

2012 ANNUAL SCHOOL

# CONSTRUCTION REPORT

*National Statistics & Trends*



*Providing Detailed Analysis*



# It's Still Billions of Dollars

School construction spending is projected to be more than \$10 billion in 2012.

by PAUL ABRAMSON

**I**N 2011, \$12.2 BILLION WORTH of school construction was put in place.

That's a lot of money, but put it in perspective. From 2000 through 2008, school construction *averaged* more than \$20 billion annually.

The demand for school space and improved facilities has not lessened — the number of children schools serve continues to rise — but, as a consequence of the 2008 recession, combined with the anti-tax sentiment it spawned, the money has dried up.

Over the last two years, in compiling this annual School Construction Report, I noted that, although school construction had fallen from previous highs, the pipeline of projects funded before the recession was still full. And so, in 2009 total construction was a solid \$16.4 billion.

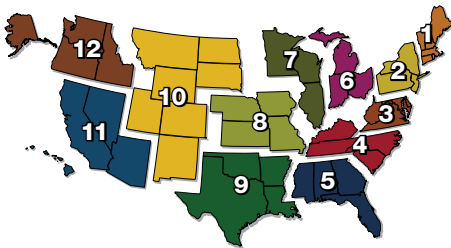
But the pipeline is not being refilled, so in 2010, construction fell to \$14.5 billion. The downward trend continued to \$12.4 billion in 2011 and it appears that total construction in 2012 will be even less, perhaps in the \$10-billion range, half of what it was before the recession.

There apparently is just a trickle left in that pipeline of pending construction projects. If predictions of future work hold up, it is already dry in many parts of the nation.

These are among the major findings and conclusions to be drawn from *School Planning & Management's* 17th Annual School Construction Report, covering activity completed in 2011 and expected to be completed or started in 2012 (see **Table 1**).

To prepare this report, *School Planning & Management* received information on school construction completed and

## SCHOOL CONSTRUCTION REGIONS



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### SCHOOL CONSTRUCTION IN THE U.S. (\$000'S)

	2011 Completed	2012 Projected to Be Completed	2012 Projected to Start
New School	\$6,900,772	\$7,285,620	\$6,664,721
Additions	\$2,687,081	\$1,621,490	\$1,405,700
Renovation	\$2,653,250	\$1,470,232	\$2,542,117
<b>Total</b>	<b>\$12,241,103</b>	<b>\$10,377,342</b>	<b>\$10,612,538</b>



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underway during 2011 and planned to start in 2012 from Market Data Retrieval (MDR), a company of Dun and Bradstreet (D&B). MDR contacts school districts throughout the United States seeking information on their construction plans — new buildings, additions to existing buildings and major renovation, retrofit or modernization projects. (The three terms are used interchangeably throughout this report.) We take that project information and use it to estimate construction on a national and regional basis, and to report on how dollars are being spent on new schools.

All of the figures published are “annual in nature.” That is, they do not accumulate ongoing construction, but rather compile information on what was completed, or expected to be completed or started in a given calendar year. School districts may be involved in more construction, but work started or completed outside the targeted years is not included.

## The National Scene

School districts in the United States spent just over \$12.24 billion on construction projects completed during the 2011 calendar year, including \$6.9 billion on new schools (accounting for 56.4 percent of the construction dollars). The balance was split pretty evenly, with \$2.69 billion on additions to existing buildings and \$2.65 billion on retrofit and modernization of existing structures (see **Table 2**).

The percentage of construction dollars

spent on new buildings was the lowest it has been since 2003 and a significant drop from the 73 percent recorded two years ago. It appears that the larger new school projects, many funded four and five years before completion, are not being started as often and that districts may be opting for smaller and quicker projects — fixing up

**School districts spent just over \$12.24 billion on construction during 2011. The balance was split pretty even, with \$6.9 billion spent on new schools, \$2.69 billion on additions and \$2.65 billion on retrofit and modernization.**

deteriorating buildings or small additions to existing ones — that can be done with previously approved construction dollars, with current funds or with voter approval of relatively small expenditures.

Table 2 shows the national construction picture in 2011. It also shows how much school districts in each of 12 regions of the nation spent on construction and how they spent it. (See map on page CR1. A more detailed account of regional activity begins on page CR11.)

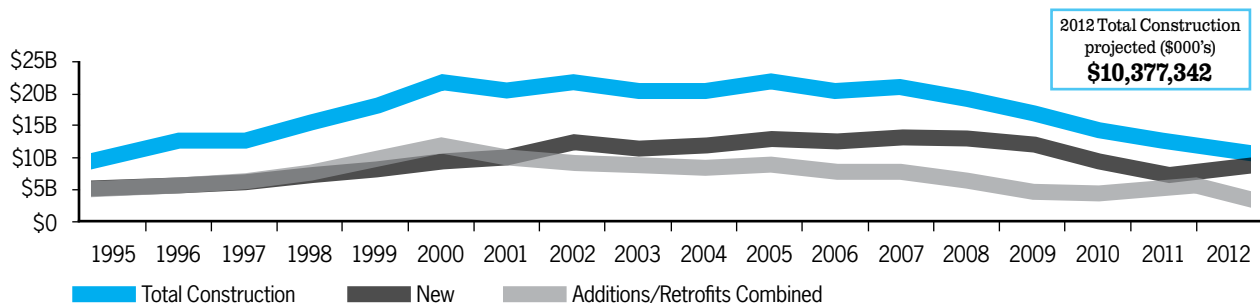
In 2011, school construction spending exceeded \$1 billion in only four regions. In previous years, as many as 10 regions had exceeded that threshold. In all but three regions, construction completed in 2011 was lower than it had been a year earlier. It is interesting to note that the three regions with slightly higher spending totals were not among the high construction areas of the nation.

Region 9, including Texas, Louisiana, Oklahoma and Arkansas, was the highest spending region, but it spent almost \$500 million less than it had a year earlier with just over \$2 billion put in place. Schools in that region were responsible for 16.7 percent of the nation’s total construction spending. Region 9 not only put more construction in place than any other region, it also led the way in spending for new school buildings with \$1.27 billion going for that purpose.

