

## Chapter 5: Federal Revenues

---

### Federal Revenues

Federal revenues for public elementary and secondary education totaled \$20.1 billion in 1997–98 (table 5-1). This was approximately 6.3 percent of total district revenues (\$321.6 billion) in 1997–98. Just over 34 percent of federal revenues came from Title I allocations (\$6.9 billion) (table 5-6), with the rest coming from other federal sources.

### Federal Revenues Per Pupil

Federal revenues per pupil in the United States averaged \$441 in 1997–98 before cost adjustments (table 5-1). Federal revenues per pupil were highest in the South (\$482) and lowest in the Midwest (\$378). At \$455 per pupil, federal revenues in the West were higher than in the Northeast (\$422). The use of cost adjustments increased the range between the highest and lowest regions from \$104 to \$143 and the ratio of revenues per pupil from 1.3 to 1.4 to 1. The South remained the region with the highest per pupil revenues at \$523, but the Northeast replaced the Midwest as the region with lowest federal revenues per pupil at \$380.

The smallest and largest districts had the most federal revenues per pupil, both before and after cost adjustments. Mid-sized districts averaged smaller federal revenues per pupil. Before cost adjustments, federal revenues per pupil averaged \$439 in districts with fewer than 1,000 students and \$490 in districts with 10,000 or more students, compared to \$384 and \$388 in the respective mid-ranges. After cost adjustments, federal revenues per pupil averaged \$499 in the smallest districts and \$478 in the largest, compared to \$410 and \$397 in the mid-sized districts. The difference between the smallest and the largest revenues per pupil decreased from \$106 to \$102 per pupil. Correlation analysis showed no significant relationship between district enrollment and federal revenues per pupil, either before or after cost adjustments (tables A-1 and A-2).

Before cost adjustments, federal revenues per pupil showed negative relationships with two measures of district wealth—median household income (-0.46) and median value owner-occupied housing (-0.15) (table A-19). In other words, districts in areas with stronger economic bases tended to have less revenue from federal sources than districts in poorer areas (table 5-1). School districts with median household income at or above \$35,000 had average federal revenues per pupil of \$228, while districts with median household incomes below \$20,000 had revenues per pupil of \$806. Similarly, districts with median housing values at or above \$85,000 had average federal revenues of \$367 per pupil, while districts with median housing values below \$40,000 had federal revenues per pupil of \$658.

The relationship was stronger after cost adjustments. Cost adjustments increased the range on federal revenues per pupil between districts with the highest and lowest wealth from \$578 to \$671 between districts with the highest and lowest median household incomes, and from \$291 to \$394 between districts with the highest and lowest median housing values. The ratios were increased from 3.5 to 4.2 to

Table 5-1. Federal revenues, cost-adjusted federal revenues, federal revenues per pupil, and cost-adjusted federal revenues per pupil in public school districts, by region, enrollment, minority enrollment, poverty, median household income, and median value owner-occupied housing: 1997–98

School district characteristics	Federal revenues (in thousands)	Cost-adjusted federal revenues (in thousands)	Federal revenues per pupil	Cost-adjusted federal revenues per pupil
All districts	\$20,132,950	\$20,355,036	\$441	\$447
Region				
Northeast	3,343,736	3,008,403	422	380
Midwest	4,016,618	4,120,249	378	390
South	7,949,168	8,624,678	482	523
West	4,823,428	4,601,706	455	436
District enrollment				
0–999	1,193,349	1,337,993	439	499
1,000–4,999	4,983,611	5,300,435	384	410
5,000–9,999	2,738,913	2,792,358	388	397
10,000 or more	11,217,077	10,924,250	490	478
Minority enrollment				
Less than 5 percent	3,132,661	3,334,244	277	295
5 percent–<20 percent	3,812,046	3,916,962	318	326
20 percent–<50 percent	6,502,154	6,588,049	507	513
50 percent or more	5,594,571	5,351,194	785	751
Data missing	1,091,518	1,164,587	—	—
School-age children in poverty				
Less than 5 percent	810,299	754,356	157	146
5 percent–<15 percent	4,357,449	4,356,757	281	281
15 percent–<25 percent	5,648,124	5,862,632	477	495
25 percent or more	8,225,560	8,216,703	765	764
Data missing	1,091,518	1,164,587	—	—
Median household income				
Less than \$20,000	2,788,492	3,049,104	806	881
\$20,000–<\$25,000	4,725,374	4,993,837	563	595
\$25,000–<\$30,000	5,720,157	5,654,393	510	504
\$30,000–<\$35,000	2,932,095	2,845,348	388	376
\$35,000 or more	2,875,314	2,647,768	228	210
Data missing	1,091,518	1,164,587	—	—
Median value owner-occupied housing				
Less than \$40,000	2,406,679	2,662,942	658	728
\$40,000–<\$55,000	4,177,120	4,475,055	534	572
\$55,000–<\$85,000	6,093,245	6,265,662	422	434
\$85,000 or more	6,364,388	5,786,789	367	334
Data missing	1,091,518	1,164,587	—	—

—Not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997–98" and U.S. Department of Commerce, Bureau of the Census, 1990 Decennial Census School District Special Tabulation.

1 for median household income and from 1.8 to 2.2 to 1 for median value owner-occupied housing. The correlation between adjusted federal revenues per pupil and median household income was -0.50 and median value owner-occupied housing was -0.23 (table A-20).

Federal revenues per pupil showed a positive relationship with two district demographic characteristics—percent minority enrollment and percent school-age children living in poverty—both before and after cost adjustments. Before adjustments, school districts with the highest minority enrollments also had the highest federal revenues per pupil, and districts with the lowest minority enrollments had the lowest—\$785 and \$277, respectively. After adjustments, the range between the lowest- and highest-minority districts decreased—from \$508 to \$456. Correlation analysis also showed a positive relationship between federal revenues per pupil and percent minority enrollment, both before (+0.56) and after (+0.49) cost adjustments.

Federal revenues per pupil were lowest in the lowest-poverty districts and highest in the highest-poverty districts both before and after cost adjustments—\$157 and \$765, respectively, before cost adjustments, and \$146 and \$764 respectively, after cost adjustments. Correlation analysis also demonstrated that districts with greater poverty tended to have more revenues per pupil from federal sources, both before (+0.66) and after (+0.65) cost adjustments.

## Variations in Federal Revenues Per Pupil

### *Restricted Range Ratio*

The restricted range ratio for unadjusted federal revenues per pupil across the United States was 7.13 (table 5-2).<sup>12</sup> Variation in the states ranged from 0.49 in Nevada to 15.38 in Connecticut and two very high values in Montana (43.43) and in New Hampshire (94.68). Fourteen states had a restricted range ratio higher than that for the United States. (The restricted range ratio could not be calculated for federal revenues in Vermont because the fifth percentile—by which the difference was divided—was equal to zero.)

When cost adjustments were applied, the restricted range ratio for federal revenues per pupil across the United States increased to 7.54 (table 5-3). Thirteen states exceeded the national variation after cost adjustments. Cost adjustments decreased the range between the lowest-variation and highest-variation states. After cost adjustments, the restricted range ratio ranged from 0.49 in Nevada to 14.80 in Connecticut, with high values in Montana (37.32) and New Hampshire (92.62).<sup>13</sup>

### *Coefficient of Variation*

The coefficient of variation for unadjusted federal revenues per pupil across the United States was 0.79 (table 5-2). Variation in the states ranged from 0.24 in Florida to 2.37 in Minnesota. Seventeen states had a coefficient of variation higher than that for the United States.

When federal revenues were adjusted for cost of education differences, the coefficient of variation for federal revenues per pupil across the United States rose to 0.81 (table 5-3). Fourteen states exceeded the national variation after cost adjustments. Cost adjustments increased the range between the lowest-variation and highest-variation states. After cost adjustments, the coefficient of variation ranged from 0.25 in Florida to 2.65 in Minnesota.

### *Gini Coefficient*

The Gini coefficient for unadjusted federal revenues per pupil across the United States was 0.34 (table 5-2). Variation in the states ranged from 0.08 in Nevada to 0.55 in Montana. Nineteen states had a Gini coefficient higher than that for the United States.

Cost-of-education adjustments had no effect on the Gini coefficient across the United States; it remained 0.34 (table 5-3). Again, 19 states exceeded the United States level of variation. Cost adjust-

<sup>12</sup>The range across the states excludes Vermont, where the restricted range ratio was infinity.

<sup>13</sup>See footnote 12 above.

Table 5-2. Variation in federal revenues per pupil (unadjusted dollars), by state: 1997–98

State	Restricted range ratio		Coefficient of variation		Gini coefficient		Average rank	Average quartile
	Value	Rank	Value	Rank	Value	Rank		
United States	7.13	†	0.79	†	0.34	†	†	†
Alabama	2.13	6	0.38	8	0.20	7	7.00	1
Alaska	10.15	42	1.27	42	0.48	46	43.33	4
Arizona	7.08	34	1.36	44	0.46	43	40.33	4
Arkansas	2.95	13	0.50	14	0.24	14	13.67	1
California	4.56	24	0.53	16	0.28	20	20.00	2
Colorado	5.05	27	0.71	29	0.33	28	28.00	3
Connecticut	15.38	46	0.98	36	0.48	46	42.67	4
Delaware	3.26	15	0.59	21	0.22	11	15.67	2
District of Columbia	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Florida	1.00	2	0.24	1	0.13	2	1.67	1
Georgia	3.64	18	0.49	13	0.27	17	16.00	2
Hawaii	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Idaho	3.29	16	0.55	17	0.23	12	15.00	2
Illinois	14.11	45	0.79	32	0.43	40	39.00	4
Indiana	9.10	39	0.68	26	0.37	32	32.33	3
Iowa	3.51	17	0.42	11	0.23	12	13.33	1
Kansas	8.38	38	1.02	39	0.40	36	37.67	4
Kentucky	2.88	12	0.39	10	0.21	9	10.33	1
Louisiana	1.43	3	0.25	2	0.14	3	2.67	1
Maine	4.22	23	1.31	43	0.31	22	29.33	3
Maryland	3.93	22	0.57	19	0.27	17	19.33	2
Massachusetts	3.90	21	0.56	18	0.31	22	20.33	2
Michigan	11.94	44	0.85	34	0.43	40	39.33	4
Minnesota	5.09	28	2.37	49	0.42	39	38.67	4
Mississippi	2.68	11	0.38	8	0.21	9	9.33	1
Missouri	7.04	33	0.68	26	0.34	30	29.67	3
Montana	43.43	47	1.77	47	0.55	49	47.67	4
Nebraska	4.95	26	1.04	40	0.39	34	33.33	3
Nevada	0.49	1	0.28	4	0.08	1	2.00	1
New Hampshire	94.68	48	0.57	19	0.31	22	29.67	3
New Jersey	9.25	40	0.91	35	0.41	37	37.33	3
New Mexico	8.02	36	0.99	37	0.39	34	35.67	3
New York	6.48	32	0.60	22	0.33	28	27.33	3
North Carolina	1.80	5	0.33	6	0.18	5	5.33	1
North Dakota	4.66	25	2.18	48	0.46	43	38.67	4
Ohio	10.08	41	0.77	31	0.41	37	36.33	3
Oklahoma	5.72	30	0.65	25	0.31	22	25.67	2
Oregon	3.65	19	0.46	12	0.25	16	15.67	2
Pennsylvania	11.48	43	0.81	33	0.43	40	38.67	4
Rhode Island	5.34	29	0.68	26	0.36	31	28.67	3
South Carolina	2.48	10	0.37	7	0.20	7	8.00	1
South Dakota	7.96	35	1.57	46	0.46	43	41.33	4
Tennessee	2.20	8	0.32	5	0.18	5	6.00	1
Texas	6.22	31	0.63	23	0.31	22	25.33	2
Utah	2.15	7	0.63	23	0.24	14	14.67	2
Vermont	( <sup>2</sup> )	( <sup>2</sup> )	1.13	41	0.53	48	44.50	4
Virginia	3.09	14	0.51	15	0.27	17	15.33	2
Washington	3.79	20	0.75	30	0.32	27	25.67	2
West Virginia	2.20	8	0.26	3	0.14	3	4.67	1
Wisconsin	8.11	37	0.99	37	0.38	33	35.67	3
Wyoming	1.65	4	1.53	45	0.29	21	23.33	2

†Not applicable.

