise mainly from the low-population-density Western states, which are particularly high in this category. The other rural states have levels that are more similar to Maine's.

Being rural clearly matters for the level of provision of natural-resources services. Thus, in this category it makes sense to compare Maine to the other rural states. Compared to other rural states, Maine does not appear to have higher-than-normal costs in this state service category.

## **Social-Insurance Administration**

Social-Insurance Administration is primarily a federal service. The only part of this category that applies to state governments is Employment Security Administration, and none of it applies to local governments. This includes the administration of unemployment compensation and employment services. This does not include payment of unemployment benefits, which are counted in Insurance Trust expenditure. Nationally, this is the smallest of the 19 state- and local-government service categories with payroll. In Maine, it is the 15<sup>th</sup>-largest category.

Maine is relatively high in this service category, as is shown in Table 30. Payroll as a percentage of state income in Maine is 26 percent higher than the national average. FTE employment per capita in Maine is 25 percent higher than the national average. Maine's net expenditure relative to state income is 92 percent higher than the national average. Maine's gross expenditure, however, is only 19 percent above the national average. Maine receives relatively less federal funding in this category than other states.

There is wide variation among rural states in their levels of employment-security administration. Some rural states are considerably higher than Maine, while others are considerably lower. Compared to the average of the other rural states, Maine is 5 percent higher in payroll, 2 percent higher in employment, 26 percent higher in net expenditure, and 25 percent lower in gross expenditure (Maine receives considerably less federal money than most rural states).

Perhaps, a better way to study costs of employment-security administration is per unemployed person. The correlation coefficient between states' number of unemployed workers and employment-security administration payroll is 0.90. For gross expenditure, it is 0.79. For net expenditure, though, the correlation coefficient is only 0.16, and is not statistically different from zero. Thus, gross, rather than net, expenditure per unemployed worker is shown in Table 31.

Maine's payroll per unemployed exceeds the national average by 47 percent and the rural average by 27 percent, as shown in Table 31. Maine's gross expenditure per unemployed is 39 percent higher than the national average, and is 9 percent lower than the rural average, although Maine is higher than six of the nine other rural states. In net expenditure per unemployed, Maine exceeds the national average by 124 percent and the rural average by 53 percent.

Overall, the comparison of states' levels of employment-security administration suggests that Maine is high in this category. Relative levels of this service are generally lower in the rural comparison states. To be conservative, though, the national average is used as the benchmark. The different measures, however, show quite different degrees of higher costs. Moreover, there is considerable federal involvement in this state function, as evidenced by the large relative differences between gross and net expenditures. Unemployment insurance and employment services are technically state programs, but they operate within federal guidelines. Thus, it is not clear to what extent Maine's relatively high cost is Maine's choice. In any event, this is one of the smaller categories of state and local services. Maine's net expenditure in employment-security administration in FY2002 was \$7.1 million. Hence, there is not much scope for large cost savings. If this figure could be reduced by, say, a third (roughly the amount that Maine exceeds the national average in payroll per unemployed), the annual cost savings would be \$2.3 million.

## **Other Education**

The small category, Other Education, includes training and education of the blind, deaf, or other handicapped; adult, vocational, or special education that operate outside of school systems; and educational activities not assignable to primary and secondary education or higher education. Some examples in this category are schools for the blind or deaf, adult education; vocational-technical schools offering less than two year certificate; and general supervision and services to elementary and secondary schools. Services in this category are exclusively state functions.

In this category, Maine's state payroll, employment, and expenditure are generally similar to the rest of the country, as is shown in Table 32. Maine ranks close to the middle in all three



measures. In payroll relative to state income, Maine is similar to the national average; Maine's ratio is 0.0450 percent and the nation's ratio is 0.0449 percent. In FTE employment per capita, Maine is 3 percent below the national average, and in expenditure relative to income, Maine is 17 percent above the national average.

Most of the other rural states have relatively high levels of other education, though. Maine's state- and local-government payroll, employment, and expenditure are lower than the averages of the other rural states by 49 percent, 48 percent, and 28 percent, respectively.

Given that being rural appears to matter for the level of other education provision, the rural states are the appropriate comparison group. Comparing Maine to the other rural states indicates that Maine is relatively low in this category. Other education does not appear to be an area that may have significant unnecessary costs. Moreover, this is one of the smaller categories of state- and local-government spending. Thus, the opportunity for cost savings in this category appears quite limited.

## VI. MIXED FUNCTIONS

### Highways

The category Highways includes the construction, maintenance, and operation of non-toll highways, roads, bridges, tunnels, ferry boats, and other transportation infrastructure. It is the third-largest category of state and local payroll in Maine, and the fifth-largest nationally. Highways is a decidedly mixed-government category. In Maine, 63 percent of highways payroll is in state government. Nationally, however, slightly more than half of highways payroll is in local governments. This service is provided by 321 governments in Maine: 316 cities and towns, 3 counties, 1 special district, and the state. In terms of governments per person, Maine has a similar rank and about the same proportionate difference as in general-purpose governments

Relative to the rest of the nation, spending on highway provision is high in Maine, as is shown in Table 33. In payroll relative to income, per capita FTE employment, and net expenditure relative to income, Maine exceeds the national averages by, respectively, 80 percent, 82 percent, and 31 percent (29 percent in gross expenditure).

Rural states generally have high levels of highways provision compared to the rest of the nation. In fact, all of the rural comparison states exceed the national averages in all three measures. Being rural appears to create a significant cost disadvantage in providing highways services. The correlation coefficients between urban percentage and payroll relative to income, FTE employment per capita, and net expenditure relative to income are, respectively, -0.72, -0.78, -0.53 (-0.70 for gross expenditure).<sup>37</sup> Thus, Maine is a little higher than most other rural states in highways payroll and employment, and exceeds the rural averages in both measures by 12 percent. However, Maine is lower than all but one of the other rural states in net expenditure, and is 15 percent below the average of the other rural states. Maine is even further below the rural average in gross expenditure (25 percent). Most of the other rural states receive relatively more federal revenues for highways than the rest of the nation. Maine, however, receives roughly the same relative proportion of federal highway dollars as the national average.

Maine is quite high in highways provision compared to its neighbor, New Hampshire. Given their similarity in weather and geography, this comparison may be particularly relevant. In payroll relative to income, per capita FTE employment, and net expenditure relative to income, Maine exceeds New Hampshire's levels by, respectively, 47 percent, 24 percent, 49 percent (and 48 percent in gross expenditure). Vermont, however, has levels similar to Maine's.

Table 34 shows how Maine compares to other states in local provision versus state provision of highways. As mentioned earlier, Maine has a higher proportion of highways payroll at the state level than the national average, and this is reflected in Table 35. Maine's highways payroll at the

---

<sup>37</sup> The correlation with population density also was examined, but the correlation with urban percentage is considerably stronger.

local-government level is 29 percent higher than the national average, but at the state level, it is 135 percent higher than the national average. In this respect, Maine is somewhat like the other rural states, although to a greater extent than most. That is, the rural states generally have higher proportions of highways services provided through state governments than the national average, but Maine's proportion is higher than most of the other rural states. In local payroll relative to income, Maine is lower than most rural states, and is 7 percent below their average. In state payroll relative to income, Maine is higher than most rural states, and is 27 percent above their average.

Figure 11 reveals large regional differences in local-government highways payroll as a percentage of income. Western Maine has a particularly high level. With the exception of Northern Maine, Western Maine's payroll relative to income is at least 80 percent higher than the state's other regions, which have fairly similar levels.

In the case of highways, data can be used to construct at least rough measures of cost per unit. For instance, data exist on road miles and road-lane miles. There are also data on vehicle miles, and vehicle miles has the strongest correlation with highways cost. Evidently it is road use that drives highways costs the most. The correlations between states' vehicle miles and states' highways payroll and net expenditure are 0.90 and 0.93, respectively.

Measuring highway payroll and net expenditure per vehicle mile makes the interstate comparison quite different, as shown in Table 35. Maine is still higher than the national averages in highways payroll and net expenditure, but this differential is smaller than when using the per-income measures. In payroll and net expenditure per vehicle mile, Maine exceeds the national averages by 44 percent and 5 percent, respectively. Maine is also higher than most of the rural comparison states. Maine is 30 percent higher than the rural average in payroll per vehicle mile, but is 1 percent lower than the rural average in net expenditure per vehicle mile, although Maine is higher than six of the nine comparison states in this measure. Compared to New Hampshire, Maine is 4 percent and 6 percent higher, respectively, in payroll and net expenditure per vehicle mile.

Winter weather is another factor that could drive highways costs. Indeed, there is a strong correlation between states' highways cost measures and states' annual heating-degree days.<sup>38</sup> The correlation coefficients between heating-degree days and payroll and net expenditure relative to income, and payroll and net expenditure per vehicle mile are, respectively, 0.60, 0.36, 0.60, and 0.33 (the last correlation coefficient is statistically different from zero with only 98 percent confidence).<sup>39</sup>

Controlling for winter temperature through multiple regression analysis greatly affects the conclusions about the provision of highways services. As noted earlier, being rural appears to create a significant cost disadvantage in providing highways services. Similarly, the number of local governments per capita involved in providing highways services has a noticeable positive correlation with measures of highways provision, suggesting that having too many local governments

---

<sup>38</sup> Heating-degree days is the preferred measure of winter weather, rather than, say, average temperature, because it measures the degree of cold weather and the length of winter.

<sup>39</sup> The correlation between highways costs and winter precipitation also was examined, but it was insignificant.

duplicating efforts contributes to the rural cost disadvantage. When simultaneously controlling for annual heating-degree days, though, neither of these conclusions appears to be supported by the data. That is, the observed correlations of highways costs with urban percentage and governments per capita are evidently mostly spurious. Urban percentage and governments per capita just happen to be correlated with cold winter weather, and, evidently, that is what is really driving relatively high highways costs.

Moreover, a basic multivariate regression analysis that simultaneously controls for annual heating-degree days and urban percentage suggests that Maine's highways provision is not higher than the interstate norm. Maine is obviously a cold-winter state; it is seventh-highest in heating-degree days. In fact, after controlling for winter weather and urban percentage, Maine's net expenditure per vehicle mile is almost 2 percent below the interstate norm.

Thus, despite most of the measures suggesting that Maine might have higher-than-necessary costs in providing highways services, apparently this is mostly a consequence of Maine's winter weather. After taking weather into account, Maine appears to be close to the interstate norm in highways. Highways is a large category of state- and local-government spending, though. Maine's net expenditure on highways in FY2002 was \$460 million. Given this, and some uncertainty about the interstate comparison, this service category probably deserves further scrutiny.

## **Public Welfare**

The category Public Welfare includes the administration of welfare programs and expenditures on welfare benefits such as Medicaid, Temporary Assistance for Needy Families, etc. In terms of state and local payroll, it is the fifth-largest payroll category in Maine, and the sixth-largest nationally. In terms of net direct expenditure, though, it is the second-largest category both nationally and in Maine. Public welfare is mostly administered at the state level in Maine. Nationally, however, it is almost evenly divided between state and local governments. Public welfare is provided by 56 governments in Maine: the state and 55 cities and towns. In terms of governments per capita, this is a relatively high number of local governments (3.1 times the national average). It is also relatively high compared to most of the other rural states—54 percent higher than the rural average.

Public welfare payroll as a percentage of personal income in Maine is the same as the national average (0.2152 percent versus 0.2149 percent), as shown in Table 36. FTE employment per capita in Maine is also similar to the national average, as Maine is just 4 percent higher than the average for all states. Net expenditure as a percentage of income, however, is substantially higher in Maine than in the most of the country. Maine exceeds the national average by 58 percent. In gross expenditure (i.e., including federal funding), Maine exceeds the national average by 55 percent.

The large difference in Maine's relative levels of payroll/employment and expenditure suggests that Maine has a high level of welfare benefits compared to the rest of the nation.

Moreover, Maine does not appear particularly costly in administering welfare benefits in comparison to the national average.

Maine's public-welfare measures are higher than in most rural states. In payroll relative to income and FTE employment, Maine is 20 percent higher than the average of the other rural states. In net expenditure relative to income, Maine is higher than all of the rural comparison states, and is 64 percent higher than the rural average. In gross expenditure relative to income, Maine is 24 percent higher than the rural average. Some of the other rural states, particularly the ones with the lowest per-capita incomes, receive relatively high amounts of federal funding for public welfare, which is hardly surprising. Maine is near the national average in terms of federal funding for public welfare.

Table 37 separates public welfare payroll into its local and state components. As noted, public welfare in Maine is mostly administered at the state level, but nationally it is roughly evenly split between state and local governments. As a result Maine's local provision of public welfare is relatively low, and its state provision is relatively high. Local payroll in Maine is 74 percent below the national average, while Maine's state payroll is 88 percent above the national average. In this respect, Maine is very much like the other rural states. With the exception of North Dakota (and also New Hampshire), public welfare is mostly administered through state governments in the rural states.

Figure 12 shows huge regional differences in local-government public welfare payroll in Maine's regions. Local public-welfare payroll is heavily concentrated in Southern Maine (Portland in particular). It is at least eight times higher in Southern Maine as in four of the five other regions. It should be kept in mind, though, that public welfare is predominantly a state function in Maine.

Rough cost-per-unit measures can be constructed for public welfare. There is a very strong correlation between levels of public welfare and numbers of families headed by a single female. Obviously, not all single mothers receive welfare benefits, but this is the predominant demographic group receiving public assistance. The correlation coefficients between states' numbers of single-female families and states' public welfare payroll and net expenditure are, respectively, 0.90 and 0.91. These correlations are noticeably higher than with other measures such as the poverty rate, the child poverty rate, etc.

Public-welfare payroll and expenditure per single-female family are shown in Table 38. The interstate comparison using these measures is similar to the comparison using the measures as a percentage of personal income. Maine's public welfare payroll per single mother is 7 percent lower than the national average. Maine's net expenditure per single mother is 47 percent higher than the national average. Compared to the averages of the other rural states, Maine is 31 percent higher in payroll per single mother and 79 percent higher in net expenditure per single mother.

The per-single-mother measures also indicate that Maine has a high level of welfare benefits compared to the rest of the nation and to most other rural states. However, the evidence on Maine's

administration of public welfare is somewhat mixed. Maine's payroll per single mother is slightly below the national average, but substantially above the rural average. The rural comparison suggests that Maine could be unusually costly in administering welfare benefits. Moreover, Maine's public-welfare payroll in FY2002 was \$78.7 million, so there could be some potential for significant cost savings.

## **Financial Administration**

Financial administration includes tax assessment and collection, purchasing, budgeting, auditing, accounting, and other financial activities. It is the seventh-largest state and local payroll category in Maine, and the 10<sup>th</sup>-largest nationally. According to Census Bureau data, there is financial administration in 419 governments in Maine: the state, all 16 counties, and 402 cities and towns. As shown in Table 39, Maine has the nation's sixth-highest number of governments per capita with financial administration, and is 3.4 times the national average.

Financial-administration payroll relative to income, FTE employment per capita, and expenditure relative to income are high in Maine in comparison to the rest of the nation. They are, respectively, 22 percent, 36 percent, and 34 percent higher than the national averages. Most of the rural states are also relatively high in financial administration. Maine's payroll, employment, and expenditure exceed the rural average by 10 percent, 13 percent, and 1 percent, respectively.

Rural states appear to have a slight, although distinct, cost disadvantage in financial administration. Indeed, the correlation coefficients between urban percentage and financial administration payroll relative to income, FTE employment per capita, and expenditure relative to income are -0.30 (statistically significant with only 96 percent confidence), -0.49, and -0.41, respectively. There are positive correlations between the number of per capita governments and the measures of financial administration, but they are small and not statistically different from zero.

Despite having a relatively high number of local governments with financial administration, Maine's relatively high level of financial administration occurs at the state-government level and not in local governments, as is shown in Table 40. Local-government financial-administration payroll as a percentage of income is 4 percent below both the national average and the rural average. State-government financial-administration payroll relative to income is 50 percent above the national average and 24 percent above the average of the other rural states.

Evidently, the rural cost disadvantage in financial administration occurs at the state-government level and not at the local-government level. In the case of Maine at least, the relatively high cost of state financial administration probably has a lot to do with having both a state income tax and a state sales tax. New Hampshire, with no state income tax or state sales tax, has the nation's lowest state financial-administration payroll as a percentage of income.

As shown in Figure 13, there is considerable variation within Maine in local-government payroll for financial administration. Local financial administration payroll relative to income is 53

percent higher in Down East Maine than in Southern Maine. Financial administration payroll relative to income is generally higher in the state's lower-income regions, although this is certainly not the whole explanation for the regional variation.

Overall, Maine is relatively high in financial administration, especially at the state-government level. State-government financial-administration payroll as a percentage of income is 24 percent above the average of the other rural states, and the difference is larger in comparison to the national average. In FY2002, Maine's state-government payroll in financial administration was \$42.3 million. If Maine had the same state-government payroll relative to income as the average of the other rural states, there would be \$8.1 million in cost savings. This \$8.1 million cost differential is not necessarily the amount of waste in state financial administration, though.

### **Other Government Administration**

The category Other Government Administration includes all executive, administrative, and staff duties that do not fall under another specific function. Some examples are offices of county and municipal government chief executives such as mayors and town managers; central personnel administration; planning and zoning; record keeping; and town councils and boards. This is mostly a local-government function both in Maine and nationally, but a significant fraction of payroll and expenditure in this category are in state government. There is other government administration payroll in 452 governments in Maine: 435 cities and towns, 16 counties, and the state. Like general-purpose governments, Maine has 2.9 times as many governments per person in this category as the rest of the nation, and ranks seventh among states.

Table 41 provides interstate data on other government administration. In payroll and employment, Maine is relatively high, but in expenditure, it is not unusual. Maine's payroll relative to income and per capita FTE employment exceed the national averages by 39 percent and 40 percent, respectively. Maine's expenditure relative to income only exceeds the national average by 2 percent.

Most of the other rural states exceed the national-average measures of other government administration. Rural states appear to have some cost disadvantage in other government administration. The correlation coefficient between other government administration expenditure relative to income and urban percentage is -0.26, but is statistically different from zero with only 93 percent probability. The correlation coefficients with payroll and employment are negative, but not quite statistically significant.

Maine's relative payroll and employment are still higher than in most of the other rural states, though. Maine's payroll relative to income and per capita FTE employment exceed the rural averages by 28 percent and 26 percent, respectively. But Maine's other government administration expenditure is 10 percent below the rural average.

The discrepancy between Maine's relative levels of other government administration payroll/employment and expenditure is puzzling. The same sort of puzzle of relatively high payroll/employment and relatively not-so-high expenditure is observed in Iowa and to an even greater extent in Vermont, where, somehow, expenditure is less than payroll. There is also a puzzle in the opposite direction, with relatively low payroll/employment and relatively high expenditure in West Virginia and Wyoming. One obvious possible explanation for these puzzles is significant measurement error that is not consistent across states. For example, perhaps something counted in Other Government Administration in some states might be counted in a different category such as Other and Unallocable in other states.

Although the rural states appear to have a slight cost disadvantage in other government administration, there does not appear to be a cost disadvantage in having a relatively high number of local governments per capita.

The expenditure data (although not the payroll data) splits Other Government Administration into the subcategories Legislative and Other. The Legislative subcategory covers all expenditure on state legislatures, including research and investigative agencies and committees that report to the legislature. Other is everything else. In Maine, the Legislative subcategory makes up 34 percent of the total other government administration in Maine. This is the highest proportion in the nation. The national average is 13 percent, and the average of the other rural states is 16 percent.

Table 42 shows the Legislative and Other subcategories of other government administration expenditure as a percentage of income. Maine is relatively high in legislative expenditure. As a percentage of income, Maine has the nation's 3<sup>rd</sup> highest legislative expenditure, 163 percent above the national average and 86 percent above the average of the other rural states. The other rural states are generally high in legislative expenditure too, although not as high as in Maine. Thus, there may be a rural cost disadvantage in this expenditure subcategory. The correlation coefficient between urban percentage and legislative expenditure as a percentage of income is not statistically significant, though.

Maine is relatively low in other government expenditure. Other expenditure relative to income is 23 percent below the national average, and 29 percent below the rural average. Most of the other rural states are either quite low or quite high in this subcategory. Thus, Maine's relatively high legislative expenditure and relatively low other expenditure are somewhat offsetting, leaving Maine near the national average and slightly below the rural average in total other government administration.

Local and state other-government payroll are separated in Table 43. Maine is somewhat high at the local level in comparison to other states. Maine's local other-government administration payroll relative to income is 11 percent higher than the national average and 19 percent above the rural average. Rural states do not seem to have any cost disadvantage in other government administration at the local level. Nor does having a relatively high number of local governments per capita appear to cause a noticeable cost disadvantage.



Maine is very high in other government administration payroll at the state level in comparison to other states. Maine's state other-government administration payroll relative to income is 141 percent higher than the national average and 48 percent above the rural average. Most of the rural comparison states also have relatively high state other-government administration payroll, although not as high as in Maine. The rural cost disadvantage in other-government administration discussed earlier evidently occurs in state government.

Regional differences in local other-government administration payroll relative to income are shown in Figure 14. Regional differences are not large compared to the differences in most other service categories. The highest level of other local-government administration is in Down East Maine, barely ahead of Northern Maine and Mid-Coast Maine. The lowest level is in Central Maine. The difference between the highest and lowest levels is 17 percent.