Construction spending in Region 11, including Arizona, California, Hawaii and Nevada, totaled almost \$2 billion, making it the second highest spending region and the only other one close to the \$2 billion mark. Much of that activity is taking place in California where, despite budget woes, state funding for school construction has continued. Perhaps more important, many large and expensive projects were reported to have been completed during 2011.

Region 5, including Florida, Georgia, Alabama and Mississippi, was the third highest spending region, responsible for

## SCHOOL CONSTRUCTION COMPLETED, 1995 THROUGH 2012 (Projected)



**In the 17 years** since 1995, school districts in the U.S. have put more than \$297 billion worth of construction in place, including nearly \$167 billion for new schools, almost \$70 billion to add space to existing schools and \$56 billion to upgrade existing buildings. During that time, there has been a change in how the money was spent. From 1995 through 2001, more than half the construction dollars went towards additions to, and upgrading of, existing buildings. Starting in 2002, the money was used to provide new buildings. There is some indication that, starting in 2010, school districts are putting a larger percentage of capital funds into existing buildings rather than building new.

2

SCHOOL CONSTRUCTION COMPLETED IN 2011 (\$000'S)

Region	New Schools	Additions	Renovation	Total	% OF SPENDING FOR			% of Nation
					New	Addition	Renovation	
1	\$330,890	\$131,418	\$253,012	\$715,319	46.3%	18.4%	35.3%	5.8%
2	\$429,700	\$275,809	\$290,268	\$995,776	43.2%	27.7%	29.1%	8.1%
3	\$650,302	\$132,350	\$160,132	\$942,784	69.0%	14.0%	17.0%	7.7%
4	\$609,254	\$141,647	\$264,453	\$1,015,354	60.0%	14.0%	26.0%	8.3%
5	\$973,613	\$315,142	\$156,736	\$1,445,492	67.4%	21.8%	10.8%	11.8%
6	\$421,890	\$164,126	\$274,551	\$860,567	49.0%	19.1%	31.9%	7.0%
7	\$204,996	\$170,882	\$194,563	\$570,440	35.9%	30.0%	34.1%	4.7%
8	\$273,497	\$164,030	\$101,628	\$539,155	50.7%	30.5%	18.8%	4.4%
9	\$1,272,466	\$377,919	\$397,174	\$2,047,559	62.1%	18.5%	19.4%	16.7%
10	\$267,414	\$106,640	\$125,163	\$499,216	53.5%	21.4%	25.1%	4.1%
11	\$1,171,244	\$557,812	\$237,373	\$1,966,429	59.6%	28.3%	12.1%	16.1%
12	\$295,505	\$149,307	\$198,199	\$643,011	46.0%	23.2%	30.8%	5.3%
Nat'l	\$6,900,772	\$2,687,081	\$2,653,250	\$12,241,102	56.4%	22.0%	21.6%	100.0%

**To read this table:** Public schools in Region 1 (New England) completed new buildings worth more than \$330 million in 2011. They also put in place almost \$132 million in additions to existing buildings and spent \$253 million on renovations. School districts in Region 1 completed about \$715 million of school construction in 2011 with 46.3 percent of those dollars spent on new buildings, the balance on adding to and upgrading existing buildings. Region 1 accounted for 5.8 percent of all school construction dollars spent on projects completed in the United States in 2011.

\$1.45 billion in construction completed in 2011 — a 22-percent drop from the previous year. The bulk of the construction dollars are still going to providing new school buildings in this growing region, but a larger slice than in previous years is being spent on fixing and enlarging existing buildings.

School districts in Region 4 (North Carolina, South Carolina, Kentucky and Tennessee) spent slightly more than \$1 billion last year, with 60 percent of that on new schools. While construction spending remains high in these four states, it has fallen significantly in the last two years. New schools had been the driving force in Region 4, and it may be that long-term projects are beginning to run out of steam.

School districts in Region 2, including New York, New Jersey and Pennsylvania, put less than \$1 billion of school construction in place in 2011, a huge drop in an area where most construction dollars go for ensuring that existing buildings have sufficient space and are in proper shape to provide their educational programs. School districts in these states, which are not gaining in population, have for many years had little difficulty getting voter

approval for upgrading schools. That is no longer true, even in the highest spending areas. Perhaps that's not surprising with governors in two of the three states effectively campaigning against schools and their teachers.

Region 3 (Delaware, District of Columbia, Maryland, Virginia and West Virginia) school districts raised their spending to \$943 million last year, an increase of more than \$100 million. The surge in Region 3 may have been caused by the completion of several large new schools. Districts in Region 6 (Indiana, Michigan and Ohio) reported just \$860 million in completed work, a drop of \$66 million from the previous year. Both regions had been regularly spending more than a billion dollars annually.

Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont) increased total spending slightly to \$715 million, still well below its pre-2008 spending. Region 12 (Alaska, Idaho, Oregon and Washington), which in 2010 was the nation's lowest spending region, also increased spending, putting \$643 million in place with a majority of its dollars going into existing structures.

Region 7 (Illinois, Minnesota and Wisconsin) spent \$570 million, about \$100 million less in 2011 than 2010. It was split evenly among new buildings, additions and retrofit. Region 8 (Iowa, Kansas, Missouri and Nebraska) divided its \$539 million somewhat differently with half for new buildings. As with Region 7, its spending was \$100 million lower than the previous year.

Region 10 (Colorado, Montana, New Mexico, North Dakota, South Dakota, Utah and Wyoming) districts spent less than \$500 million, a \$250-million drop from the previous year when a number of new buildings opened and pushed spending up. More detail on regional spending is shown beginning on page CR11.

**What's Underway Now?**

**Table 3** examines construction that school districts say they will complete in calendar year 2012. If these projections are accurate, total construction this year will fall below \$10.4 billion — a big drop from what was completed in 2011. (Actual completions in 2011 were below what was predicted a year ago, a reversal of previous trends.)

