

A (Baker's) Dozen Years of State and Local Government Capital Investment

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In this special report, the authors provide an overview of state and local capital expenditure for 2000 through 2012, including data on specific areas of spending, such as highways and education. They write that differences between the states in the types and quantity of spending cannot be explained by economic or social circumstances alone.

Introduction

An examination and understanding of state and local government capital expenditure is important for several reasons. State and local government expenditure on capital goods (as measured by the Census Bureau)¹ annually is substantial, representing about 2.3 percent of GDP and about 12 percent of total state and local spending over the period 2000 through 2012. Aggregate measures of state and local capital expenditure have been relatively stable over this period, although there is evidence that capital expenditure increased during the recession periods and decreased in recent years. Beyond the short-run spending effects, there are potential relationships between public capital and long-run economic growth. The latter issue has been controversial, with ambiguity in the research results based on the type of analysis performed, the period examined, and the method of measuring the public capital stock. Alicia Munnell, Edward

¹As defined by the Governments Division of the Census Bureau, state and local government capital expenditure.

Gramlich, and Ronald C. Fisher review this literature.² Still, it seems important to know how public capital investment is changing. Finally, there have been some concerns raised recently about declining quality of public infrastructure (transportation, water, and sanitation, for instance) and the implications for public safety and environmental degradation.

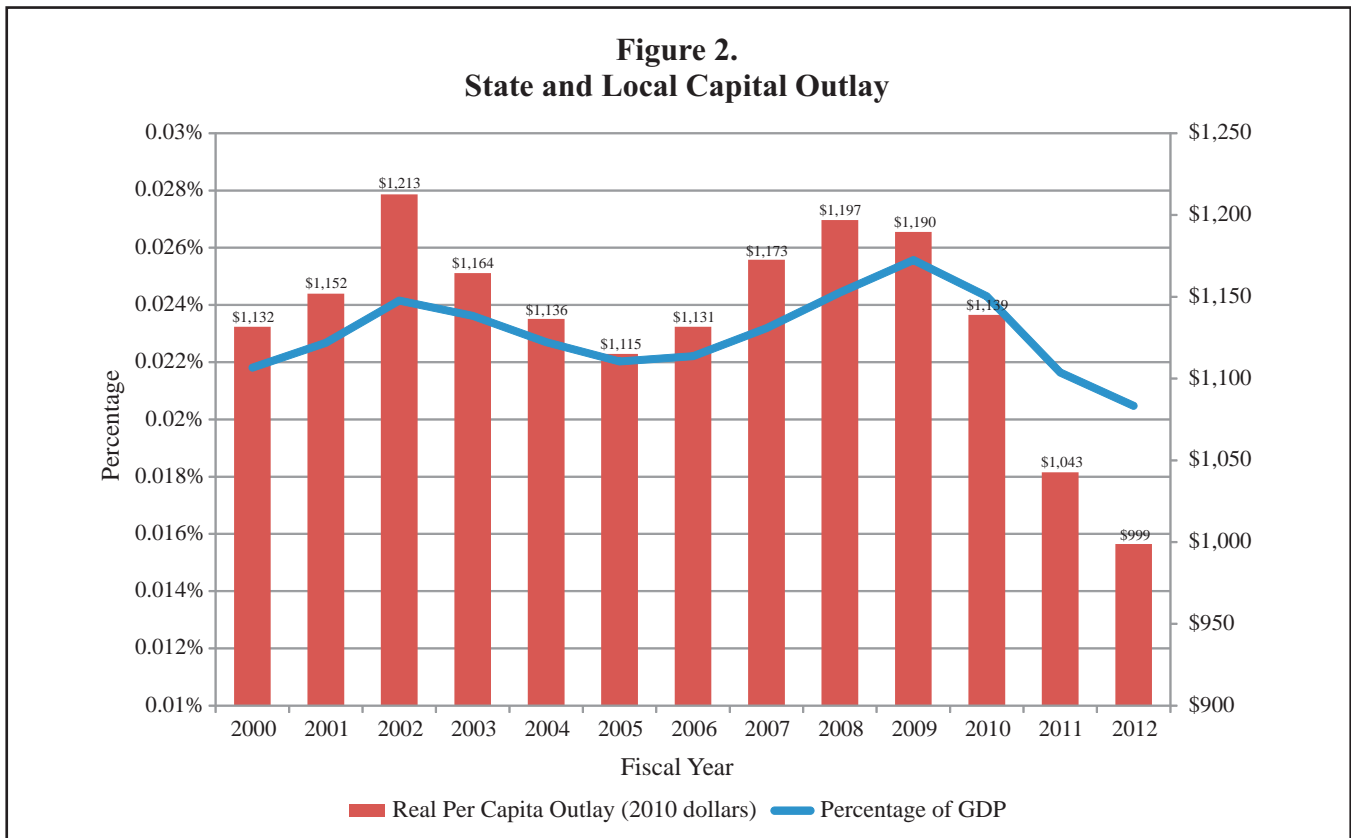
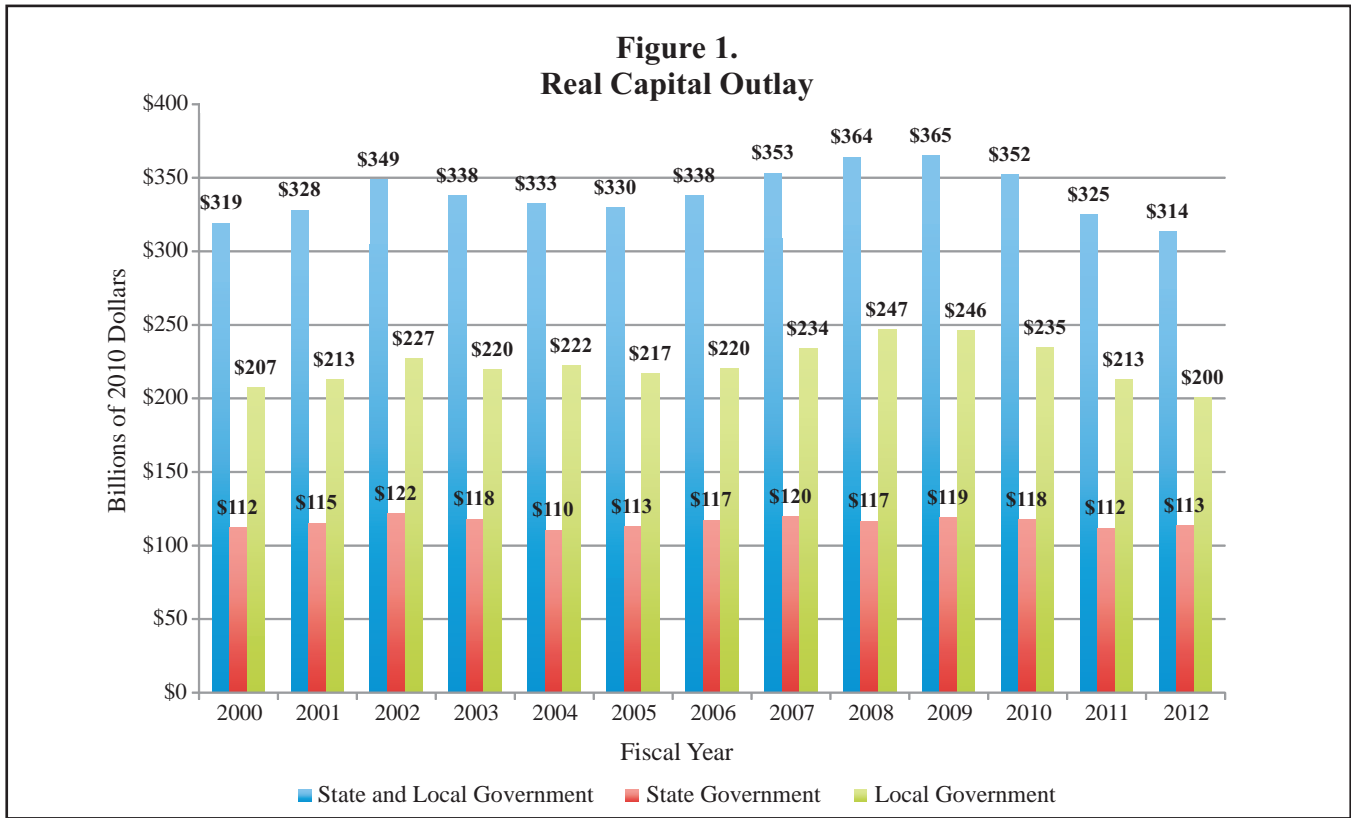
Beyond aggregate capital expenditure, there are substantial differences among states in both the amount and composition of capital spending. Such differences raise a host of questions. What factors explain why capital expenditure is large both in absolute amount and relative to budgets in some states and small in others? Why do some states concentrate capital expenditure in specific functional areas (such as transportation) whereas other states emphasize capital investment in entirely different categories (such as education)? And following the topic noted above, do the differences in state capital investment behavior translate to economic or social results? All of these questions present additional reasons for a factual understanding of state and local capital expenditure.