<sup>1</sup>Variation is not measured in the District of Columbia or Hawaii where there is only one school district.<sup>2</sup>The restricted range ratio could not be calculated for federal revenues in Vermont because the fifth percentile—by which the difference is divided—was equal to zero.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997–98."

Table 5-3. Variation in federal revenues per pupil (cost-adjusted dollars), by state: 1997–98

State	Restricted range ratio		Coefficient of variation		Gini coefficient		Average rank	Average quartile
	Value	Rank	Value	Rank	Value	Rank		
United States	7.54	†	0.81	†	0.34	†	†	†
Alabama	2.45	8	0.40	9	0.21	7	8.00	1
Alaska	10.69	42	1.30	43	0.48	46	43.67	4
Arizona	7.26	34	1.42	44	0.47	43	40.33	4
Arkansas	3.01	12	0.53	14	0.25	15	13.67	1
California	4.89	25	0.55	16	0.28	19	20.00	2
Colorado	5.38	29	0.70	29	0.33	27	28.33	3
Connecticut	14.80	46	0.96	37	0.47	43	42.00	4
Delaware	3.52	16	0.62	23	0.24	12	17.00	2
District of Columbia	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Florida	1.07	2	0.25	1	0.13	2	1.67	1
Georgia	4.41	22	0.54	15	0.29	21	19.33	2
Hawaii	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Idaho	3.43	15	0.57	19	0.24	12	15.33	2
Illinois	14.13	45	0.77	32	0.42	40	39.00	4
Indiana	8.97	39	0.66	26	0.36	32	32.33	3
Iowa	3.79	18	0.42	11	0.23	11	13.33	1
Kansas	9.00	40	0.98	38	0.39	36	38.00	4
Kentucky	3.36	14	0.41	10	0.22	9	11.00	1
Louisiana	1.56	3	0.27	2	0.14	3	2.67	1
Maine	4.85	24	0.56	17	0.28	19	20.00	2
Maryland	3.71	17	0.56	17	0.27	17	17.00	2
Massachusetts	4.10	20	0.57	19	0.31	23	20.67	2
Michigan	11.33	43	0.79	33	0.41	38	38.00	4
Minnesota	4.59	23	2.65	49	0.43	41	37.67	4
Mississippi	2.97	11	0.39	7	0.22	9	9.00	1
Missouri	7.45	35	0.67	28	0.34	30	31.00	3
Montana	37.32	47	1.78	47	0.55	49	47.67	4
Nebraska	5.20	27	1.07	41	0.37	33	33.67	3
Nevada	0.49	1	0.30	4	0.08	1	2.00	1
New Hampshire	92.62	48	0.60	22	0.32	24	31.33	3
New Jersey	8.82	38	0.92	36	0.41	38	37.33	3
New Mexico	5.90	30	0.99	39	0.37	33	34.00	3
New York	7.09	33	0.59	21	0.32	24	26.00	2
North Carolina	2.10	6	0.36	6	0.19	5	5.67	1
North Dakota	5.20	27	2.31	48	0.47	43	39.33	4
Ohio	9.73	41	0.75	31	0.40	37	36.33	3
Oklahoma	6.78	32	0.70	29	0.33	27	29.33	3
Oregon	4.09	19	0.49	12	0.25	15	15.33	2
Pennsylvania	11.53	44	0.80	34	0.43	41	39.67	4
Rhode Island	5.18	26	0.66	26	0.35	31	27.67	3
South Carolina	2.74	10	0.39	7	0.21	7	8.00	1
South Dakota	8.45	37	1.65	46	0.48	46	43.00	4
Tennessee	2.68	9	0.34	5	0.19	5	6.33	1
Texas	6.43	31	0.65	24	0.32	24	26.33	2
Utah	2.03	5	0.65	24	0.24	12	13.67	1
Vermont	( <sup>2</sup> )	( <sup>2</sup> )	1.13	42	0.52	48	45.00	4
Virginia	3.14	13	0.51	13	0.27	17	14.33	2
Washington	4.33	21	0.80	34	0.33	27	27.33	3
West Virginia	2.29	7	0.27	2	0.15	4	4.33	1
Wisconsin	8.09	36	1.01	40	0.37	33	36.33	3
Wyoming	1.78	4	1.54	45	0.29	21	23.33	2

†Not applicable.

<sup>1</sup>Variation is not measured in the District of Columbia or Hawaii where there is only one school district.<sup>2</sup>The restricted range ratio could not be calculated for federal revenues in Vermont because the fifth percentile—by which the difference is divided—was equal to zero.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997–98."

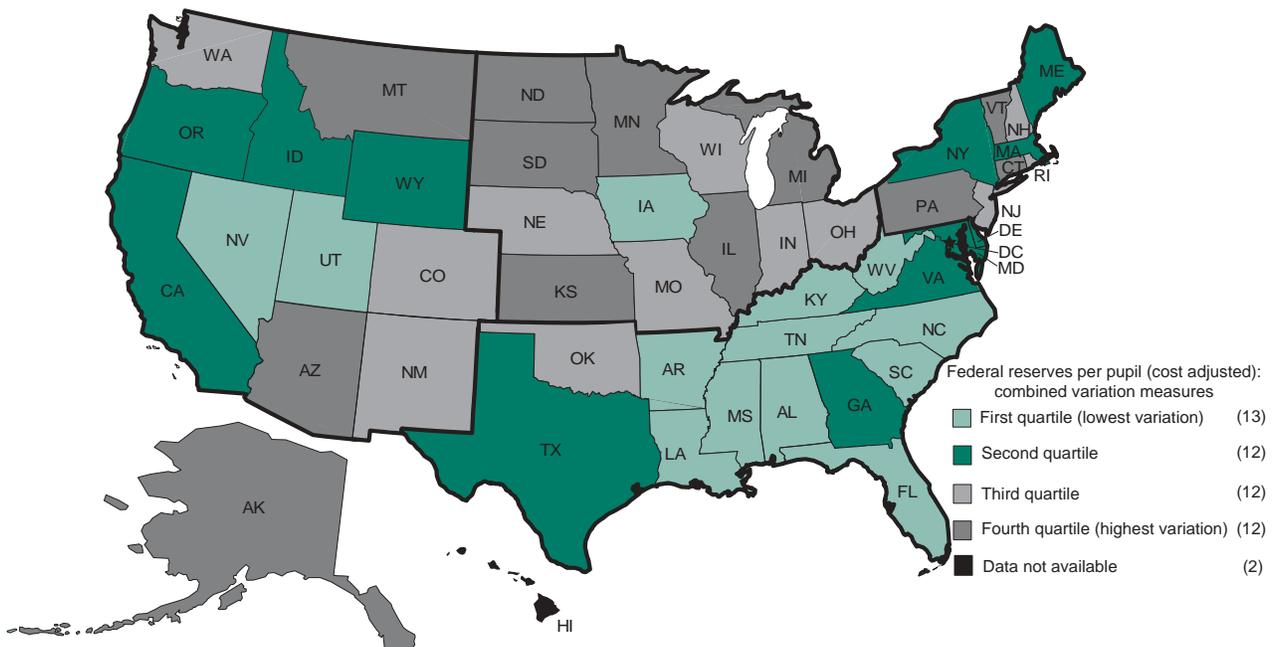
ments had no effect on the range of variation among the states. After adjustments, the Gini coefficient still ranged from 0.08 in Nevada to 0.55 in Montana.

### Overall Variation

In a synthesis of the three variation measures of unadjusted federal revenues per pupil, states in the Northeast and Midwest had high interdistrict variation relative to states across the country, and states in the South had low variation (figure 5-1). Half of the Western states were in the two quartiles with lowest variation when ranked with states across the country (table 5-4). Based on cost-adjusted revenues per pupil, nearly all Midwestern states (92 percent) were in the two quartiles with highest variation, and two-thirds of the Northeastern states were in these quartiles (67 percent after cost adjustments). In contrast, nearly all Southern states were in the low-variation quartiles after cost adjustments (94 percent).

In comparing the rankings of states on all three variation measures, both before and after cost adjustments, a large number of states measured differently depending on which measure of variation was used (tables 5-2 and 5-3). Of particular note was Wyoming, which was in the top quartile when measured by the restricted range ratio, the bottom quartile by the Gini coefficient, and in the middle quartiles by the coefficient of variation. Also of interest were Minnesota and New Hampshire, where the restricted range ratio was lower or higher than the other two variation measures, relative to the other states. In the case of Minnesota, where the restricted range ratio was relatively low, this might be the result of several large outliers that were excluded from the restricted range ratio but were included in the other measures. In the case of New Hampshire, where the restricted range ratio was higher, this

Figure 5-1. Synthesis of variation measures of federal revenues per pupil (cost-adjusted dollars), by state: 1997–98



NOTE: Variation is not measured in the District of Columbia or Hawaii where there is only one school district. Regions are delineated in black; Alaska and Hawaii are part of the Western Region.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997–98."

Table 5-4. Variation in federal revenues per pupil, by region: 1997–98

Region	Percent of states in quartiles 1 and 2 (low variation)	Percent of states in quartiles 3 and 4 (high variation)
Unadjusted federal revenues per pupil		
Northeast	11	89
Midwest	8	92
South	100	0
West	58	42
Cost-adjusted federal revenues per pupil		
Northeast	33	67
Midwest	8	92
South	94	6
West	50	50

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997–98."

could be a result of several districts receiving no federal revenues, thus making the fifth percentile close to zero.