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CONSTRUCTION EXPECTED TO BE COMPLETED IN 2012 (\$000'S)

Region	New Schools	Additions	Renovation	Total	% OF SPENDING FOR			% of Nation
					New	Addition	Renovation	
1	\$494,842	\$91,809	\$84,409	\$671,059	73.7%	13.7%	12.6%	6.5%
2	\$705,993	\$225,500	\$429,489	\$1,360,981	51.9%	16.5%	31.6%	13.1%
3	\$557,501	\$96,514	\$166,982	\$820,998	67.9%	11.8%	20.3%	7.9%
4	\$372,219	\$92,779	\$65,340	\$530,338	70.2%	17.5%	12.3%	5.1%
5	\$663,687	\$149,273	\$90,587	\$903,546	73.5%	16.5%	10.0%	8.7%
6	\$835,732	\$130,090	\$113,679	\$1,079,501	77.4%	12.1%	10.5%	10.4%
7	\$199,700	\$52,549	\$40,028	\$292,276	68.3%	18.0%	13.7%	2.8%
8	\$352,067	\$210,920	\$95,327	\$658,314	53.5%	32.0%	14.5%	6.3%
9	\$1,002,896	\$251,078	\$163,099	\$1,417,073	70.8%	17.7%	11.5%	13.7%
10	\$205,560	\$39,471	\$27,218	\$272,248	75.5%	14.5%	10.0%	2.6%
11	\$1,641,254	\$174,045	\$141,149	\$1,956,448	83.9%	8.9%	7.2%	18.9%
12	\$254,170	\$107,464	\$52,927	\$414,561	61.3%	25.9%	12.8%	4.0%
Nat'l	\$7,285,620	\$1,621,490	\$1,470,232	\$10,377,342	70.2%	15.6%	14.2%	100.0%

**To read this table:** In 2012, public schools in Region 1 (New England) are expecting to complete new buildings worth \$495 million. They also expect to complete additions worth \$92 million and renovations valued at \$84 million. Total spending in Region 1 is projected at over \$670 million, with 73.7 percent of the dollars for new buildings, the balance for additions and renovations. New England is projected to account for 6.5 percent of all school construction dollars spent in the nation for schools to be completed in 2012.

Projections for 2011 completions were made at that time when there was a renewed push for federal support for school construction, with a specific focus on shovel-ready projects to enlarge and retrofit existing schools. Many of the projections may have been based on getting that aid. Unfortunately, Congress never provided the funds, and that could have been the reason districts over-projected what they could accomplish.

In terms of overall spending, Regions 9 and 11 are most optimistic about what they will complete this year, but while Region 11

again, those that are waiting for federal stimulus — have yet to be fully scheduled. Time (and next year’s report) will tell.

**Looking Ahead**

Table 4 reports on construction that is projected to start this year. It is perhaps the truest picture of the mood of the school construction market, with districts across the board wondering if they will have the dollars necessary to get their needed construction underway. The total shown, \$10.6 billion, is higher than what is projected to be completed this year, so perhaps there is

weighted to additions and, particularly, revisions of existing buildings. School districts that have tried and failed to get money for new buildings seem now to be focusing on smaller projects that will solve known and obvious problems and, hopefully, garner public support.

**New Schools Completed in 2011**

Table 5 provides a profile, on a national basis, of New Schools that were completed in 2011. The figures shown in Table 5 are medians. That means, for example, that among elementary schools being built in

**In 2011, the median elementary school in the United States cost \$181 per square foot to build, median spending was \$24,000 per pupil and the median elementary school provided 129.4 square feet for each student.**

districts project that activity will remain about the same as it did in 2011, those in Region 9 project construction completions to fall more than half-a-billion dollars.

Region 2 districts expect to get back above the \$1-billion mark, as do districts in Region 6. Note that in almost all regions, there is a preponderance of new schools. It may be that smaller projects — possibly,

a little optimism creeping in. I have heard anecdotally of school districts with money that have been unable to sell their bonds, and others that have access to dollars but are concerned about public backlash over any spending of money on public projects. Maybe these obstacles are being overcome.

It is interesting to note that construction scheduled to start this year is more

the nation today, half of them will cost \$181 per square foot or more, and half, \$181 per square foot or less. By using medians rather than averages, we are able to minimize the influence of special schools that may be extremely expensive or inexpensive, or cases where reporting is faulty.

Table 5 shows that in 2011, the median elementary school in the United States

## 4 SCHOOL CONSTRUCTION PROJECTED TO START IN 2012 (\$000'S)

Region	New Schools	Additions	Renovation	Total	% OF SPENDING FOR			% of Nation
					New	Addition	Renovation	
1	\$331,070	\$217,151	\$178,481	\$726,701	45.6%	29.8%	24.6%	6.8%
2	\$321,857	\$86,602	\$192,007	\$600,466	53.6%	14.4%	32.0%	5.7%
3	\$528,588	\$205,315	\$90,958	\$824,861	64.1%	24.9%	11.0%	7.8%
4	\$429,834	\$90,726	\$79,935	\$600,495	71.6%	15.1%	13.3%	5.7%
5	\$938,123	\$101,180	\$69,765	\$1,109,068	84.6%	9.1%	6.3%	10.5%
6	\$574,371	\$169,473	\$173,738	\$917,582	62.6%	18.5%	18.9%	8.6%
7	\$284,768	\$58,231	\$139,231	\$482,230	59.1%	12.1%	28.8%	4.5%
8	\$252,730	\$21,903	\$42,278	\$316,910	79.7%	6.9%	13.4%	3.0%
9	\$917,569	\$186,546	\$349,654	\$1,453,770	63.1%	12.8%	24.1%	13.7%
10	\$247,500	\$54,565	\$126,028	\$428,093	57.8%	12.8%	29.4%	4.0%
11	\$1,367,600	\$129,849	\$1,017,712	\$2,515,162	54.3%	5.2%	40.5%	23.7%
12	\$470,710	\$84,159	\$82,331	\$637,199	73.9%	13.2%	12.9%	6.0%
Nat'l	\$6,664,721	\$1,405,700	\$2,542,117	\$10,612,538	62.8%	13.2%	24.0%	100.0%