Although the data provide some apparent inconsistencies and puzzles in the interstate data, they are consistent in suggesting an unusually high cost in Maine's other state-government administration. Maine's state-legislative expenditure relative to income far exceeds the national and rural averages (163 percent and 86 percent, respectively). Maine's other state-government administration payroll relative to income also far exceeds the national and rural averages (141 percent and 48 percent, respectively). Both measures suggest some rural cost disadvantage in state other-government administration, thus the rural average is an appropriate benchmark. Maine's legislative expenditure was \$25.9 million in FY2002. If Maine had the same legislative expenditure as a percentage of income as the average of the rural comparison states, \$12.0 million would be saved. Again, it is important to keep in mind that this \$12.0 is a cost differential, not an estimate of wasteful spending.

The interstate evidence is inconsistent in other local-government administration. Other other-government administration expenditure is presumably mostly in local government (the legislative/other expenditure and state/local payroll percentages within this category are consistent with this interpretation). In this measure relative to income, Maine is relatively low—23 percent and 29 percent lower than the national and rural averages, respectively. In local other-government administration payroll relative to income, however, Maine is relatively high—11 percent and 19 percent higher than the national and rural averages, respectively. Hence, the evidence on a cost differential in other local-government administration is inconclusive. In other-government administration in Maine in FY2002, other expenditure was \$49.7 million, and local-government payroll was \$39.8 million. Thus, this is a large enough category that, if there is a possible cost differential, then it could be several million dollars.

## **Health**

The category Health includes public-health programs. It does not include hospital care or public assistance in health (i.e., mostly Medicaid), which are included in other categories. Just about everything else to do with public health is included, such as public-health administration, health

education, alcohol- and drug-abuse programs, health inspection, animal control, immunization programs, research, environmental-health activities, etc.

Health is the ninth largest state- and local-government payroll category both in Maine and nationally. Public-health services are primarily provided through the state government in Maine. Nationally, however, it is a more mixed category, with somewhat more than half of state and local health payroll being in local governments. Public-health services in Maine are provided by the state government and 127 cities and towns. This gives Maine the nation's highest per capita number of local governments providing health services, 4.7 times the national average. Clearly, most of these 127 Maine cities and towns provide relatively very low levels of services, because, together, they make up only 10.5 percent of Maine state and local health payroll. Most other rural states also have relatively high numbers of per-capita local governments in this service category.

Health is another category with puzzling interstate data. This is shown in Table 44. In health payroll and employment, Maine is relatively low in comparison to the rest of the country, but similar to most other rural states. Maine's health payroll relative to income is 12 percent lower than the U.S. average and 3 percent lower than the average of the other rural states. Maine's FTE employment per capita in health is 21 percent below the national average and 13 percent below the rural average.

In health net expenditure, however, Maine is very high compared to the rest of the nation and compared to the other rural states. Maine's health net expenditure relative to income is the second highest in the country, and 95 percent above the national average. Moreover, the difference is even larger in comparison to the other rural states. Maine's health net expenditure relative to income is 3.1 times the rural average. With the exception of Montana and, to a lesser extent, Wyoming, the rural states are well below the national average in health net expenditure.

Maine receives a relatively small amount of federal dollars for public health, but this can only explain part of Maine's huge interstate difference in health net expenditure. In health gross expenditure relative to income, Maine is 57 percent above the national average and the fourth-highest state nationally. In this measure, Maine is 95 percent above the average of the rural comparison states. Federal funding is 17 percent of Maine's total health expenditure, compared to 33 percent nationally and an average of 49 percent in the other rural states.

The huge discrepancy in Maine's relative levels of health payroll and expenditure is puzzling. Perhaps Maine has dramatically more contracting with private firms in health than in the rest of the nation, which would show up as expenditure but not payroll and employment. Indeed, payroll is only a fraction, albeit not a small fraction, of health net expenditure. In Maine, payroll is 11 percent of health net expenditure. Nationally, it is 42 percent. Perhaps, the discrepancy is due to large differences in capital spending in FY2002. It is also possible that the inconsistency is due to an important measurement error that is not consistent across states.

Compared to the rest of the country, Maine is particularly low in health payroll at the local level and relatively high at the state level, as Table 45 shows. Compared to the national averages, Maine is 84 percent lower in local payroll relative to income and 82 percent higher in state payroll relative to income. This is to be expected given that health is much more of a state-government function in Maine than nationally. The non-urban states are generally similar in this respect, although Maine is something of an outlier. Compared to the rural averages, Maine is 65 percent lower in local payroll relative to income, and 24 percent higher in state payroll relative to income.

There is considerable variation in local health payroll within Maine, as is shown in Figure 15. However, it should be kept in mind that public health is predominately a state function in Maine. Western Maine is particularly low in the provision of public-health services. Local-health payroll relative to income is 2.2 times higher in Southern Maine than Western Maine.

The interstate comparison of the Census Bureau data on public health does not allow a cost differential to be calculated with any reliability. The evidence is conflicting. The data on payroll relative to income show that Maine is 12 percent and 3 percent below the national and rural averages, respectively. The data on net expenditure relative to income show that Maine is 95 percent and 210 percent above the national and rural averages, respectively. In FY2002, Maine's net expenditure on health was \$317.9 million; gross expenditure was \$383.7 million. Thus, if the interstate net expenditure data are to be believed, there could be a substantial cost differential. If Maine's health net expenditure were the same as the national average, \$154.8 million would have been saved. The cost differential would be much larger if the rural average was used as the benchmark. Given the possible magnitude of this cost differential, clearly further investigation is warranted in this service category.

## **Judicial and Legal**

The Judicial and Legal category includes all court activities as well as public legal services. Of the 19 state- and local-government service categories with payroll (not counting Other and Unallocable), Judicial and Legal is the 11<sup>th</sup>-largest payroll category in Maine, and the seventh-largest nationally. Judicial and legal services are mostly provided at the state level in Maine, but a majority of these services are delivered at the local level in the rest of the nation. Judicial and legal services are provided by 31 governments in Maine: the state, all 16 counties, and 14 cities and towns. Unlike every other service category with local-government provision in Maine, the rest of the nation has more local governments per capita providing judicial and legal services. Maine also has fewer local governments per capita in this service category than all of the rural comparison states.

Maine has the nation's lowest judicial and legal payroll relative to income and FTE employment per capita, and the nation's third-lowest judicial and legal expenditure relative to income, as shown in Table 46. In these measures, Maine is, respectively, 48 percent, 49 percent, and 38 percent below the national averages. Most of the other rural states are also relatively low in judicial and legal services, although not as low as Maine (except for South Dakota in expenditure). If

anything, rural states appear to have a cost advantage in this service category. Maine's measures are, respectively, 32 percent, 33 percent, and 27 percent below the rural averages.

Data on state and local judicial payroll as a percentage of income are shown separately in Table 47. Given that Maine, like most other rural states, provides these services mostly at the state level, Maine's state judicial and legal payroll is not as low compared to the rest of the country as its local judicial and legal payroll. Maine's state judicial and legal payroll relative to income is 1 percent higher than the national average and 8 percent below the national average. Maine's local judicial and legal payroll relative to income is 84 percent and 69 percent lower than the national and rural averages, respectively.

Figure 16 shows significant regional differences in local judicial and legal payroll as a percentage of income. Local payroll relative to income is 2.1 times higher in Down East Maine than in Central Maine. It should be kept in mind, though, that judicial and legal services are predominately a state function in Maine.

As in the case of police protection and corrections, obviously part of the reason why Maine is relatively low in expenditure on judicial and legal services is the state's relatively low crime rate. The correlation coefficients between states' number of crimes and their judicial and legal payrolls and expenditures are 0.86 and 0.85, respectively. Thus, better measures of relative judicial and legal levels are per crime.<sup>40</sup> These are shown in Table 48.

Maine's judicial and legal payroll and expenditure per crime are below the national averages by 26 percent and 12 percent, respectively. Maine's per-crime measures are about the same as the average of the other rural states (-1 percent and +7 percent, respectively), although there is considerable variation in these measures among the rural states. In judicial and legal payroll and expenditure per crime, Maine is lower than other rural states, except for Mississippi and Arkansas.

Like police protection per crime, much of the interstate variation in judicial and legal services per crime appears to be due to differences in per capita income. States' judicial and legal payrolls and expenditures per crime are highly correlated with their per capita incomes. Both correlation coefficients are 0.62. Evidently, greater judicial and legal services are demanded where incomes are higher. A basic multivariate regression analysis that simultaneously controls for per capita income and urban percentage suggests that Maine's judicial and legal payroll and expenditure per crime are, respectively, 13 percent and 3 percent lower than the interstate norms. Moreover, being rural evidently has no effect after controlling for differences in per capita income.

---

<sup>40</sup> Judicial and legal costs per arrest would seem to be preferable measures, but the correlation coefficients between arrests and judicial and legal payrolls and expenditures are somewhat weaker (both are 0.82). Moreover, there appear to be some anomalies in the arrest data (such as the number of arrests exceeding the number of crimes in some states). The arrest data has become available only recently; thus, they may not be as reliable as the crime data that have been collected for decades.

Thus, Maine appears to be somewhat below the interstate norm in providing judicial and legal services. This does not prove that Maine is necessarily cost-effective in this category.

### **General Public Buildings**

The category General Public Buildings includes the construction, equipping, maintenance, and operation of public buildings not assigned to specific functions. Some examples are general county office buildings, town halls, and other multi-purpose office buildings. There is no employment assigned to this function; thus there are only expenditure data for this category. A majority (68.9 percent) of this category is in state government in Maine. Nationally, though, a majority (75.8 percent) of this category is in local governments.

Maine is relatively high in the provision of general public buildings, as Table 49 shows. Maine's expenditure as a percentage of income is 94 percent above the national average. Maine is noticeably higher than all other rural states except Vermont. Most of the rural states are below the national average in general public buildings. Maine is 138 percent higher than the rural average. Evidently, Maine's relatively high general public-buildings expenditure is not due to its being rural. Nor is it due to Maine having a relatively high number of general-purpose governments. The states with the highest number of local, general-purpose governments—North Dakota and South Dakota—have relatively low levels of general public-buildings expenditure.

It is at the state level that Maine is relatively high in general public buildings, as Table 49 also reveals. Maine's local general public-buildings expenditure relative to income is 21 percent lower than the U.S. average and 4 percent lower than the rural average. Maine's state general public-buildings expenditure relative to income is 5.5 times the national average and 3.9 times the rural average.

In FY2002, Maine's expenditure on general public buildings was \$87.5 million. If Maine had the same expenditure as a percentage of income as the national average, \$42.4 million would have been saved. The cost differential would have been larger in comparison to the rural average. This does not prove that there were \$42.4 million in excess costs in this category, but it does suggest that closer inspection of spending on general public buildings may be in order.

### **Other and Unallocable**

Other and Unallocable is a leftover category for activities that are multifunctional or not allocable to a specific function. Some examples are National Guard, insurance premiums, judgments and compensation, administration of multifunctional agencies, economic development, voter registration and elections, etc. Payroll in this category is predominately at the state level in Maine, but is roughly evenly split between state and local governments nationally. In Maine, there are 232 governments with payroll in this category: the state, 16 counties, 211 cities and towns, and 4 special districts.

Other and Unallocable is another category with puzzling interstate data, as shown in Table 50. Maine is relatively low in this category in payroll and employment. Its payroll as a percentage of income and FTE employment per capita are, respectively, 19 percent and 13 percent lower than the national averages. They are below the rural averages by 20 percent and 19 percent, respectively. In these measures, Maine is lower than all of the rural comparison states.

Maine is relatively quite high in Other and Unallocable net expenditure, though. The state's net expenditure as a percentage of income is 83 percent higher than the U.S. average and 467 percent higher than the rural average. In this measure, Maine is higher than all of the rural comparison states. Some, but not all, of Maine's huge difference in net expenditure is attributable to Maine receiving relatively less federal money in this category. Maine's gross expenditure as a percentage of income is 62 percent and 120 percent higher than the national and rural averages, respectively. Most of the rural states receive relatively more federal funding than the national average in this category.

Local and state Other and Unallocable payroll as a percentage of income are shown separately in Table 51 (keeping in mind that, in payroll, Maine is relatively low in combined state and local). At the local-government level, Maine is low. Maine is 57 percent lower than the national average and 21 percent lower than the average of the rural comparison states. In state payroll relative to income, Maine is 20 percent higher than the national average, but 20 percent lower than the rural average. In state-government Other and Unallocable payroll relative to income, all of the rural states are higher than the national average. Indeed, Maine is the lowest of the rural states.

Maine's regional variation in Other and Unallocable payroll relative to income is shown in Figure 17. In this category, Northern Maine is the highest, followed by Down East Maine and Mid-Coast Maine. The difference between the level in Northern Maine and the lowest level in Central Maine is 62 percent.

Other and Unallocable is another difficult category to evaluate because of the large discrepancy between Maine's relative levels of payroll/employment and net expenditure. Not only is it not known what exactly is in this category, but the evidence is conflicting. To further compound the problem, this is not a trivial category. Maine's Other and Unallocable net expenditure in FY2002 was \$526.1 million. Maine's payroll relative to income in this category is 19 percent and 20 percent below the national and rural averages, respectively. But Maine's net expenditure in this category is 83 percent and 467 percent above the national and rural averages, respectively. Only 12 percent of Maine's net expenditure is in payroll, whereas nationally, 28 percent of net expenditure in this category is in payroll. Hence, the data are not necessarily incompatible with each other. But it is also quite possible that there is a measurement error that is not consistent across states. For example, a possible explanation for some of the inconsistency could be interstate differences in assigning costs to the Other Administration category and Other and Unallocable category. Recall, that the inconsistency between measures in other administration is basically opposite of that in Other and Unallocable.

Thus, more information about this category would be desirable. The interstate data on Other and Unallocable net expenditure suggest that Maine could have unusually high costs. If Maine had the same net expenditure relative to income as the national average, \$238 million would have been saved. A possible cost differential of this magnitude certainly deserves closer attention.

## VII. DISCUSSION

### Recap of Findings

After going through the details of 21 different state- and local-government service categories, as well as those with subcategories, it is worth briefly recapping the findings. Table 52 provides a numerical review. In this summary it is important to keep in mind that the estimated cost differentials should not be interpreted as estimates of wasteful spending. They should be interpreted as signals for services in Maine that deserve closer inspection.

### Aggregate Totals

Examination of aggregate state- and local-government payroll and expenditure is complicated by quasi-private enterprises, such as public hospitals and public utilities. The provision of these quasi-private goods are mostly financed through user charges and do not contribute to the tax burden nearly to the extent that they add to aggregate spending totals. Thus, it is appropriate to remove these categories from the aggregates to more accurately understand overall levels of state and local public goods.

After making this necessary adjustment to the data, Maine's aggregate net expenditure (i.e., direct expenditure less intergovernmental transfers from the federal government) is high in comparison to the rest of the nation. Maine's aggregate net expenditure in FY2002 was 15.1 percent of state personal income. This proportion exceeds the national average by 13 percent, and is the eighth-highest of the 50 states. Maine's net expenditure relative to income is the highest of the 10 most rural states, and is 12 percent above their average.

In aggregate state- and local-government payroll and employment, however, Maine is not especially high compared to the rest of the country. In payroll as a percentage of personal income, Maine is only 1 percent above the national average, and ranks 26<sup>th</sup> among states. Moreover, Maine's payroll is 5 percent lower than the average of the nine other most rural states. In FTE employment per capita, Maine is 11 percent higher than the U.S. average and 2 percent higher than the rural average. In this measure, Maine ranks ninth among states.

Like other rural states, Maine provides relatively more public services through the state government than through local governments. Local-government payroll in Maine is 9 percent below the national average, while state-government payroll is 24 percent above the national average. Compared to the other rural states, though, Maine's local payroll is 1 percent below their average, and its state payroll is 13 percent below the average of the other rural states.

Within Maine, there are sizable differences in local-government payroll as a percentage of personal income. Local-government payrolls relative to income in Northern, Central, and Western Maine are more than 20 percent higher than in Down East, Mid-Coast, and Southern Maine.



## Local Functions

### *Primary and Secondary Education*

Local-government services are dominated by primary and secondary education. Public education is by far the largest local-government service. More than 70 percent of all local-government payroll in Maine is in primary and secondary education. Maine's net expenditure on K-12 education in FY2002 was more than \$1.6 billion.

Compared to the rest of the nation, Maine spends a high amount on primary and secondary education. Net expenditure per student in Maine is 8 percent higher than the national average, and Maine's payroll per student is 11 percent higher than the national average, despite personal income in Maine being 13 percent below the national average. Moreover, other rural states do not appear to have a significant cost disadvantage in providing public education. Maine's net expenditure per student exceeds the average of the other rural states by 39 percent. Maine's payroll per student exceeds the rural average by 25 percent. If Maine's net expenditure per student were the same as the national average, it would create \$152 million in annual cost savings. If differences in per capita income were taken into account, this cost differential would be even higher.

There are large differences in public education payroll within Maine. Education payroll as a percentage of personal income in Southern Maine is much lower than in all other regions, while it is the highest in Central Maine, followed by Western Maine.

### *Police Protection*

The interstate comparison of levels of police protection is mixed. Maine spends much less on police protection than the rest of the country. It is not clear, however, to what extent this is due to better cost performance in Maine, lower crime in Maine, lower crime in rural states generally, or lower income in Maine. Police payroll and expenditure per crime in Maine are, respectively, 46 percent and 20 percent higher than the averages of the other rural states. If Maine had the same expenditure per crime as the rural average, perhaps \$30 million per year could be saved. This cost differential, however, appears to be mostly due to the differences in per capita income. After accounting for income differences, the cost differential is about \$6 million.

In comparison to the rest of the nation, state police, as opposed to local police, spending in Maine is relatively high. Also, there are large differences within Maine in the level of local police protection. Local police payroll as a percentage of personal income is considerably higher in Maine's less rural regions.

### *Fire Protection*

The interstate comparison of levels of fire protection is also mixed, although perhaps not as much as in the case of police protection. Maine spends less on fire protection than in most states,

but this is true for the majority of rural states. Maine's fire expenditure relative to personal income is 10 percent above the average of the other rural states. If Maine had the same fire expenditure relative to income as the other rural states, \$7 million would be saved. Moreover, this cost differential appears to be a somewhat conservative estimate.

Perhaps Maine's high cost of fire protection in comparison to other rural states is due to Maine having noticeably more support personnel per firefighter than the other rural states. Support payroll is 4.94 percent of total fire payroll in Maine, compared to the rural average of 3.28 percent. Also, there are huge differences within Maine in the level of fire protection, as fire payroll as a percentage of personal income is dramatically lower in less rural regions.

#### *Parks and Recreation*

Compared to both the national average and the rural average, parks and recreation spending is very low in Maine. Maine's expenditure relative to state income is less than half of these averages. Within Maine, huge differences exist in parks and recreation payroll relative to income, as levels in Northern, Southern, and Central Maine are much higher than in Down East, Mid-Coast, and Western Maine.

#### *Sewerage*

The interstate evidence on sewerage, like police and fire, is somewhat mixed. Compared to the national average, Maine is 10 percent lower in sewerage net expenditure as a percentage of personal income. But compared to the average of the other rural states, Maine is 7 percent higher. If Maine had the same net expenditure relative to income as the average of other rural states, \$7 million would be saved annually. Within Maine, very large regional differences exist in the providing sewerage services, with sewerage payroll as a percentage of personal income relatively high in Northern and Central Maine, and relatively low in Down East and Mid-Coast Maine.

#### *Housing and Community Development*

The interstate evidence on housing and community development is also somewhat mixed. Again, in this service category, payroll and expenditure relative to income are below the national averages, but above the non-urban averages. The degree of urbanization, as well as per capita income, clearly affects the provision of housing and community development. After taking interstate differences in urban percentage and per capita income into account, Maine's net expenditure appears to be 22 percent higher than the interstate norm, which means about \$4 million per year. However, housing and community development is mainly federal programs administered through local governments. Thus, it is unclear if the cost differential has anything to do with performance and choices in Maine.

#### *Solid-Waste Management*

The interstate data on Maine's relative provision of solid-waste-management services is particularly mixed. Solid-waste management payroll relative to income and employment per capita in Maine are at, or slightly below, the national and rural averages. However, expenditure relative to income in Maine is well above the national and rural averages. Maine's expenditure in this service category is 32 percent higher than the U.S. average. If Maine had the same expenditure as a percentage of income as the U.S. average, \$25 million would be saved. The conflicting measures, however, suggest that this cost differential merits further investigation. Moreover, there appear to be puzzlingly large differences within Maine in the provision of solid-waste management.

### *Libraries*

The provision of library services in Maine is relatively low in comparison to other states. Libraries payroll and expenditure as a percentage of income in Maine are, respectively, 38 percent and 26 percent below the national averages. Maine is also relatively low in comparison to other rural states. Maine's payroll and expenditure are, respectively, 15 percent and 22 percent below the rural averages. In library services there are large differences within Maine, with payroll relative to income much lower in regions without urban areas than in the regions with urban areas.

## **State Functions**

### *Higher Education*

Public higher-education provision in Maine is low in comparison to the rest of the nation and to other rural states. The extent of this, however, depends on which measures are emphasized. Maine's net state contribution for higher education as a percentage of income is 26 percent below the national average and 45 percent below the rural average. Maine's net state contribution per FTE student, however, is 14 percent lower than the U.S. average and 5 percent lower than the average of other rural states. The reason for the difference is that Maine has a relatively low number of students in public higher education, especially in comparison to other rural states. But neither measure suggests unusually high costs in higher education in Maine.