### Relationship between Federal Revenues Per Pupil and Selected District Fiscal and Demographic Characteristics

For the United States as a whole, federal revenues per pupil in unadjusted dollars showed a negative relationship with a school district's median household income (-0.46) and its median value owner-occupied housing (-0.15) (table A-19). Similarly, at the state level, median value owner-occupied housing was negatively related to federal revenues per pupil in all but seven of the 40 states with available data; there was no significant relationship found in Delaware, Florida, New York, North Dakota, Vermont, or Wyoming, and a weak positive relationship was found in Nebraska (table 5-5). A moderate negative relationship was found in 17 states, while 16 states showed a strong negative relationship between median value owner-occupied housing and federal revenues per pupil. Median household income was more strongly related to federal revenues per pupil. Two states (Delaware and Nevada) showed no statistically significant relationship between district income and federal revenues per pupil, but two-thirds of the states with sufficient data (26) showed a strong negative relationship between income and revenues.

After cost adjustments, there was a stronger negative relationship between district wealth and federal revenues per pupil for the United States as a whole. The cost-adjusted correlation with median value owner-occupied housing was -0.23. The cost-adjusted correlation with median household income was -0.50 (table A-20). After cost adjustments, six states (Delaware, Nebraska, New York, North Dakota, Vermont, and Wyoming) again showed no significant relationship between federal revenues per pupil and median value owner-occupied housing (figure 5-2). Fifteen states showed a moderate negative relationship, but nearly half of the states with sufficient data (19) showed a strong negative relationship between housing value and revenues. Similarly, after cost adjustments only Delaware demonstrated no significant relationship between median household income and federal revenues per pupil, while 28 states demonstrated a strong negative relationship (figure 5-3).

Federal revenues per pupil showed a positive relationship with minority enrollment for the United States as a whole, both before (+0.56) and after (+0.49) cost adjustments. No states demonstrated a negative relationship and four states—Delaware, Maine, Nevada, and West Virginia—showed no significant relationship, both before and after cost adjustments (figure 5-4). Over half of the states (30

Table 5-5. Correlations between federal revenues per pupil and selected fiscal and demographic characteristics, by state: 1997–98

Characteristics	States (before cost adjustments)	States (after cost adjustments)
<b>Minority enrollment</b>		
Strong positive relationship	Alabama, Alaska, Arizona, California, Connecticut, Florida, Idaho, Illinois, Indiana, Iowa, Louisiana, Maryland, Massachusetts, Michigan, Missouri, Montana, Nebraska, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Utah, Virginia, Washington, Wisconsin, Wyoming, <i>US overall</i>	Alabama, Alaska, Arizona, Connecticut, Idaho, Illinois, Indiana, Maryland, Massachusetts, Michigan, Montana, Nebraska, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, Utah, Virginia, Washington, Wisconsin, Wyoming
Moderate positive relationship	Kansas, Minnesota, New Hampshire, Tennessee, Texas, Vermont	California, <sup>1</sup> Florida, <sup>1</sup> Iowa, <sup>1</sup> Kansas, Louisiana, <sup>1</sup> Minnesota, Missouri, <sup>1</sup> New Hampshire, Oregon, <sup>1</sup> Tennessee, Texas, Vermont, <i>US overall</i>
Weak positive relationship	[none]	[none]
Weak negative relationship	[none]	[none]
Moderate negative relationship	[none]	[none]
Strong negative relationship	[none]	[none]
No significant relationship	Delaware, Maine, Nevada, West Virginia	Delaware, Maine, Nevada, West Virginia
<b>School-age children in poverty</b>		
Strong positive relationship	Alabama, Alaska, Arizona, California, Connecticut, Florida, Illinois, Indiana, Iowa, Louisiana, Maryland, Massachusetts, Michigan, Missouri, Montana, New Hampshire, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, Wyoming, <i>US overall</i>	Alabama, Alaska, Arizona, California, Connecticut, Florida, Illinois, Indiana, Iowa, Louisiana, Maryland, Massachusetts, Michigan, Missouri, Montana, New Hampshire, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, Wyoming, <i>US overall</i>
Moderate positive relationship	Idaho, Kansas, Maine, Minnesota, Nebraska, Vermont	Idaho, Kansas, Maine, Minnesota, Nebraska, Vermont
Weak positive relationship	[none]	[none]
Weak negative relationship	[none]	[none]
Moderate negative relationship	[none]	[none]
Strong negative relationship	[none]	[none]
No significant relationship	Delaware, Nevada	Delaware, Nevada
<b>Median household income</b>		
Strong positive relationship	[none]	[none]
Moderate positive relationship	[none]	[none]
Weak positive relationship	[none]	[none]
Weak negative relationship	[none]	[none]
Moderate negative relationship	Florida, Idaho, Kansas, Maine, Minnesota, Montana, Nebraska, New Hampshire, North Dakota, Vermont, Wisconsin, Wyoming, <i>US overall</i>	Idaho, Kansas, Maine, Minnesota, Montana, Nebraska, Nevada, <sup>1</sup> North Dakota, Vermont, Wisconsin, Wyoming
Strong negative relationship	Alabama, Alaska, Arizona, California, Connecticut, Illinois, Indiana, Iowa, Louisiana, Maryland, Massachusetts, Michigan, Missouri, New York, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, West Virginia	Alabama, Alaska, Arizona, California, Connecticut, Florida, <sup>1</sup> Illinois, Indiana, Iowa, Louisiana, Maryland, Massachusetts, Michigan, Missouri, New Hampshire, <sup>1</sup> New York, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, <i>US overall</i>
No significant relationship	Delaware, Nevada	Delaware
<b>Median value owner-occupied housing</b>		
Strong positive relationship	[none]	[none]
Moderate positive relationship	[none]	[none]
Weak positive relationship	Nebraska	[none]
Weak negative relationship	[none]	[none]
Moderate negative relationship	California, Connecticut, Idaho, Illinois, Indiana, Kansas, Louisiana, Maine, Massachusetts, Minnesota, Missouri, Montana, New Hampshire, Utah, Virginia, Washington, Wisconsin, <i>US overall</i>	California, Connecticut, Florida, <sup>1</sup> Idaho, Illinois, Kansas, Maine, Massachusetts, Minnesota, Missouri, Montana, New Hampshire, Utah, Washington, Wisconsin, <i>US overall</i>
Strong negative relationship	Alabama, Alaska, Arizona, Iowa, Maryland, Michigan, Nevada, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, West Virginia	Alabama, Alaska, Arizona, Indiana, <sup>1</sup> Iowa, Louisiana, <sup>1</sup> Maryland, Michigan, Nevada, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Virginia, <sup>1</sup> West Virginia
No significant relationship	Delaware, Florida, New York, North Dakota, Vermont, Wyoming	Delaware, Nebraska, <sup>1</sup> New York, North Dakota, Vermont, Wyoming

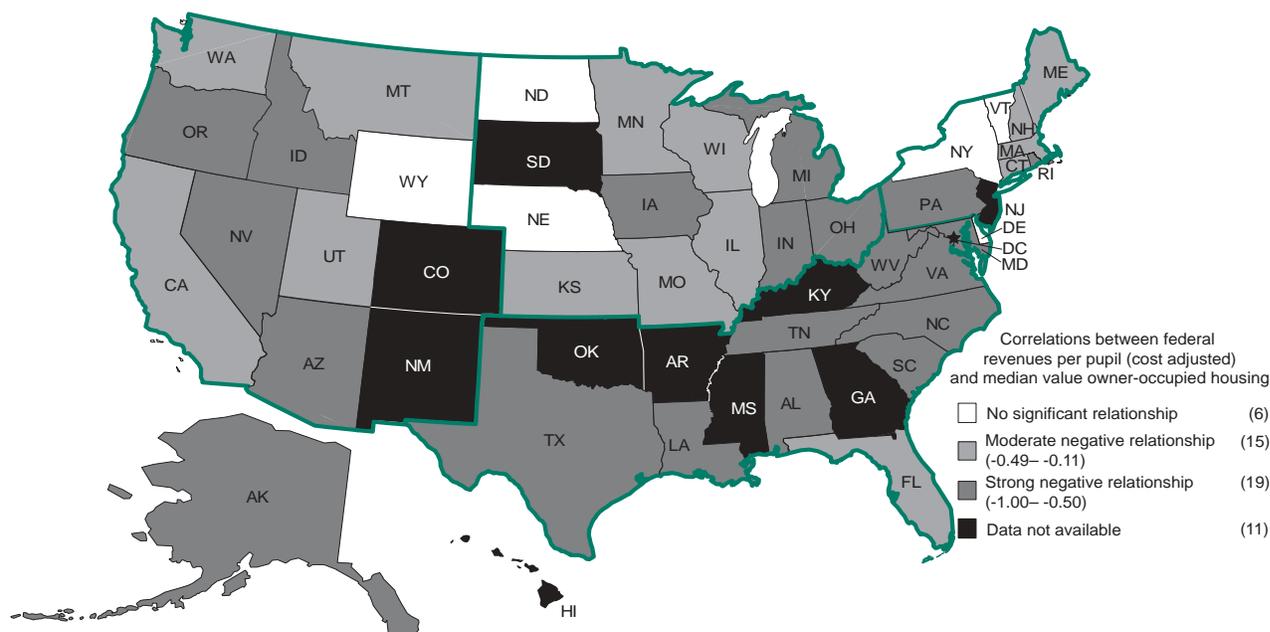
Table 5-5. Correlations between federal revenues per pupil and selected fiscal and demographic characteristics, by state: 1997–98—Continued

Characteristics	States (before cost adjustments)	States (after cost adjustments)
<b>Student membership</b>		
Strong positive relationship	Connecticut, Rhode Island	Connecticut, Rhode Island
Moderate positive relationship	Illinois, Indiana, New Jersey, Ohio, Pennsylvania, Vermont	Indiana, Massachusetts, <sup>1</sup> Ohio, Vermont
Weak positive relationship	Nebraska, New York	Illinois, <sup>1</sup> Pennsylvania <sup>1</sup>
Weak negative relationship	[none]	[none]
Moderate negative relationship	Arkansas, Georgia, Louisiana, Massachusetts, Mississippi, North Carolina, Oklahoma, South Carolina, Washington	Arkansas, Georgia, Idaho, <sup>1</sup> Louisiana, Maine, <sup>1</sup> Mississippi, Missouri, <sup>1</sup> North Carolina, Oklahoma, South Carolina, Tennessee, <sup>1</sup> Washington
Strong negative relationship	[none]	[none]
No significant relationship	Alabama, Alaska, Arizona, California, Colorado, Delaware, Florida, Idaho, Iowa, Kansas, Kentucky, Maine, Maryland, Michigan, Minnesota, Missouri, Montana, Nevada, New Hampshire, New Mexico, North Dakota, Oregon, South Dakota, Tennessee, Texas, Utah, Virginia, West Virginia, Wisconsin, Wyoming, <i>US overall</i>	Alabama, Alaska, Arizona, California, Colorado, Delaware, Florida, Iowa, Kansas, Kentucky, Maryland, Michigan, Minnesota, Montana, Nebraska, <sup>1</sup> Nevada, New Hampshire, New Jersey, <sup>1</sup> New Mexico, New York, <sup>1</sup> North Dakota, Oregon, South Dakota, Texas, Utah, Virginia, West Virginia, Wisconsin, Wyoming, <i>US overall</i>

<sup>1</sup>State changed categories after cost adjustments.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997–98" and U.S. Department of Commerce, Bureau of the Census, 1990 Decennial Census School District Special Tabulation.