**To read this table:** In the year 2012, school districts in Region 1 (New England) expect to start construction on new buildings worth \$331 million. They also project starting work on \$217 million in additions to existing buildings and on renovations valued at \$178 million. Altogether, school districts in Region 1 predict they will start \$726 million worth of school construction in 2012, with 45.6 percent of the dollars devoted to new schools, the balance to additions and renovations. Region 1's spending will be about 6.8 percent of all school construction spending projected to start in 2012

## 5 PROFILE OF NEW SCHOOLS COMPLETED IN 2011

National Medians	\$/Sq. Ft.	\$/Per Student	Sq. Ft./Per Student	No. of Students	Building Size (Sq. Ft.)	Building Cost (\$000's)
Elementary Schools	\$181.00	\$24,000	129.4	700	85,593	\$16,400
Middle School	\$195.31	\$28,182	137.5	840	108,000	\$22,068
High Schools	\$219.18	\$35,833	165.3	1,100	200,000	\$39,000
Low Quartile	\$/Sq. Ft.	\$/Per Student	Sq. Ft./Per Student	No. of Students	Building Size (Sq. Ft.)	Building Cost (\$000's)
Elementary Schools	\$144.91	\$19,871	112.5	500	67,579	\$11,000
Middle School	\$162.50	\$19,747	123.3	600	86,000	\$17,000
High Schools	\$162.34	\$27,826	139.3	725	110,000	\$22,000
High Quartile	\$/Sq. Ft.	\$/Per Student	Sq. Ft./Per Student	No. of Students	Building Size (Sq. Ft.)	Building Cost (\$000's)
Elementary Schools	\$231.88	\$32,170	149.5	802	103,519	\$22,755
Middle School	\$280.96	\$41,207	158.3	1200	148,050	\$38,000
High Schools	\$284.55	\$44,444	192.2	1600	270,000	\$64,000

**To read this table:** The national median cost per square foot for construction of an elementary school completed in 2011 was \$181.00. Cost per student was \$24,000 and the median school provides 129.4 square feet per student. One quarter of all school districts (the low 25 percent) spent \$144.91 per square foot or less for its elementary school construction while one quarter of all districts spent \$231.88 per square foot or more. The median high school completed in 2011 cost \$39 million. Based on data from 121 elementary schools, 47 middle schools, 67 high schools.

cost \$181 per square foot to build, median spending was \$24,000 per pupil and the median elementary school provided 129.4 square feet for each student. The median elementary school was designed for 700

students and provides 85,593 square feet at a total cost of \$16,400,000. Note that in finding medians, each variable is looked at separately so that the school that cost \$181 per square foot is not necessarily the same

one that spends \$24,000 per pupil or that was planned for 700 students.

Looking at middle schools, the median cost is \$195.31 per square foot. Median spending per pupil was \$28,182 and the

## 6

## WHERE THE MONEY GOES, BY BUILDING TYPE (\$000'S)

2011 Completions	Elementary	Middle	High	District	Total
New	\$2,259,704	\$1,657,644	\$2,958,423	\$25,000	\$6,900,772
Additions	\$778,573	\$431,368	\$1,423,956	\$53,184	\$2,687,081
Renovations	\$993,026	\$578,037	\$1,033,133	\$49,055	\$2,653,250
<b>Total</b>	<b>\$4,031,303</b>	<b>\$2,667,049</b>	<b>\$5,415,512</b>	<b>\$127,238</b>	<b>\$12,241,102</b>
<b>% of Year's Dollars</b>	<b>32.9%</b>	<b>21.8%</b>	<b>44.3%</b>	<b>1.0%</b>	<b>100.0%</b>

2012 Expected Completions	Elementary	Middle	High	District	Total
New	\$2,514,275	\$1,385,270	\$3,369,075	\$17,000	\$7,285,620
Additions	\$387,715	\$243,542	\$894,657	\$95,575	\$1,621,490
Renovations	\$513,900	\$268,832	\$658,983	\$28,517	\$1,470,232
<b>Total</b>	<b>\$3,415,891</b>	<b>\$1,897,644</b>	<b>\$4,922,715</b>	<b>\$141,093</b>	<b>\$10,377,342</b>
<b>% of Year's Dollars</b>	<b>32.9%</b>	<b>18.3%</b>	<b>47.4%</b>	<b>1.4%</b>	<b>100.0%</b>

2012 Projected Starts	Elementary	Middle	High	District	Total
New	\$2,193,169	\$1,442,745	\$2,980,886	\$47,921	\$6,664,721
Additions	\$474,224	\$147,582	\$678,202	\$105,692	\$1,405,700
Renovations	\$889,915	\$717,618	\$700,903	\$233,680	\$2,542,117
<b>Total</b>	<b>\$3,557,308</b>	<b>\$2,307,945</b>	<b>\$4,359,991</b>	<b>\$387,294</b>	<b>\$10,612,538</b>
<b>% of Year's Dollars</b>	<b>33.5%</b>	<b>21.7%</b>	<b>41.2%</b>	<b>3.6%</b>	<b>100.0%</b>

Total	Elementary	Middle	High	District	Total
New	\$6,967,149	\$4,485,659	\$9,308,384	\$89,921	\$20,851,113
Additions	\$1,640,511	\$822,493	\$2,996,815	\$254,451	\$5,714,270
Renovations	\$2,396,842	\$1,564,487	\$2,393,019	\$311,252	\$6,665,599
<b>Total</b>	<b>\$11,004,502</b>	<b>\$6,872,638</b>	<b>\$14,698,218</b>	<b>\$655,625</b>	<b>\$33,230,983</b>
<b>% of Year's Dollars</b>	<b>33.1%</b>	<b>20.7%</b>	<b>44.2%</b>	<b>2.0%</b>	<b>100.0%</b>

**To read this table:** Of the \$6.901 billion spent on new buildings in 2011, \$2.26 billion went into elementary schools, \$1.6 billion was spent on middle schools and almost \$3 billion on high schools. About \$25 million was spent on district buildings such as maintenance and bus garages and administrative centers.

median middle school provides 137.5 square feet per student. The median number of students in middle schools completed in 2011 is 840 and the building size is 108,000 square feet. The cost is slightly more than \$22 million.