However, the interstate comparison of the Instructional and Other subcategories of higher education payroll indicates that Maine may have unusually high costs in non-instructional areas. Maine has the nation's highest ratio of other payroll to instructional payroll by a considerable margin. For every \$1 going to instructional payroll, \$2.13 goes to non-instructional payroll in Maine, compared to \$1.11 nationally and \$0.96 in other rural states. In non-instructional payroll relative to state income, Maine exceeds the national average by 4 percent and rural average 24 percent. Maine's cost differential relative to the national average is perhaps \$14 million.

### *Corrections*

The interstate evidence on Maine's provision of correctional services is conflicting. Maine's corrections payroll and expenditure relative to income are, respectively, 32 percent and 36 percent

below the U.S. averages. But Maine's estimated number of prison inmates per capita is 73 percent below the national average. Thus, Maine's estimated corrections payroll and expenditure per inmate are 2.2 times the U.S. averages. If Maine's estimated annual expenditure per inmate of about \$62,300 were the same as the nation's estimated yearly cost per inmate of roughly \$28,500, it would save about \$79 million.

### *Natural Resources*

The interstate comparison of the provision of natural-resources services is somewhat mixed. Maine's natural-resources payroll and net expenditure relative to income are 73 percent and 49 percent above the national averages, respectively. Maine's natural-resources payroll and net expenditure as a percentage of income are, respectively, 8 percent and 6 percent below the averages of the other rural states. Relative to the rural comparison states, Maine does not appear to have unusual costs in this service category.

### *Social-Insurance Administration*

Maine is relatively costly in providing social-insurance administration (to be more specific, employment-security administration). As a percentage of personal income, Maine's payroll and net expenditure are, respectively, 26 percent and 92 percent higher than the national averages, and 5 percent and 26 percent higher than the rural averages. Per unemployed person, Maine's payroll and net expenditure are 47 percent and 124 percent above the national averages, and 27 percent and 53 percent above the rural averages. This is a small category, though. Even if Maine reduced its employment-security administration net expenditure dramatically, it might save perhaps \$2 million. Moreover, employment-security administration is largely a federal program administered through states. Thus, the extent that Maine can influence its cost differential is unclear.

### *Other Education*

The interstate evidence on Maine's provision of other education is somewhat mixed. Maine's payroll relative to income is similar to the national average. The state's expenditure relative to income is 17 percent higher than the U.S. average. However, Maine's payroll and expenditure relative to income are, respectively, 49 percent and 28 percent lower than the average of the rural comparison states. Thus, Other Education does not appear to be a category with significant unnecessary costs in Maine.

## **Mixed Functions**

### *Highways*

Highways are another category with mixed interstate evidence. Relative to income, Maine's highways payroll and net expenditure are very high compared to the rest of the nation, although the difference is considerably smaller relative to vehicle miles. Compared to the other rural states,

Maine's highways payroll is somewhat high relative to income and relative to vehicle miles, but Maine's highways net expenditure is somewhat low relative to income and about the same relative to vehicle miles. Much of the apparently high relative highways cost in Maine, however, appears to be due to the state's severe winter weather. After taking weather into account, Maine appears to be about average in highways compared to other states. Within Maine, Western Maine has a particularly high level of local highways payroll relative to income.

### *Public Welfare*

Maine clearly has a high level of welfare benefits in comparison to the rest of the nation and to other rural states. The interstate evidence on Maine's administration of public welfare is mixed, as the state's public-welfare payroll per single-female family is 7 percent below the national average, but 31 percent above the average of the other rural states. Thus, it is unclear if Maine could be unusually costly in administering welfare benefits.

### *Financial Administration*

Maine is relatively high in financial administration, particularly in state government. Maine is slightly lower than the national and rural averages in local-government financial administration payroll relative to income. But in state-government financial administration payroll relative to income, Maine is 50 percent above the national average and 24 percent above the average of the other rural states. Overall, Maine's state- and local-government financial-administration expenditure is 34 percent higher than the national average and 1 percent higher than the rural average. If Maine had the average rural state payroll relative to income, \$8 million would be saved. Within Maine, local-government financial administration payroll as a percentage of income is particularly high in Down East Maine.

### *Other Government Administration*

In the state part of other-government administration, Maine is high in comparison to the rest of the country. The interstate comparison indicates that Maine's state-legislative expenditure relative to income is 163 percent higher than the U.S. average and 86 percent higher than the average of the rural comparison states. If Maine had the same legislative expenditure as a percentage of income as the average of the rural states, \$12 million would be saved.

In the local part of other-government administration, the evidence is conflicting. Maine's non-legislative expenditure relative to income is noticeably lower than the national and rural averages. But, Maine's other local-government administration payroll relative to income is higher than the national and rural averages.

### *Health*

The interstate evidence on public health is also conflicting. The health payroll and employment data suggest that Maine is relatively low in this service category. Maine's payroll relative to income is 12 percent below the national average and 3 percent below the rural average. The health net expenditure data, however, suggest that Maine is very high in this service category. Maine's net expenditure relative to income is 95 percent higher than the national average and 210 percent higher than the average of the other rural states. If the interstate net expenditure data are correct, Maine's possible cost differential in providing public health is \$155 million. However, given the conflicting signals from the different measures, not a lot of confidence can be placed in this estimate.

### *Judicial and Legal*

In judicial and legal services relative to income, Maine has the nation's lowest payroll and third-lowest expenditure. Maine's levels are, respectively, 48 percent and 38 percent below the national averages. Much, but not all, of these differences are evidently due to Maine's relatively low crime rate. Maine appears to be somewhat below the interstate norms in providing judicial and legal services.

### *General Public Buildings*

In comparison to other states, Maine is high in providing general public buildings. Maine's expenditure relative to income is 94 percent and 138 percent above the national and rural averages, respectively. It is in state government where Maine's expenditure is relatively high for general public buildings. Maine's local expenditure relative to income is 21 percent and 4 percent below the national and rural averages, respectively. Maine's state expenditure relative to income is 454 percent and 285 percent above the national and rural averages, respectively. If Maine had the same general public buildings expenditure relative to income as the national average, \$42 million would have been saved.

### *Other and Unallocable*

The catch-all category Other and Unallocable has puzzling interstate data. Maine's payroll as a percentage of income is 19 percent and 20 percent lower than the national and rural averages, respectively. Maine's net expenditure as a percentage of income is 83 percent and 467 percent higher than the national and rural averages, respectively. Thus, the data are conflicting as to a possible cost differential for Maine in this category. If the interstate net expenditure data are accurate, then Maine's possible cost differential in Other and Unallocable is \$238 million. However, there is a particularly high degree of uncertainty in this estimate.

## **The 800-Pound Gorilla**

After examining 21 different state and local spending categories in detail, it is easy to lose sight of the big picture. In local fiscal policy, the big picture is basically primary and secondary

education. If Bill Clinton studied local-government spending, he would probably conclude “it’s K–12, stupid.” Primary and secondary education is like the proverbial 800-pound gorilla—not in a judgmental sense, but in how it dominates the local fiscal-policy landscape across the country, and especially in Maine.

Nationally, 58 percent of total local-government payroll (excluding quasi-private enterprises) is in primary and secondary education. In Maine, primary and secondary education payroll is 73 percent of the total. In this ratio, Maine is fourth-highest among states.

This has two important implications. First, comparisons of aggregate local-government payroll are almost comparisons of just primary and secondary education payroll. This is illustrated in Figure 18, which shows the main local-government payroll categories as a percentage of income for each Maine region.<sup>41</sup> Primary and secondary education payroll relative to income is highest in Central Maine, followed by Western Maine, and lowest in Southern Maine. The same ordering applies to aggregate local-government payroll relative to income.

Second, Maine’s relatively high spending on primary and secondary education does not appear to leave much room for other local-government services. That is, having a relatively large primary- and secondary-education sector may, to some extent, crowd out the provision of other local amenities. Maine’s police, corrections, and judicial and legal services are relatively low as a percentage of income largely because of its relatively low crime rate. But Maine is also relatively low in parks and recreation and libraries. Budgetary pressure from primary and secondary education could be part of the reason.

Moreover, the state government provides a large fraction of the financing of primary and secondary education. Thus, some state services may feel the squeeze too. Maine is particularly low in expenditure on higher education compared to the rest of the country. This may be, in part, due to fiscal pressure from Maine’s relatively large primary- and secondary-education sector.

## **Regional Differences**

There are surprisingly large regional differences in Maine’s provision of local public services. Moreover, the pattern of differences varies considerably among services, as regions with relatively high provision in some service areas also have relatively low provision in other areas.

Perhaps the most notable differences are Southern Maine compared to the rest of Maine. Given that Southern Maine is the most unlike the other five regions in terms of urban percentage, population density, and per capita income, it makes some sense to consider Southern Maine in comparison to the rest of Maine. Moreover, 35 percent of Maine’s population lives in the Southern Maine region.

---

<sup>41</sup> The regional payroll totals differ slightly from those shown in Figure 1, because quasi-private enterprises are excluded from the totals shown in Figure 18.

Southern Maine frequently has either the highest or the lowest level of local-government services. The service areas where Southern Maine is lowest are seemingly ones with the greatest economies of scale. That is, it appears that Southern Maine has a cost advantage in some services because it is more densely populated. In particular, Southern Maine is low in comparison to the rest of the state in primary and secondary education (i.e., the 800-pound gorilla), corrections, and financial administration. The service areas where Southern Maine is the highest or near the highest are seemingly those driven by having a higher income and/or by being more urban. In particular, Southern Maine is relatively high in police, fire, parks and recreation, libraries, and public health.

Down East Maine is also a region that is often either the highest or the lowest in some local-government services. In fact, it is often the opposite of Southern Maine. Down East Maine is the highest region in corrections, local financial administration, and judicial and legal. It is the lowest or near the lowest region in police, fire, parks and recreation, sewerage, and libraries. Local services in Mid-Coast Maine are generally very similar to Down East Maine, although a little less extreme in being either relatively high or low.

Central Maine and Western Maine are also either near the top or near the bottom in providing certain local services. Most importantly, these are the top regions in primary and secondary education; thus, they are the top regions in total local provision of services.

With the exception of the most important category, primary and secondary education, Northern Maine is generally high in comparison to the other regions in providing most local services, although it is seldom the highest region in a service category.

## **Extreme Priorities**

Although there are some notable exceptions, in most service categories Maine is not extremely high or extremely low relative to the rest of the country. There are not many instances where Maine ranks among the top or bottom five states. Where Maine appears to be more extreme is in some of its priorities. That is, Maine is unusual compared to the rest of the nation in its relative mix of services.

For example, Maine's spending on primary and secondary education is relatively high, but relatively low on higher education (and also libraries). This is an enigma because, in one area, Maine appears to place a relatively high value on education, but in another, the state seems to place a relatively low value on education.

Nationally, state- and local-government net contribution for primary and secondary education is 3.7 times the state- and local-government net contribution for higher education. In Maine, the ratio is 5.6, which is the nation's fifth-highest, and 51 percent greater than the national average. Moreover, Maine's ratio is higher than all of the rural comparison states, most of which are below the



national ratio. Maine's ratio exceeds the average ratio of the other rural states of 2.55 by 120 percent.

Some of this large difference may be attributable to Maine having relatively few students in higher education—mostly because Maine is one the nation's biggest net exporters of college students to other states. Maine's state- and local-government net contribution per student in primary and secondary education is 0.84 times its state- and local-government net contribution per FTE student in higher education. The national and rural averages are 0.67 and 0.51, respectively. Maine's ratio differs from these percentages by 26 percent and 51 percent, respectively.

A related puzzle is that Maine has the nation's highest ratio of non-instructional payroll relative to instructional payroll in higher education, but in primary and secondary education Maine is below the national average in non-instructional relative to instructional payroll (although it should be kept in mind that instructional payroll in primary and secondary education includes principals, guidance councilors, and school librarians).

### **Administrationland<sup>42</sup>**

Another area where Maine appears to have unusual priorities is in government administration. Compared to other states, Maine state and local government are consistently high in the administrative categories. Moreover, excess duplication appears at least part of the reason.

For example, Maine has the nation's highest ratio of non-instructional payroll relative to instructional payroll in public higher education. The non-instructional data are not disaggregated, thus this does not necessarily prove excess administration, in public higher education in Maine. But it does hint at it. Moreover, having 15 separate university and college administrations serving a cumulative student body of 30,611 FTE students in FY2002 is another strong hint.

Although the Census Bureau data are inadequate to reveal much evidence of it, data from the U.S. Department of Education indicate that Maine has relatively more administration in primary and secondary education than in the rest of the country. Compared to national averages, Maine has 108 percent more FTE school district officials per student 45 percent more school principals per student. In these measures Maine is, respectively, the sixth and fourth highest nationally. Moreover, Maine is higher than all of the rural comparison states in principals per student, and higher than all but two of the rural comparison states in school district officials per student.<sup>43</sup>

In addition, relative to other states, Maine appears to be high in every administrative-type category. To be specific, Maine is high in comparison to other states in financial administration, other government administration, and employment-security administration.

---

<sup>42</sup> On this issue see Philip Trostel, "Administrationland," *Bangor Daily News*, March 30, 2005, p. A9.

<sup>43</sup> For more on this issue, see Philip Trostel and Catherine Reilly, "Improving Educational Resource Allocation in Maine: A Study of School District Size," Margaret Chase Smith Policy Center, 2005.

Moreover, there are other categories that could be considered administrative to some extent, and there is some evidence that Maine is relatively high in these too. In the administration of public welfare, there is some interstate evidence that Maine is relatively high, although the evidence is mixed on this. Perhaps general public buildings and Other and Unallocable should be included as administrative-type categories. Maine is high compared to most other states in general public buildings. In Other and Unallocable, there is some evidence that Maine is relatively high, although the evidence is conflicting on this.

## **Large State Government**

Many of the instances where Maine has relatively high levels of services compared to the rest of the nation appear to be in state government. Maine's state government is not high in all service areas, and some of the service areas with higher-than-usual costs are local functions. Generally, though, there are a surprising number of public services where expenditures are higher than normal in state government.

One possible reason why Maine state-government payrolls and expenditures may be higher than the rest of the nation is that Maine's state government may be performing duties that are done by local governments, particularly county governments, in other states. In other words, Maine's weak system of county government may force relatively more duties on to the state government. Although this may help explain some of the instances where Maine's state government seems to have higher-than-normal costs, it does not appear to be the whole explanation. In most of the services noted below, Maine's combined state- and local-government payrolls and expenditures are higher than the interstate norms, and those services are primarily the duties of the state government.

Corrections is primarily a state function, and corrections cost per inmate is high in Maine compared to other states. Employment-security administration is exclusively a state function, and Maine is relatively high in this category too. The state-government portion of financial administration, other government administration, general public buildings, and Other and Unallocable are high in Maine compared to most other states. Maine may be relatively high in public health and the administration of public welfare (the interstate evidence is mixed in these categories), and these are primarily state-government functions in Maine. Also, the state provision of police protection is high compared to other states.

Thus, many of the services areas that have been identified in this report as ones that deserve closer scrutiny are provided by the state government.

## **Being Rural**

It is sometimes asserted that Maine's higher-than-normal cost in providing some public services is an unavoidable consequence of being rural. That is, being rural, to some extent, creates an inherent cost disadvantage and excess duplication of services because economies of scale cannot be fully realized. Although it is certainly possible that this may be true for some services in some places, this notion generally is refuted by the interstate data. The data indicate that rural

states do not appear to have significant cost disadvantages in providing state- and local-government services. Indeed, the data suggest that rural states have more important cost advantages than cost disadvantages.

There are some government service areas where rural states appear to be at a cost disadvantage. Not surprisingly, governments in rural states generally spend more than urban states on natural resources relative to income. Rural states generally spend more on other education as a percentage of the income. Rural states are also generally high in social-insurance administration, financial administration, and other government administration. All of the above categories are relatively small, though. Most rural states are relatively high in higher education as a percentage of income, but they are generally somewhat low in higher education per student. Rural states appear to have a cost disadvantage in providing highways, but evidently the apparent cost disadvantage is really from winter weather.

The list of government service areas where rural states may have a cost advantage is longer. As a percentage of income, rural states generally spend less than urban states on fire protection, parks and recreation, sewerage, housing and community development, solid-waste management, and public health. However, these are relatively small categories. Rural states are also generally low in corrections costs per inmate. Rural states are generally low in judicial and legal costs relative to income, but this appears to be due to their generally low crime rates rather than greater efficiency in providing this service. Most rural states are relatively low in primary and secondary education spending per student and in police spending per crime, but these appear to be due to their relatively low incomes on average.

Of course, the above urban/rural differences may be more a reflection of service levels and cost advantages. Also, urban/rural differences, or lack of differences, among states are not necessarily the same as urban/rural differences within states. That is, interstate evidence that being a rural state does not appear to cause a cost disadvantage in providing a government service does not necessarily imply that there is not a rural cost disadvantage in providing that service within Maine.

## **Cost Advantages**

Much has been made of Maine's relatively high tax burden. Indeed, concern over Maine's taxes is the main reason for the concern over Maine's spending on state and local services, which is the reason for this study. Maine's tax burden could be considerably higher, though, if it were not for some significant cost advantages in Maine. In particular, Maine's relatively low crime rate creates three cost advantages. It allows Maine's spending relative to income to be low in police protection, corrections, and judicial and legal services. Moreover, police and corrections are two somewhat large service areas. Because Maine is 45<sup>th</sup> in crimes per capita, 36 percent below the national average, it has an important fiscal advantage.

Of total state- and local-government payroll, excluding quasi-private enterprises such as hospitals and public utilities, 15.8 percent goes to police protection, corrections, and judicial and legal services nationally. Of total net expenditure, 12.7 percent goes to these crime-related services nationally. In Maine, though, these proportions are, respectively, 10.3 percent and 7.4 percent. This creates a big fiscal advantage for Maine. The difference between 12.7 percent and 7.4 percent of Maine's total state- and local-government net expenditure is \$294 million, which is 0.80 percent of the state's personal income.

Maine tax burden also could be considerably higher if state support for higher education were more like that in other states.<sup>44</sup> Higher education is one of the larger categories of state- and local-government spending. Nationally, state-government net contribution (i.e., expenditure less tuition and fees) for higher education is 7.9 percent of total state- and local-government net expenditure, excluding quasi-private enterprises. In Maine, this proportion is 5.1 percent. The difference between 7.9 percent and 5.1 percent of Maine's total state- and local-government net expenditure is \$151 million.

These two fiscal advantages for Maine combined make a substantial impact. Recall from Table 6 that, as a percentage of income, Maine ranks eighth in total state- and local-government net expenditure, excluding quasi-private enterprises. By this measure Maine is 13 percent above the national average, and 12 percent above the average of the rural comparison states. This would be quite different if police, corrections, judicial and legal, and higher education were removed from the total. That is, in total state and local net expenditure, excluding quasi-private enterprises, crime-related categories, and higher education, Maine ranks second only to Alaska, which has substantial state revenues from petroleum royalties. By this measure, Maine is 24 percent higher than the national average, and 23 percent higher than the average of the other rural states.

---

<sup>44</sup> Actually, this may not necessarily be the case. The higher incomes of college graduates have an important fiscal benefit to states through their effect on the tax base. Thus, in the long run, state funding for education actually may have an inverse effect on the state's tax burden. For more on this issue, see Philip Trostel, "The Long-Term Economic Effects of Declining State Support for Higher Education: Are States Shooting Themselves in the Foot?" Wisconsin Center for the Advancement of Postsecondary Education, 2003.

**Table 1  
Comparison States**

	<u>Urban Percentage</u>		<u>Population Density</u>		<u>Population</u>		<u>Income</u>	
<b>Maine</b>	24.6%	48	41.3	38	1,275	40	\$26,020	35
<b>United States</b>	68.3%		79.6		281,422		\$29,927	
<b>Vermont</b>	17.3%	50	65.8	30	609	49	\$27,730	28
<b>Mississippi</b>	23.9%	49	60.6	32	2,845	31	\$21,035	50
<b>Wyoming</b>	25.5%	47	5.1	49	494	50	\$28,480	21
<b>South Dakota</b>	25.8%	46	9.9	46	755	46	\$25,751	37
<b>Montana</b>	26.0%	45	6.2	48	902	44	\$22,962	46
<b>West Virginia</b>	28.3%	44	75.1	29	1,808	37	\$21,889	49
<b>Arkansas</b>	32.2%	43	51.3	34	2,673	33	\$21,967	48
<b>North Dakota</b>	35.9%	42	9.3	47	642	47	\$25,065	38
<b>Iowa</b>	38.1%	41	52.4	33	2,926	30	\$26,574	33
<b>Average</b>	29.7%		23.7		1,517		\$23,663	
<b>New Hampshire</b>	44.7%	36	137.8	20	1,236	41	\$33,524	7

Numbers are derived from the 2000 U.S. Census. "Urban" areas consist of densely settled territories (at least 1,000 people per square mile) that contain at least 50,000 people. "Population density" is people per square mile. Population is in thousands. "Income" is per capita personal income. The whole numbers to the right of the ratios are the state ranks.