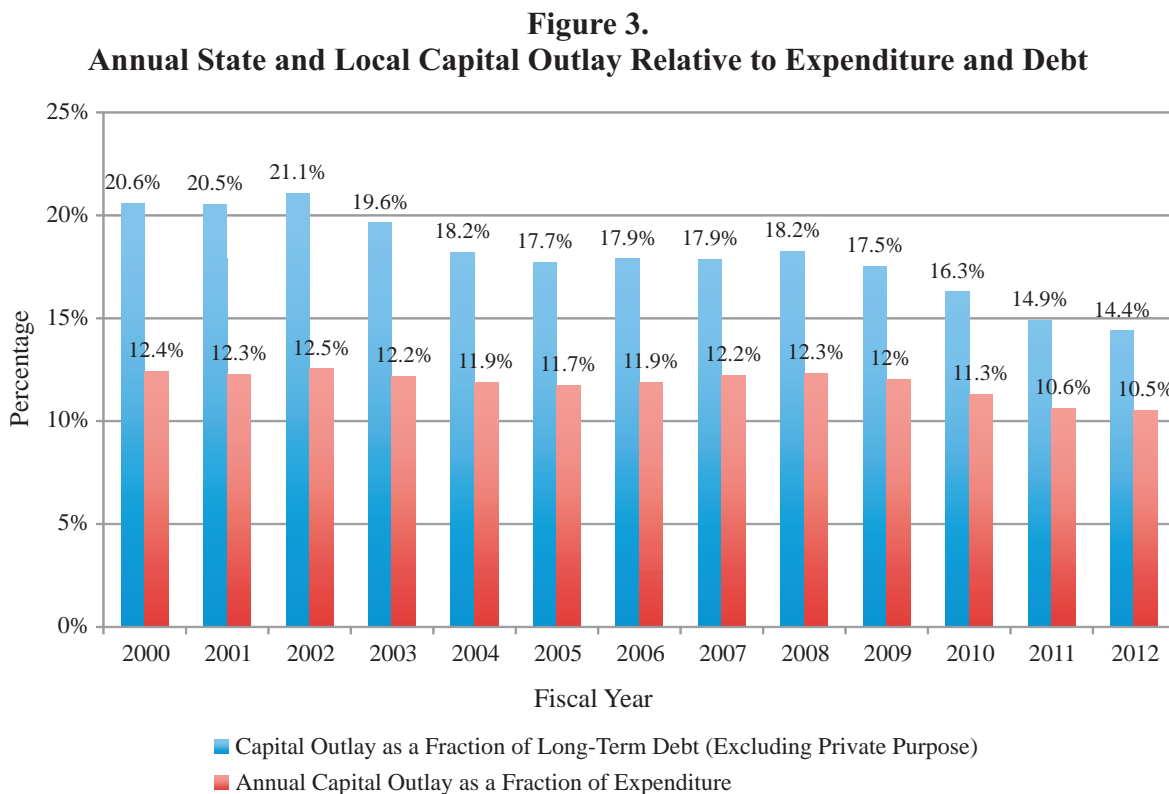
Therefore, we present an overview of the facts concerning state and local government capital expenditure during the years 2000 through 2012. This baseline understanding may contribute to enhanced policy discourse, and provide the basis for subsequent analysis of the key economic and policy research issues.

Amount of Capital Expenditure

U.S. state and local governments spent more than \$331 billion (or \$1,054 per capita) on capital investment in fiscal 2012, an amount that represents about 2 percent of GDP, 10.5 percent of total state and local expenditure, and 14.4 percent of outstanding long-term debt (excluding private purpose debt). Local governments account for two-thirds of

²Munnell, "Policy Watch: Infrastructure Investment and Economic Growth," *J. of Econ. Perspectives* (Fall 1992); Gramlich, "Infrastructure Investment: A Review Essay," 32 *J. of Econ. Lit.* 1176 (1994); Fisher, "The Effects of State and Local Public Services on Economic Development," *New England Econ. Rev.* (Mar./Apr. 1997), at 53-67. A more recent policy perspective is provided by Josh Bivens, "Public Investment: The Next 'New Thing' for Powering Economic Growth," Economic Policy Institute Briefing Paper 338 (Apr. 18, 2012).





subnational capital spending, with capital spending representing 12.1 percent of local government expenditure, but only 6 percent of state government expenditure.

The real (inflation-adjusted) magnitude of state and local capital expenditure has changed remarkably little since 2000, as shown in Figure 1, averaging about \$339 billion. Adjusting by the GDP deflator for state and local government consumption implies that state and local governments have maintained a relatively constant amount of real capital investment over this 13-year period, with relatively small variation from year to year.

The pattern shown in Figure 1 does suggest, interestingly, that real capital expenditure increases during national recessions — shown by the changes for fiscal 2002 and fiscal years 2008 and 2009.³ This pattern is particularly evident for local government capital expenditure. This raises the issue, of course, whether national government stabilization policies particularly target or affect subnational capital spending as a stabilization device. That is, was the observed real increase in state and local capital spending in fiscal years

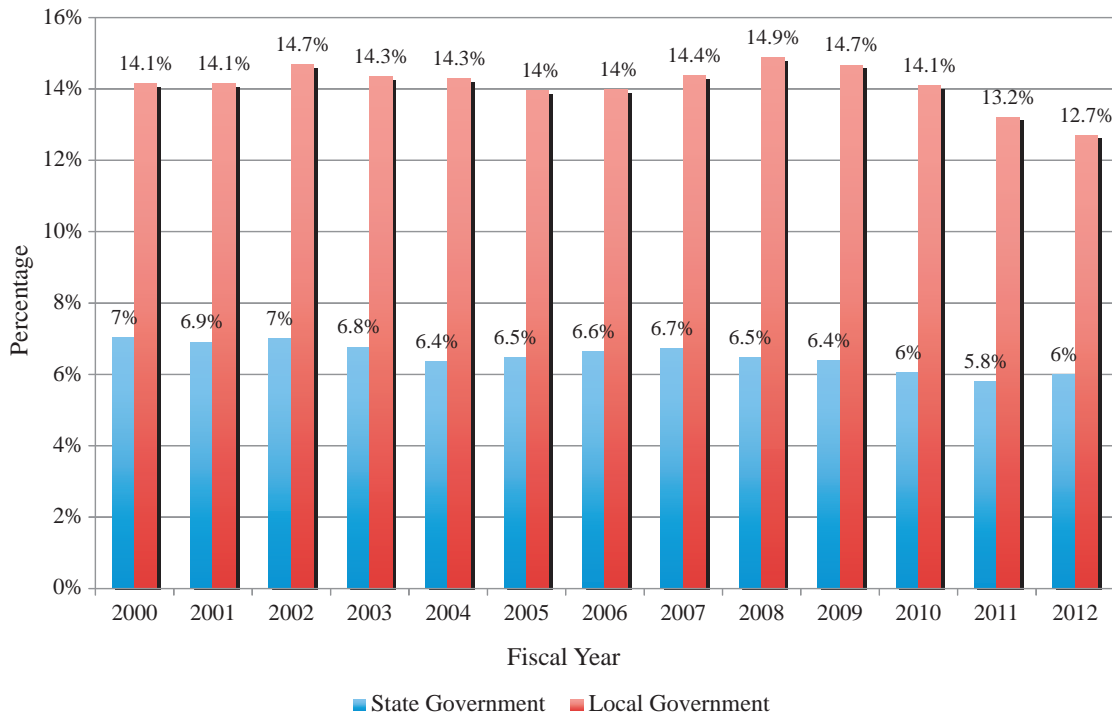
2008 and 2009 partly the result of the federal government stimulus act in 2008 and the American Recovery and Reinvestment Act in 2009? The decreases in capital spending in 2010 and after are consistent with this view.⁴

A similar pattern is apparent in state and local capital expenditure relative to GDP and in per capita terms, as shown in Figure 2. Over these years, annual state and local capital expenditure averages 2.3 percent of GDP and varies from a high of 2.6 (2009) to 2.2 percent (2000, 2005, and 2006) and 2 percent in the most recent year (2012). In real per capita terms, capital expenditure averages \$1,137 and varies from \$999 (2012) to \$1,213 (2002). To some extent the pattern shown in the two figures may overstate the actual annual variation in capital spending because both GDP and price changes are reduced during a recession period, which contributes to capital expenditure rising as a fraction of GDP and in real terms. These aggregate measures suggest that state and local capital expenditure has been relatively stable over the past decade, although declining to its lowest levels in the two years with the most recent data.

³Census data are reported for government fiscal years, which in most cases run from July through June, so that (for instance) fiscal 2008 generally represents July 2007 through June 2008. The national recessions during this period were from March 2001 to November 2001 and from December 2007 to June 2009.

⁴For analyses supporting this view, see Fisher and Wassmer, “An Analysis of State and Local Government Capital Expenditure During the 2000s,” *Pub. Budg. and Fin.* (Spring 2015), and Justin Marlowe, “Capital Budgeting and Spending,” in *The Oxford Handbook of State and Local Government Finance*, R. Ebel and J. Petersen, eds. (2012).