The median high school cost \$39 million and provided 200,000 square feet. It was designed to accommodate 1,100 students. The median high school provides 165.3 square feet per student at \$35,833 for each student. The cost per square foot was \$219.18.

Median costs for elementary and middle schools, in particular, are lower than those found a year ago, and the secondary schools tend to be smaller. Neither of these facts should be seen as trends. Rather, they are a reflection of where the completed

buildings were located, and on which ones provided full information. Most of the new schools this year came from lower-spending regions of the nation. The exception was construction in Region 11, and particularly California, which tended to be more expensive, particularly in terms of cost per square foot.

### Finding Your Fit

The median figures found in the first section of Table 5 may be significant to your district. (Caution: Though they are shown as exact numbers, they are based on estimated costs, size and students, and should be used only as estimates.) But, depending on your location, your district's aspirations, the labor market in your area and many other

factors, the median may not apply to you.

If your district is in a high-cost area or feels that it is a high-quality district in terms of how it spends its money and how it builds its buildings, you may want to look at the high quartile numbers, at least in terms of cost and space per student. They show that 25-percent of new elementary schools being built cost \$231.88 per square foot or more. One-quarter of the elementary schools completed last year provided 149.5 square feet per student. At the high school level, 25 percent of the districts will spend \$284 per square foot or more, and one-quarter of all the new high schools completed last year cost more than \$64 million, housed more than 1,600 students and were bigger than 270,000 square foot.

## 7

## DOES SCHOOL SIZE MATTER?

The low quartile, also shown in Table 5, is the point at which 75 percent of the reporting schools are higher and 25 percent are lower. Thus, 25 percent of elementary schools were completed for \$145 per square foot or less. Twenty-five percent of the new elementary schools provided fewer than 112 square feet per student, and the low quarter of all reporting school districts built their elementary school for \$11 million or less.

Once again, it must be emphasized that these are not necessarily the same school building, but the point at which, in looking at total cost or square feet per student or cost per student, one-quarter of the reporting districts are spending that amount or less.

Being in the low quartile does not necessarily suggest that the school is behind others. It may simply indicate that it is in an area with lower construction costs. Or, for example, in looking at the number of students in the school, the fact that one-quarter of all elementary schools are built for 500 or fewer students may be a factor of location (that's all the students there could be) or a mark of distinction (the school was kept small for educational purposes).

The figures shown in Table 5 are based on the experience of 121 elementary schools, 47 middle schools and 67 high schools either completed in 2011 or substantially finished and scheduled to open early in 2012. Keep in mind that the figures shown in Table 5 are meant as comparison points, not as arbiters of right and wrong, cheap or expensive.

## Where to Put the Money

Most school districts have multiple construction needs. Whether caused by an expanding student population, need for technology, questions of safety and accessibility or the need to upgrade schools built in another time, school boards are often faced with multiple demands for construction dollars.

**Table 6** takes a look, in terms of dollars, at how some of those questions are being answered. It shows the school level at which construction is taking place (money is being spent) and the type of construction that was undertaken. For example, among school construction projects completed in 2011, 32.9 percent was spent on elementary schools, while 21.8 percent went to middle

schools. High schools received 44.2 percent of the dollars spent. The balance was spent on "district projects," generally transportation and/or maintenance buildings, sometimes football stadiums.

Table 6 also shows the purpose for which construction dollars were spent at each level. For example, of the \$4.031 billion spent last year on elementary schools,

\$2.29 billion was for new buildings. Almost \$1 billion was for renovations to existing buildings, and the balance (\$779 million) was for added space in existing buildings.

Table 6 also shows how districts are expecting to spend their dollars in projects being completed or starting in 2012. In general, high schools get the lion's share of the dollars.

	Median No. of Students	Median Size of Building (Sq. Ft.)	Median Project Cost (\$000's)	Median Cost per Sq. Ft.	Median Cost per Student	Median Space per Student (Sq. Ft.)
<b>Elementary Schools</b>						
<b>Smallest Quarter</b> (fewer than 501 students)	400	60,000	\$10,000	\$172.62	\$25,562	140
<b>National Median</b>	700	85,593	\$16,400	\$181	\$24,000	129.4
<b>Largest Quarter</b> (802 to 1,400 students)	900	104,407	\$19,537	\$181.41	\$22,375	120.8
<b>Middle Schools</b>						
<b>Smallest Quarter</b> (fewer than 601 students)	543	79,043	\$17,750	\$204.69	\$29,667	142.5
<b>National Median</b>	840	108,000	\$22,068	\$195.31	\$28,182	137.5
<b>Largest Quarter</b> (1,200 to 1,600 students)	1,271	167,500	\$32,547	\$196.09	\$26,417	133.9
<b>High Schools</b>						
<b>Smallest Quarter</b> (fewer than 725 students)	500	76,862	\$16,000	\$181.82	\$27,692	160
<b>National Median</b>	1,100	200,000	\$39,000	\$219.18	\$35,833	165.3
<b>Largest Quarter</b> (1,600 to 2,500 students)	2,000	288,826	\$75,000	\$230.24	\$35,400	162.4

**To read this table:** One quarter of all new elementary schools were constructed for 500 or fewer students. Among this group, the median number of students accommodated was 400. The median small elementary school was 60,000 square feet and cost \$10 million. Median cost per square foot for these smaller elementary schools was \$172.62 and cost per student was \$25,562. The median small elementary school provided 140 square feet per student. By contrast, the median large elementary school (with 900 students) provided just 120.8 square feet per student.