**Table 2**  
**Maine Regions**

	<u>Urban Percentage</u>	<u>Population Density</u>	<u>Population</u>	<u>Income</u>
<b>Northern</b>	25.0%	16.8	236.1	\$22,532
<b>Down East</b>	0.0%	20.6	85.7	\$24,761
<b>Mid-Coast</b>	0.0%	80.2	144.7	\$25,329
<b>Southern</b>	45.2%	247.7	452.4	\$30,194
<b>Western</b>	26.9%	44.3	188.0	\$23,059
<b>Central</b>	0.0%	35.0	168.0	\$24,232

Numbers are derived from the 2000 U.S. Census. "Urban" areas consist of densely settled territories (at least 1,000 people per square mile) that contain at least 50,000 people. "Population density" is people per square mile. Population is in thousands. "Income" is personal per capita income. "Northern" Maine consists of Aroostook, Penobscot, and Piscataquis Counties. "Down East" Maine is Hancock and Washington Counties. "Mid-Coast" Maine is Knox, Lincoln, Sagadahoc, and Waldo Counties. "Southern" Maine is Cumberland and York Counties. "Western" Maine is Androscoggin, Franklin, and Oxford Counties. "Central" Maine is Kennebec and Somerset Counties.

**Table 3**  
**Percentages of Total State- and Local-Government Payroll**

	<u>Maine</u>		<u>United States</u>	
<b>Local Functions</b>				
Elementary and Secondary Education	45.91%	(99.8%)	37.84%	(99.0%)
Police Protection	5.13%	(78.1%)	6.94%	(88.2%)
Fire Protection	2.04%	(100%)	2.60%	(100%)
Parks & Recreation	1.02%	(77.3%)	1.29%	(85.6%)
Sewerage	0.89%	(100%)	0.85%	(97.9%)
Housing and Community Development	0.63%	(100%)	0.74%	(100%)
Solid Waste Management	0.61%	(100%)	0.67%	(99.7%)
Libraries	0.40%	(100%)	0.61%	(99.5%)
<b>State Functions</b>				
Higher Education	10.70%	(0%)	12.53%	(17.1%)
Corrections	3.18%	(22.5%)	4.41%	(35.4%)
Natural Resources	2.17%	(2.4%)	1.18%	(18.6%)
Social Insurance Administration	0.77%	(0%)	0.58%	(0%)
Other Education	0.68%	(0%)	0.64%	(0%)
<b>Mixed State &amp; Local Functions</b>				
Highways	6.46%	(37.0%)	3.38%	(51.7%)
Public Welfare	3.26%	(13.9%)	3.07%	(54.0%)
Financial Administration	3.17%	(44.7%)	2.44%	(54.9%)
Other Government Administration	2.62%	(62.9%)	1.78%	(78.7%)
Health	2.49%	(10.5%)	2.67%	(57.1%)
Judicial and Legal	1.64%	(17.5%)	2.96%	(57.3%)
General Public Buildings	0.00%	(31.1%)	0.00%	(75.8%)
Other and Unallocable	2.70%	(26.9%)	3.13%	(50.7%)
<b>Sum</b>	<b>96.48%</b>	<b>(65.5%)</b>	<b>90.31%</b>	<b>(72.0%)</b>

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. The numbers in parentheses are the fraction of the payroll (expenditure in the case of General Public Buildings) from local government. The sums are not 100 percent because several functions are excluded.

**Table 4**  
**Total State and Local Government**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Net Expenditure</u>		<u>Local Governments</u>	
<b>Maine</b>	6.60%	35	56.81	21	18.43%	23	3.89	7
<b>United States</b>	7.01%		54.55		19.04%		1.36	
<b>Vermont</b>	7.16%	20	61.70	10	16.96%	43	4.83	6
<b>Mississippi</b>	7.93%	5	63.98	5	19.61%	16	1.32	26
<b>Wyoming</b>	8.69%	3	83.22	1	20.28%	13	2.42	13
<b>South Dakota</b>	6.37%	39	56.54	24	15.30%	48	17.29	2
<b>Montana</b>	7.50%	12	57.64	18	18.00%	31	2.01	19
<b>West Virginia</b>	7.09%	24	53.04	35	20.75%	11	1.60	24
<b>Arkansas</b>	6.95%	29	55.69	27	17.19%	40	2.12	17
<b>North Dakota</b>	7.69%	8	62.36	9	17.90%	34	27.52	1
<b>Iowa</b>	7.72%	6	60.46	11	19.11%	18	3.57	8
<b>Average</b>	7.46%		59.85		18.64%		4.33	
<b>New Hampshire</b>	5.27%	50	51.94	41	13.09%	50	1.91	21

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Net expenditure" is direct expenditure less transfers from federal government, and is reported as a percentage of personal income. "Local governments" are the number of general-purpose local governments per 10,000 people. The whole numbers to the right of the ratios are the state ranks.

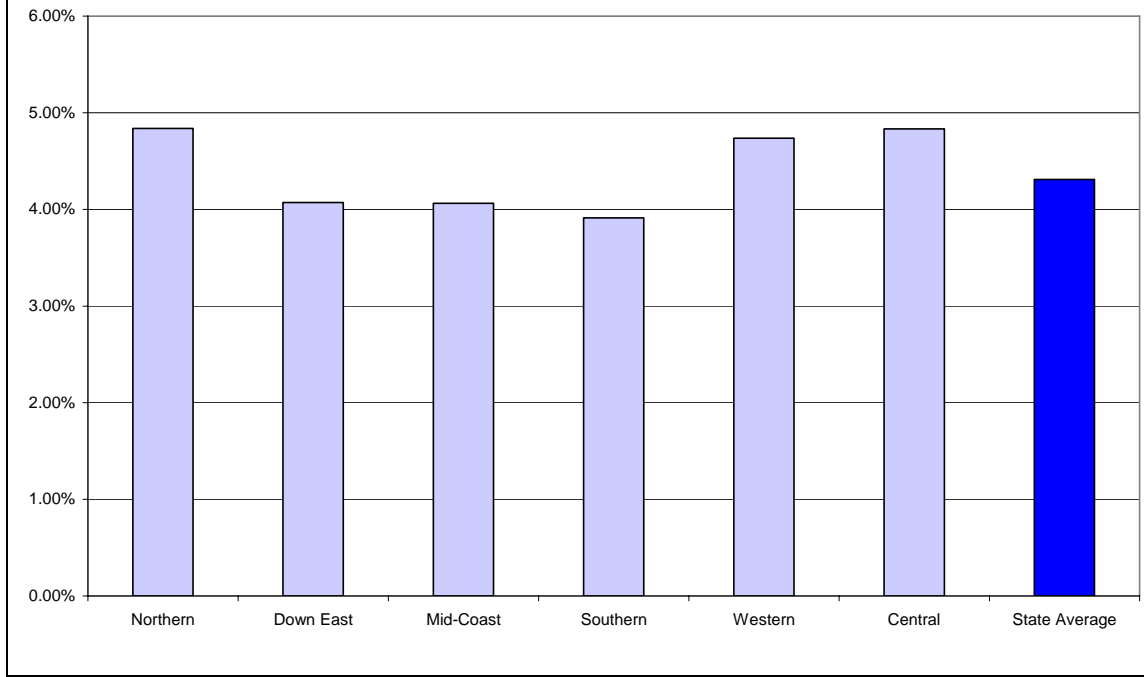


**Table 5**  
**Total Government Payroll**  
**Local versus State**

	<u>Local</u>		<u>State</u>	
<b>Maine</b>	4.31%	36	2.29%	22
<b>United States</b>	5.03%		1.98%	
<b>Vermont</b>	4.17%	43	2.99%	7
<b>Mississippi</b>	5.11%	8	2.81%	10
<b>Wyoming</b>	6.14%	2	2.55%	18
<b>South Dakota</b>	4.19%	41	2.18%	26
<b>Montana</b>	4.58%	28	2.93%	8
<b>West Virginia</b>	4.30%	38	2.80%	11
<b>Arkansas</b>	4.12%	44	2.83%	9
<b>North Dakota</b>	4.46%	30	3.23%	5
<b>Iowa</b>	4.92%	17	2.80%	12
<b>Average</b>	4.66%		2.80%	
<b>New Hampshire</b>	3.54%	47	1.74%	44

Numbers are for FY2002 state and local governments separately, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Figure 1**  
**Total Local Payroll in Maine**



**Table 6**  
**Total State and Local Government**  
**Excluding Quasi-Private Enterprises (Hospitals, Utilities, etc.)**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Net Expenditure</u>	
<b>Maine</b>	6.37%	26	55.01	9	15.08%	8
<b>United States</b>	6.33%		49.49		13.39%	
<b>Vermont</b>	7.00%	7	60.42	4	13.59%	21
<b>Mississippi</b>	6.45%	24	52.80	18	12.79%	33
<b>Wyoming</b>	7.39%	5	70.99	2	13.85%	19
<b>South Dakota</b>	6.05%	36	53.75	13	12.13%	41
<b>Montana</b>	7.26%	6	55.63	7	14.03%	18
<b>West Virginia</b>	6.72%	14	49.75	33	14.09%	15
<b>Arkansas</b>	6.51%	21	52.18	22	13.01%	31
<b>North Dakota</b>	7.45%	4	60.04	5	13.70%	20
<b>Iowa</b>	6.83%	12	53.63	14	14.20%	11
<b>Average</b>	6.73%		54.03		13.50%	
<b>New Hampshire</b>	5.14%	50	50.55	29	10.32%	50

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Net expenditure" is direct expenditure less transfers from federal government, and is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Table 7**  
**Total Government Payroll Excluding Quasi-Private**  
**Enterprises**  
**Local versus State**

	<u>Local</u>		<u>State</u>	
<b>Maine</b>	4.17%	24	2.20%	22
<b>United States</b>	4.55%		1.77%	
<b>Vermont</b>	4.06%	29	2.94%	5
<b>Mississippi</b>	4.14%	25	2.32%	17
<b>Wyoming</b>	4.99%	5	2.40%	15
<b>South Dakota</b>	4.00%	36	2.05%	24
<b>Montana</b>	4.41%	16	2.85%	7
<b>West Virginia</b>	4.02%	34	2.70%	9
<b>Arkansas</b>	3.88%	40	2.63%	10
<b>North Dakota</b>	4.37%	19	3.07%	4
<b>Iowa</b>	4.40%	17	2.43%	14
<b>Average</b>	4.19%		2.54%	
<b>New Hampshire</b>	3.49%	47	1.65%	39

Numbers are for FY2002 state and local governments separately, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Table 8**  
**Elementary and Secondary Education**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Net Expenditure</u>		<u>Local Governments</u>	
<b>Maine</b>	3.03%	10	28.73	4	4.46%	7	2.03	6
<b>United States</b>	2.65%		22.18		4.04%		0.49	
<b>Vermont</b>	3.31%	2	31.79	1	4.18%	14	4.08	1
<b>Mississippi</b>	2.57%	31	24.00	20	3.37%	43	0.53	23
<b>Wyoming</b>	3.10%	6	31.63	2	3.49%	39	0.96	12
<b>South Dakota</b>	2.66%	26	25.79	7	3.78%	31	2.29	5
<b>Montana</b>	2.91%	14	24.40	17	3.90%	24	3.80	2
<b>West Virginia</b>	3.20%	3	22.58	30	4.37%	11	0.30	36
<b>Arkansas</b>	2.75%	21	24.01	19	3.83%	27	1.14	10
<b>North Dakota</b>	3.00%	11	23.02	26	3.24%	47	3.47	3
<b>Iowa</b>	2.79%	19	25.08	11	3.75%	33	1.27	9
<b>Average</b>	2.84%		24.75		3.77%		1.40	
<b>New Hampshire</b>	2.31%	43	24.63	15	3.75%	34	1.31	8

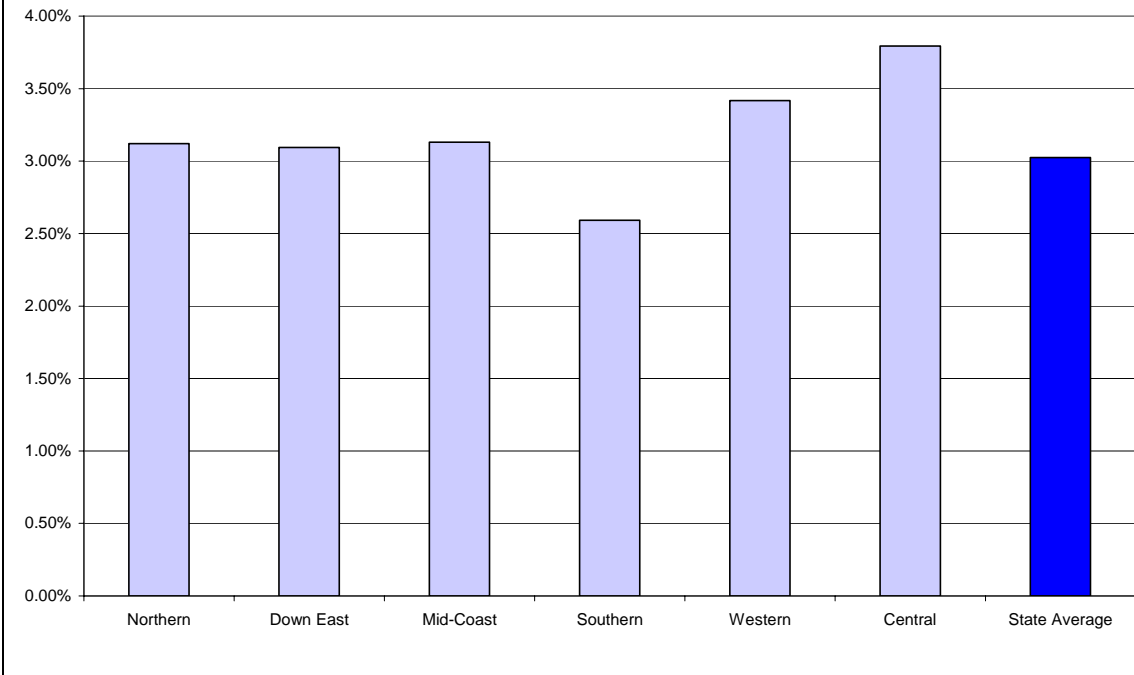
Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Net expenditure" is direct expenditure less transfers from federal government, and is reported as a percentage of personal income. "Local governments" are the number of sub-state governments per 10,000 people. The whole numbers to the right of the ratios are the state ranks.

**Table 9**  
**Elementary and Secondary Education Payroll**  
**Instructional versus Other**

	<u>Instructional</u>		<u>Other</u>	
<b>Maine</b>	2.42%	8	0.61%	13
<b>United States</b>	2.08%		0.57%	
<b>Vermont</b>	2.71%	1	0.60%	18
<b>Mississippi</b>	2.04%	31	0.54%	32
<b>Wyoming</b>	2.38%	10	0.71%	4
<b>South Dakota</b>	2.06%	27	0.60%	17
<b>Montana</b>	2.36%	11	0.56%	28
<b>West Virginia</b>	2.41%	9	0.79%	3
<b>Arkansas</b>	2.16%	21	0.59%	21
<b>North Dakota</b>	2.44%	7	0.56%	27
<b>Iowa</b>	2.19%	18	0.60%	16
<b>Average</b>	2.24%		0.61%	
<b>New Hampshire</b>	1.94%	39	0.37%	50

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Figure 2**  
**Elementary and Secondary Education Payroll in Maine**



**Table 10**  
**Elementary and Secondary Education**  
**Per Student**

	<u>Payroll</u>		<u>Net Expenditure</u>	
<b>Maine</b>	\$5,421	10	\$7,972	11
<b>United States</b>	\$4,865		\$7,416	
<b>Vermont</b>	\$6,098	6	\$7,696	17
<b>Mississippi</b>	\$3,373	49	\$4,421	50
<b>Wyoming</b>	\$5,465	9	\$6,148	34
<b>South Dakota</b>	\$4,184	38	\$5,939	36
<b>Montana</b>	\$4,344	30	\$5,813	38
<b>West Virginia</b>	\$4,879	20	\$6,656	28
<b>Arkansas</b>	\$3,872	42	\$5,403	44
<b>North Dakota</b>	\$4,875	21	\$5,261	46
<b>Iowa</b>	\$4,725	25	\$6,354	32
<b>Average</b>	\$4,323		\$5,727	
<b>New Hampshire</b>	\$4,907	19	\$7,951	12

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division and U.S. Department of Education, National Center for Education Statistics. "Net expenditure" is direct expenditure less transfers from federal government. The whole numbers to the right of the ratios are the state ranks.



**Table 11  
Police Protection**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Expenditure</u>		<u>Local Governments</u>	
<b>Maine</b>	0.34%	44	2.48	41	0.49%	47	1.43	7
<b>United States</b>	0.49%		3.08		0.73%		0.60	
<b>Vermont</b>	0.29%	48	1.91	50	0.50%	46	1.36	9
<b>Mississippi</b>	0.39%	32	3.06	17	0.71%	19	1.17	16
<b>Wyoming</b>	0.41%	20	3.50	7	0.78%	9	1.62	4
<b>South Dakota</b>	0.29%	47	2.29	46	0.52%	44	2.33	1
<b>Montana</b>	0.35%	39	2.50	40	0.76%	13	1.23	14
<b>West Virginia</b>	0.25%	50	2.00	49	0.43%	50	1.26	12
<b>Arkansas</b>	0.36%	36	2.82	28	0.63%	29	1.33	10
<b>North Dakota</b>	0.28%	49	2.24	48	0.45%	49	1.97	2
<b>Iowa</b>	0.35%	41	2.45	42	0.56%	38	1.56	5
<b>Average</b>	0.34%		2.59		0.60%		1.43	
<b>New Hampshire</b>	0.35%	40	2.74	32	0.48%	48	1.69	3

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Expenditure" is reported as a percentage of personal income. "Local governments" are the number of sub-state governments per 10,000 people. The whole numbers to the right of the ratios are the state ranks.

**Table 12**  
**Police Payroll**  
**Police with Power of Arrest versus Other**

	<b>Police with Power of Arrest</b>	<b>Other</b>
<b>Maine</b>	0.27% 43	0.07% 38
<b>United States</b>	0.39%	0.09%
<b>Vermont</b>	0.24% 47	0.05% 49
<b>Mississippi</b>	0.29% 34	0.10% 12
<b>Wyoming</b>	0.32% 23	0.09% 14
<b>South Dakota</b>	0.23% 49	0.06% 42
<b>Montana</b>	0.26% 45	0.09% 17
<b>West Virginia</b>	0.21% 50	0.04% 50
<b>Arkansas</b>	0.29% 39	0.07% 32
<b>North Dakota</b>	0.23% 48	0.05% 47
<b>Iowa</b>	0.28% 42	0.07% 34
<b>Average</b>	0.27%	0.07%
<b>New Hampshire</b>	0.29% 35	0.06% 45

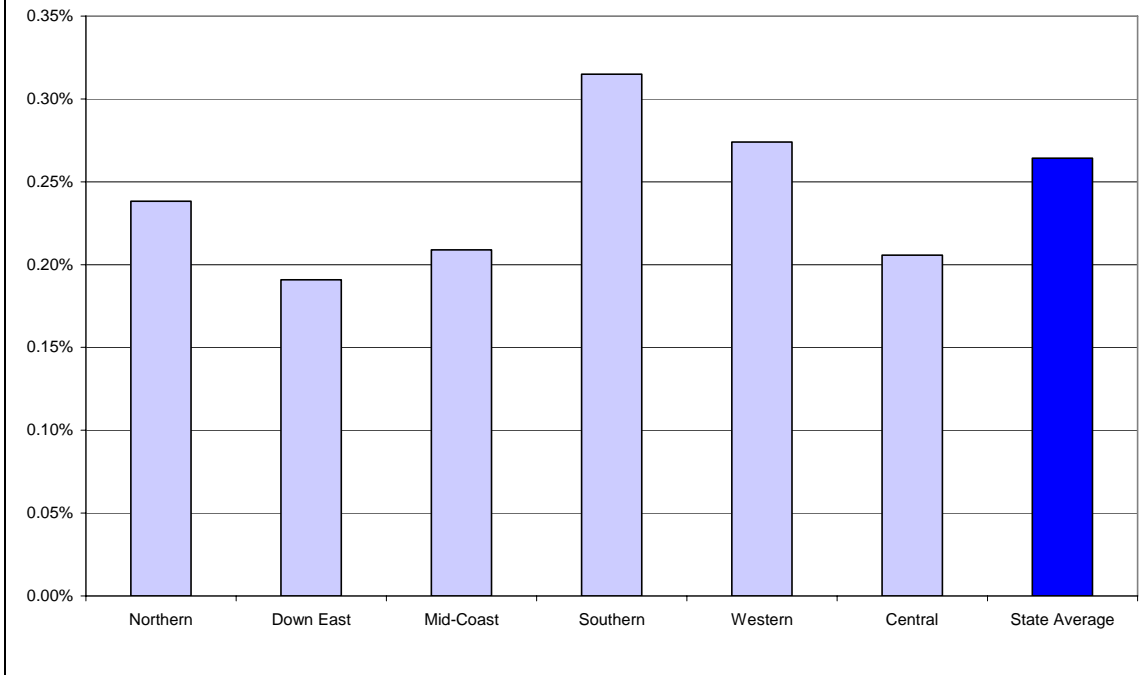
Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Table 13**  
**Police Payroll**  
**Local versus State**

	<u>Local</u>		<u>State</u>	
<b>Maine</b>	0.26%	44	0.07%	11
<b>United States</b>	0.43%		0.06%	
<b>Vermont</b>	0.17%	50	0.12%	3
<b>Mississippi</b>	0.33%	27	0.06%	25
<b>Wyoming</b>	0.35%	22	0.06%	22
<b>South Dakota</b>	0.24%	47	0.05%	36
<b>Montana</b>	0.28%	43	0.07%	16
<b>West Virginia</b>	0.17%	49	0.08%	7
<b>Arkansas</b>	0.30%	40	0.06%	21
<b>North Dakota</b>	0.24%	48	0.05%	41
<b>Iowa</b>	0.29%	42	0.06%	29
<b>Average</b>	0.27%		0.06%	
<b>New Hampshire</b>	0.30%	39	0.05%	39

Numbers are for FY2002 state and local governments separately, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Figure 3**  
**Local Police Payroll in Maine**



**Table 14**  
**Police Protection**  
**Per Crime**

	<u>Payroll</u>		<u>Expenditure</u>	
<b>Maine</b>	\$3,588	13	\$5,242	21
<b>United States</b>	\$3,623		\$5,436	
<b>Vermont</b>	\$3,281	21	\$5,646	19
<b>Mississippi</b>	\$2,091	49	\$3,858	36
<b>Wyoming</b>	\$3,629	12	\$6,884	10
<b>South Dakota</b>	\$3,402	17	\$6,028	14
<b>Montana</b>	\$2,394	36	\$5,210	22
<b>West Virginia</b>	\$2,369	38	\$4,088	34
<b>Arkansas</b>	\$2,040	50	\$3,601	45
<b>North Dakota</b>	\$3,132	22	\$5,038	25
<b>Iowa</b>	\$2,853	28	\$4,636	28
<b>Average</b>	\$2,465		\$4,365	
<b>New Hampshire</b>	\$5,329	5	\$7,368	6

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division and U.S. Department of Justice, Bureau of Justice Statistics. The whole numbers to the right of the ratios are the state ranks.