Figure 4.
Capital Outlay as a Percentage of Expenditure



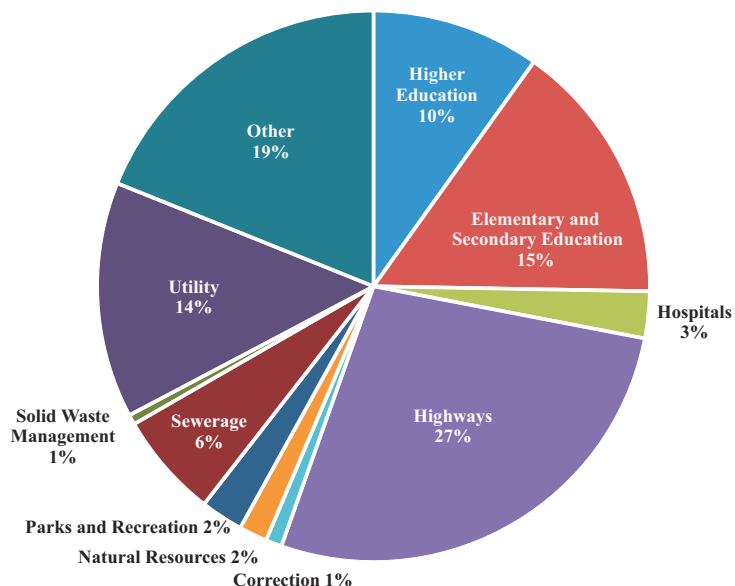
An alternative is to examine state and local capital expenditure relative to the magnitude of state and local budgets. Shown in Figure 3, annual capital outlay as a fraction of annual expenditure has varied between 10.5 percent and 12.5 percent over this period. Similarly, the relationship between debt and capital expenditure is relatively stable, with annual capital expenditure varying from about 14 percent to 21 percent of outstanding long-term debt (excluding that for private purposes). This suggests that state and local governments maintain a consistent pattern of capital expenditure, rather than altering amounts wildly from year to year. Despite the general stability, capital expenditure was generally a greater component of state and local government budgets in the first part of the decade than it has been recently. And as previously noted, capital expenditure did not decline in a relative budget sense — and may even have increased — during the Great Recession, but has decreased since.

As noted, local governments have accounted for approximately two-thirds of aggregate state and local capital expenditure — \$211 billion of the total \$331 billion in 2012. The local government share has increased modestly since 2000, rising from 64.9 percent of the total in that year, until 2012, when the local government share declined to 63.8 percent. Capital spending by state governments was 6 percent of total state government expenditure in 2012, but had been as much as 7 percent early in the decade. As shown in Figure 4,

capital spending by state governments has not grown as quickly as total state spending since 2000. In contrast, capital spending by local governments remained stable relative to total local government spending until the two most recent years. Thus, part of the overall decline in capital expenditure relative to state and local budgets is due to the growth of noncapital components of state government budgets (likely for Medicaid and other welfare programs). The other influence is the decline in local government capital spending in 2011 and 2012 as the fiscal effects of the recession started to influence local government budgets.

Finally, all of the measures show that state and local capital spending declined in a relative sense in fiscal 2010 through 2012 compared with the prior two years — and by all measures was low in 2011 and 2012 compared with the entire period. Several factors may have contributed. The large amount of capital expenditure in 2008 and 2009 may suggest that projects were advanced because of the stimulus. Although fiscal 2010 came after the recession formally ended, the effects on state and local governments' budgets were still substantial then. The effects of the financial market crisis and the recession for local governments were worsening in 2010 through 2012, partly because of the delayed response of property taxes. Indeed, the relative decline in capital spending in 2010 through 2012 was much

Figure 5.
Composition of State and Local Capital Outlay, 2012



greater for local governments than state governments.⁵ Also, of course, federal government stimulus support — including the Build America Bonds program — ended.

Composition of Capital Expenditure

Capital spending for projects concerning highways, education, and utilities represent the bulk of state and local government capital expenditure, as shown in Figure 5. The categories of highways and education (about 27 percent and 25 percent of total capital spending, respectively) alone accounted for more than half of state and local capital expenditure in 2012. However, there are substantial differences between the capital investment focus of state governments compared with local governments, as shown in Figure 6. For state governments, two categories — highways and higher education — account for about 75 percent of capital spending. Among local governments, elementary and secondary education (about 25 percent) and utilities (almost 20 percent) are the largest categories of capital spending. Not surprisingly, state governments have primary responsibility for higher education capital investment, whereas local governments (often independent school districts) have dominant responsibility for capital spending for K-12 education.⁶ Although capital expenditure for highways represents only about 11 percent of local government capital expenditure

and more than 50 percent of state government capital expenditure on average, some states differ greatly from this average depending on how the responsibility for road maintenance is allocated between the state and local governments.⁷

The composition of state and local capital spending has been relatively stable over time, as shown in figures 6a and 6b, with a few exceptions. For state governments in aggregate, capital expenditure for higher education has increased substantially faster than the total, rising from 17 percent of total state capital expenditure in 2000 to 23 percent in 2012. Notably, state capital spending in the area of corrections (essentially, prison construction) declined from 3.3 percent of the total in 2000 to 1.6 percent in 2012, and the share for highway investment remained basically unchanged. At the local government level, the major changes have been a decreased share of capital spending for elementary and secondary education (from 31.7 percent of the local total in 2000 to 23.9 percent in 2012) and an increased share of capital spending by public utilities (14.6 percent in 2000 and 19.5 percent in 2012). The latter suggests, of course, slower growth in K-12 facilities tied to the number of school-age children but more infrastructure investment for public electric, water, and sanitation systems because of either growth or replacement.

⁵Real local capital spending declined by \$46 billion from 2009 to 2012, whereas state capital spending declined by only \$6 billion.

⁶Spending by public state colleges and universities is counted as part of state government in the census statistics.

⁷For information about how states differ, see Fisher and Andrew Bristle, “State Intergovernmental Grant Programs,” in *The Oxford Handbook of State and Local Government Finance*, R. Ebel and J. Petersen, eds. (2012), at 213-245.

Figure 6a.
Major Categories of State Government Capital Outlay

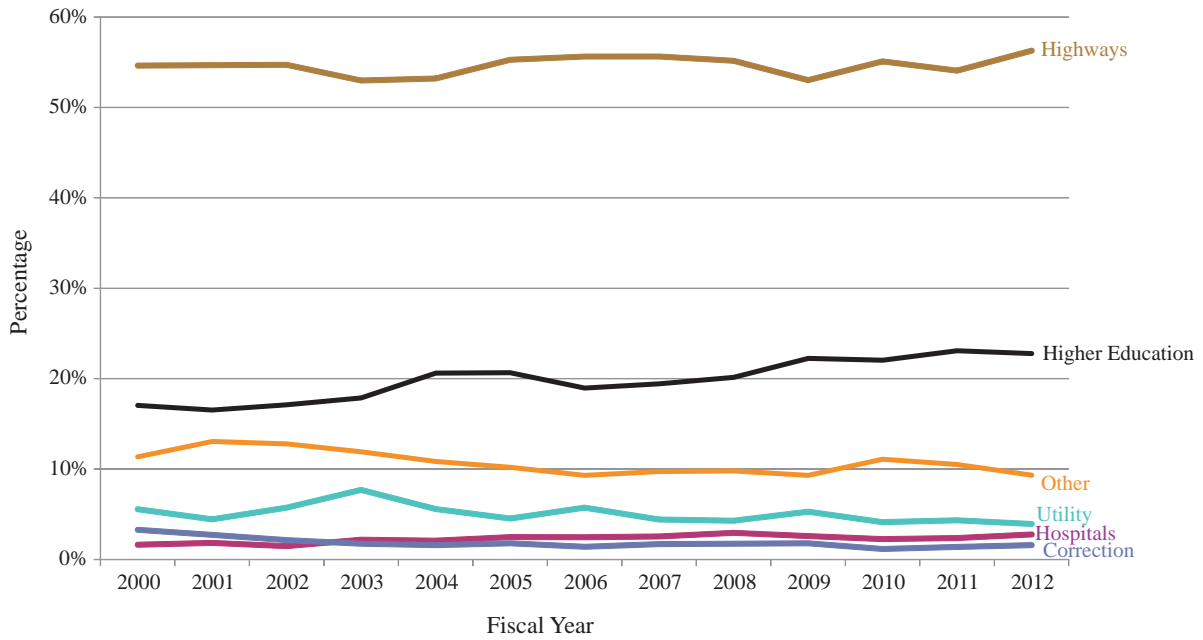
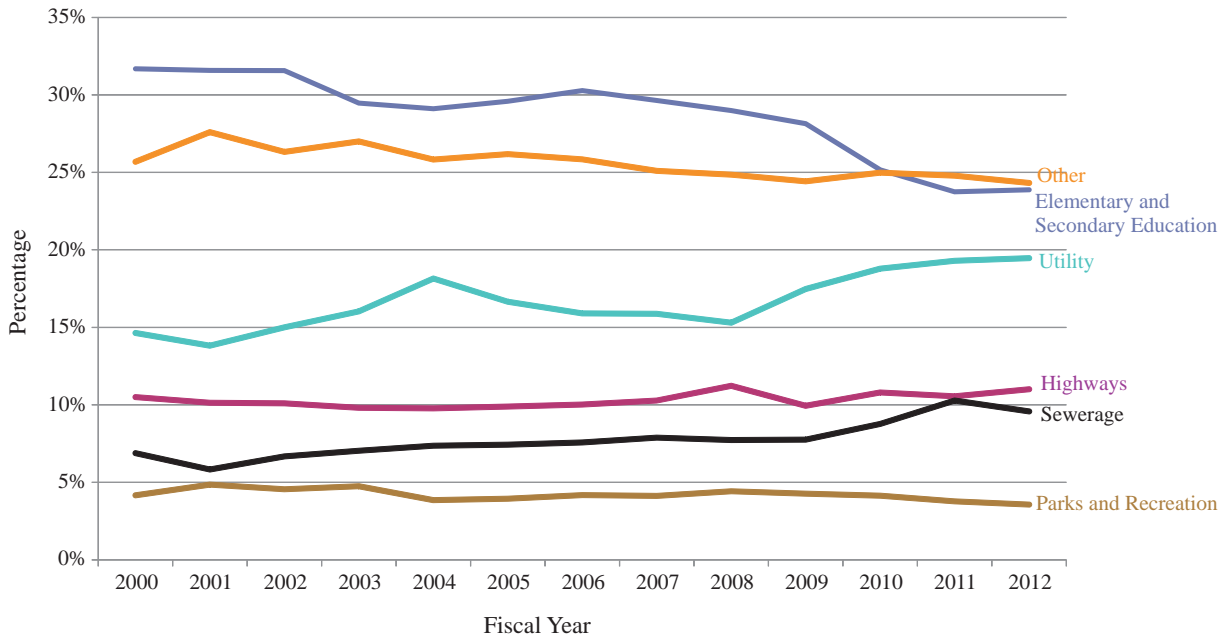