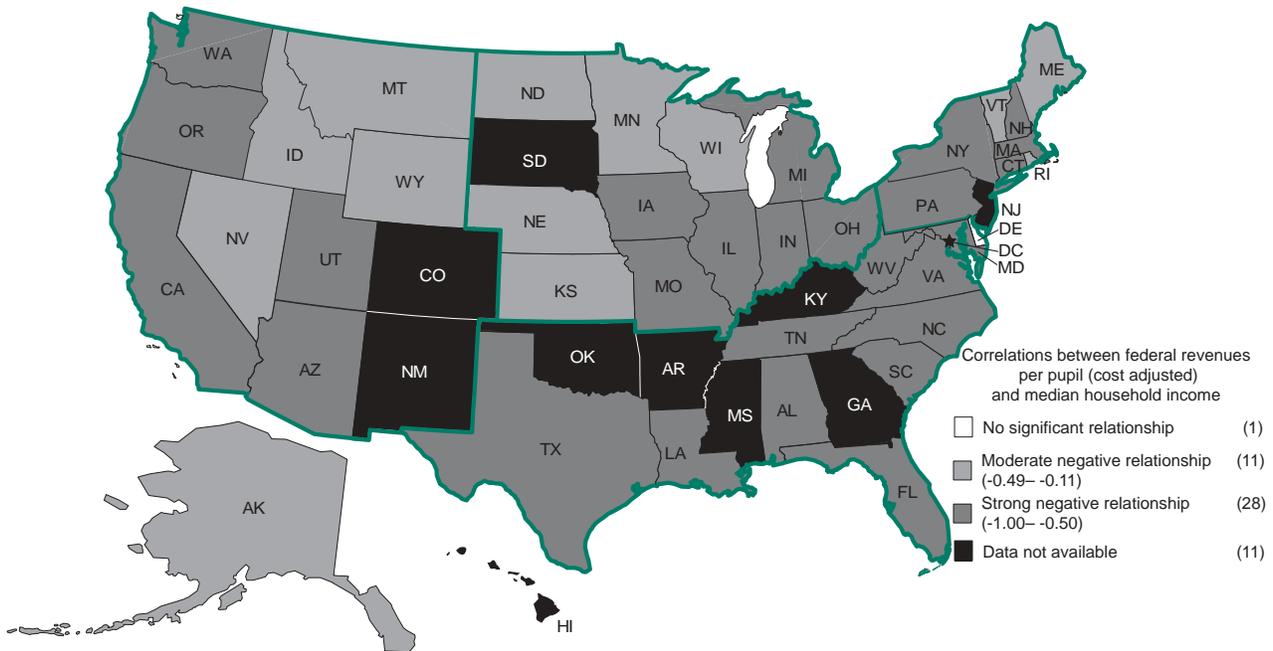
Figure 5-2. Correlations between federal revenues per pupil and median value owner-occupied housing (cost-adjusted dollars), by state: 1997–98



NOTE: No state-level correlation analysis was possible for the District of Columbia or Hawaii since they only have one district. Nine other states (Arkansas, Colorado, Georgia, Kentucky, Mississippi, New Jersey, New Mexico, Oklahoma, and South Dakota) were excluded from state-level correlation analysis because more than 50 percent of the school districts in the state were missing Census data. Regions are delineated in green; Alaska and Hawaii are part of the Western Region.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997–98" and U.S. Department of Commerce, Bureau of the Census, 1990 Decennial Census School District Special Tabulation.

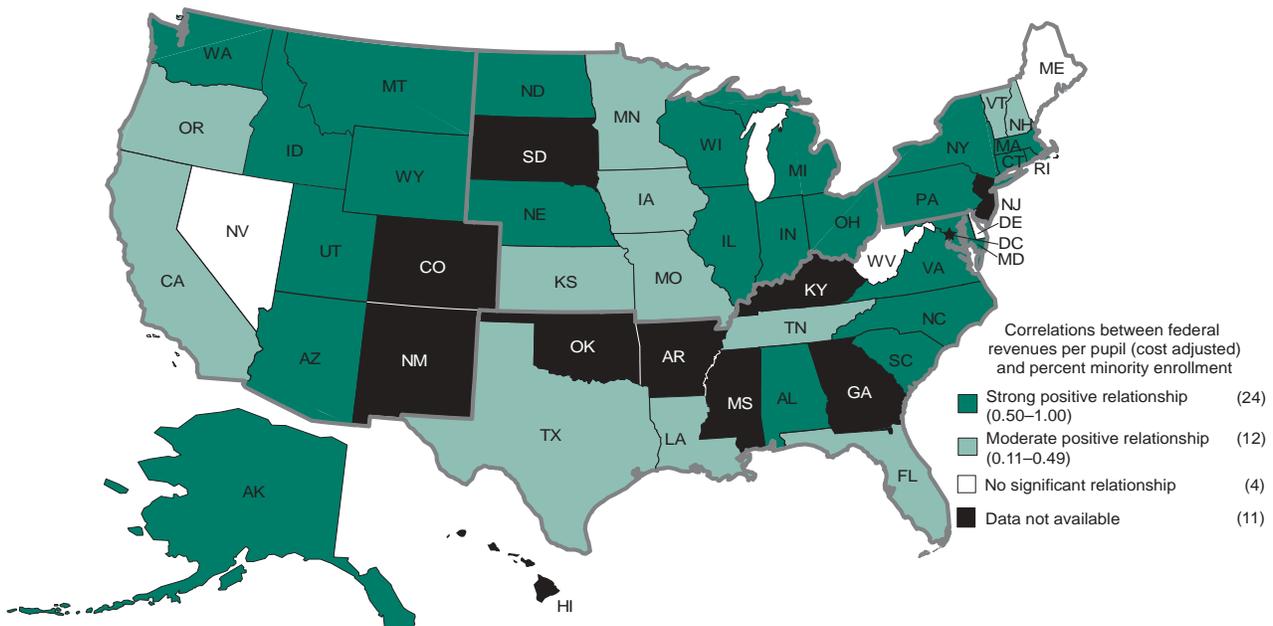
Figure 5-3. Correlations between federal revenues per pupil and median household income (cost-adjusted dollars), by state: 1997–98



NOTE: No state-level correlation analysis was possible for the District of Columbia or Hawaii since they only have one district. Nine other states (Arkansas, Colorado, Georgia, Kentucky, Mississippi, New Jersey, New Mexico, Oklahoma, and South Dakota) were excluded from state-level correlation analysis because more than 50 percent of the school districts in the state were missing Census data. Regions are delineated in green; Alaska and Hawaii are part of the Western Region.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, “School District Financial Survey (Form F-33): School Year 1997–98” and U.S. Department of Commerce, Bureau of the Census, 1990 Decennial Census School District Special Tabulation.

Figure 5-4. Correlations between federal revenues per pupil and percent minority enrollment (cost-adjusted dollars), by state: 1997–98



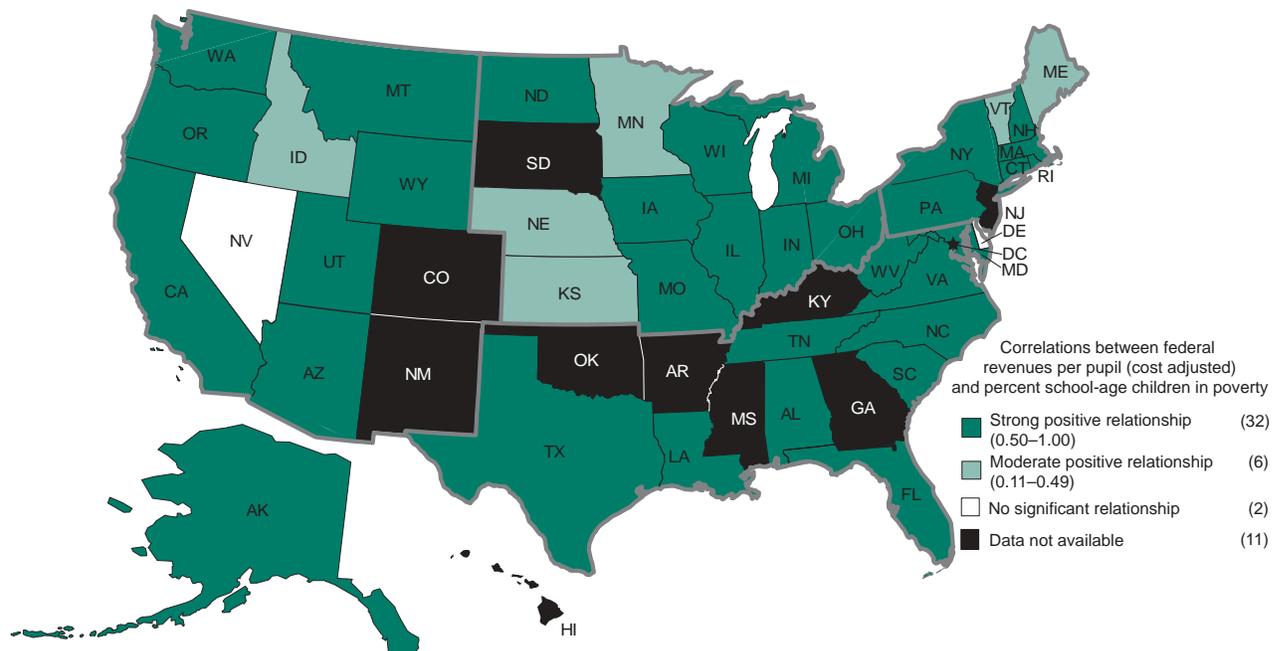
NOTE: No state-level correlation analysis was possible for the District of Columbia or Hawaii since they only have one district. Nine other states (Arkansas, Colorado, Georgia, Kentucky, Mississippi, New Jersey, New Mexico, Oklahoma, and South Dakota) were excluded from state-level correlation analysis because more than 50 percent of the school districts in the state were missing Census data. Regions are delineated in gray; Alaska and Hawaii are part of the Western Region.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, “School District Financial Survey (Form F-33): School Year 1997–98” and U.S. Department of Commerce, Bureau of the Census, 1990 Decennial Census School District Special Tabulation.

before cost adjustments and 24 after) showed a strong positive relationship between minority enrollment and federal revenues per pupil.