## 8

## WHAT NEW SCHOOLS COMPLETED IN 2011 AND 2012 WILL PROVIDE

(% of new schools that reported facility, by grade)

		Elementary	Middle/JHS	High School
<b>Core Facilities</b>	Classrooms	100.0%	100.0%	100.0%
	Library	95.9%	100.0%	100.0%
	Media Center	84.2%	100.0%	100.0%
	Computer Lab	96.5%	100.0%	100.0%
	Science Lab	5.8%	100.0%	100.0%
	Music	97.1%	100.0%	100.0%
	Arts/Crafts	100.0%	100.0%	92.5%
	Gymnasium	100.0%	100.0%	100.0%
	Multipurpose Room	8.8%	4.4%	7.5%
	Stage	15.8%	29.4%	81.1%
	Auditorium/Theater	4.7%	25.0%	77.4%
	Special Ed/Resource	93.6%	95.6%	79.2%
	Fine Arts	0.0%	5.9%	28.3%
	Home Arts	0.6%	10.3%	41.5%
	Industrial Tech.	0.6%	4.4%	15.1%
	Vocational Shops	0.0%	2.9%	39.6%
	Photo Lab	0.0%	0.0%	3.5%
TV/Radio Studio	0.6%	1.9%	9.4%	
<b>Support Facilities</b>	Offices	100.0%	100.0%	100.0%
	Infirmary/Clinic	100.0%	100.0%	100.0%
	Cafeteria	100.0%	100.0%	100.0%
	Kitchen	100.0%	100.0%	100.0%
	Hall Lockers	7.6%	95.6%	100.0%
<b>Technology Support</b>	LANs	100.0%	100.0%	100.0%
	Fiber Optics/Cable	100.0%	100.0%	100.0%
	Technology Lab (Digital)	1.2%	8.8%	43.9%
	Language Lab	0.6%	7.4%	9.4%
	WANs	100.0%	100.0%	100.0%
<b>Athletic Support</b>	Locker Rooms	2.3%	80.9%	100.0%
	Bleachers	9.9%	9.4%	100.0%
	Track	0.0%	2.9%	34.0%
	Field House	0.0%	0.0%	9.4%
	Fitness Center	0.0%	5.9%	35.8%
	Tennis	0.0%	0.0%	13.2%
	Pool	0.6%	0.0%	5.7%
	Stadium	0.0%	0.0%	18.9%
	Athletic Fields	10.5%	86.8%	88.7%
Playground	100.0%	14.7%	13.2%	
<b>Other Facilities</b>	Day Care/Nursery	12.9%	0.0%	1.9%
	Elevators	12.3%	13.2%	43.4%

## 9

## TOP ADDITIONS BY SCHOOL TYPE

(% of new school additions that are reported to contain facility)

### Elementary

1	Classrooms	63.6%
2	Lavatories	41.6%
3	Library/Media Center	20.5%
4	Gymnasium	19.6%
5	Offices	16.8%
6	Multipurpose	13.1%
7	Cafeteria	11.7%
8	Music	7.9%
9	Kitchen	7.0%
10	Special Education	5.6%

### Middle/JHS

1	Classrooms	45.8%
2	Lavatories	37.5%
3	Gymnasium	29.2%
4	Science Labs	19.4%
5	Music	18.1%
6	Cafeteria	18.1%
7	Library/Media Center	13.9%
8	Offices	12.5%
9	Kitchen	12.5%
10	Locker Room	8.3%

### High School

1	Lavatories	40.2%
2	Classrooms	40.2%
3	Gymnasium	21.3%
4	Science Labs	19.0%
5	Library/Media Center	15.5%
6	Locker Rooms	15.5%
7	Offices	14.4%
8	Stage	14.4%
9	Cafeteria	13.8%
10	Auditorium/Theater	13.2%
11	Arts, Crafts, Fine Arts	11.5%
12	Music	11.5%

## Does Size Matter?

Students do better in smaller learning environments. There is ample evidence for this statement and most educators accept it. But somewhere there appears to be a gap between educational understanding and educational construction. The majority of the schools that we build today continue to be large.

The reason, of course, revolves around questions of efficiency and cost. While advocates of small schools insist that the cost of building and running them (and the cost per student educated successfully) are actually lower for small schools, at times it is a hard sell.

**Table 7** examines the question of the comparative cost of building schools by size. To do this, all of the new school buildings completed in 2011 or scheduled to open in 2012 on which information was available were lined up by size and then divided into four equal groups so that median costs and other information could be found among the smaller and larger buildings.

Looking at elementary schools, one-quarter of them were designed to house 501 or fewer students. Among that group, the median building will house 400 students and will contain 60,000 square feet. The cost will be \$10 million. The median cost per square foot among the smaller elementary schools was \$172.62, and cost per student was \$25,562.

By contrast, one of every four new elementary schools was designed for 802 or more students. The largest one reported

was designed for 1,400 elementary school students.

Among these larger elementary schools, the median student population was 900, the median size almost 104,500 square feet and the median cost \$19.5 million. In terms of cost per square foot, these larger buildings cost \$181.41, almost \$9 more than the smaller elementary schools. The cost per student, \$22,375, was less than the \$25,562 being spent per pupil for the smaller schools. On the other hand, the smaller schools provided much more space per pupil (140 square feet per student) than the larger schools (120.8).

One-quarter of the middle schools were constructed for 601 or fewer students. The median among them housed 543 students in 79,000 square feet at a cost of \$17.8 million. The median cost per square foot for these smaller schools was almost \$205 and the cost per pupil \$29,677. These smaller middle schools provided 142.5 square feet per student.

Among larger middle schools (with between 1,200 and 1,600 students) the median was 1,271 students, 167,500 square feet and \$32.5 million in cost. Costs per square foot and per pupil were lower in the large middle schools than the smaller ones.

The high school picture shows that the median cost per student in larger schools (with 1,600 to 2,500 students) was more than for smaller ones (fewer than 725 students), as was cost per square foot.

The difference in construction cost per student between large and small high schools is significant as is the cost per square foot. Considering the educa-

tional implications, and the usually higher administrative and security costs of large high schools, school districts may wish to look once again at the efficacy of putting 2,000 or more students into a single building. In terms of overall cost, it appears that four high schools for 500 students would cost significantly less than one for 2,000.

## Providing Facilities

New school buildings have great similarities. **Table 8** records the percentage of new schools completed in 2011 that include specific facilities.