Figure 6b.
Major Categories of Local Government Capital Outlay



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Interstate Differences in Capital Expenditure

Interstate differences in both the amount and composition of capital expenditure are common and substantial. Total per capita capital spending, capital expenditure as a percentage of personal income, and capital spending as a fraction of total expenditure for all states, aggregated over fiscal 2000 through 2012, are shown in Table 1.⁸ The annual average real per capita amounts of capital spending for the 2000-2012 period for all states — in total and for the subcategories of highways, K-12 education, and higher education — are shown in figures 7a through 7d.

Combining the nominal amounts for the 11 years of available data (2000-2012, excluding 2001 and 2003), per capita spending on capital varied from \$34,787 in the District of Columbia to \$6,704 in Maine, with a U.S. average of \$11,327. Because this is the aggregate for an 11-year period, state and local capital expenditure averaged about \$1,030 per person per year (in nominal terms). Compared with state personal income, state and local capital expenditure varied from 6.4 percent of state personal income (Alaska) to 1.6 percent (New Hampshire), with an average for all states of 2.7 percent. The state rankings for spending relative to income reflect only slight differences from those based on population. Not surprisingly, similarly substantial interstate differences also apply for state governments and local governments separately. The differences reflect not only the level of spending, but also the division of responsibility between the state government and localities.

A slightly different way of representing the interstate differences is shown in Figure 7a, which depicts the annual average real per capita amounts of state and local capital expenditure by state from 2000 through 2012 — the years of available data.

Represented in 2010 dollars and adjusted for population, it is clear that Alaska and Wyoming are dramatic outliers. However, even ignoring those two cases, annual state and local capital spending per person varied from almost \$1,731 in New York to less than \$700 in Maine and Rhode Island over this entire decade, with a coefficient of variation of 0.22. With this perspective, the absolute magnitude of the interstate differences appears smaller than with the aggregate, nominal comparison in Table 1, but the relative differences remain. Some regional differences stand out. Capital spending in the New England states seems low, whereas spending among many Plains states seems relatively high.

States also differ substantially in the relative importance of capital expenditure in public budgets. State and local capital spending during these years varied from 17 percent of total state and local expenditure (Wyoming) to 6.6 percent (Rhode Island), with a U.S. average of 11.7 percent.

Capital spending averaged 6.4 percent of state government total expenditure during the period 2000 through 2012 and 14.1 percent of total local government expenditure, with similar variation among the states. The capital share of total expenditure seems a better measure of investment in capital, or the choice for a more capital-intensive public sector, than does capital spending relative to population or income. New York, for example, has relatively high capital spending per capita and relative to income (both well above the national average), but the capital spending share of total expenditure is average. The level of capital spending is high in New York simply because total expenditure is relatively high, but New York is not investing in public capital disproportionate to overall spending. From the opposite perspective, Texas ranks substantially higher in the capital spending share of total expenditure than it does in capital spending per capita or relative to income.

Also, states differ in the mix of capital spending by function, as shown in Table 2 and figures 7b through 7d. For the three large categories of highways (Figure 7b), elementary and secondary education (Figure 7c), and higher education (Figure 7d), the percentage of total capital expenditure during the period 2000 through 2012 for each category is shown in Table 2 for every state (in order from high to low). Again, differences are substantial. For instance, about half of public capital spending in Montana and North Dakota was for highways, compared with 16 percent in California. Similar differences apply for K-12 education capital expenditure (more than 25 percent of the total in New Jersey, South Carolina, and Texas, but only 8 percent in Rhode Island) and higher education capital spending (more than 15 percent of the total in Michigan and Vermont but about 5 percent in Alaska, Florida, Louisiana, Nevada, and New York).

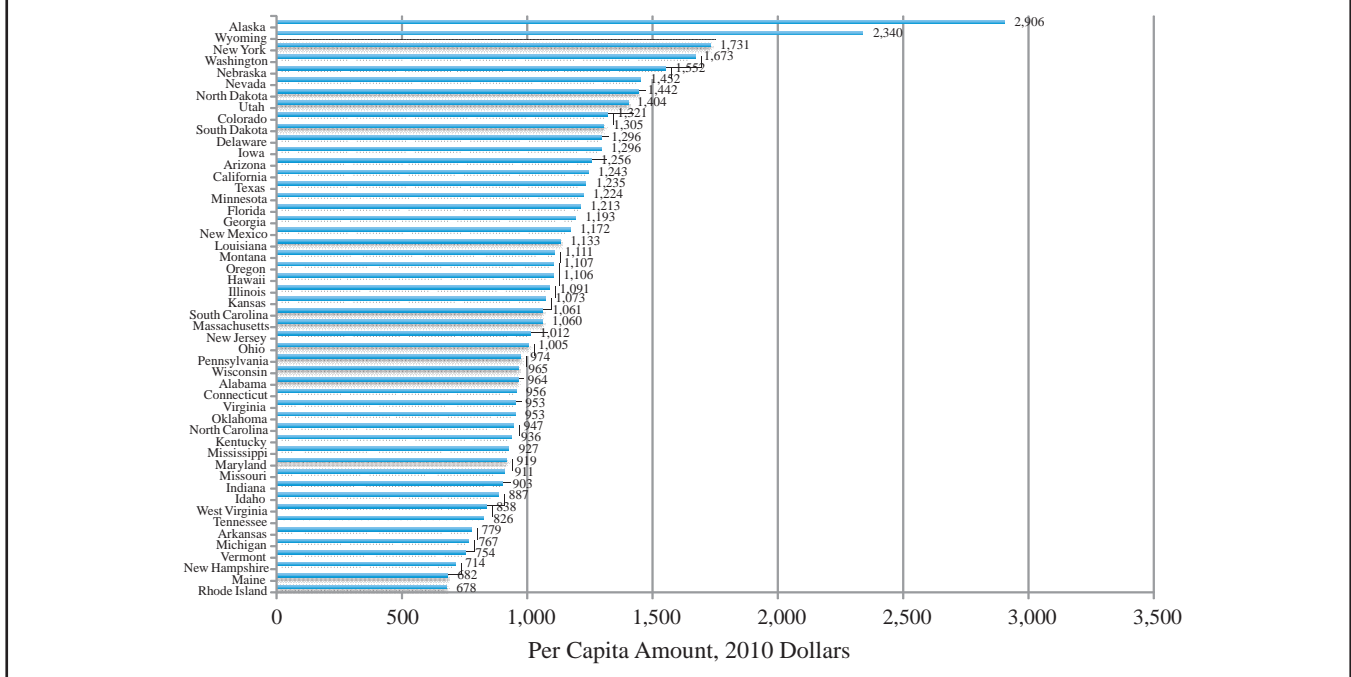
Rather than the shares of overall capital spending by category, the category spending amounts are shown in figures 7a through 7d. The average annual real state and local per capita capital outlay for these three important categories by state during the period 2000 through 2012 is reported. Again, the differences are quite substantial. Alaska and Wyoming remain dramatic outliers in the categories of highway and K-12 education capital spending. For the category of highways, annual real per capita spending differed from a high of about \$692 in North Dakota (ignoring the outliers Alaska and Wyoming) to a low of about \$154 in Michigan. For K-12 education, the variation is from about \$310 in Texas to \$52 in Rhode Island (again ignoring Alaska and Wyoming). The coefficients of variation (ignoring the two outliers) are 0.31 for both the categories of highway and K-12 education capital spending.⁹

⁸The aggregated state-by-state data in the tables and figures for the period 2000 through 2012 exclude the years 2001 and 2003 because the Census Bureau did not tabulate individual state fiscal data for those years.