**Table 15  
Fire Protection**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Expenditure</u>		<u>Local Governments</u>	
<b>Maine</b>	0.13%	35	1.14	16	0.23%	38	1.63	1
<b>United States</b>	0.18%		1.07		0.29%		0.37	
<b>Vermont</b>	0.06%	49	0.44	49	0.19%	43	0.52	21
<b>Mississippi</b>	0.15%	28	1.20	12	0.27%	23	0.59	13
<b>Wyoming</b>	0.10%	43	0.75	40	0.27%	21	0.88	5
<b>South Dakota</b>	0.08%	44	0.52	44	0.18%	45	0.50	23
<b>Montana</b>	0.10%	42	0.60	43	0.19%	44	0.67	8
<b>West Virginia</b>	0.06%	48	0.48	48	0.15%	48	0.29	38
<b>Arkansas</b>	0.14%	34	0.91	33	0.23%	37	0.66	9
<b>North Dakota</b>	0.07%	46	0.50	46	0.16%	47	0.96	2
<b>Iowa</b>	0.10%	41	0.64	42	0.20%	42	0.59	15
<b>Average</b>	0.11%		0.77		0.21%		0.59	
<b>New Hampshire</b>	0.16%	23	1.25	9	0.27%	22	0.94	4

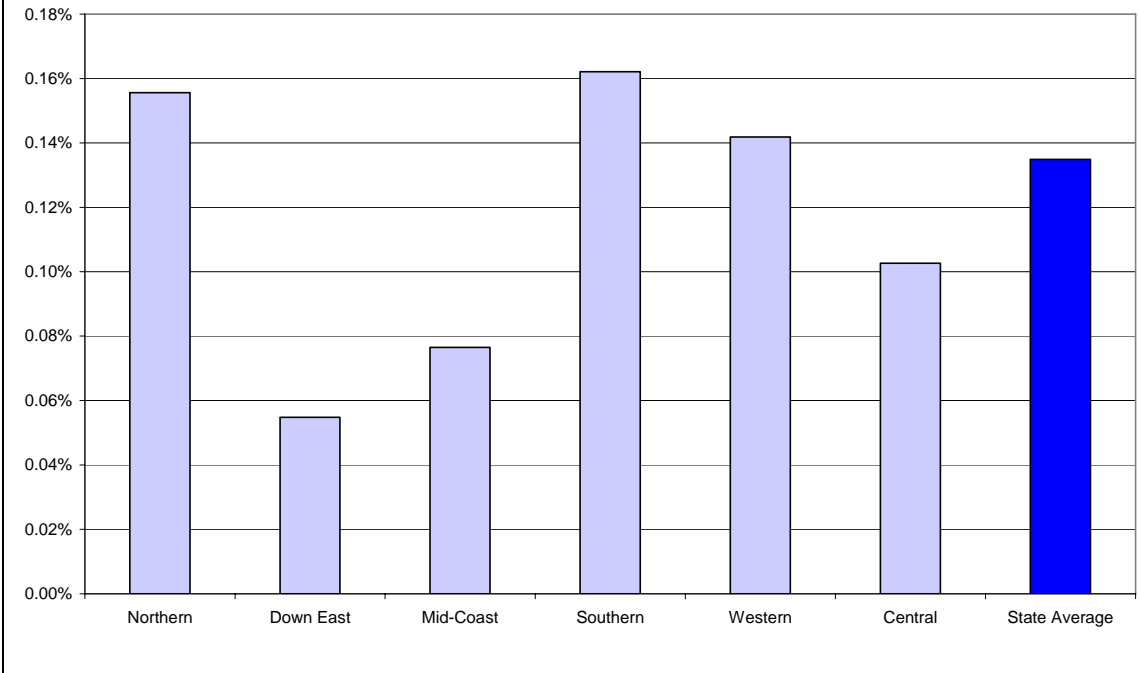
Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Expenditure" is reported as a percentage of personal income. "Local governments" are the number of sub-state governments per 10,000 people. The whole numbers to the right of the ratios are the state ranks.

**Table 16**  
**Fire Payroll**  
**Firefighters versus Other**

	<u>Firefighters</u>		<u>Other</u>	
<b>Maine</b>	0.13%	35	0.01%	30
<b>United States</b>	0.17%		0.01%	
<b>Vermont</b>	0.06%	49	0.00%	50
<b>Mississippi</b>	0.15%	26	0.00%	42
<b>Wyoming</b>	0.09%	43	0.01%	32
<b>South Dakota</b>	0.08%	44	0.00%	47
<b>Montana</b>	0.09%	42	0.01%	23
<b>West Virginia</b>	0.06%	48	0.00%	48
<b>Arkansas</b>	0.14%	32	0.00%	46
<b>North Dakota</b>	0.07%	46	0.01%	36
<b>Iowa</b>	0.10%	41	0.00%	45
<b>Average</b>	0.10%		0.00%	
<b>New Hampshire</b>	0.15%	21	0.01%	33

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Figure 4**  
**Fire Payroll in Maine**





**Table 17  
Parks and Recreation**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Expenditure</u>		<u>Local Governments</u>	
<b>Maine</b>	0.07%	37	0.68	38	0.15%	48	0.76	2
<b>United States</b>	0.09%		0.91		0.34%		0.17	
<b>Vermont</b>	0.05%	45	0.48	49	0.17%	47	0.47	6
<b>Mississippi</b>	0.05%	48	0.53	46	0.25%	41	0.14	35
<b>Wyoming</b>	0.13%	6	1.40	5	0.50%	8	0.54	5
<b>South Dakota</b>	0.08%	25	0.81	27	0.51%	7	0.14	34
<b>Montana</b>	0.06%	40	0.56	45	0.19%	44	0.37	8
<b>West Virginia</b>	0.06%	41	0.73	34	0.26%	37	0.23	16
<b>Arkansas</b>	0.06%	38	0.63	41	0.26%	38	0.07	42
<b>North Dakota</b>	0.12%	8	1.50	2	0.56%	5	2.18	1
<b>Iowa</b>	0.08%	27	0.75	32	0.36%	17	0.62	4
<b>Average</b>	0.07%		0.72		0.31%		0.38	
<b>New Hampshire</b>	0.04%	50	0.45	50	0.15%	49	0.67	3

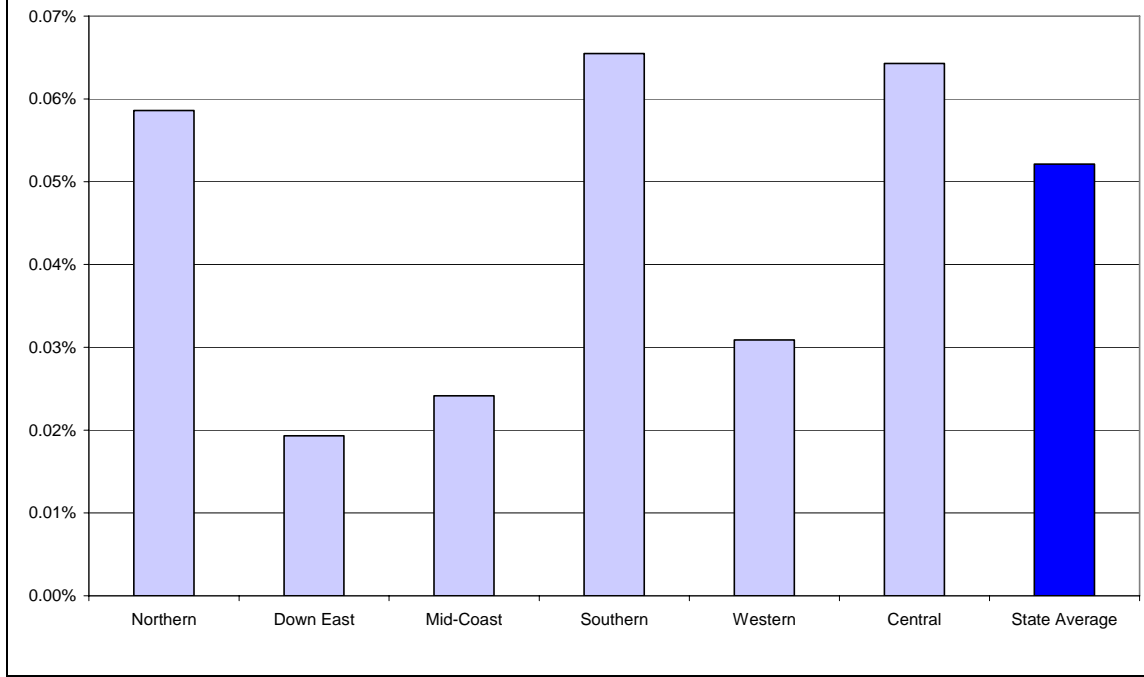
Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Expenditure" is reported as a percentage of personal income. "Local governments" are the number of sub-state governments per 10,000 people. The whole numbers to the right of the ratios are the state ranks.

**Table 18**  
**Parks and Recreation Payroll**  
**Local versus State**

	<u>Local</u>		<u>State</u>	
<b>Maine</b>	0.05%	38	0.02%	24
<b>United States</b>	0.08%		0.01%	
<b>Vermont</b>	0.02%	50	0.03%	3
<b>West Virginia</b>	0.04%	42	0.01%	30
<b>Mississippi</b>	0.11%	7	0.02%	12
<b>South Dakota</b>	0.07%	25	0.02%	14
<b>Arkansas</b>	0.05%	40	0.01%	37
<b>Montana</b>	0.03%	46	0.03%	8
<b>Alabama</b>	0.04%	43	0.03%	7
<b>Kentucky</b>	0.10%	13	0.02%	13
<b>North Dakota</b>	0.08%	20	0.01%	45
	0.05%		0.02%	
<b>New Hampshire</b>	0.03%	49	0.01%	38

Numbers are for FY2002 state and local governments separately, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Figure 5**  
**Local Parks and Recreation Payroll in Maine**

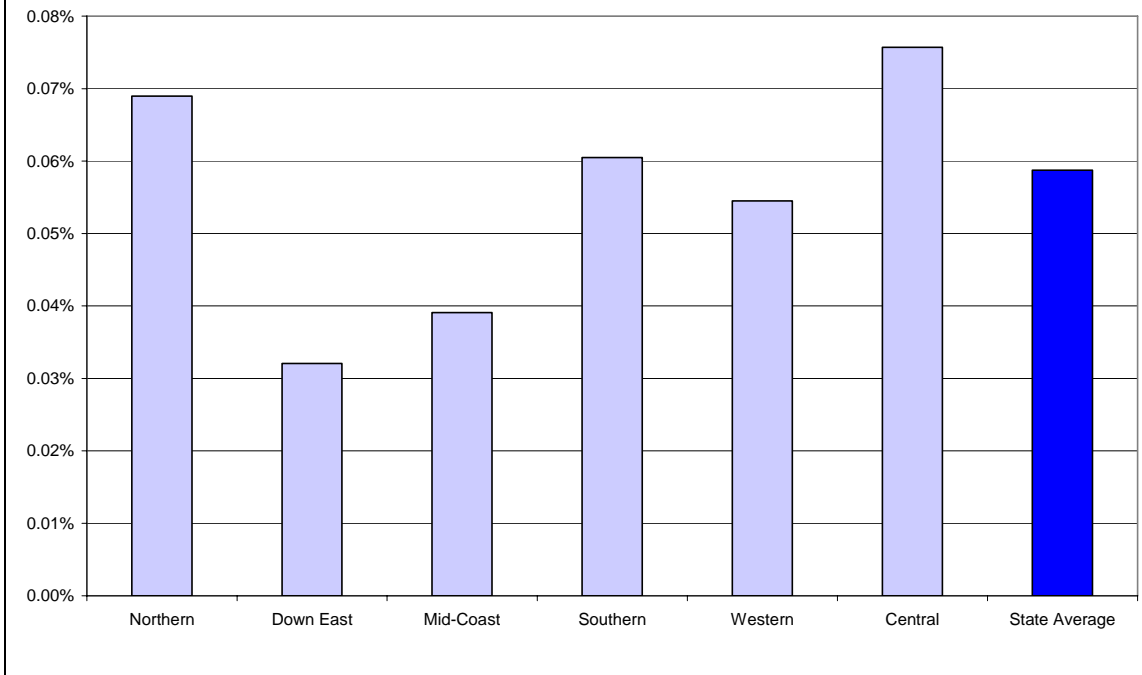


**Table 19  
Sewerage**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Net Expenditure</u>		<u>Local Governments</u>	
<b>Maine</b>	0.06%	19	0.49	14	0.29%	29	0.92	12
<b>United States</b>	0.06%		0.44		0.35%		0.41	
<b>Vermont</b>	0.03%	44	0.29	44	0.23%	43	1.02	11
<b>Mississippi</b>	0.02%	50	0.23	50	0.18%	48	0.38	30
<b>Wyoming</b>	0.04%	43	0.33	43	0.28%	32	1.20	5
<b>South Dakota</b>	0.04%	41	0.33	41	0.22%	46	1.83	1
<b>Montana</b>	0.05%	36	0.35	39	0.23%	42	1.09	7
<b>West Virginia</b>	0.06%	13	0.57	6	0.28%	30	1.02	10
<b>Arkansas</b>	0.05%	28	0.41	27	0.30%	28	0.71	16
<b>North Dakota</b>	0.03%	48	0.24	48	0.18%	47	1.29	4
<b>Iowa</b>	0.05%	33	0.40	28	0.37%	15	1.38	3
<b>Average</b>	0.04%		0.37		0.27%		0.97	
<b>New Hampshire</b>	0.03%	49	0.24	47	0.17%	50	0.51	23

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Net expenditure" is direct expenditure less transfers from federal government, and is reported as a percentage of personal income. "Local governments" are the number of sub-state governments per 10,000 people. The whole numbers to the right of the ratios are the state ranks.

**Figure 6**  
**Sewerage Payroll in Maine**

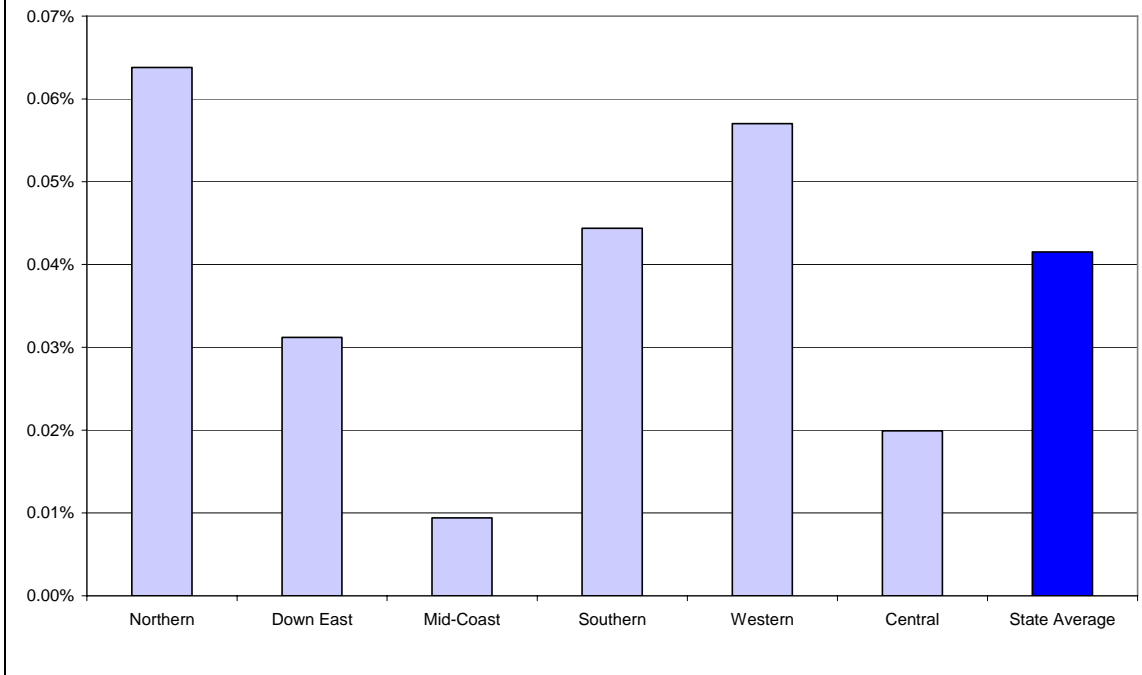


**Table 20**  
**Housing and Community Development**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Net Expenditure</u>		<u>Gross Expenditure</u>	
<b>Maine</b>	0.04%	19	0.37	18	0.06%	29	0.35%	17
<b>United States</b>	0.05%		0.41		0.10%		0.36%	
<b>Vermont</b>	0.02%	46	0.21	44	0.17%	7	0.49%	5
<b>Mississippi</b>	0.04%	25	0.31	28	-0.04%	49	0.22%	40
<b>Wyoming</b>	0.01%	50	0.12	50	0.00%	48	0.05%	50
<b>South Dakota</b>	0.02%	48	0.19	46	0.00%	47	0.25%	36
<b>Montana</b>	0.04%	29	0.29	30	0.10%	20	0.37%	16
<b>West Virginia</b>	0.04%	24	0.35	22	0.01%	45	0.26%	33
<b>Arkansas</b>	0.04%	27	0.36	20	0.06%	31	0.25%	37
<b>North Dakota</b>	0.05%	15	0.49	8	0.01%	46	0.32%	23
<b>Iowa</b>	0.03%	45	0.19	47	0.02%	42	0.18%	45
<b>Average</b>	0.03%		0.29		0.03%		0.25%	
<b>New Hampshire</b>	0.03%	38	0.32	26	0.13%	13	0.35%	19

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Net expenditure" is direct expenditure less transfers from federal government. Net and gross expenditure are reported as a percentage of personal income. "Local governments" are the number of sub-state governments per 10,000 people. The whole numbers to the right of the ratios are the state ranks.