The percent of school-age children in poverty in a district showed a very strong, positive relationship with federal revenues per pupil, both at the national level and in the states. The correlation between percent school-age children in poverty and total revenues per pupil was +0.66 before cost adjustments and +0.65 after cost adjustments. No states showed a negative relationship between children in poverty and federal revenues per pupil, and only Delaware and Nevada showed no significant relationship, both before and after cost adjustments. Over three-quarters of the states with sufficient data (32) showed a strong relationship between poverty and federal revenues, both before and after cost adjustments (figure 5-5).

Figure 5-5. Correlations between federal revenues per pupil and percent school-age children in poverty (cost-adjusted dollars), by state: 1997–98



NOTE: No state-level correlation analysis was possible for the District of Columbia or Hawaii since they only have one district. Nine other states (Arkansas, Colorado, Georgia, Kentucky, Mississippi, New Jersey, New Mexico, Oklahoma, and South Dakota) were excluded from state-level correlation analysis because more than 50 percent of the school districts in the state were missing Census data. Regions are delineated in gray; Alaska and Hawaii are part of the Western Region.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997–98" and U.S. Department of Commerce, Bureau of the Census, 1990 Decennial Census School District Special Tabulation.

## Title I Revenues

Title I revenues for public elementary and secondary education totaled \$6.9 billion in 1997–98 (table 5-6). This was just over 34 percent of federal revenues (\$20.1 billion) in 1997–98.

## Title I Revenues Per Pupil

Title I revenues per pupil in the United States averaged \$150 in 1997–98 before cost adjustments (table 5-6). Title I revenues per pupil were highest in the Northeast (\$174) and lowest in the West (\$134). At \$154, Title I revenues per pupil were higher in the South than in the Midwest (\$144). The use of cost adjustments had little effect on the range between the highest and lowest regions. The range changed

Table 5-6. Federal Title I revenues, cost-adjusted Title I revenues, Title I revenues per pupil, and cost-adjusted Title I revenues per pupil in public school districts, by region, enrollment, minority enrollment, poverty, median household income, and median value owner-occupied housing: 1997–98

School district characteristics	Title I revenues (in thousands)	Cost-adjusted Title I revenues (in thousands)	Title I revenues per pupil	Cost-adjusted Title I revenues per pupil
All districts	\$6,862,458	\$6,917,465	\$150	\$152
Region				
Northeast	1,381,815	1,243,452	174	157
Midwest	1,529,603	1,562,024	144	148
South	2,533,115	2,758,459	154	167
West	1,417,925	1,353,530	134	128
District enrollment				
0–999	376,168	427,470	138	160
1,000–4,999	1,624,061	1,743,797	125	135
5,000–9,999	881,081	903,257	125	128
10,000 or more	3,981,148	3,842,942	174	168
Minority enrollment				
Less than 5 percent	1,084,227	1,164,006	96	103
5 percent–<20 percent	1,103,073	1,140,723	92	95
20 percent–<50 percent	2,139,279	2,167,271	167	169
50 percent or more	2,193,380	2,074,006	308	291
Data missing	342,499	371,460	—	—
School-age children in poverty				
Less than 5 percent	144,485	135,074	28	26
5 percent–<15 percent	1,174,307	1,177,225	76	76
15 percent–<25 percent	1,862,637	1,929,912	157	163
25 percent or more	3,338,530	3,303,794	310	307
Data missing	342,499	371,460	—	—
Median household income				
Less than \$20,000	1,069,097	1,158,416	309	335
\$20,000–<\$25,000	1,785,313	1,870,732	213	223
\$25,000–<\$30,000	2,088,859	2,029,574	186	181
\$30,000–<\$35,000	888,037	854,769	117	113
\$35,000 or more	688,653	632,515	55	50
Data missing	342,499	371,460	—	—
Median value owner-occupied housing				
Less than \$40,000	949,347	1,040,279	259	284
\$40,000–<\$55,000	1,544,252	1,644,104	197	210
\$55,000–<\$85,000	1,948,590	1,992,726	135	138
\$85,000 or more	2,077,770	1,868,897	120	108
Data missing	342,499	371,460	—	—

—Not available.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997–98" and U.S. Department of Commerce, Bureau of the Census, 1990 Decennial Census School District Special Tabulation.

from \$40 to \$39 and the ratio of revenues per pupil remained 1.3 to 1. The South (\$167) replaced the Northeast (\$157) as the region with the highest per pupil revenues, and the West (\$128) remained the region with lowest Title I revenues per pupil, followed by the Midwest (\$148).

Large districts tended to have the highest Title I revenues per pupil, followed by the smallest districts, both before and after cost adjustments. Districts with between 1,000 and 10,000 students had the lowest Title I revenues per pupil on average. Before cost adjustments, revenues per pupil averaged \$174 in districts with 10,000 or more students, compared to \$138 in districts with less than 1,000 students and \$125 in districts with between 1,000 and 10,000 students. After cost adjustments, the difference became smaller. Cost-adjusted revenues ranged from \$168 in the largest districts and \$160 in the smallest districts, to \$135 and \$128 in mid-sized districts. Correlation analysis found a weak positive relation-

ship between district enrollment and Title I revenues per pupil before cost adjustments (+0.02) and no significant relationship after cost adjustments (tables A-1 and A-2).

Before cost adjustments, Title I revenues per pupil showed a negative relationship with both measures of district wealth—median household income (-0.57) and median value owner-occupied housing (-0.18) (table A-21). School districts with median household income at or above \$35,000 had average revenues per pupil of \$55, while districts with median household incomes below \$20,000 had revenues per pupil of \$309 (table 5-6). The relationship between Title I revenues per pupil and median value owner-occupied housing was less distinct (table A-21). Districts with median housing values at or above \$85,000 had average revenues per pupil of \$120, while districts with median housing values below \$40,000 had revenues per pupil of \$259.

After cost adjustments, the differences became greater. Adjusted Title I revenues per pupil became higher in districts with the lowest median household incomes (\$335), and lower in districts with the highest incomes (\$50). Adjustments also raised Title I revenues per pupil in districts with the lowest median housing values (\$284) and lowered them in districts with the highest housing values to \$108. Correlation measures were also stronger after cost adjustments. The correlation between adjusted Title I revenues per pupil and median household income was -0.63 and median value owner-occupied housing was -0.27 (table A-22).

Title I revenues per pupil showed a strong positive relationship with percent minority enrollment both before (+0.63) and after (+0.58) cost adjustments. Before cost adjustments, Title I revenues per pupil ranged from \$96 on average in districts with less than 5 percent minority and \$92 in districts with 5 to 20 percent minority, to \$308 in districts with 50 percent or higher minority levels. Cost adjustments decreased the range, from \$103 and \$95, respectively, in low-minority districts to \$291 in high-minority districts.

Title I revenues per pupil showed a very strong positive correlation with district poverty, both before (+0.85) and after (+0.87) cost adjustments. Revenues per pupil were lowest in the lowest-poverty districts and highest in the highest-poverty districts—\$28 and \$310, respectively, before cost adjustments, and \$26 and \$307 respectively, after cost adjustments.

## Variations in Title I Revenues Per Pupil

Variation of Title I revenues per pupil was high in the states and across the United States (table 5-7). The restricted range ratio for unadjusted Title I revenues per pupil ranged from 1.06 in Nevada to 174.6 in Indiana.<sup>14</sup> The United States ratio was 32.45 with 4 states exceeding the national measure: Indiana, Missouri, Texas, and Wisconsin. After cost adjustments, the restricted range ratio ranged from 1.18 in Nevada to 158.70 in Indiana (table 5-8). The cost-adjusted United States ratio was 29.73, with the same 4 states continuing to exceed the national measure.

The coefficient of variation for unadjusted Title I revenues per pupil ranged from 0.21 in Nevada to 2.34 in Vermont (table 5-7).<sup>15</sup> Twenty states, from all areas of the country, exceeded the national variation of 0.82. After cost adjustments, the coefficient of variation ranged from 0.23 in Nevada to 2.34 in

<sup>14</sup>The restricted range ratio could not be calculated in California, Colorado, Connecticut, Illinois, Kansas, Massachusetts, Montana, Nebraska, New Hampshire, New Jersey, Oregon, Pennsylvania, Rhode Island, or Vermont because Title I revenues per pupil were equal to zero at the fifth percentile.

<sup>15</sup>See footnote 12 above.

Table 5-7. Variation in Title I revenues per pupil (unadjusted dollars), by state: 1997–98

State	Restricted range ratio		Coefficient of variation		Gini coefficient		Average rank	Average quartile
	Value	Rank	Value	Rank	Value	Rank		
United States	32.45	†	0.82	†	0.44	†	†	†
Alabama	4.06	8	0.52	11	0.28	12	10.33	1
Alaska	4.91	11	0.87	33	0.33	18	20.67	2
Arizona	7.00	19	0.73	22	0.35	22	21.00	2
Arkansas	6.73	17	0.63	18	0.32	17	17.33	2
California	(?)	(?)	0.66	19	0.38	23	21.00	2
Colorado	(?)	(?)	0.86	32	0.45	36	34.00	3
Connecticut	(?)	(?)	1.42	48	0.65	48	48.00	4
Delaware	2.01	3	0.31	2	0.15	2	2.33	1
District of Columbia	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Florida	2.02	4	0.33	3	0.18	3	3.33	1
Georgia	12.55	27	0.72	21	0.39	24	24.00	3
Hawaii	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Idaho	6.07	14	0.55	14	0.30	14	14.00	1
Illinois	(?)	(?)	0.97	42	0.52	44	43.00	4
Indiana	174.60	35	0.87	33	0.45	36	34.67	3
Iowa	6.96	18	0.55	14	0.30	14	15.33	2
Kansas	(?)	(?)	0.70	20	0.39	24	22.00	2
Kentucky	5.03	12	0.47	8	0.26	9	9.67	1
Louisiana	1.97	2	0.34	4	0.19	4	3.33	1
Maine	8.04	22	0.74	25	0.34	21	22.67	2
Maryland	9.32	25	0.92	37	0.41	30	30.67	3
Massachusetts	(?)	(?)	1.03	44	0.55	46	45.00	4
Michigan	26.90	30	0.94	39	0.49	42	37.00	4
Minnesota	12.63	28	0.83	30	0.43	33	30.33	3
Mississippi	6.16	15	0.54	13	0.30	14	14.00	1
Missouri	34.28	32	0.79	26	0.41	30	29.33	3
Montana	(?)	(?)	0.97	42	0.48	41	41.50	4
Nebraska	(?)	(?)	0.81	28	0.44	35	31.50	3
Nevada	1.06	1	0.21	1	0.10	1	1.00	1
New Hampshire	(?)	(?)	0.93	38	0.46	38	38.00	4
New Jersey	(?)	(?)	1.19	47	0.59	47	47.00	4
New Mexico	5.04	13	0.46	7	0.23	6	8.67	1
New York	16.44	29	0.73	22	0.40	27	26.00	3
North Carolina	3.06	5	0.48	9	0.26	9	7.67	1
North Dakota	4.44	9	0.83	30	0.33	18	19.00	2
Ohio	28.71	31	0.91	36	0.49	42	36.33	4
Oklahoma	7.98	21	0.60	17	0.33	18	18.67	2
Oregon	(?)	(?)	0.73	22	0.39	24	23.00	2
Pennsylvania	(?)	(?)	0.87	33	0.47	40	36.50	4
Rhode Island	(?)	(?)	1.10	46	0.54	45	45.50	4
South Carolina	7.97	20	0.53	12	0.29	13	15.00	2
South Dakota	8.24	23	1.07	45	0.40	27	31.67	3
Tennessee	4.76	10	0.43	6	0.24	7	7.67	1
Texas	82.04	34	0.79	26	0.43	33	31.00	3
Utah	3.10	6	0.51	10	0.25	8	8.00	1
Vermont	(?)	(?)	2.34	49	0.86	49	49.00	4
Virginia	10.19	26	0.81	28	0.42	32	28.67	3
Washington	8.43	24	0.95	40	0.40	27	30.33	3
West Virginia	3.85	7	0.39	5	0.21	5	5.67	1
Wisconsin	60.21	33	0.95	40	0.46	38	37.00	4
Wyoming	6.17	16	0.59	16	0.27	11	14.33	2

†Not applicable.