⁹These interstate comparisons cover 11 years over a 13-year recent period. Thus, these interstate differences likely are not arising because of the “lumpy” nature of capital investment reflecting only short-run

(Footnote continued on next page.)

Figure 7a.
Average Annual Real Per Capita Capital Outlay, Total, 2000-2012



Finally, it is possible to estimate how states have changed their capital expenditure behavior during the period by comparing capital spending in 2012 and 2000. The data in Table 3 show the percentage change in nominal per capita capital expenditure from 2000 to 2012 and the percentage change in the share of total expenditure going to capital between those years. Because of reduced spending coming out of the recession and the end of the federal government stimulus, 2012 was a somewhat unusual year for state and local capital expenditure. Therefore, the magnitude of the state-by-state numbers in Table 3 likely is a bit misleading, but the relative position of the states seems telling. Those at the top of each ranking clearly have shifted relatively toward investing more in public capital in 2012 than in 2000 compared to those at the bottom.

For instance, per capita capital expenditure in 2012 was more than twice that in 2000 in Louisiana, Montana, and North Dakota. In contrast, *nominal* per capita capital expenditure was *lower* in 2012 than in 2000 in Arizona, Colorado, Florida, Georgia, Michigan, Nevada, South Carolina, Tennessee, and Wisconsin. Even allowing for the unusual character of 2012, it seems reasonable to conclude that Louisiana, Montana, and North Dakota expanded capital investment over the decade while the other nine states did not.

differences. However, they do likely reflect the conditions in each state during the first decade of this century.

The change in the capital expenditure share of total state and local expenditure (shown in the second set of columns in Table 3) seems even more telling about relative investment in public capital. For states near the top of the listing (Maine and above), capital expenditure was relatively more important in overall state and local budgets in 2012 compared to 2000. For instance, in New York capital spending was 10.9 percent of total state and local expenditure in 2000 but 11.6 percent in 2012. In contrast, Massachusetts capital spending was 14.3 percent of total state and local expenditure in 2000 but 9 percent in 2012. Thus, the capital spending share rose by 6 percent in New York and fell by 37 percent in Massachusetts. Again, comparing two specific years may be misleading in the case of some states because of specific capital spending circumstances then, such as an unusually large project, but this initial analysis suggests there are a set of states where capital expenditure may have changed substantially.¹⁰ These are the states worthy of specific analysis.

A final method for comparing states is shown in Figure 8, which depicts the pattern of real per capita capital spending over the decade (the 11 years for which data are available).

¹⁰Nationally, the capital-spending share declined from 12.4 percent in 2000 to 10.5 percent in 2012. This reflects the relatively low level nationally of capital expenditure in 2012. So one possible comparison is whether the capital-spending share declined more than the national average.

Figure 7b.
Average Annual Real Per Capita Capital Outlay, Highways, 2000-2012

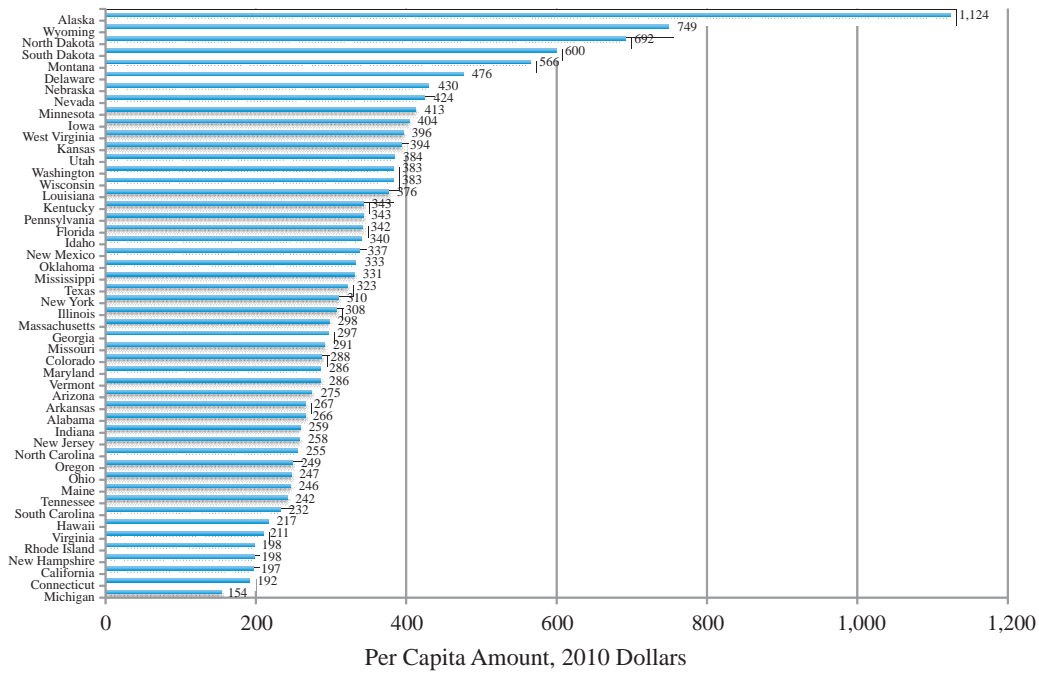
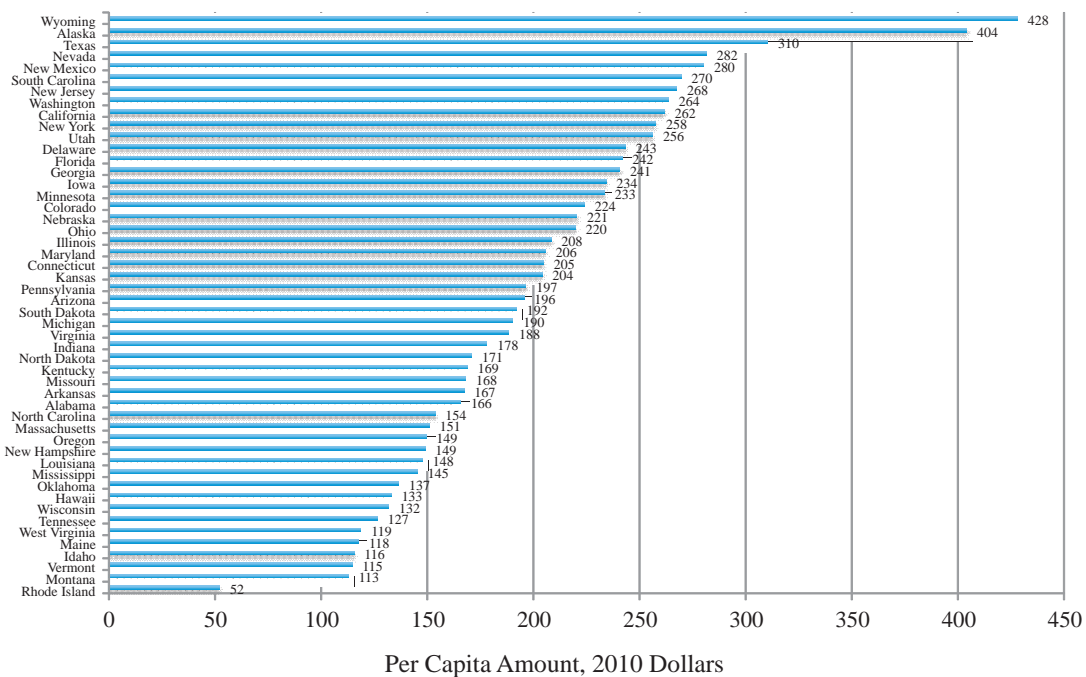
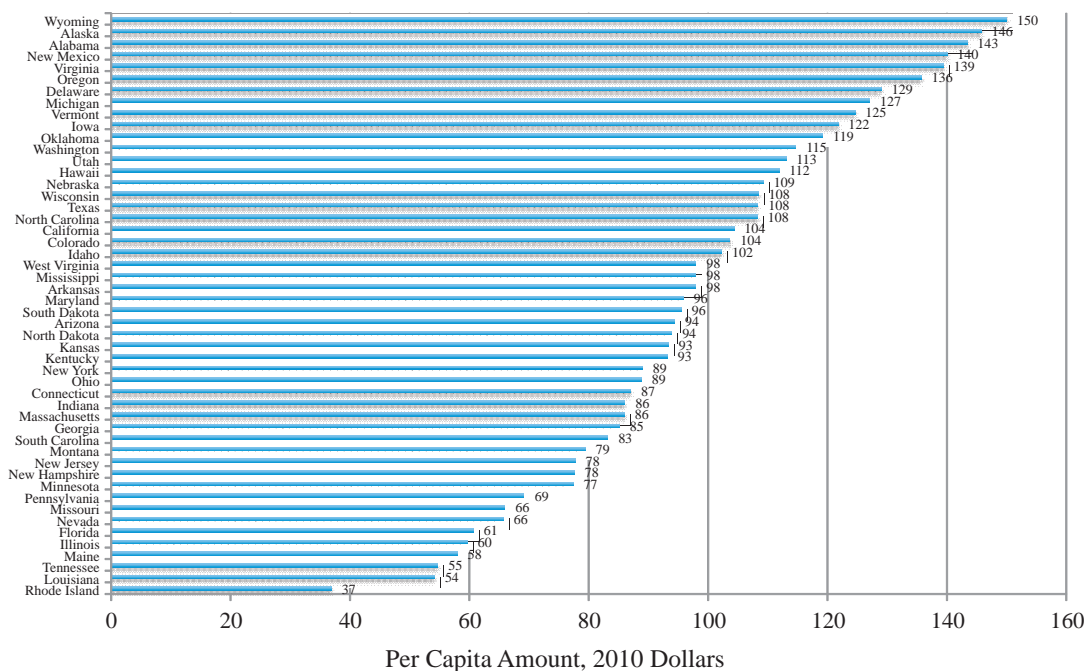