All have classrooms and offices and facilities for physical education. Some kind of a nurse's station is a regular feature. Libraries are in all buildings, though in some they may be listed as media centers. In elementary schools this year, every one contacted indicated they were providing both a gymnasium and a cafeteria. Less than one in 10 still lists a multipurpose room.

**Table 9** details information collected on additions to existing schools. It shows the facilities most often included by school type in 2011.

Classrooms and lavatories were the top two facilities added at every school level. Gymnasiums also ranked high, as did science labs in secondary schools. Considering the fact that important subjects like music and art are often squeezed out of programs in schools that teach to the standardized tests, it was good to see that facilities to support creative activities showed up at every grade level. [SPM](#)



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# Trends Since 1995

A look at medians for elementary, middle and high schools.

**T**HIS IS THE 17TH YEAR that *School Planning & Management* has collected and published data on costs of new schools in the United States. Reporting is done based on medians. The number shown is more than what one-half of schools constructed cost, and less than the cost for the other half (see Table 5 for more on national medians and Table 10 for regional medians).

In 1995, as **Graph A** shows, the median school district was paying about \$104 per square foot for middle schools and high schools; \$93 per square foot for elementary. Costs remained reasonably close to those numbers for the next four years, rising slightly, but still staying close to \$100 a square foot, a little above that in high cost parts of the nation, a little below in areas where all costs tended to be lower.

And then things changed. By 2003, high school construction costs had risen to \$132 per square foot — a 25 percent increase. Four years later, in 2007, the median high school was being constructed for \$171 per square foot, and in 2011 median costs for constructing a high school breached the \$200 mark at \$203.13, a 93-percent increase over the costs a decade earlier. Last year, the cost of constructing a new high school rose to an estimated \$219 per square foot.

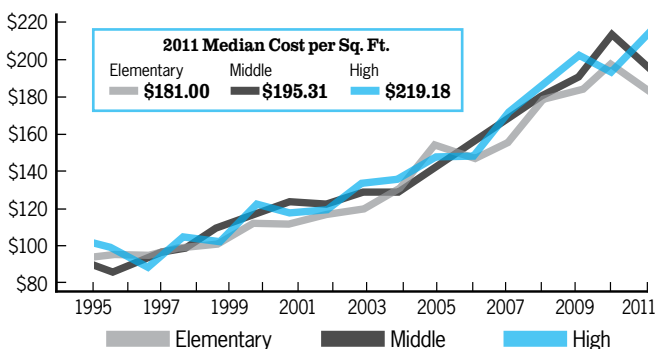
The middle school picture was similar. From 1999 (when costs were \$108 per square foot), the price rose steadily to \$130 in 2003 and \$162 in 2007. In 2011, the median cost for a new middle school was \$187.50 per square foot, a 73-percent increase over a decade. In 2010, reported costs surged to better than \$215 per square foot, but in 2011 it fell back to a more reasonable \$195, more in line with the previous rate of increase.

The cost of constructing an elementary school has almost doubled since 1985, going from \$93 to \$181 today.

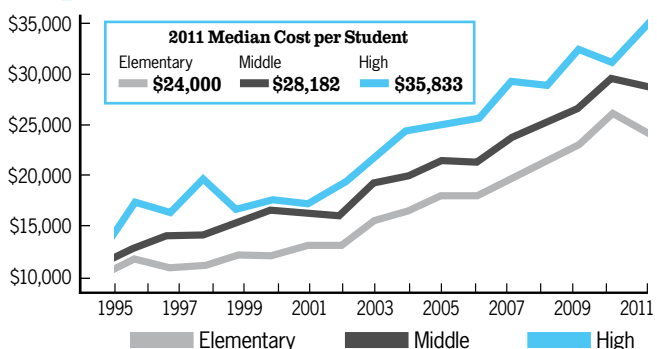
**Graph B** examines the history of construction cost per student over the same period of time. Cost per square foot is essentially controlled by outside forces. Cost per student, to some extent, can be controlled by the school district. The simple act of increasing the announced number of students who will be served by a new school, after all, will lower the cost per pupil. It is assumed that school districts do not do this, but with the economy robbing schools of operating funds, some districts are increasing the number of students allowed per class and that, in turn, can affect the cost per student if the new standards are applied to a building under construction.

**Graph C** shows the amount of space each school type is allocating per student. This is an area where schools can control costs. Compared to 1995, elementary schools are providing about

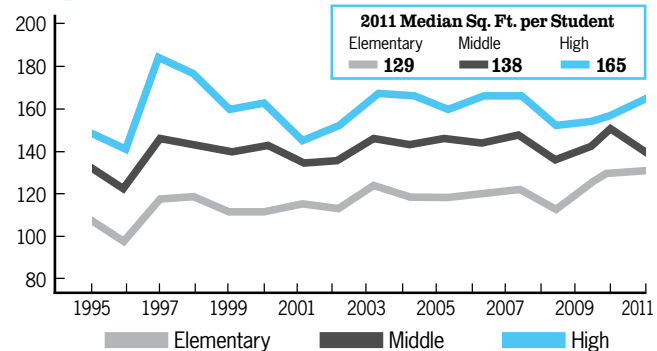
**Graph A: Median Cost per Sq. Ft., 1995-2011**



**Graph B: Median Cost per Student, 1995-2011**



**Graph C: Median Sq. Ft. per Student, 1995-2011**



20 square feet more for each pupil. In that same period, high schools have provided about 15 additional square feet for each student. Middle schools also added an extra 15 square feet, but those reported this year tended to be smaller. [SPM](#)

# A Closer Look at Regions

What your neighbors are doing.

**N**ATIONAL FIGURES are always instructive, but from the point of view of the local school administrator or school board, it may be more important to know what your neighbors are doing. *School Planning & Management's* regional figures are designed to help you do that.

Over the past years, a full set of figures, including median costs for construction of new schools, has been provided for each of 12 regions of the United States. However, with the annual number of new schools declining (from an estimated 960 in 2002 to just 290 in 2011), it has become increasingly difficult to acquire complete data on a sufficient number of schools so that reasonable medians can be published for each region. Rather than abandoning this important guideline completely, we have chosen to gather the 12 regions into five "areas," so that information on new buildings can be presented with confidence.