<sup>1</sup>Variation is not measured in the District of Columbia or Hawaii where there is only one school district.<sup>2</sup>The restricted range ratio could not be calculated for Title I revenues per pupil in California, Colorado, Connecticut, Illinois, Kansas, Massachusetts, Montana, Nebraska, New Hampshire, New Jersey, Oregon, Pennsylvania, Rhode Island, or Vermont because the fifth percentile—by which the difference is divided—was equal to zero.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997–98."

Table 5-8. Variation in Title I revenues per pupil (cost-adjusted dollars), by state: 1997–98

State	Restricted range ratio		Coefficient of variation		Gini coefficient		Average rank	Average quartile
	Value	Rank	Value	Rank	Value	Rank		
United States	29.73	†	0.81	†	0.43	†	†	†
Alabama	4.47	11	0.54	11	0.29	12	11.33	1
Alaska	4.06	8	0.88	34	0.33	18	20.00	2
Arizona	6.92	18	0.75	24	0.36	22	21.33	2
Arkansas	6.89	17	0.65	18	0.32	17	17.33	2
California	(?)	(?)	0.67	19	0.38	23	21.00	2
Colorado	(?)	(?)	0.87	32	0.45	37	34.50	3
Connecticut	(?)	(?)	1.40	48	0.64	48	48.00	4
Delaware	1.96	2	0.33	2	0.16	2	2.00	1
District of Columbia	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Florida	2.07	4	0.34	3	0.18	3	3.33	1
Georgia	13.29	28	0.73	22	0.40	26	25.33	3
Hawaii	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Idaho	6.83	16	0.57	14	0.30	13	14.33	2
Illinois	(?)	(?)	0.95	40	0.51	44	42.00	4
Indiana	158.70	35	0.83	29	0.44	34	32.67	3
Iowa	8.16	19	0.57	14	0.31	16	16.33	2
Kansas	(?)	(?)	0.72	21	0.40	26	23.50	2
Kentucky	5.78	13	0.49	8	0.27	9	10.00	1
Louisiana	2.11	5	0.34	3	0.19	4	4.00	1
Maine	9.12	25	0.73	22	0.34	19	22.00	2
Maryland	8.87	22	0.90	37	0.41	28	29.00	3
Massachusetts	(?)	(?)	1.02	44	0.55	46	45.00	4
Michigan	23.70	30	0.92	39	0.48	41	36.67	4
Minnesota	12.47	27	0.86	31	0.43	31	29.67	3
Mississippi	6.71	15	0.55	12	0.30	13	13.33	2
Missouri	32.70	32	0.78	25	0.41	28	28.33	3
Montana	(?)	(?)	1.01	42	0.48	41	41.50	4
Nebraska	(?)	(?)	0.82	28	0.44	34	31.00	3
Nevada	1.18	1	0.23	1	0.10	1	1.00	1
New Hampshire	(?)	(?)	1.01	42	0.45	37	39.50	4
New Jersey	(?)	(?)	1.16	47	0.58	47	47.00	4
New Mexico	2.04	3	0.45	7	0.22	5	5.00	1
New York	16.32	29	0.71	20	0.39	24	24.33	2
North Carolina	3.32	7	0.51	9	0.27	9	8.33	1
North Dakota	4.27	10	0.88	34	0.35	21	21.67	2
Ohio	26.73	31	0.88	34	0.48	41	35.33	4
Oklahoma	9.05	24	0.64	17	0.34	19	20.00	2
Oregon	(?)	(?)	0.78	25	0.39	24	24.50	3
Pennsylvania	(?)	(?)	0.87	32	0.47	40	36.00	4
Rhode Island	(?)	(?)	1.08	45	0.54	45	45.00	4
South Carolina	8.25	20	0.55	12	0.30	13	15.00	2
South Dakota	8.73	21	1.13	46	0.43	31	32.67	3
Tennessee	4.76	12	0.43	6	0.24	7	8.33	1
Texas	85.99	34	0.80	27	0.44	34	31.67	3
Utah	2.94	6	0.52	10	0.25	8	8.00	1
Vermont	(?)	(?)	2.34	49	0.84	49	49.00	4
Virginia	10.17	26	0.83	29	0.43	31	28.67	3
Washington	9.04	23	0.98	41	0.41	28	30.67	3
West Virginia	4.20	9	0.40	5	0.22	5	6.33	1
Wisconsin	61.47	33	0.90	37	0.45	37	35.67	3
Wyoming	6.22	14	0.60	16	0.27	9	13.00	1

†Not applicable.

<sup>1</sup>Variation is not measured in the District of Columbia or Hawaii where there is only one school district.<sup>2</sup>The restricted range ratio could not be calculated for Title I revenues per pupil in California, Colorado, Connecticut, Illinois, Kansas, Massachusetts, Montana, Nebraska, New Hampshire, New Jersey, Oregon, Pennsylvania, Rhode Island, or Vermont because the fifth percentile—by which the difference is divided—was equal to zero.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997–98."

Vermont (table 5-8). The cost-adjusted United States coefficient was 0.81, and 22 states exceeded the national measure.

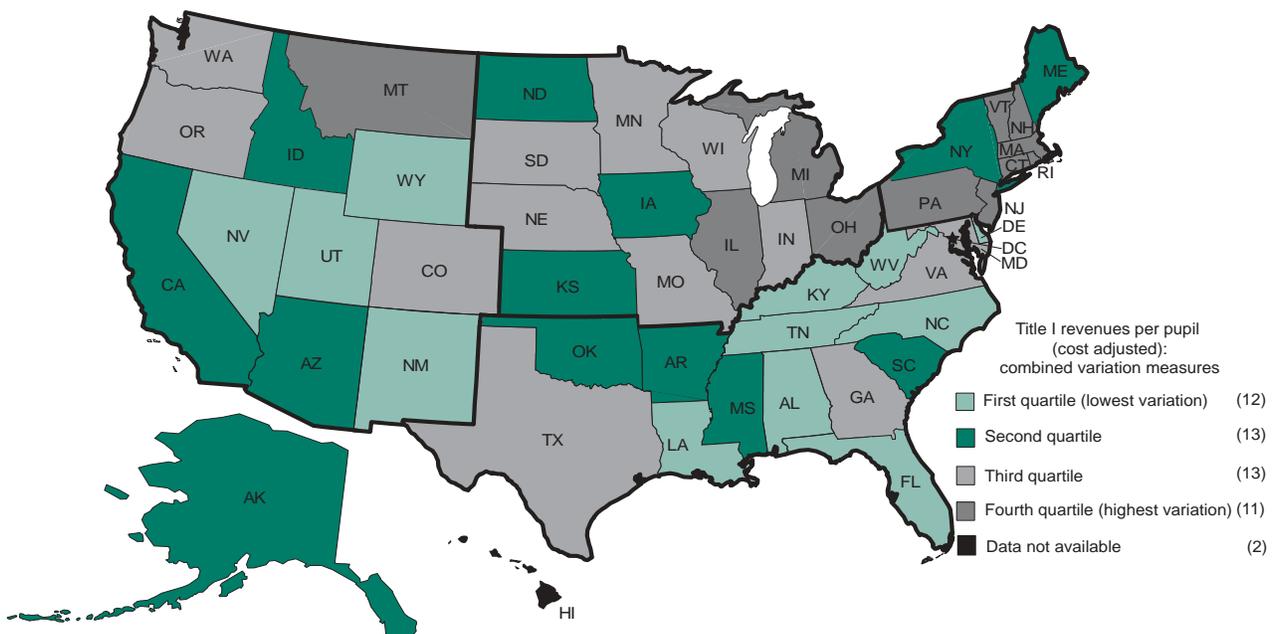
Before cost adjustments, the Gini coefficient for Title I revenues per pupil ranged from 0.10 in Nevada to 0.86 in Vermont (table 5-7). The unadjusted coefficient for the United States was 0.44, with 14 states exceeding the national measure. After cost adjustments, the coefficient ranged from 0.10 in Nevada to 0.84 in Vermont (table 5-8). The national Gini coefficient was 0.43 after cost adjustments. Sixteen states had variation greater than the cost-adjusted national measure.

In a composite of the three variation measures, the South and West had less interdistrict variation than the Northwest and Midwest (figure 5-6). Three-quarters of the states in the Northeast (78 percent) and Midwest (75 percent) fell into the two quartiles with highest variation when ranked with states across the country after cost adjustments (table 5-9). Three-quarters (75 percent) of the Southern states and two-thirds of the Western (67 percent) fell into the two quartiles with lowest variation relative to other states.

### Relationship between Title I Revenues Per Pupil and Selected District Fiscal and Demographic Characteristics

For the majority of the states and for the United States as a whole, Title I revenues per pupil showed a negative relationship with two measures of district fiscal capacity—median value owner-occupied housing and median household income—both before and after cost adjustments. The unadjusted United States correlation for median value owner-occupied housing was -0.18 and for median household income was -0.57. The adjusted correlations were -0.27 (housing value) and -0.63 (household income)

Figure 5-6. Synthesis of variation measures of Title I revenues per pupil (cost-adjusted dollars), by state: 1997–98



NOTE: Variation is not measured in the District of Columbia or Hawaii where there is only one school district. Regions are delineated in black; Alaska and Hawaii are part of the Western Region.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997–98."