Figure 7c.
Average Annual Real Per Capita Capital Outlay, K-12 Education, 2000-2012



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Figure 7d.
Average Annual Real Per Capita Capital Outlay, Higher Education, 2000-2012



The top panel presents the results for Montana, New York, and North Dakota — all states that appear to have been high-spending over this period by various measures. In contrast, the results for Idaho, Michigan, and Rhode Island — states that were low-spending — are shown in the bottom panel. Clearly, the levels of spending are different for the two sets of states, but so is the pattern. The top three states had higher levels of capital spending that increased, or at least were maintained, over the decade, whereas the bottom three states had lower levels of capital spending that decreased during this period. Thus, the differences expanded.

Capital Expenditure, Borrowing, and Debt

Capital expenditure, borrowing, and debt for state and local governments are related in several important ways, although the relationship is not always straightforward. State and local governments borrow money for three purposes: (1) to finance infrastructure, public capital projects, or public facilities (such as roads, bridges, schools, public buildings, water and sanitation facilities, parks, and recreation facilities); (2) to provide cash flow for short-term spending or for special projects of a short duration; and (3) to support and subsidize private activities such as private home mortgages,

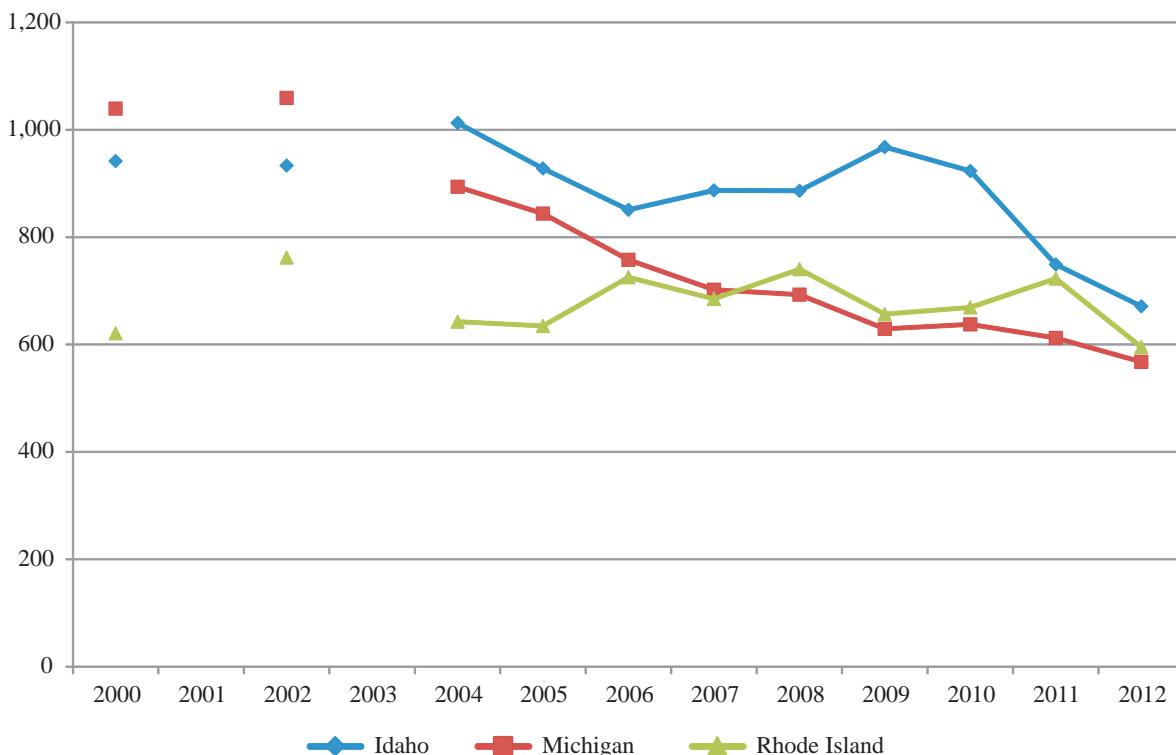
student loans, and industrial or commercial development.¹¹ Also, state and local governments may borrow to pay off old debt sooner if interest rates fall (refinancing or refunding). In the case of refinancing, the aggregate level of government debt may not change as one debt replaces another, but annual interest costs are lower. Therefore, borrowing to fund public capital investment is expected to represent only a portion of overall state and local borrowing.¹²

Second, state and local governments typically finance capital investment with a combination of three types of funds — borrowed funds, current revenues (taxes), and federal grants. Because public capital goods require a large initial expenditure and generate benefits over a number of years, borrowing the funds to be repaid with interest from taxes in future years (“pay as you use” finance) recognizes both the irregular nature of capital expenditures and the fact that residents and users will benefit from the capital facility. Long-term debt is the form used for financing public capital projects (and financing private purpose activities).

¹¹The third category is what the Census Bureau defines as “public debt for private purposes.”

¹²For a review of state and local government debt, see Wassmer and Fisher, “State and Local Government Debt, 1992-2008,” *State Tax Notes*, Aug. 15, 2011, p. 427; and Fisher and Wassmer, “The Issuance of State and Local Debt During the United States’ Great Recession,” *National Tax Journal* (Mar. 2014).

Figure 8a.
Aggregate Capital Expenditure for Selected States, 2000-2012



Long-term borrowing is particularly appropriate for financing capital projects on a pay-as-you-use plan because the term of the loan can be set to correspond to the expected life of the asset. However, only a portion of state and local capital expenditure is expected to be financed by borrowing because of the availability of federal grants and the use of current revenue (“pay as you go” finance).

The relationship among these fiscal variables may be summarized as follows: Suppose that

K_t = capital expenditure in year t

B_t = total borrowing in year t

R_t = debt retired or refinanced in year t

L_t = borrowing or debt incurred in year t for private purposes

T_t = current tax revenue allocated to capital goods in year t

F_t = federal funds for infrastructure in year t

b = share of capital expenditure to be financed by borrowing

It follows that

$$K_t = bB_t + F_t + T_t,$$

so if $b < 1$ and F_t and $T_t > 0$, total capital expenditure (K_t) may be greater or less than total borrowing (B_t).