**Figure 7**  
**Housing and Community Development Payroll in Maine**



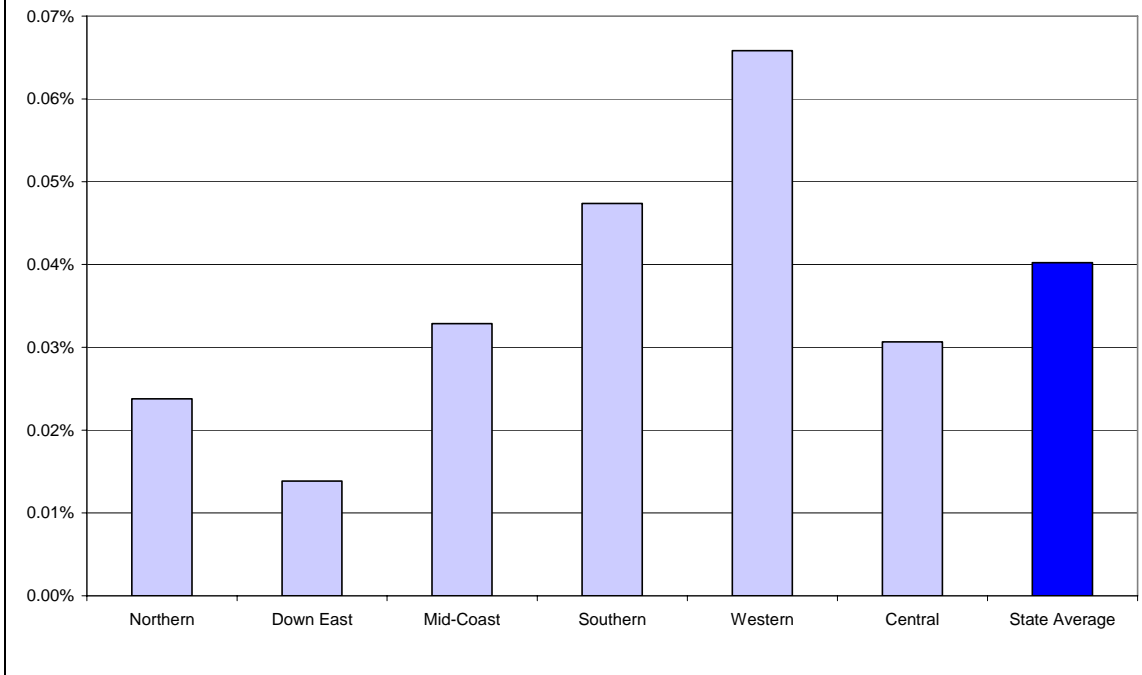
**Table 21**  
**Solid-Waste Management**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Expenditure</u>		<u>Local Governments</u>	
<b>Maine</b>	0.04%	19	0.39	23	0.28%	6	1.53	1
<b>United States</b>	0.05%		0.39		0.22%		0.29	
<b>Vermont</b>	0.02%	41	0.23	40	0.19%	29	1.33	2
<b>Mississippi</b>	0.04%	23	0.40	21	0.18%	30	0.58	15
<b>Wyoming</b>	0.06%	9	0.66	5	0.23%	20	1.32	3
<b>South Dakota</b>	0.03%	33	0.31	29	0.12%	46	1.08	7
<b>Montana</b>	0.07%	5	0.59	8	0.25%	11	0.98	9
<b>West Virginia</b>	0.03%	35	0.35	26	0.14%	40	0.73	10
<b>Arkansas</b>	0.05%	14	0.56	10	0.23%	18	0.70	13
<b>North Dakota</b>	0.05%	15	0.46	13	0.20%	25	1.17	5
<b>Iowa</b>	0.03%	29	0.31	28	0.18%	33	0.64	14
<b>Average</b>	0.04%		0.42		0.19%		0.78	
<b>New Hampshire</b>	0.04%	21	0.43	18	0.18%	32	1.24	4

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Expenditure" is reported as a percentage of personal income. "Local governments" are the number of sub-state governments per 10,000 people. The whole numbers to the right of the ratios are the state ranks.



**Figure 8**  
**Solid Waste Management Payroll in Maine**

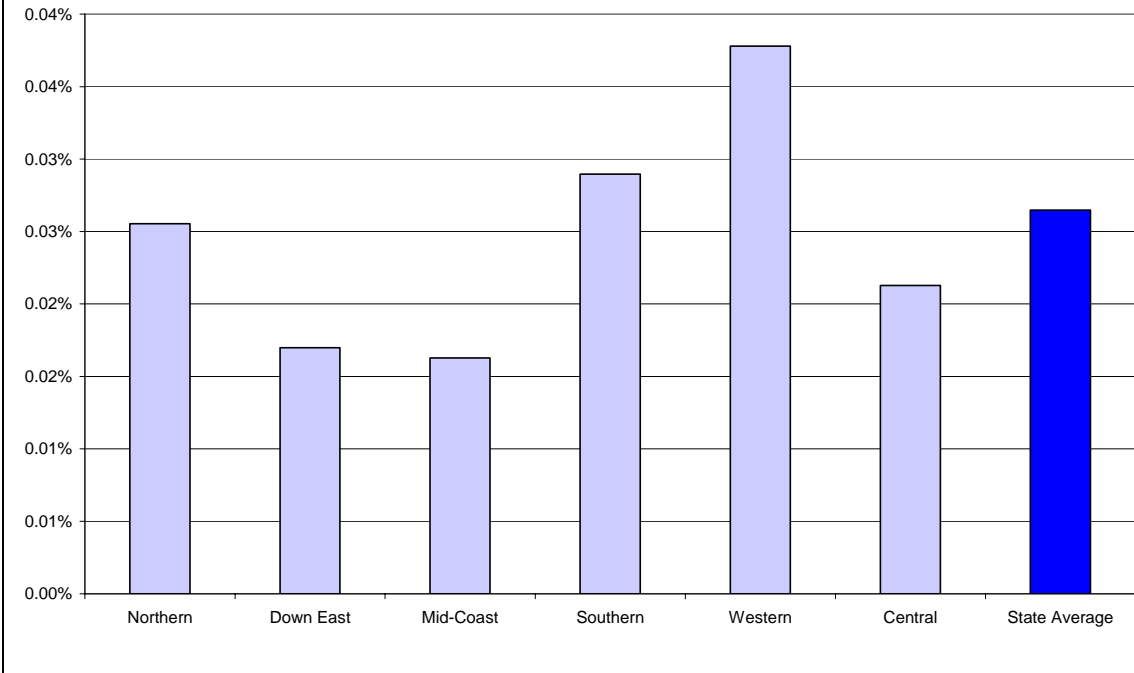


**Table 22**  
**Libraries**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Expenditure</u>		<u>Local Governments</u>	
<b>Maine</b>	0.03%	43	0.29	41	0.07%	40	0.84	6
<b>United States</b>	0.04%		0.43		0.09%		0.25	
<b>Vermont</b>	0.02%	47	0.22	47	0.08%	34	1.02	5
<b>Mississippi</b>	0.03%	40	0.32	38	0.07%	42	0.24	30
<b>Wyoming</b>	0.04%	19	0.55	9	0.15%	3	0.32	21
<b>South Dakota</b>	0.04%	28	0.37	26	0.08%	30	1.38	2
<b>Montana</b>	0.03%	36	0.34	32	0.08%	28	0.77	7
<b>West Virginia</b>	0.02%	48	0.20	48	0.07%	41	0.10	43
<b>Arkansas</b>	0.03%	45	0.28	45	0.09%	26	0.38	16
<b>North Dakota</b>	0.02%	49	0.17	49	0.06%	43	0.74	8
<b>Iowa</b>	0.05%	14	0.50	13	0.12%	9	1.60	1
<b>Average</b>	0.03%		0.34		0.09%		0.70	
<b>New Hampshire</b>	0.04%	25	0.47	20	0.06%	47	1.14	4

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Expenditure" is reported as a percentage of personal income. "Local governments" are the number of sub-state governments per 10,000 people. The whole numbers to the right of the ratios are the state ranks.

**Figure 9**  
**Libraries Payroll in Maine**



**Table 23  
Higher Education**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Net Expenditure</u>		<u>Net Contribution</u>	
<b>Maine</b>	0.71%	42	5.46	42	1.51%	41	0.77%	42
<b>United States</b>	0.88%		6.35		1.75%		1.05%	
<b>Vermont</b>	0.98%	26	7.99	15	2.29%	12	0.79%	41
<b>Mississippi</b>	1.46%	5	8.69	8	2.80%	5	1.76%	4
<b>Wyoming</b>	1.11%	15	9.94	4	2.24%	17	1.48%	9
<b>South Dakota</b>	0.93%	31	6.75	26	1.74%	35	0.94%	37
<b>Montana</b>	1.19%	10	7.17	21	2.22%	21	1.00%	30
<b>West Virginia</b>	0.99%	23	6.17	36	2.29%	13	1.37%	15
<b>Arkansas</b>	1.14%	13	6.82	24	2.23%	18	1.35%	16
<b>North Dakota</b>	1.46%	4	11.36	1	2.96%	3	1.53%	7
<b>Iowa</b>	1.61%	1	10.27	3	2.81%	4	1.52%	8
<b>Average</b>	1.29%		8.26		2.49%		1.41%	
<b>New Hampshire</b>	0.69%	43	5.65	41	1.26%	44	0.48%	50

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Net expenditure" is direct expenditure less transfers from federal government, and is reported as a percentage of personal income. "Net contribution" is net expenditure less charges (i.e., tuition, fees, etc.), and is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Table 24**  
**Higher Education Payroll**  
**Instructional versus Other**

	<u>Instructional</u>		<u>Other</u>	
<b>Maine</b>	0.23%	49	0.48%	29
<b>United States</b>	0.42%		0.46%	
<b>Vermont</b>	0.47%	25	0.51%	25
<b>Mississippi</b>	0.73%	3	0.73%	5
<b>Wyoming</b>	0.53%	16	0.58%	14
<b>South Dakota</b>	0.54%	15	0.39%	41
<b>Montana</b>	0.62%	5	0.57%	16
<b>West Virginia</b>	0.51%	19	0.48%	28
<b>Arkansas</b>	0.61%	7	0.53%	24
<b>North Dakota</b>	0.80%	1	0.66%	8
<b>Iowa</b>	0.79%	2	0.82%	3
<b>Average</b>	0.66%		0.63%	
<b>New Hampshire</b>	0.24%	47	0.45%	32

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Table 25**  
**Higher Education**  
**Per Full-Time-Equivalent Student**

	<u>Payroll</u>		<u>Net Expenditure</u>		<u>Net Contribution</u>	
<b>Maine</b>	\$8,430	31	\$18,035	23	\$9,253	39
<b>United States</b>	\$8,987		\$17,892		\$10,781	
<b>Vermont</b>	\$11,390	4	\$26,706	2	\$9,221	40
<b>Mississippi</b>	\$8,744	28	\$16,838	37	\$10,586	24
<b>Wyoming</b>	\$8,287	36	\$16,764	38	\$11,082	21
<b>South Dakota</b>	\$6,395	49	\$11,998	50	\$6,498	50
<b>Montana</b>	\$7,899	41	\$14,712	47	\$6,651	49
<b>West Virginia</b>	\$6,694	48	\$15,391	43	\$9,203	41
<b>Arkansas</b>	\$8,623	29	\$16,879	36	\$10,222	27
<b>North Dakota</b>	\$7,464	45	\$15,155	44	\$7,842	46
<b>Iowa</b>	\$11,951	2	\$20,820	10	\$11,228	19
<b>Average</b>	\$8,954		\$17,307		\$9,776	
<b>New Hampshire</b>	\$11,027	6	\$20,189	12	\$7,673	47

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division and U.S. Department of Education, National Center for Education Statistics. "Net expenditure" is expenditure less transfers from federal government. "Net contribution" is net expenditure less charges (i.e., tuition, fees, etc.). The whole numbers to the right of the ratios are the state ranks.

**Table 26  
Corrections**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Expenditure</u>		<u>Local Governments</u>	
<b>Maine</b>	0.21%	40	1.48	49	0.40%	47	0.13	24
<b>United States</b>	0.31%		2.45		0.62%		0.10	
<b>Vermont</b>	0.21%	43	1.58	46	0.43%	42	0.00	48
<b>Mississippi</b>	0.21%	41	2.00	36	0.50%	32	0.24	10
<b>Wyoming</b>	0.27%	25	2.80	10	0.71%	10	0.46	1
<b>South Dakota</b>	0.18%	47	1.69	41	0.46%	39	0.29	4
<b>Montana</b>	0.21%	42	1.71	40	0.55%	26	0.43	2
<b>West Virginia</b>	0.17%	48	1.78	38	0.47%	36	0.12	26
<b>Arkansas</b>	0.24%	34	2.25	24	0.58%	21	0.28	7
<b>North Dakota</b>	0.14%	50	1.32	50	0.35%	49	0.28	6
<b>Iowa</b>	0.20%	44	1.50	48	0.40%	45	0.29	5
<b>Average</b>	0.21%		1.85		0.49%		0.26	
<b>New Hampshire</b>	0.17%	49	1.57	47	0.26%	50	0.08	36

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Expenditure" is reported as a percentage of personal income. "Local governments" are the number of sub-state governments per 10,000 people. The whole numbers to the right of the ratios are the state ranks.

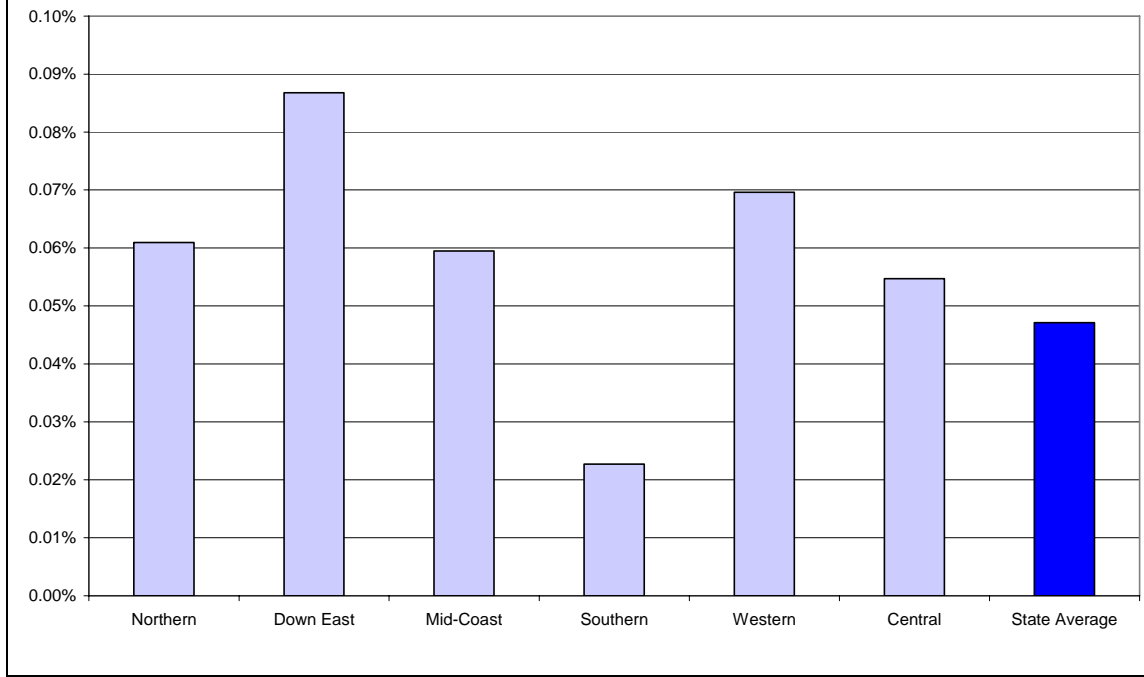
**Table 27**  
**Corrections Payroll**  
**Local versus State**

	<u>Local</u>		<u>State</u>	
<b>Maine</b>	0.05%	39	0.16%	34
<b>United States</b>	0.11%		0.20%	
<b>Vermont</b>	0.00%	50	0.21%	20
<b>Mississippi</b>	0.05%	38	0.16%	37
<b>Wyoming</b>	0.08%	22	0.19%	25
<b>South Dakota</b>	0.06%	33	0.12%	47
<b>Montana</b>	0.08%	26	0.13%	44
<b>West Virginia</b>	0.01%	45	0.16%	36
<b>Arkansas</b>	0.06%	32	0.18%	29
<b>North Dakota</b>	0.04%	42	0.11%	49
<b>Iowa</b>	0.04%	41	0.16%	39
<b>Average</b>	0.05%		0.16%	
<b>New Hampshire</b>	0.04%	40	0.13%	45

Numbers are for FY2002 state and local governments separately, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.



**Figure 10**  
**Local Corrections Payroll in Maine**



**Table 28**  
**Corrections**  
**Per Inmate**

	<u>Payroll</u>		<u>Expenditure</u>	
<b>Maine</b>	\$33,184	2	\$62,273	2
<b>United States</b>	\$14,851		\$28,466	
<b>Vermont</b>	\$28,717	4	\$59,636	3
<b>Mississippi</b>	\$8,750	47	\$15,996	49
<b>Wyoming</b>	\$20,376	18	\$32,171	26
<b>South Dakota</b>	\$8,494	48	\$20,500	44
<b>Montana</b>	\$18,893	22	\$30,753	29
<b>West Virginia</b>	\$21,415	12	\$57,348	4
<b>Arkansas</b>	\$12,085	41	\$25,089	39
<b>North Dakota</b>	\$16,775	26	\$39,496	16
<b>Iowa</b>	\$13,730	35	\$27,309	33
<b>Average</b>	\$13,186		\$26,490	
<b>New Hampshire</b>	\$23,308	10	\$35,446	21

Numbers are for FY2002 state and local governments combined, and are estimated from data from the U.S. Census Bureau, Governments Division and U.S. Department of Justice, Bureau of Justice Statistics. The whole numbers to the right of the ratios are the state ranks.

**Table 29  
Natural Resources**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Net Expenditure</u>	
<b>Maine</b>	0.14%	13	1.03	12	0.32%	14
<b>United States</b>	0.08%		0.66		0.22%	
<b>Vermont</b>	0.15%	12	0.96	16	0.21%	29
<b>Mississippi</b>	0.17%	7	1.35	8	0.28%	19
<b>Wyoming</b>	0.20%	5	1.75	5	0.79%	1
<b>South Dakota</b>	0.16%	10	1.43	7	0.44%	7
<b>Montana</b>	0.24%	4	1.81	4	0.78%	2
<b>West Virginia</b>	0.18%	6	1.35	9	0.24%	25
<b>Arkansas</b>	0.10%	23	0.79	21	0.27%	20
<b>North Dakota</b>	0.29%	2	2.69	2	0.62%	3
<b>Iowa</b>	0.11%	19	0.79	20	0.27%	21
<b>Average</b>	0.15%		1.21		0.35%	
<b>New Hampshire</b>	0.05%	47	0.50	41	0.09%	47

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Net expenditure" is direct expenditure less transfers from federal government, and is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Table 30**  
**Social-Insurance Administration**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Net Expenditure</u>		<u>Gross Expenditure</u>	
<b>Maine</b>	0.05%	14	0.39	13	0.02%	14	0.07%	24
<b>United States</b>	0.04%		0.31		0.01%		0.06%	
<b>Vermont</b>	0.07%	9	0.51	7	-0.02%	47	0.01%	50
<b>Mississippi</b>	0.05%	17	0.37	19	0.02%	18	0.11%	7
<b>Wyoming</b>	0.06%	10	0.56	6	0.10%	2	0.19%	1
<b>South Dakota</b>	0.04%	26	0.37	20	0.01%	19	0.09%	10
<b>Montana</b>	0.11%	1	0.77	1	0.00%	25	0.06%	30
<b>West Virginia</b>	0.05%	13	0.42	12	0.00%	33	0.07%	18
<b>Arkansas</b>	0.06%	12	0.38	14	0.00%	39	0.07%	25
<b>North Dakota</b>	0.08%	5	0.66	4	-0.01%	45	0.03%	44
<b>Iowa</b>	0.02%	48	0.11	49	0.04%	6	0.13%	4
<b>Average</b>	0.05%		0.38		0.02%		0.09%	
<b>New Hampshire</b>	0.03%	34	0.31	25	0.00%	40	0.05%	32

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Net expenditure" is direct expenditure less transfers from federal government. Net and gross expenditure are reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Table 31**  
**Social Insurance Administration**  
**Per Unemployed**

	<u>Payroll</u>		<u>Gross Expenditure</u>	
<b>Maine</b>	\$666	13	\$894	14
<b>United States</b>	\$452		\$642	
<b>Vermont</b>	\$974	3	\$212	48
<b>Mississippi</b>	\$370	30	\$829	17
<b>Wyoming</b>	\$916	5	\$2,654	1
<b>South Dakota</b>	\$537	18	\$1,291	8
<b>Montana</b>	\$1,135	2	\$638	32
<b>West Virginia</b>	\$514	20	\$726	26
<b>Arkansas</b>	\$546	17	\$664	30
<b>North Dakota</b>	\$1,192	1	\$463	38
<b>Iowa</b>	\$213	47	\$1,727	3
<b>Average</b>	\$523		\$979	
<b>New Hampshire</b>	\$438	24	\$771	19

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division and U.S. Department of Labor, Bureau of Labor Statistics. The whole numbers to the right of the ratios are the state ranks.

**Table 32  
Other Education**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Expenditure</u>	
<b>Maine</b>	0.05%	29	0.33	33	0.35%	22
<b>United States</b>	0.04%		0.34		0.30%	
<b>Vermont</b>	0.12%	3	0.89	3	0.52%	8
<b>Mississippi</b>	0.07%	15	0.53	16	0.48%	9
<b>Wyoming</b>	0.04%	33	0.36	30	0.39%	15
<b>South Dakota</b>	0.06%	23	0.51	18	0.28%	33
<b>Montana</b>	0.06%	19	0.48	19	0.69%	1
<b>West Virginia</b>	0.11%	4	0.78	6	0.56%	5
<b>Arkansas</b>	0.15%	2	1.04	2	0.62%	2
<b>North Dakota</b>	0.06%	24	0.46	21	0.31%	29
<b>Iowa</b>	0.06%	20	0.40	26	0.41%	14
<b>Average</b>	0.09%		0.64		0.49%	
<b>New Hampshire</b>	0.03%	43	0.26	37	0.16%	46

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Expenditure" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Table 33  
Highways**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Net Expenditure</u>		<u>Local Governments</u>	
<b>Maine</b>	0.43%	5	3.44	4	1.26%	21	2.47	7
<b>United States</b>	0.24%		1.89		0.96%		0.81	
<b>Vermont</b>	0.43%	4	3.32	6	1.36%	14	3.82	3
<b>Mississippi</b>	0.30%	17	2.86	11	1.32%	18	0.85	21
<b>Wyoming</b>	0.58%	2	5.09	2	1.74%	4	1.78	11
<b>South Dakota</b>	0.38%	8	3.33	5	1.76%	3	4.28	1
<b>Montana</b>	0.53%	3	3.64	3	1.12%	25	1.38	18
<b>West Virginia</b>	0.42%	6	3.26	8	1.41%	12	0.74	24
<b>Arkansas</b>	0.33%	15	2.72	15	1.40%	13	1.28	19
<b>North Dakota</b>	0.39%	7	3.24	9	1.45%	10	4.01	2
<b>Iowa</b>	0.37%	9	2.85	12	1.71%	5	2.05	8
<b>Average</b>	0.38%		3.08		1.48%		1.71	
<b>New Hampshire</b>	0.29%	18	2.78	13	0.84%	38	1.62	14

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Net expenditure" is direct expenditure less transfers from federal government, and is reported as a percentage of personal income. "Local governments" are the number of sub-state governments per 10,000 people. The whole numbers to the right of the ratios are the state ranks.