Table 5-9. Variation in Title I revenues per pupil, by region: 1997–98

Region	Percent of states in quartiles 1 and 2 (low variation)	Percent of states in quartiles 3 and 4 (high variation)
Unadjusted Title I revenues per pupil		
Northeast	11	89
Midwest	25	75
South	75	25
West	75	25
Cost-adjusted Title I revenues per pupil		
Northeast	22	78
Midwest	25	75
South	75	25
West	67	33

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997–98."

(tables A-21 and A-22). Before cost adjustments, four states—Delaware, Florida, Nevada, and Vermont—showed no significant relationship between Title I revenues per pupil and median value owner-occupied housing (table 5-10). Only New York showed a moderate positive relationship. The remaining 35 states with sufficient data showed a negative relationship between these two variables, with 20 of those states showing a strong negative relationship. After cost adjustments, Nevada, New York, and Vermont showed no significant relationship, and no states demonstrated a positive relationship between Title I revenues per pupil and median value owner-occupied housing. Twenty-one states showed a strong negative relationship, while 16 showed a moderate negative relationship after cost adjustments.

State relationships between unadjusted Title I revenues per pupil and median household income were also strongly negative. No states demonstrated a positive relationship, and only Delaware showed no significant relationship between revenues per pupil and income. Four states—Montana, Nebraska, New Hampshire, and Vermont—demonstrated a moderate negative relationship, and the remaining 35 states with sufficient data showed a strong negative relationship between these variables. Cost adjustments had no effect on the classification of states. Delaware still showed no significant relationship, and the same four states demonstrated a moderate negative relationship between Title I revenues per pupil and median household income.

For the United States as a whole, a strong positive relationship was found between Title I revenues per pupil and percent minority enrollment, both before (+0.63) and after (+0.58) cost adjustments. Before cost adjustments, no significant relationship was found in Maine or West Virginia (table 5-10). Six states—Iowa, Kansas, Montana, New Hampshire, Texas, and Vermont—showed a moderate positive relationship, while 32 states showed a strong positive relationship between percent minority enrollment and unadjusted Title I revenues per pupil. After cost adjustments were applied, Missouri joined the states showing a moderate positive relationship. The same two states showed no significant relationship between these variables. No states showed a negative relationship, either before or after cost adjustments.

Percent school-age children in poverty was strongly correlated with Title I revenues per pupil, both before (+0.85) and after (+0.87) cost adjustments and in all the states except Vermont. All states with sufficient data showed a positive relationship, and only Vermont showed a moderate positive relationship, both before and after cost adjustments (table 5-10).

Table 5-10. Correlations between Title I revenues per pupil and selected fiscal and demographic characteristics, by state: 1997–98

Characteristics	States (before cost adjustments)	States (after cost adjustments)
<b>Minority enrollment</b>		
Strong positive relationship	Alabama, Alaska, Arizona, California, Connecticut, Delaware, Florida, Idaho, Illinois, Indiana, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, Nevada, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Utah, Virginia, Washington, Wisconsin, Wyoming, <i>US overall</i>	Alabama, Alaska, Arizona, California, Connecticut, Delaware, Florida, Idaho, Illinois, Indiana, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Nebraska, Nevada, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Utah, Virginia, Washington, Wisconsin, Wyoming, <i>US overall</i>
Moderate positive relationship	Iowa, Kansas, Montana, New Hampshire, Texas, Vermont	Iowa, Kansas, Missouri, <sup>1</sup> Montana, New Hampshire, Texas, Vermont
Weak positive relationship	[none]	[none]
Weak negative relationship	[none]	[none]
Moderate negative relationship	[none]	[none]
Strong negative relationship	[none]	[none]
No significant relationship	Maine, West Virginia	Maine, West Virginia
<b>School-age children in poverty</b>		
Strong positive relationship	Alabama, Alaska, Arizona, California, Connecticut, Delaware, Florida, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, Wyoming, <i>US overall</i>	Alabama, Alaska, Arizona, California, Connecticut, Delaware, Florida, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, Wyoming, <i>US overall</i>
Moderate positive relationship	Vermont	Vermont
Weak positive relationship	[none]	[none]
Weak negative relationship	[none]	[none]
Moderate negative relationship	[none]	[none]
Strong negative relationship	[none]	[none]
No significant relationship	[none]	[none]
<b>Median household income</b>		
Strong positive relationship	[none]	[none]
Moderate positive relationship	[none]	[none]
Weak positive relationship	[none]	[none]
Weak negative relationship	[none]	[none]
Moderate negative relationship	Montana, Nebraska, New Hampshire, Vermont	Montana, Nebraska, New Hampshire, Vermont
Strong negative relationship	Alabama, Alaska, Arizona, California, Connecticut, Florida, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nevada, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, Wyoming, <i>US overall</i>	Alabama, Alaska, Arizona, California, Connecticut, Florida, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nevada, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, Wyoming, <i>US overall</i>
No significant relationship	Delaware	Delaware
<b>Median value owner-occupied housing</b>		
Strong positive relationship	[none]	[none]
Moderate positive relationship	New York	[none]
Weak positive relationship	[none]	[none]
Weak negative relationship	[none]	[none]
Moderate negative relationship	California, Connecticut, Illinois, Kansas, Louisiana, Massachusetts, Montana, Nebraska, New Hampshire, North Dakota, Oregon, South Carolina, Washington, Wisconsin, Wyoming, <i>US overall</i>	California, Connecticut, Florida, <sup>1</sup> Illinois, Kansas, Louisiana, Massachusetts, Montana, Nebraska, New Hampshire, North Dakota, Oregon, South Carolina, Washington, Wisconsin, Wyoming, <i>US overall</i>
Strong negative relationship	Alabama, Alaska, Arizona, Idaho, Indiana, Iowa, Maine, Maryland, Michigan, Minnesota, Missouri, North Carolina, Ohio, Pennsylvania, Rhode Island, Tennessee, Texas, Utah, Virginia, West Virginia	Alabama, Alaska, Arizona, Delaware, <sup>1</sup> Idaho, Indiana, Iowa, Maine, Maryland, Michigan, Minnesota, Missouri, North Carolina, Ohio, Pennsylvania, Rhode Island, Tennessee, Texas, Utah, Virginia, West Virginia
No significant relationship	Delaware, Florida, Nevada, Vermont	Nevada, New York, <sup>1</sup> Vermont

Table 5-10. Correlations between Title I revenues per pupil and selected fiscal and demographic characteristics, by state: 1997–98—Continued

Characteristics	States (before cost adjustments)	States (after cost adjustments)
<b>Student membership</b>		
Strong positive relationship	Connecticut, Massachusetts, Rhode Island	Connecticut, Massachusetts, Rhode Island
Moderate positive relationship	Indiana, New Jersey, New York, Ohio, Vermont, Wisconsin	Indiana, New Jersey, Ohio, Vermont
Weak positive relationship	Illinois, Michigan, Nebraska, <i>US overall</i>	New York <sup>1</sup>
Weak negative relationship	[none]	Iowa <sup>1</sup>
Moderate negative relationship	Arkansas, Georgia, Maine, Minnesota, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Virginia	Arizona, <sup>1</sup> Arkansas, Florida, <sup>1</sup> Georgia, Idaho, <sup>1</sup> Louisiana, <sup>1</sup> Maine, Minnesota, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Virginia, Washington <sup>1</sup>
Strong negative relationship	[none]	[none]
No significant relationship	Alabama, Alaska, Arizona, California, Colorado, Delaware, Florida, Idaho, Iowa, Kansas, Kentucky, Louisiana, Maryland, Montana, Nevada, New Hampshire, New Mexico, North Dakota, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Utah, Washington, West Virginia, Wyoming	Alabama, Alaska, California, Colorado, Delaware, Illinois, <sup>1</sup> Kansas, Kentucky, Maryland, Michigan, <sup>1</sup> Montana, Nebraska, <sup>1</sup> Nevada, New Hampshire, New Mexico, North Dakota, Oregon, Pennsylvania, South Dakota, Tennessee, Texas, Utah, West Virginia, Wisconsin, <sup>1</sup> Wyoming, <i>US overall</i> <sup>1</sup>

<sup>1</sup>State changed categories after cost adjustments.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997-98" and U.S. Department of Commerce, Bureau of the Census, 1990 Decennial Census School District Special Tabulation.

## Federal Revenues as a Percentage of Total Revenues

Federal revenues were just over 6 percent of total district revenues for public elementary and secondary education in the United States in 1997–98. Federal revenues were the smallest source of funds for public education, after state revenues (48 percent) and local revenues (46 percent).

### Variations in Federal Revenues as a Percentage of Total Revenues

The restricted range ratio was 8.61 for percent federal revenues across the United States (table 5-11). Among the states, the ratio ranged from a low of 0.14 in Nevada to a high of 35.67 in Montana and 86.52 in New Hampshire. Eight states—Connecticut, Illinois, Michigan, Montana, New Hampshire, New York, Ohio, and Pennsylvania—had a higher restricted range ratio than the national measure.<sup>16</sup>

The coefficient of variation ranged from 0.20 in Nevada to 1.22 in North Dakota. Twenty states throughout the country had greater variation than the national level of 0.66.

The smallest Gini coefficient was 0.06, found in Nevada. Vermont had the highest variation at 0.53. Fifteen states exceeded the national measure of 0.34.

When a composite variation measure was calculated, Northeastern and Midwestern states had high variation in percent federal revenues relative to other states (figure 5-7). With 94 percent of Southern states falling into the two quartiles with lowest variation when ranked against other states, the South had the lowest variations (table 5-12). Half of the Western states (58 percent) were in the low-variation quartiles in percent federal revenues.

<sup>16</sup>The range across the states excludes Vermont, where the restricted range ratio was infinity.