From another perspective

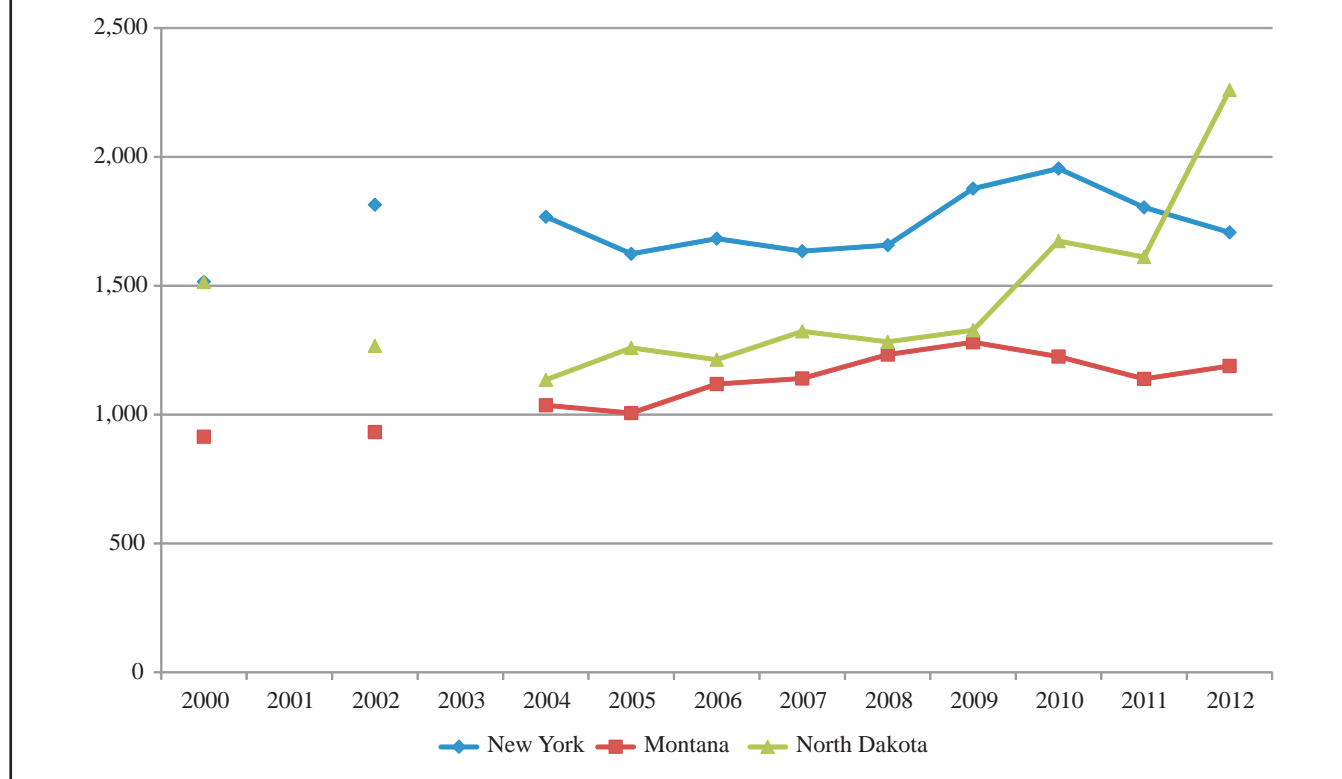
$$B_t - R_t = bK_t + L_t$$

Thus, net borrowing, which is also the addition to total or outstanding debt in year t , will be positive if $b > 0$ and $K_t > 0$, but *net* borrowing also may be greater or less than *total* capital expenditure.¹³ So if state or local governments engage in positive capital spending in one year and finance at least part of that capital investment by borrowing, one expects that total outstanding debt must increase.

The actual relationship between capital expenditure and borrowing is interesting but difficult to interpret. The ratio of annual net long-term borrowing (excluding debt retirements or refinancings) to capital expenditure varies substantially from year to year. In 2010, for instance, state and local government net long-term borrowing amounted to about one-third of capital expenditure. Over the 11 years with data from 2000 through 2012, this ratio varies from 1 percent to about 50 percent. One might think of this ratio as a rough measure of the share of capital expenditure financed by borrowing or debt, because except as noted above, borrowed

¹³As a special case, net borrowing could be negative in a year and capital expenditure still positive if $b = 0$. In that case, the government is using current revenue to replace debt and engage in capital investment.

Figure 8b.
Aggregate Capital Expenditure for Selected States, 2000-2012



funds may be used for purposes other than investment in public capital. Therefore, further analysis is necessary to understand this relationship more clearly and explain this variation.¹⁴

Conclusions and Implications

Capital spending by state and local governments has been stable over the period 2000 through 2012, remaining essentially constant in real terms and as a fraction of total state and local expenditure. However, capital investment declined in both an absolute and relative sense in 2010, 2011, and 2012. This might be interpreted in two ways. On one hand, state and local governments have not reduced their commitment to maintaining the public capital stock. State and local governments are spending more than \$330 billion annually in capital investment. On the other hand, state and local gov-

ernments have not taken any concerted action to enhance attention to public capital, which some have called for in light of concern about public capital depreciation. There is no evidence of a reallocation of state and local resources toward capital or of a major expansion of investment.

One important observation from the aggregate data is that the two national recessions during this period — the short recession at the start of the decade and the Great Recession in 2007-2009 — do not seem to have hurt public capital investment. There is little evidence in the data that investment declined during the recessions. Indeed, the data suggest, especially for the Great Recession, that capital investment by state and local governments increased during this period. Recent statistical analysis by the authors confirms that capital spending around the two recessions did increase.¹⁵

As with many aspects of state and local public finance, interstate differences are substantial so that the picture presented by the aggregate sector can be deceiving for specific cases. These differences suggest several questions about the factors influencing state decisions about both the level and composition of capital spending. It seems important to

¹⁴There are several factors to consider in interpreting this ratio. It may reflect differences in borrowing costs over time. A simple interpretation of this ratio is also difficult because borrowing for a project and spending on a project may occur in separate years. Also, of course, state and localities issue bonds for many things other than capital expenditure, including such things as student loans, low-income mortgage loans, industrial or commercial development projects, and so on. Much of this is what the census categorizes as private purpose debt.

¹⁵See Fisher and Wassmer, *supra* note 12.

better understand why some states seem to be investing in public capital at a substantial rate while others are lagging. Are these differences the result of expected economic factors, or are states engaging in unintended or inappropriate fiscal decisions? Our statistical analysis suggests that interstate differences remain even after controlling for economic and political differences among the states. In essence, some states invested in capital to a greater degree than expected based on their economic and social circumstances, whereas others invested less than expected.

One important aspect for future research concerning the interstate differences is relating capital spending to the quality of the public capital stock. Is there evidence that states with severely depreciated public capital assets are spending relatively more on capital? Conversely, is there evidence that the quality of the public capital stock has improved in states that have spent relatively more on public capital? And how is that capital stock regarding the quality of public services as well as broader issues of economic growth? In essence, one wants to relate capital spending to

issues of depreciation and services.¹⁶ Capital spending alone is, of course, merely a means toward satisfying citizens' demand for public services and maintaining the infrastructure necessary for the economy to function effectively.

This review provides basic information so that officials in each state can evaluate their own state's capital investment history in the context of both national trends and the fiscal behavior of relevant other states. The information also provides a rationale for state and local government officials to examine the policies, practices, and regulations that influence capital investment decisions in their jurisdictions. Governments that have experienced unusually high or low levels of capital investment might investigate whether those decisions appropriately reflect economic and social conditions or whether governance practices may have influenced capital investment decisions differentially.

¹⁶In the past, a state's circumstances may have led to the establishment of a large or high-quality public capital stock. If circumstances have changed and that capital stock is no longer demanded, a state simply may let the stock depreciate. The opposite is also feasible.

Table 1.
State and Local Capital Expenditure, 2000-2012

Per Capita Capital Outlay (nominal)		Percentage of Personal Income		Percentage of Total Expenditure	
Alaska	\$28,775	Alaska	6.4%	Wyoming	17.0%
Wyoming	\$23,454	Wyoming	5.0%	South Dakota	16.7%
New York	\$17,200	Utah	4.1%	Nevada	16.2%
Washington	\$16,549	Nebraska	3.7%	Utah	16.1%
Nebraska	\$15,315	Washington	3.7%	North Dakota	15.6%
North Dakota	\$14,482	North Dakota	3.5%	Washington	15.4%
Nevada	\$14,097	New York	3.5%	Nebraska	15.2%
Utah	\$14,001	New Mexico	3.4%	Arizona	14.8%
South Dakota	\$13,027	Nevada	3.3%	Texas	14.8%
Iowa	\$12,928	Iowa	3.3%	Alaska	14.8%
Colorado	\$12,862	Arizona	3.3%	Iowa	14.3%
Delaware	\$12,789	South Dakota	3.2%	Georgia	14.1%
California	\$12,315	Montana	3.1%	Florida	13.8%
Arizona	\$12,294	Louisiana	3.1%	Colorado	13.6%
Texas	\$12,183	Georgia	3.1%	Montana	13.0%
Minnesota	\$11,954	Texas	3.0%	Kansas	12.4%
Florida	\$11,864	South Carolina	3.0%	Oklahoma	12.3%
New Mexico	\$11,682	Delaware	3.0%	New York	12.0%
Georgia	\$11,637	Mississippi	2.9%	Delaware	12.0%
Louisiana	\$11,426	Florida	2.9%	Louisiana	11.9%
United States Total	\$11,327	Oregon	2.9%	New Mexico	11.8%
Montana	\$11,124	Colorado	2.8%	Minnesota	11.7%
Hawaii	\$10,975	Kentucky	2.7%	United States Total	11.7%
Oregon	\$10,953	Alabama	2.7%	Idaho	11.7%
Illinois	\$10,709	California	2.7%	South Carolina	11.4%
Kansas	\$10,683	United States Total	2.7%	Virginia	11.4%
South Carolina	\$10,363	Minnesota	2.7%	Missouri	11.4%
Massachusetts	\$10,265	Kansas	2.7%	Illinois	11.3%
New Jersey	\$9,955	Hawaii	2.6%	Indiana	11.3%
Ohio	\$9,882	Ohio	2.6%	Alabama	11.2%
Pennsylvania	\$9,680	West Virginia	2.6%	Kentucky	11.2%
Oklahoma	\$9,515	Oklahoma	2.6%	North Carolina	11.1%
Alabama	\$9,439	Idaho	2.5%	Oregon	11.1%
Virginia	\$9,434	North Carolina	2.5%	Hawaii	10.8%
Connecticut	\$9,412	Indiana	2.5%	California	10.7%
Wisconsin	\$9,404	Illinois	2.4%	Mississippi	10.6%
Kentucky	\$9,267	Wisconsin	2.4%	Ohio	10.5%
North Carolina	\$9,251	Missouri	2.3%	Arkansas	10.4%
Mississippi	\$9,209	Pennsylvania	2.3%	West Virginia	10.3%
Maryland	\$9,026	Arkansas	2.3%	Pennsylvania	10.2%
Missouri	\$8,964	Tennessee	2.2%	Wisconsin	10.0%
Indiana	\$8,913	Virginia	2.0%	Maryland	9.7%
Idaho	\$8,699	Michigan	2.0%	Tennessee	9.5%
West Virginia	\$8,333	Massachusetts	1.9%	Massachusetts	9.3%
Tennessee	\$8,057	New Jersey	1.9%	New Jersey	9.2%
Arkansas	\$7,702	Vermont	1.9%	Connecticut	9.0%
Vermont	\$7,511	Maryland	1.8%	New Hampshire	8.8%
Michigan	\$7,385	Maine	1.8%	Michigan	8.4%
New Hampshire	\$7,022	Connecticut	1.6%	Vermont	7.5%
Rhode Island	\$6,705	Rhode Island	1.6%	Maine	7.4%
Maine	\$6,704	New Hampshire	1.5%	Rhode Island	6.6%