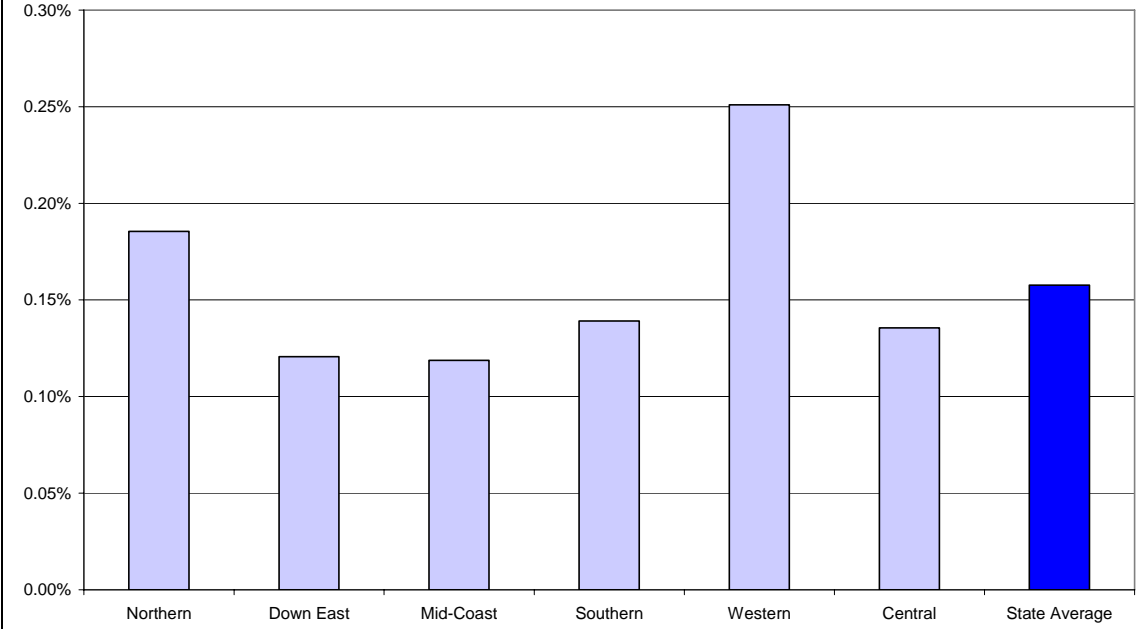
**Table 34**  
**Highways Payroll**  
**Local versus State**

	<u>Local</u>		<u>State</u>	
<b>Maine</b>	0.16%	20	0.27%	5
<b>United States</b>	0.12%		0.11%	
<b>Vermont</b>	0.18%	10	0.25%	6
<b>Mississippi</b>	0.17%	14	0.13%	26
<b>Wyoming</b>	0.17%	13	0.41%	2
<b>South Dakota</b>	0.20%	3	0.18%	11
<b>Montana</b>	0.18%	11	0.36%	4
<b>West Virginia</b>	0.05%	49	0.37%	3
<b>Arkansas</b>	0.14%	23	0.20%	8
<b>North Dakota</b>	0.20%	4	0.19%	10
<b>Iowa</b>	0.24%	1	0.13%	28
<b>Average</b>	0.17%		0.21%	
<b>New Hampshire</b>	0.13%	26	0.16%	16

Numbers are for FY2002 state and local governments separately, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.



**Figure 11**  
**Local Highways Payroll in Maine**



**Table 35**  
**Highways**  
**Per 1,000 Vehicle Miles**

	<u>Payroll</u>		<u>Net Expenditure</u>	
<b>Maine</b>	\$10.69	8	\$31.56	19
<b>United States</b>	\$7.41		\$30.10	
<b>Vermont</b>	\$8.25	24	\$25.99	34
<b>Mississippi</b>	\$5.33	44	\$23.51	41
<b>Wyoming</b>	\$10.17	10	\$30.61	22
<b>South Dakota</b>	\$9.18	14	\$42.12	8
<b>Montana</b>	\$11.69	4	\$24.52	37
<b>West Virginia</b>	\$9.08	15	\$30.53	23
<b>Arkansas</b>	\$7.12	31	\$29.82	27
<b>North Dakota</b>	\$9.03	16	\$33.74	17
<b>Iowa</b>	\$9.85	11	\$45.86	6
<b>Average</b>	\$8.20		\$31.83	
<b>New Hampshire</b>	\$10.29	9	\$29.86	26

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division and U.S. Department of Transportation, Office of Highway Policy Information. "Net expenditure" is direct expenditure less transfers from federal government. The whole numbers to the right of the ratios are the state ranks.

**Table 36  
Public Welfare**

	<b>Payroll</b>		<b>FTE Employment</b>		<b>Net Expenditure</b>		<b>Gross Expenditure</b>	
<b>Maine</b>	0.22%	20	1.89	21	1.71%	4	4.90%	5
<b>United States</b>	0.21%		1.83		1.08%		3.16%	
<b>Vermont</b>	0.25%	11	1.91	19	1.24%	18	4.11%	11
<b>Mississippi</b>	0.12%	45	1.16	45	0.75%	40	5.01%	2
<b>Wyoming</b>	0.21%	22	1.93	18	0.83%	38	2.45%	39
<b>South Dakota</b>	0.17%	33	1.67	28	0.54%	45	2.96%	32
<b>Montana</b>	0.27%	8	2.32	8	0.34%	48	3.00%	31
<b>West Virginia</b>	0.19%	29	1.78	24	1.29%	14	4.97%	3
<b>Arkansas</b>	0.17%	32	1.54	31	1.20%	21	4.08%	12
<b>North Dakota</b>	0.23%	14	2.17	10	1.38%	12	3.92%	15
<b>Iowa</b>	0.17%	31	1.38	37	1.27%	15	3.28%	24
<b>Average</b>	0.18%		1.58		1.05%		3.96%	
<b>New Hampshire</b>	0.26%	9	3.02	3	1.06%	28	2.34%	44

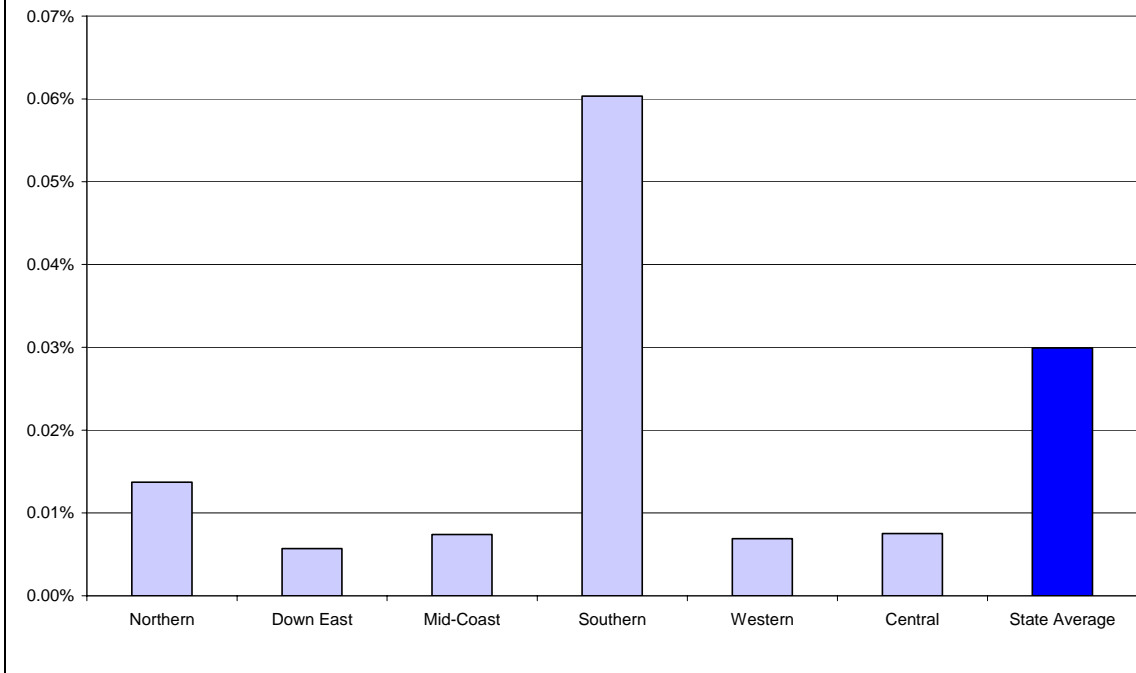
Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Net expenditure" is direct expenditure less transfers from federal government. Net and gross expenditure are reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Table 37**  
**Public Welfare Payroll**  
**Local versus State**

	<u>Local</u>		<u>State</u>	
<b>Maine</b>	0.03%	27	0.19%	13
<b>United States</b>	0.12%		0.10%	
<b>Vermont</b>	0.00%	50	0.25%	2
<b>Mississippi</b>	0.01%	42	0.11%	30
<b>Wyoming</b>	0.01%	46	0.20%	9
<b>South Dakota</b>	0.03%	30	0.14%	23
<b>Montana</b>	0.05%	15	0.22%	7
<b>West Virginia</b>	0.00%	49	0.19%	12
<b>Arkansas</b>	0.00%	47	0.17%	16
<b>North Dakota</b>	0.15%	9	0.08%	41
<b>Iowa</b>	0.04%	21	0.13%	27
<b>Average</b>	0.03%		0.15%	
<b>New Hampshire</b>	0.16%	8	0.11%	32

Numbers are for FY2002 state and local governments separately, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Figure 12**  
**Local Public Welfare Payroll in Maine**



**Table 38**  
**Public Welfare**  
**Per Single Mother**

	<u>Payroll</u>		<u>Net Expenditure</u>	
<b>Maine</b>	\$1,324	29	\$10,526	10
<b>United States</b>	\$1,426		\$7,184	
<b>Vermont</b>	\$2,032	8	\$9,918	13
<b>Mississippi</b>	\$416	50	\$2,575	48
<b>Wyoming</b>	\$1,822	14	\$7,227	26
<b>South Dakota</b>	\$1,340	27	\$4,313	42
<b>Montana</b>	\$2,081	7	\$2,599	47
<b>West Virginia</b>	\$1,067	34	\$7,202	27
<b>Arkansas</b>	\$836	38	\$5,882	34
<b>North Dakota</b>	\$1,791	16	\$10,886	8
<b>Iowa</b>	\$1,347	26	\$9,958	12
<b>Average</b>	\$1,010		\$5,865	
<b>New Hampshire</b>	\$2,328	5	\$9,330	16

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. The number of single mothers is from the 2000 U.S. Census. "Net expenditure" is expenditure less transfers from federal government. The whole numbers to the right of the ratios are the state ranks.

**Table 39**  
**Financial Administration**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Expenditure</u>		<u>Local Governments</u>	
<b>Maine</b>	0.21%	12	1.81	10	0.49%	13	3.22	6
<b>United States</b>	0.17%		1.33		0.37%		0.96	
<b>Vermont</b>	0.21%	10	1.74	12	0.68%	5	4.20	4
<b>Mississippi</b>	0.16%	33	1.29	33	0.34%	31	0.88	25
<b>Wyoming</b>	0.23%	7	2.25	2	0.48%	15	1.96	9
<b>South Dakota</b>	0.19%	19	1.75	11	0.45%	19	12.13	2
<b>Montana</b>	0.23%	8	1.88	9	0.79%	2	1.55	14
<b>West Virginia</b>	0.23%	6	2.13	4	0.73%	4	1.03	23
<b>Arkansas</b>	0.17%	24	1.44	20	0.47%	17	1.23	20
<b>North Dakota</b>	0.24%	5	2.09	6	0.50%	12	19.79	1
<b>Iowa</b>	0.17%	27	1.35	27	0.43%	21	1.43	17
<b>Average</b>	0.19%		1.60		0.50%		2.81	
<b>New Hampshire</b>	0.11%	50	1.12	45	0.31%	38	1.75	12

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Expenditure" is reported as a percentage of personal income. "Local governments" are the number of sub-state governments per 10,000 people. The whole numbers to the right of the ratios are the state ranks.

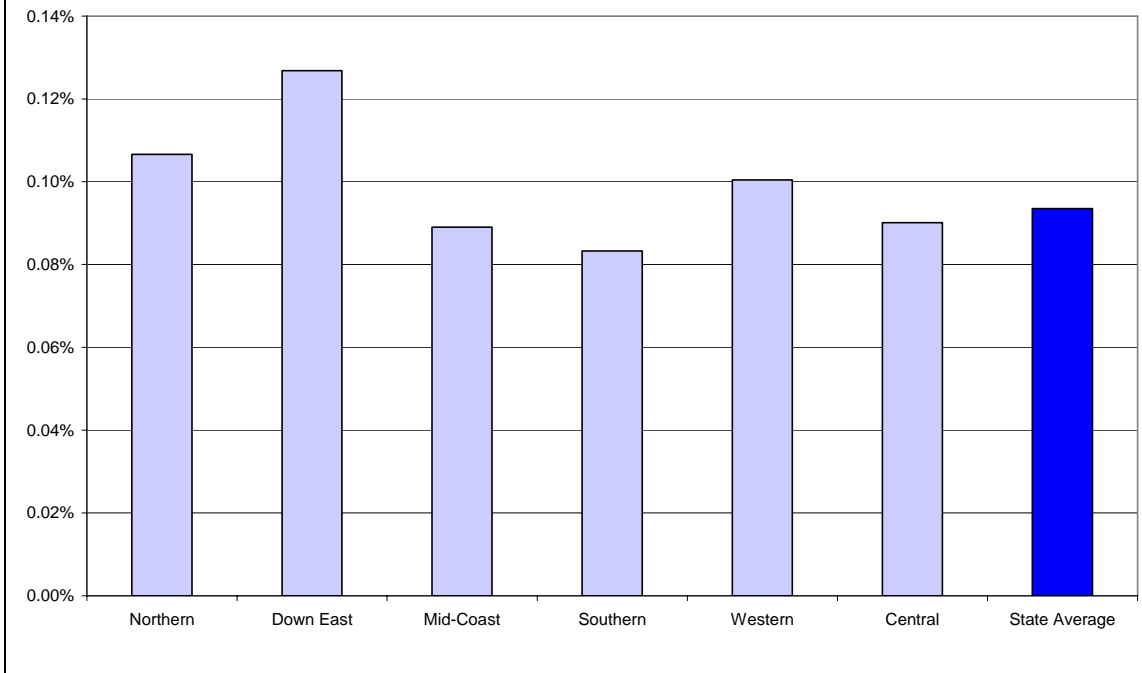
**Table 40**  
**Financial Administration Payroll**  
**Local versus State**

	<u>Local</u>		<u>State</u>	
<b>Maine</b>	0.09%	26	0.12%	10
<b>United States</b>	0.09%		0.08%	
<b>Vermont</b>	0.08%	34	0.13%	7
<b>Mississippi</b>	0.10%	20	0.06%	38
<b>Wyoming</b>	0.12%	11	0.11%	11
<b>South Dakota</b>	0.13%	3	0.06%	44
<b>Montana</b>	0.09%	31	0.14%	6
<b>West Virginia</b>	0.08%	33	0.15%	4
<b>Arkansas</b>	0.08%	36	0.09%	16
<b>North Dakota</b>	0.12%	9	0.12%	8
<b>Iowa</b>	0.10%	19	0.07%	36
<b>Average</b>	0.10%		0.09%	
<b>New Hampshire</b>	0.07%	43	0.04%	50

Numbers are for FY2002 state and local governments separately, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.



**Figure 13**  
**Local Financial Administration Payroll in Maine**



**Table 41**  
**Other Government Administration**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Expenditure</u>		<u>Local Governments</u>	
<b>Maine</b>	0.17%	6	1.32	5	0.21%	29	3.47	7
<b>United States</b>	0.13%		0.94		0.20%		1.21	
<b>Vermont</b>	0.22%	2	1.84	2	0.17%	39	3.92	6
<b>Mississippi</b>	0.13%	22	0.96	31	0.25%	16	1.26	24
<b>Wyoming</b>	0.16%	10	1.52	3	0.54%	1	2.30	11
<b>South Dakota</b>	0.14%	18	1.09	16	0.22%	26	13.89	2
<b>Montana</b>	0.17%	8	1.27	7	0.26%	15	1.81	17
<b>West Virginia</b>	0.11%	36	0.88	38	0.33%	5	1.51	22
<b>Arkansas</b>	0.12%	33	0.93	34	0.18%	36	1.89	15
<b>North Dakota</b>	0.10%	42	0.87	39	0.16%	45	24.32	1
<b>Iowa</b>	0.14%	19	1.05	21	0.17%	41	3.42	8
<b>Average</b>	0.14%		1.05		0.23%		3.84	
<b>New Hampshire</b>	0.10%	41	0.97	30	0.22%	24	1.74	20

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Expenditure" is reported as a percentage of personal income. "Local governments" are the number of sub-state governments per 10,000 people. The whole numbers to the right of the ratios are the state ranks.

**Table 42**  
**Other Government Administration Expenditure**  
**Legislative versus Other**

	<u>Legislative</u>		<u>Other</u>	
<b>Maine</b>	0.07%	3	0.14%	42
<b>United States</b>	0.03%		0.18%	
<b>Vermont</b>	0.04%	10	0.13%	43
<b>Mississippi</b>	0.03%	27	0.22%	16
<b>Wyoming</b>	0.04%	15	0.50%	1
<b>South Dakota</b>	0.03%	28	0.19%	23
<b>Montana</b>	0.05%	8	0.21%	17
<b>West Virginia</b>	0.05%	6	0.28%	6
<b>Arkansas</b>	0.05%	7	0.13%	44
<b>North Dakota</b>	0.04%	11	0.12%	47
<b>Iowa</b>	0.03%	25	0.14%	41
<b>Average</b>	0.04%		0.19%	
<b>New Hampshire</b>	0.02%	39	0.20%	19

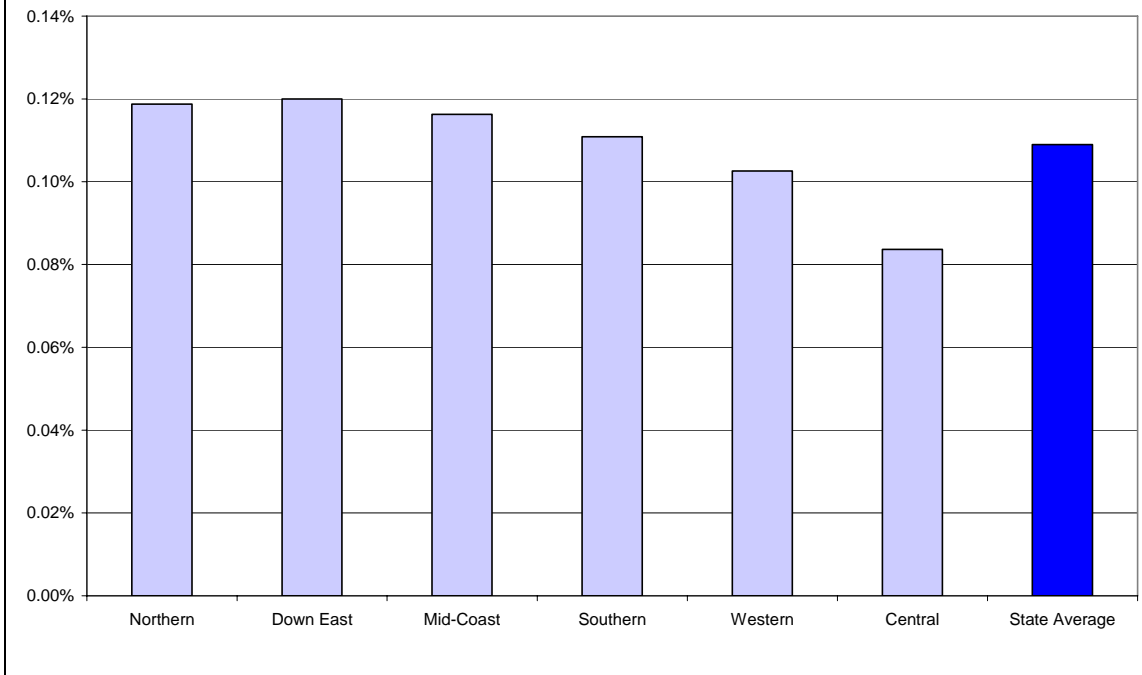
Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Expenditure" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Table 43**  
**Other Government Administration Payroll**  
**Local versus State**