Table 5-11. Variation in percent federal revenues, by state: 1997–98

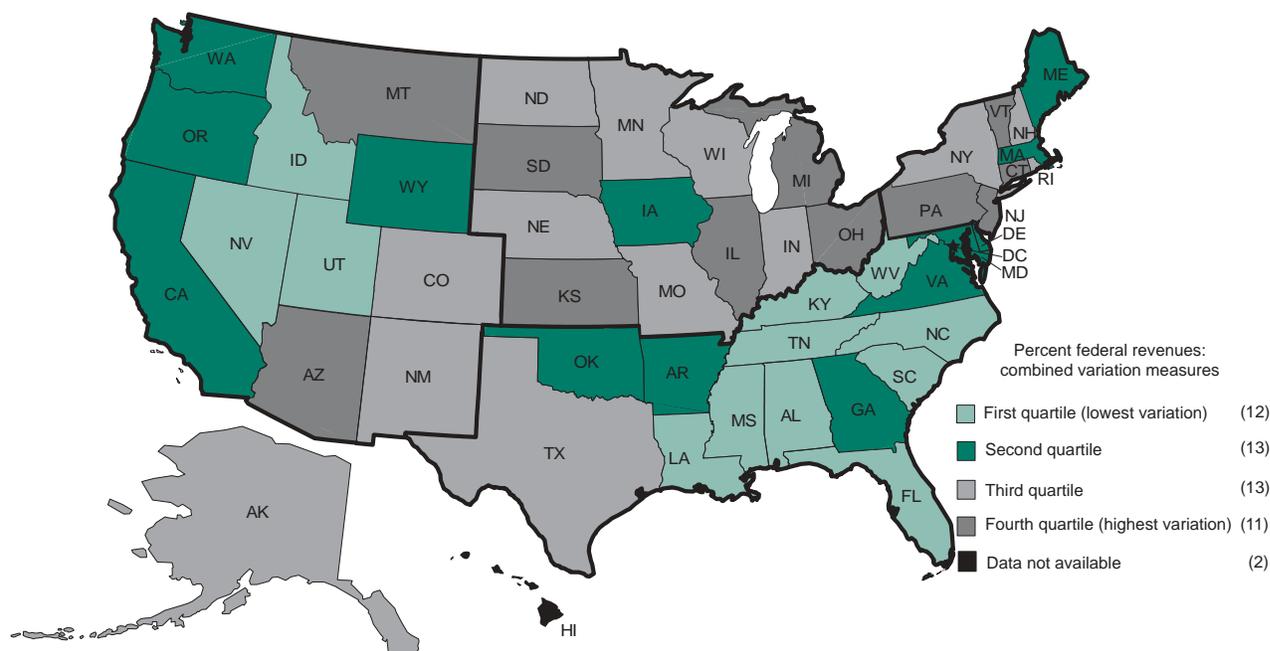
State	Restricted range ratio		Coefficient of variation		Gini coefficient		Average rank	Average quartile
	Value	Rank	Value	Rank	Value	Rank		
United States	8.61	†	0.66	†	0.34	†	†	†
Alabama	2.19	8	0.38	10	0.21	11	9.67	1
Alaska	4.84	27	0.82	38	0.33	29	31.33	3
Arizona	7.22	35	0.95	43	0.39	42	40.00	4
Arkansas	2.54	13	0.45	14	0.23	14	13.67	2
California	4.69	26	0.48	16	0.26	18	20.00	2
Colorado	5.36	31	0.68	30	0.33	29	30.00	3
Connecticut	12.89	44	0.90	42	0.45	47	44.33	4
Delaware	2.68	15	0.50	18	0.22	12	15.00	2
District of Columbia	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Florida	1.06	2	0.23	2	0.12	2	2.00	1
Georgia	4.34	24	0.50	18	0.28	21	21.00	2
Hawaii	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )
Idaho	2.33	9	0.45	14	0.22	12	11.67	1
Illinois	17.02	46	0.77	35	0.42	45	42.00	4
Indiana	7.78	38	0.60	25	0.34	31	31.33	3
Iowa	3.31	16	0.40	12	0.23	14	14.00	2
Kansas	8.33	40	0.96	44	0.39	42	42.00	4
Kentucky	2.39	10	0.34	7	0.19	8	8.33	1
Louisiana	2.01	7	0.28	4	0.15	4	5.00	1
Maine	4.84	27	0.68	30	0.28	21	26.00	2
Maryland	3.62	19	0.59	23	0.28	21	21.00	2
Massachusetts	3.65	20	0.49	17	0.27	19	18.67	2
Michigan	12.62	43	0.76	33	0.41	44	40.00	4
Minnesota	3.32	17	1.08	46	0.32	28	30.33	3
Mississippi	2.47	12	0.35	8	0.20	9	9.67	1
Missouri	5.39	32	0.59	23	0.30	25	26.67	3
Montana	35.67	47	1.18	48	0.45	47	47.33	4
Nebraska	5.24	30	0.87	40	0.37	37	35.67	3
Nevada	0.14	1	0.20	1	0.06	1	1.00	1
New Hampshire	86.52	48	0.61	26	0.34	31	35.00	3
New Jersey	8.27	39	0.87	40	0.38	40	39.67	4
New Mexico	7.76	37	0.83	39	0.34	31	35.67	3
New York	8.71	41	0.63	27	0.35	35	34.33	3
North Carolina	1.71	4	0.33	6	0.18	6	5.33	1
North Dakota	3.42	18	1.22	49	0.37	37	34.67	3
Ohio	9.07	42	0.68	30	0.38	40	37.33	4
Oklahoma	5.11	29	0.52	20	0.27	19	22.67	2
Oregon	4.07	22	0.43	13	0.24	16	17.00	2
Pennsylvania	13.37	45	0.81	37	0.44	46	42.67	4
Rhode Island	4.62	25	0.64	28	0.34	31	28.00	3
South Carolina	2.44	11	0.36	9	0.20	9	9.67	1
South Dakota	6.05	34	1.04	45	0.37	37	38.67	4
Tennessee	1.95	6	0.30	5	0.16	5	5.33	1
Texas	5.87	33	0.55	22	0.30	25	26.67	3
Utah	1.34	3	0.39	11	0.18	6	6.67	1
Vermont	( <sup>2</sup> )	( <sup>2</sup> )	1.09	47	0.53	49	48.00	4
Virginia	3.80	21	0.52	20	0.28	21	20.67	2
Washington	4.21	23	0.65	29	0.30	25	25.67	2
West Virginia	1.88	5	0.25	3	0.14	3	3.67	1
Wisconsin	7.24	36	0.76	33	0.35	35	34.67	3
Wyoming	2.54	13	0.77	35	0.24	16	21.33	2

†Not applicable.

<sup>1</sup>Variation is not measured in the District of Columbia or Hawaii where there is only one school district.<sup>2</sup>The restricted range ratio could not be calculated for percent federal revenues in Vermont because the fifth percentile—by which the difference was divided—was equal to zero.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997–98."

Figure 5-7. Synthesis of variation measures of percent federal revenues, by state: 1997–98



NOTE: Variation is not measured in the District of Columbia or Hawaii where there is only one school district. Regions are delineated in black; Alaska and Hawaii are part of the Western Region.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997–98."

Table 5-12. Variation in percent federal revenues, by region: 1997–98

Region	Percent of states in quartiles 1 and 2 (low variation)	Percent of states in quartiles 3 and 4 (high variation)
Percent federal revenues		
Northeast	22	78
Midwest	8	92
South	94	6
West	58	42

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997–98."

## Relationship between Percent Federal Revenues and Selected District Fiscal and Demographic Characteristics

For the United States as a whole and for nearly all states with sufficient data, percent federal revenues showed a negative relationship with both measures of district fiscal capacity—median value owner-occupied housing (-0.24) and median household income (-0.59) (table A-23). Thirty-three states showed a negative relationship between percent federal revenues and median value owner-occupied housing, with 19 states demonstrating a strong negative correlation (table 5-13). Nebraska demonstrated a moderate positive relationship. Six states—Delaware, Nevada, New York, North Dakota, Vermont, and Wyoming—showed no significant relationship between these variables. Only Delaware and Nevada did not show a negative relationship between percent federal revenues and median household income: they showed no significant relationship. Kansas, Minnesota, Montana, Nebraska, New Hampshire, Vermont, and Wyoming showed a moderate negative relationship between percent federal revenues

Table 5-13. Correlations between percent federal revenues and selected fiscal and demographic characteristics, by state: 1997–98

Characteristics	States
<b>Minority enrollment</b>	
Strong positive relationship	Alabama, Alaska, Arizona, California, Connecticut, Florida, Idaho, Illinois, Indiana, Louisiana, Maryland, Massachusetts, Michigan, Montana, Nebraska, New York, North Carolina, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, Utah, Virginia, Washington, Wisconsin, Wyoming, <i>US overall</i>
Moderate positive relationship	Iowa, Kansas, Minnesota, Missouri, New Hampshire, Oregon, Tennessee, Texas, Vermont
Weak positive relationship	[none]
Weak negative relationship	[none]
Moderate negative relationship	[none]
Strong negative relationship	[none]
No significant relationship	Delaware, Maine, Nevada, West Virginia
<b>School-age children in poverty</b>	
Strong positive relationship	Alabama, Alaska, Arizona, California, Connecticut, Florida, Illinois, Indiana, Iowa, Louisiana, Maryland, Massachusetts, Michigan, Missouri, Montana, New Hampshire, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, Wyoming, <i>US overall</i>
Moderate positive relationship	Idaho, Kansas, Maine, Minnesota, Nebraska, Vermont
Weak positive relationship	[none]
Weak negative relationship	[none]
Moderate negative relationship	[none]
Strong negative relationship	[none]
No significant relationship	Delaware, Nevada
<b>Median household income</b>	
Strong positive relationship	[none]
Moderate positive relationship	[none]
Weak positive relationship	[none]
Weak negative relationship	[none]
Moderate negative relationship	Kansas, Minnesota, Montana, Nebraska, New Hampshire, Vermont, Wyoming
Strong negative relationship	Alabama, Alaska, Arizona, California, Connecticut, Florida, Idaho, Illinois, Indiana, Iowa, Louisiana, Maine, Maryland, Massachusetts, Michigan, Missouri, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, <i>US overall</i>
No significant relationship	Delaware, Nevada
<b>Median value owner-occupied housing</b>	
Strong positive relationship	[none]
Moderate positive relationship	Nebraska
Weak positive relationship	[none]
Weak negative relationship	[none]
Moderate negative relationship	California, Connecticut, Florida, Idaho, Illinois, Kansas, Louisiana, Maine, Minnesota, Missouri, Montana, New Hampshire, Washington, Wisconsin, <i>US overall</i>
Strong negative relationship	Alabama, Alaska, Arizona, Indiana, Iowa, Maryland, Massachusetts, Michigan, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Virginia, West Virginia
No significant relationship	Delaware, Nevada, New York, North Dakota, Vermont, Wyoming

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data, "School District Financial Survey (Form F-33): School Year 1997–98" and U.S. Department of Commerce, Bureau of the Census, 1990 Decennial Census School District Special Tabulation.

and median household income, while the remaining 31 states with sufficient data demonstrated a strong negative relationship.

A strong positive relationship (+0.58) was found between percent federal revenues and percent minority enrollment. Twenty-seven of the 40 states with sufficient data showed a strong positive relationship (table 5-13). Nine states showed a moderate positive relationship, while Delaware, Maine, Nevada, and West Virginia showed no significant relationship between percent federal revenues and percent minority enrollment.

Percent federal revenues was highly correlated (+0.76) with percent school-age children in poverty, both at the national level and among the states. No states demonstrated a negative relationship between percent poverty and percent federal revenues (table 5-13). Delaware and Nevada demonstrated no

significant relationship. Six states—Idaho, Kansas, Maine, Minnesota, Nebraska, and Vermont—showed a moderate positive relationship. The remaining 32 states with sufficient data showed a strong positive relationship between percent poverty and percent federal revenues.