Source: U.S. Census Bureau.

Table 2.
Distribution of State and Local Capital Expenditure, 2000-2012

Percentage Capital Outlay for:					
K-12 Education		Highways		Higher Education	
New Jersey	26.4%	Montana	50.9%	Michigan	16.6%
South Carolina	25.4%	North Dakota	48.0%	Vermont	16.5%
Texas	25.1%	West Virginia	47.3%	Alabama	14.9%
Michigan	24.8%	South Dakota	46.0%	Virginia	14.6%
New Mexico	23.9%	Wisconsin	39.7%	Arkansas	12.6%
Maryland	22.4%	Alaska	38.7%	Oklahoma	12.5%
Ohio	21.9%	Idaho	38.4%	Oregon	12.3%
Arkansas	21.5%	Vermont	37.9%	New Mexico	11.9%
Connecticut	21.4%	Delaware	36.7%	West Virginia	11.7%
California	21.1%	Kansas	36.7%	Idaho	11.5%
New Hampshire	20.9%	Kentucky	36.7%	North Carolina	11.4%
Georgia	20.2%	Maine	36.1%	Wisconsin	11.2%
Pennsylvania	20.2%	Mississippi	35.7%	New Hampshire	10.9%
Florida	19.9%	Pennsylvania	35.2%	Mississippi	10.6%
Virginia	19.8%	Oklahoma	34.9%	Maryland	10.4%
Indiana	19.7%	Arkansas	34.2%	Hawaii	10.1%
Nevada	19.4%	Minnesota	33.7%	Delaware	10.0%
United States Total	19.1%	Louisiana	33.2%	Kentucky	9.9%
Illinois	19.1%	Wyoming	32.0%	Indiana	9.5%
Minnesota	19.1%	Missouri	32.0%	Iowa	9.4%
Kansas	19.0%	Iowa	31.2%	Connecticut	9.1%
Delaware	18.8%	Maryland	31.1%	Ohio	8.8%
Missouri	18.4%	Tennessee	29.3%	Texas	8.8%
Wyoming	18.3%	Rhode Island	29.2%	Kansas	8.7%
Utah	18.3%	Nevada	29.2%	Maine	8.5%
Iowa	18.1%	New Mexico	28.8%	California	8.4%
Kentucky	18.0%	Indiana	28.7%	United States Total	8.1%
Maine	17.3%	Florida	28.2%	Massachusetts	8.1%
Alabama	17.2%	Illinois	28.2%	Utah	8.1%
Colorado	17.0%	Massachusetts	28.1%	Colorado	7.8%
North Carolina	16.2%	Nebraska	27.7%	South Carolina	7.8%
Washington	15.8%	New Hampshire	27.7%	New Jersey	7.7%
Mississippi	15.7%	Alabama	27.6%	Arizona	7.5%
Arizona	15.6%	Utah	27.4%	South Dakota	7.3%
Tennessee	15.3%	North Carolina	27.0%	Missouri	7.2%
Vermont	15.2%	Texas	26.1%	Montana	7.2%
New York	14.9%	New Jersey	25.5%	Georgia	7.1%
South Dakota	14.7%	United States Total	25.5%	Pennsylvania	7.1%
Oklahoma	14.3%	Georgia	24.9%	Nebraska	7.0%
Massachusetts	14.3%	Ohio	24.6%	Washington	6.9%
Nebraska	14.2%	Washington	22.9%	Tennessee	6.6%
West Virginia	14.2%	Oregon	22.5%	North Dakota	6.5%
Alaska	13.9%	Virginia	22.1%	Wyoming	6.4%
Wisconsin	13.7%	South Carolina	21.9%	Minnesota	6.3%
Oregon	13.5%	Arizona	21.9%	Illinois	5.5%
Louisiana	13.0%	Colorado	21.8%	Rhode Island	5.4%
Idaho	13.0%	Michigan	20.1%	New York	5.1%
Hawaii	12.0%	Connecticut	20.1%	Alaska	5.0%
North Dakota	11.9%	Hawaii	19.6%	Florida	5.0%
Montana	10.2%	New York	17.9%	Louisiana	4.8%
Rhode Island	7.7%	California	15.8%	Nevada	4.5%

Source: U.S. Census Bureau.

Table 3.
Percentage Change in State and Local Capital Expenditure, 2012 vs. 2000

Per Capita Expenditure (Nominal)		Share of Total Expenditure	
North Dakota	131.6%	North Dakota	26.6%
Louisiana	109.6%	Montana	21.1%
Montana	101.7%	Louisiana	14.2%
District of Columbia	95.6%	Iowa	12.1%
Iowa	93.2%	West Virginia	11.8%
Vermont	89.8%	District of Columbia	10.5%
West Virginia	79.8%	Vermont	8.8%
New York	74.8%	Utah	8.6%
South Dakota	71.0%	New York	6.1%
Virginia	66.1%	Virginia	5.1%
Wyoming	62.8%	Hawaii	4.6%
Connecticut	62.2%	South Dakota	4.3%
Utah	61.3%	Connecticut	2.7%
Hawaii	60.3%	Maine	0.3%
Arkansas	59.9%	Pennsylvania	-2.5%
Pennsylvania	57.0%	Alaska	-3.4%
Delaware	56.3%	Washington	-3.6%
Maine	54.9%	Arkansas	-7.1%
Maryland	54.6%	California	-7.4%
Oklahoma	54.4%	Delaware	-7.6%
California	54.4%	Oregon	-8.4%
Kansas	49.6%	New Mexico	-11.1%
Rhode Island	48.7%	Oklahoma	-11.2%
Washington	46.2%	Rhode Island	-11.2%
Mississippi	43.0%	Indiana	-12.2%
Alaska	40.9%	Kansas	-12.2%
New Mexico	40.2%	Maryland	-13.4%
New Hampshire	38.2%	Mississippi	-14.7%
Kentucky	37.0%	United States Total	-15.5%
New Jersey	35.0%	New Hampshire	-17.2%
Indiana	34.3%	Wyoming	-17.5%
United States Total	33.4%	Texas	-17.9%
Nebraska	32.6%	Kentucky	-18.0%
Oregon	30.2%	Nebraska	-20.9%
Texas	28.2%	New Jersey	-21.4%
Illinois	26.4%	Alabama	-21.6%
Missouri	21.4%	Idaho	-21.6%
Ohio	18.0%	Illinois	-22.5%
Alabama	17.8%	Minnesota	-23.5%
Idaho	10.7%	Missouri	-26.6%
Minnesota	9.4%	Ohio	-26.6%
Massachusetts	4.8%	North Carolina	-27.0%
North Carolina	4.6%	Nevada	-28.1%
Wisconsin	3.9%	Arizona	-29.8%
Tennessee	-0.5%	Wisconsin	-30.0%
Florida	-2.5%	Georgia	-31.9%
Georgia	-2.6%	Tennessee	-33.3%
Nevada	-2.8%	Florida	-34.0%
Arizona	-3.0%	Colorado	-35.3%
Colorado	-3.9%	South Carolina	-36.0%
South Carolina	-5.7%	Massachusetts	-36.7%
Michigan	-15.2%	Michigan	-41.0%

Source: U.S. Census Bureau.

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