	<u>Local</u>		<u>State</u>	
<b>Maine</b>	0.11%	15	0.06%	6
<b>United States</b>	0.10%		0.03%	
<b>Vermont</b>	0.09%	26	0.13%	2
<b>Mississippi</b>	0.10%	19	0.03%	28
<b>Wyoming</b>	0.11%	13	0.04%	13
<b>South Dakota</b>	0.09%	30	0.06%	9
<b>Montana</b>	0.10%	18	0.06%	8
<b>West Virginia</b>	0.07%	47	0.04%	14
<b>Arkansas</b>	0.08%	34	0.03%	20
<b>North Dakota</b>	0.07%	48	0.04%	17
<b>Iowa</b>	0.10%	21	0.03%	22
<b>Average</b>	0.09%		0.04%	
<b>New Hampshire</b>	0.08%	42	0.03%	30

Numbers are for FY2002 state and local governments separately, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Figure 14**  
**Local Other Government Administration Payroll in Maine**



**Table 44  
Health**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Net Expenditure</u>		<u>Local Governments</u>	
<b>Maine</b>	0.16%	32	1.18	33	0.87%	2	0.98	1
<b>United States</b>	0.19%		1.49		0.45%		0.21	
<b>Vermont</b>	0.15%	36	1.05	40	0.05%	49	0.41	11
<b>Mississippi</b>	0.16%	33	1.14	36	0.21%	42	0.20	31
<b>Wyoming</b>	0.22%	16	1.95	10	0.48%	20	0.86	3
<b>South Dakota</b>	0.14%	39	1.10	39	0.26%	35	0.95	2
<b>Montana</b>	0.23%	11	1.85	12	0.85%	3	0.75	5
<b>West Virginia</b>	0.14%	38	1.04	41	0.27%	33	0.29	20
<b>Arkansas</b>	0.22%	13	1.80	13	0.35%	28	0.30	19
<b>North Dakota</b>	0.34%	2	2.78	3	0.19%	45	0.80	4
<b>Iowa</b>	0.10%	45	0.91	43	0.17%	46	0.48	8
<b>Average</b>	0.17%		1.35		0.28%		0.43	
<b>New Hampshire</b>	0.10%	46	0.91	42	0.24%	37	0.61	6

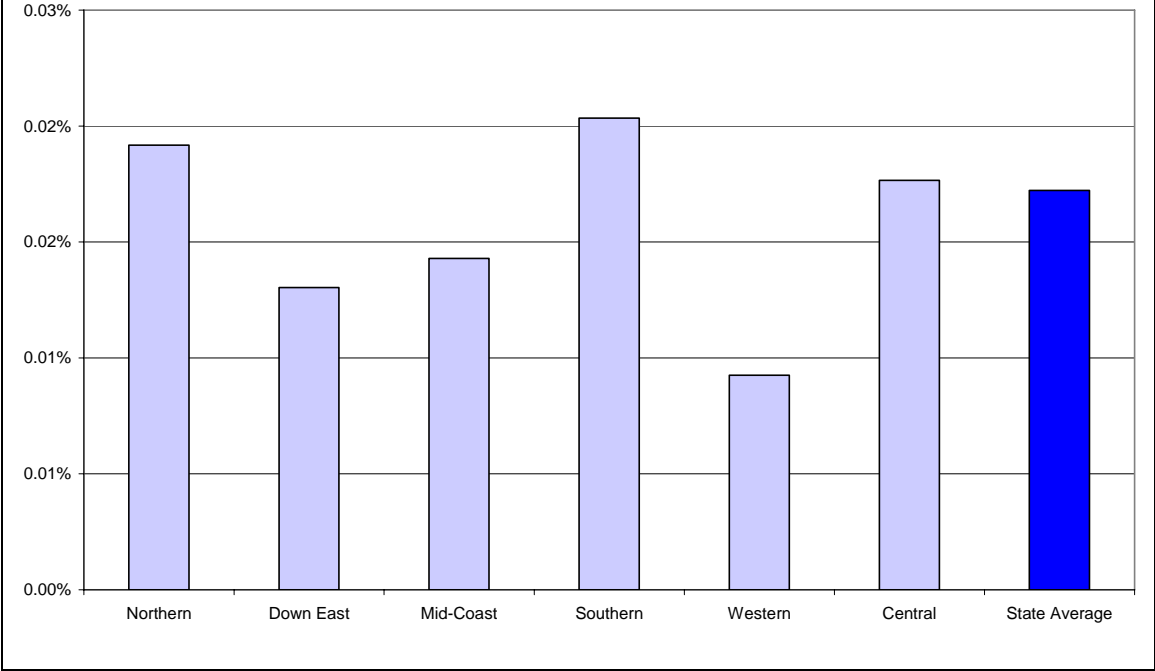
Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Net expenditure" is direct expenditure less transfers from federal government, and is reported as a percentage of personal income. "Local governments" are the number of sub-state governments per 10,000 people. The whole numbers to the right of the ratios are the state ranks.

**Table 45**  
**Health Payroll**  
**Local versus State**

	<u>Local</u>		<u>State</u>	
<b>Maine</b>	0.02%	45	0.15%	11
<b>United States</b>	0.11%		0.08%	
<b>Vermont</b>	0.01%	50	0.14%	15
<b>Mississippi</b>	0.01%	48	0.15%	12
<b>Wyoming</b>	0.08%	22	0.13%	17
<b>South Dakota</b>	0.03%	42	0.11%	22
<b>Montana</b>	0.11%	12	0.12%	21
<b>West Virginia</b>	0.07%	27	0.06%	37
<b>Arkansas</b>	0.01%	47	0.21%	6
<b>North Dakota</b>	0.10%	16	0.24%	3
<b>Iowa</b>	0.08%	24	0.02%	49
<b>Average</b>	0.05%		0.12%	
<b>New Hampshire</b>	0.02%	46	0.09%	25

Numbers are for FY2002 state and local governments separately, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Figure 15**  
**Local Health Payroll in Maine**





**Table 46**  
**Judicial and Legal**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Expenditure</u>		<u>Local Governments</u>	
<b>Maine</b>	0.11%	50	0.72	50	0.22%	48	0.23	34
<b>United States</b>	0.21%		1.41		0.35%		0.36	
<b>Vermont</b>	0.15%	39	1.02	43	0.23%	43	0.28	31
<b>Mississippi</b>	0.14%	43	0.89	48	0.24%	41	0.96	7
<b>Wyoming</b>	0.19%	19	1.49	12	0.37%	13	1.58	2
<b>South Dakota</b>	0.14%	41	1.03	42	0.21%	49	1.05	5
<b>Montana</b>	0.17%	29	1.20	30	0.34%	17	1.36	3
<b>West Virginia</b>	0.16%	35	1.18	31	0.29%	30	0.80	9
<b>Arkansas</b>	0.15%	38	1.10	37	0.31%	23	1.05	6
<b>North Dakota</b>	0.17%	31	1.23	28	0.30%	28	1.91	1
<b>Iowa</b>	0.17%	28	1.07	38	0.35%	16	0.43	22
<b>Average</b>	0.16%		1.08		0.30%		0.91	
<b>New Hampshire</b>	0.11%	49	0.92	47	0.22%	47	0.26	32

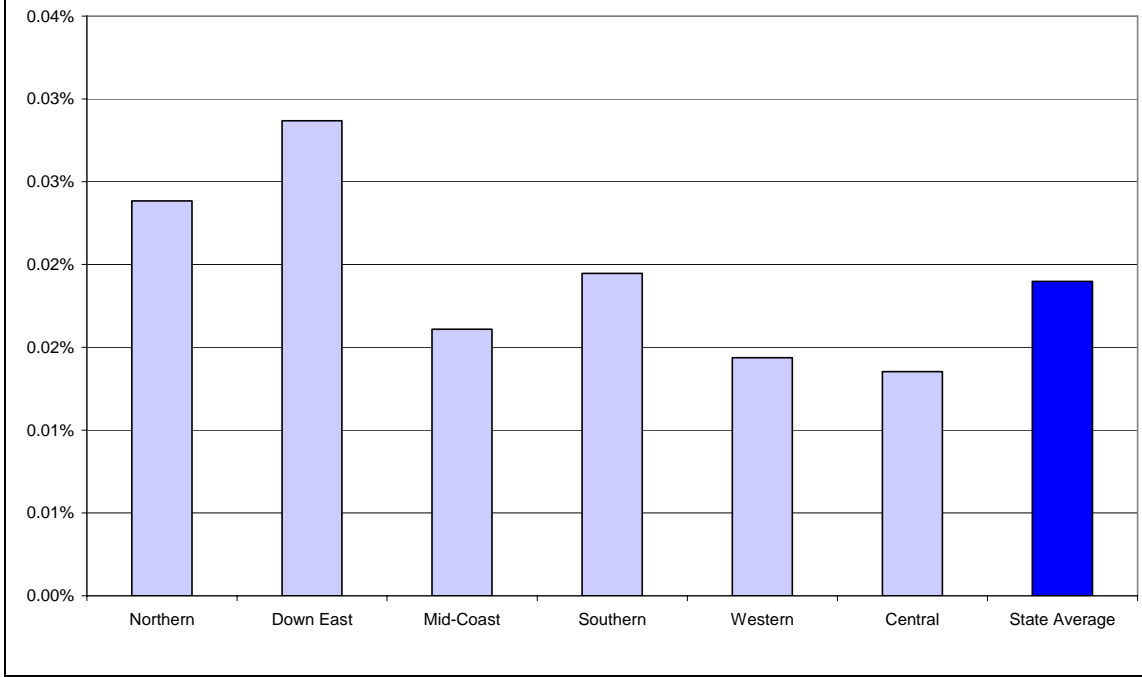
Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Expenditure" is reported as a percentage of personal income. "Local governments" are the number of sub-state governments per 10,000 people. The whole numbers to the right of the ratios are the state ranks.

**Table 47**  
**Judicial and Legal Payroll**  
**Local versus State**

	<u>Local</u>		<u>State</u>	
<b>Maine</b>	0.02%	44	0.09%	27
<b>United States</b>	0.12%		0.09%	
<b>Vermont</b>	0.01%	48	0.14%	11
<b>Mississippi</b>	0.08%	22	0.06%	37
<b>Wyoming</b>	0.08%	23	0.11%	21
<b>South Dakota</b>	0.05%	36	0.10%	24
<b>Montana</b>	0.12%	11	0.05%	41
<b>West Virginia</b>	0.06%	34	0.10%	22
<b>Arkansas</b>	0.06%	33	0.09%	26
<b>North Dakota</b>	0.05%	35	0.12%	17
<b>Iowa</b>	0.04%	39	0.13%	12
<b>Average</b>	0.06%		0.10%	
<b>New Hampshire</b>	0.03%	43	0.09%	28

Numbers are for FY2002 state and local governments separately, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Figure 16**  
**Local Judicial and Legal Payroll in Maine**



**Table 48**  
**Judicial and Legal**  
**Per Crime**

	<u>Payroll</u>		<u>Expenditure</u>	
<b>Maine</b>	\$1,151	35	\$2,321	28
<b>United States</b>	\$1,545		\$2,633	
<b>Vermont</b>	\$1,682	16	\$2,617	24
<b>Mississippi</b>	\$759	48	\$1,321	49
<b>Wyoming</b>	\$1,658	17	\$3,234	11
<b>South Dakota</b>	\$1,691	14	\$2,476	25
<b>Montana</b>	\$1,183	32	\$2,342	27
<b>West Virginia</b>	\$1,513	23	\$2,730	20
<b>Arkansas</b>	\$849	46	\$1,744	40
<b>North Dakota</b>	\$1,886	8	\$3,277	10
<b>Iowa</b>	\$1,428	26	\$2,915	16
<b>Average</b>	\$1,157		\$2,178	
<b>New Hampshire</b>	\$1,721	13	\$3,378	8

Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division and U.S. Department of Justice, Bureau of Justice Statistics. The whole numbers to the right of the ratios are the state ranks.

**Table 49**  
**General Public Buildings Expenditure**

	<u>State and Local</u>		<u>Local</u>		<u>State</u>	
<b>Maine</b>	0.24%	6	0.07%	31	0.16%	7
<b>United States</b>	0.12%		0.09%		0.03%	
<b>Vermont</b>	0.30%	4	0.02%	50	0.27%	2
<b>Mississippi</b>	0.15%	19	0.09%	20	0.05%	9
<b>Wyoming</b>	0.18%	9	0.16%	3	0.03%	21
<b>South Dakota</b>	0.10%	36	0.08%	30	0.02%	27
<b>Montana</b>	0.11%	31	0.06%	38	0.04%	10
<b>West Virginia</b>	0.12%	24	0.10%	19	0.03%	20
<b>Arkansas</b>	0.09%	37	0.06%	40	0.03%	17
<b>North Dakota</b>	0.10%	34	0.09%	25	0.02%	35
<b>Iowa</b>	0.08%	45	0.07%	35	0.01%	47
<b>Average</b>	0.10%		0.08%		0.04%	
<b>New Hampshire</b>	0.07%	46	0.06%	41	0.01%	46

Numbers are for FY2002 and are derived from data from the U.S. Census Bureau, Governments Division. "Expenditure" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Table 50**  
**Other and Unallocable**

	<u>Payroll</u>		<u>FTE Employment</u>		<u>Net Expenditure</u>		<u>Local Governments</u>	
<b>Maine</b>	0.18%	34	1.40	35	1.44%	6	1.78	6
<b>United States</b>	0.22%		1.59		0.79%		0.53	
<b>Vermont</b>	0.26%	11	2.04	13	0.43%	35	1.22	14
<b>Mississippi</b>	0.19%	30	1.52	29	0.46%	32	0.55	25
<b>Wyoming</b>	0.25%	13	2.42	6	-0.68%	50	2.24	3
<b>South Dakota</b>	0.28%	6	2.43	5	0.28%	45	2.30	2
<b>Montana</b>	0.24%	15	1.88	15	0.30%	43	1.70	7
<b>West Virginia</b>	0.22%	22	1.70	22	0.38%	39	0.60	22
<b>Arkansas</b>	0.18%	32	1.38	36	-0.33%	49	0.62	19
<b>North Dakota</b>	0.33%	4	2.54	4	0.52%	27	2.48	1
<b>Iowa</b>	0.23%	19	1.64	26	0.54%	25	1.31	11
<b>Average</b>	0.22%		1.72		0.25%		1.09	
<b>New Hampshire</b>	0.20%	28	2.02	14	0.43%	34	1.22	12

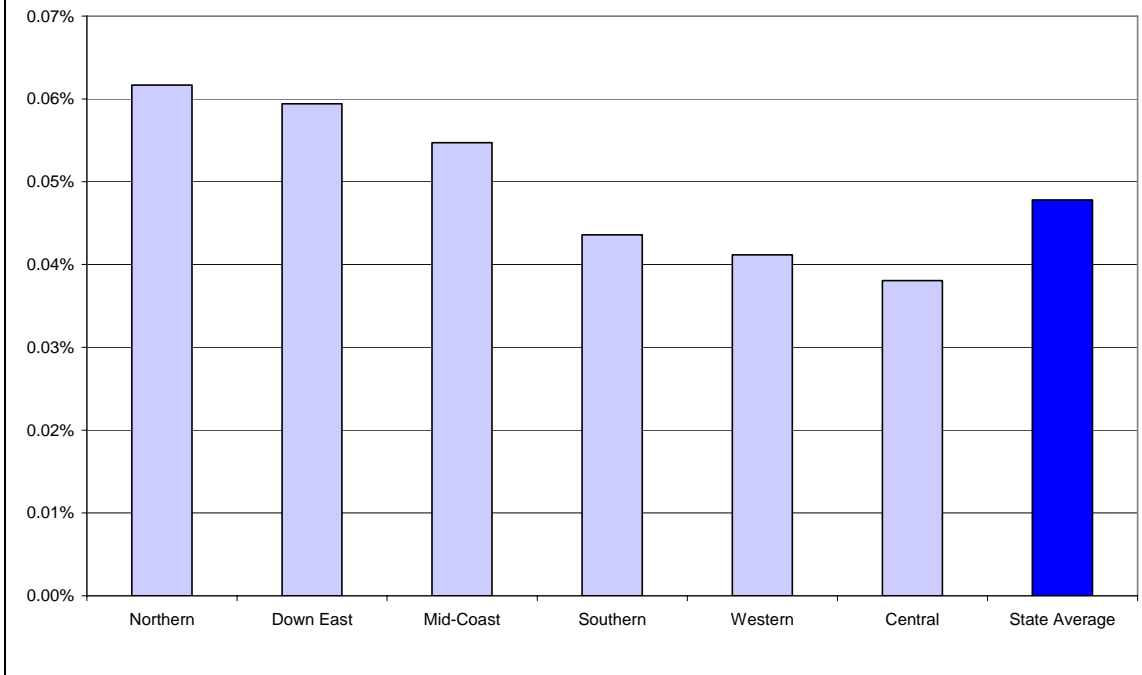
Numbers are for FY2002 state and local governments combined, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. "FTE employment" is full-time-equivalent employment per 1,000 people. "Net expenditure" is direct expenditure less transfers from federal government, and is reported as a percentage of personal income. "Local governments" are the number of sub-state governments per 10,000 people. The whole numbers to the right of the ratios are the state ranks.

**Table 51**  
**Other and Unallocable Payroll**  
**Local versus State**

	Local		State	
<b>Maine</b>	0.05%	47	0.13%	23
<b>United States</b>	0.11%		0.11%	
<b>Vermont</b>	0.02%	50	0.24%	5
<b>Mississippi</b>	0.05%	46	0.14%	18
<b>Wyoming</b>	0.11%	12	0.14%	20
<b>South Dakota</b>	0.11%	11	0.17%	9
<b>Montana</b>	0.08%	24	0.16%	14
<b>West Virginia</b>	0.05%	48	0.17%	8
<b>Arkansas</b>	0.05%	45	0.13%	22
<b>North Dakota</b>	0.06%	40	0.27%	3
<b>Iowa</b>	0.06%	37	0.16%	10
<b>Average</b>	0.06%		0.16%	
<b>New Hampshire</b>	0.04%	49	0.16%	12

Numbers are for FY2002 state and local governments separately, and are derived from data from the U.S. Census Bureau, Governments Division. "Payroll" is reported as a percentage of personal income. The whole numbers to the right of the ratios are the state ranks.

**Figure 17**  
**Local Other and Unallocable Payroll in Maine**





**Table 52  
Net Expenditures Summary**

	<u>Maine</u>	<u>United States</u>	<u>Rural Average</u>	<u>Cost Differential (in millions)</u>	
<b>Total</b> (percent of income)	15.08%	13.39%	13.50%		
<b>Local Functions</b>					
<b>Elementary &amp; Secondary Education</b> (per student)	\$7,972	\$7,416	\$5,727	\$152	(8% > U.S. Average)
<b>Police Protection</b> (per crime)	\$5,242	\$5,434	\$4,365	\$6	(3% > U.S. Average) <sup>a</sup>
<b>Fire Protection</b> (percent of income)	0.23%	0.29%	0.21%	\$7	(10% > Rural Average)
<b>Parks &amp; Recreation</b> (percent of income)	0.15%	0.34%	0.31%		
<b>Sewerage</b> (percent of income)	0.29%	0.35%	0.27%	\$7	(7% > Rural Average)
<b>Housing &amp; Community Development</b> (percent of income)	0.06%	0.10%	0.03%	\$4	(22% > U.S. Average) <sup>a</sup>
<b>Solid Waste Management</b> (percent of income)	0.28%	0.22%	0.19%	\$25	(32% > U.S. Average)
<b>Libraries</b> (percent of income)	0.07%	0.09%	0.09%		
<b>State Functions</b>					
<b>Higher Education</b> (per FTE student)	\$18,035	\$17,892	\$17,307	\$14	(4% > U.S. Average) <sup>b</sup>
<b>Corrections</b> (per inmate)	\$62,273	\$28,466	\$26,490	\$79	(119% > U.S. Average)
<b>Natural Resources</b> (percent of income)	0.32%	0.22%	0.35%		
<b>Social Insurance Administration</b> (percent of income)	0.02%	0.01%	0.02%	\$2	(47% > U.S. Average) <sup>c</sup>
<b>Other Education</b> (percent of income)	0.35%	0.30%	0.49%		
<b>Mixed Functions</b>					
<b>Highways</b> (per 1,000 vehicle miles)	\$31.56	\$30.10	\$31.83		
<b>Public Welfare</b> (per single mother)	\$10,526	\$7,184	\$5,865		
<b>Financial Administration</b> (percent of income)	0.49%	0.37%	0.50%	\$8	(24% > Rural Average) <sup>d</sup>
<b>Other Government Administration</b> (percent of income)	0.21%	0.20%	0.23%	\$12	(86% > Rural Average) <sup>e</sup>
<b>Health</b> (percent of income)	0.87%	0.45%	0.28%	\$155	(95% > Rural Average)
<b>Judicial &amp; Legal</b> (per crime)	\$2,321	\$2,633	\$2,178		
<b>General Public Buildings</b> (percent of income)	0.24%	0.12%	0.10%	\$42	(94% > U.S. Average)
<b>Other and Unallocable</b> (percent of income)	1.44%	0.79%	0.25%	\$238	(83% > U.S. Average)

Numbers are for FY2002 state and local governments combined, and are derived from the U.S. Census Bureau, Governments Division. "Total" excludes quasi-private enterprises. Unless there is evidence of systematic cost differences in rural states, the U.S. average is used as the norm. a. After controlling for urban percentage and per capita income. b. In the Other Payroll subcategory. c. In payroll per unemployed. d. In state government payroll relative to income. e. In the Legislative subcategory.