On the following pages, figures are given for new school activity for each of the five areas and on total construction for each of the 12 regions of the United States. Regionally, figures are shown for total construction activity in 2011 and how that money was spent (on new schools, additions or renovations). They also show what percentage of money in each region goes to elementary schools, middle schools and high schools.

The purpose of this report is to provide data that can help you understand not only what your own district needs, but also what others are doing and how much their projects cost. The national tables allow comparison with districts with similar aspirations. Thus, if districts in your region on average tend to provide minimal space per student, but your district aspires to a variety of programs that need space, you may want to look at the space per pupil provided in the high quarter of the nation's schools.

The regional tables allow you to measure yourself against your neighbors. The area figures on new construction encompass enough new school building activity to provide guidelines to costs and space allocations per student and per square foot.

With this information, you will have data necessary to make your own plans and, in many cases, to help the public understand what you are building, why you are doing it and what it is likely to cost. Remember, there is no right or wrong; these are guidelines that must be applied to your own local needs.

**Area A** is the northeastern United States including the six New England states (**Region 1**) and the states of New York, New Jersey and Pennsylvania (**Region 2**). This is essentially a high-cost area, dominated by major population centers. The amount of school construction (number of projects) is low, but in terms of cost per project, the area and its two regions tend to rank high

A

## REGIONS 1 & 2

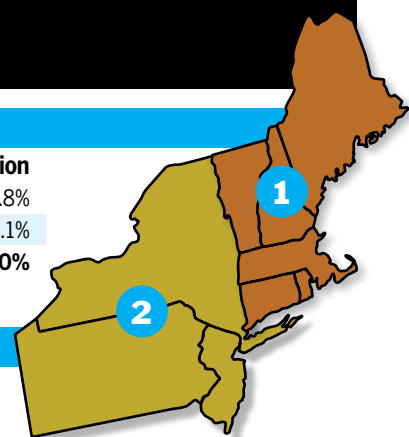
(Region 1: CT, ME, MA, NH, RI, VT. Region 2: NJ, NY, PA.)

### How Much Was Spent in 2011? (\$000s)

	New Schools	Additions	Renovations	Total	% of Nation
Region 1	\$330,890	\$131,418	\$253,012	\$715,319	5.8%
Region 2	\$429,700	\$275,809	\$290,268	\$995,776	8.1%
<b>Area A</b>	<b>\$760,590</b>	<b>\$407,226</b>	<b>\$543,279</b>	<b>\$1,711,095</b>	<b>14.0%</b>
<b>% of Total</b>	<b>44.5%</b>	<b>23.8%</b>	<b>31.8%</b>		

### Where Was the Money Spent?

	Total (\$000s)	Percentage of total devoted by type of school		
		Elementary	Middle	High
Region 1	\$715,319	37.8%	15.8%	46.4%
Region 2	\$995,776	55.0%	10.6%	34.3%
<b>Area A</b>	<b>\$1,711,095</b>	<b>47.8%</b>	<b>12.8%</b>	<b>39.4%</b>



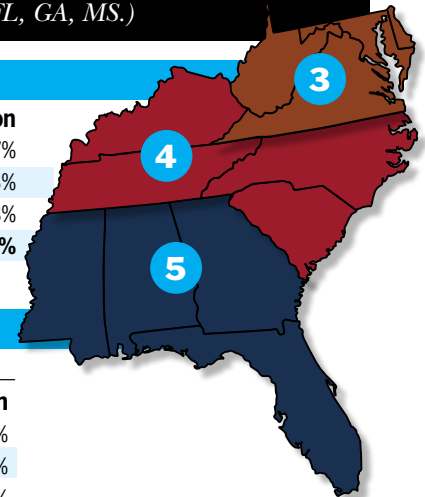
### Area A Spending for NEW SCHOOLS Only

	Cost/ Sq. Ft.	Cost/ Student	Sq. Ft./ Student	Median Cost (\$000s)	Median No. Students	Median Size (Sq. Ft.)
Elementary	\$293.34	\$35,484	130.8	\$25,800,000	700	91,000
Middle/JHS	\$320.91	\$50,694	154.2	\$32,500,000	660	100,600
High School	\$293.63	\$46,508	173.9	\$59,000,000	1,200	208,750

# B

## REGIONS 3, 4 & 5

(Region 3: DC, DE, MD, VA, WV. Region 4: KY, NC, SC, TN. Region 5: AL, FL, GA, MS.)



### How Much Was Spent in 2011? (\$000s)

	New Schools	Additions	Renovations	Total	% of Nation
Region 3	\$650,302	\$132,350	\$160,132	\$942,784	7.7%
Region 4	\$609,254	\$141,647	\$264,453	\$1,015,354	8.3%
Region 5	\$973,613	\$315,142	\$156,736	\$1,445,491	11.8%
<b>Area B</b>	<b>\$2,233,169</b>	<b>\$589,139</b>	<b>\$581,321</b>	<b>\$3,403,629</b>	<b>27.8%</b>
<b>% of Total</b>	<b>65.6%</b>	<b>17.3%</b>	<b>17.1%</b>		

### Where Was the Money Spent?

	Total (\$000s)	Percentage of total devoted by type of school		
		Elementary	Middle	High
Region 3	\$942,784	33.5%	35.8%	29.7%
Region 4	\$1,015,354	32.9%	25.2%	40.0%
Region 5	\$1,445,491	23.4%	22.3%	53.9%
<b>Area B</b>	<b>\$3,403,629</b>	<b>29.0%</b>	<b>26.9%</b>	<b>43.1%</b>

### Area B Spending for NEW SCHOOLS Only

	Cost/ Sq. Ft.	Cost/ Student	Sq. Ft./ Student	Median Cost (\$000s)	Median No. Students	Median Size (Sq. Ft.)
Elementary	\$185.24	\$25,039	132.0	\$17,550,000	775	100,000
Middle/JHS	\$180.59	\$24,387	141.7	\$20,413,939	875	129,000
High School	\$202.15	\$33,750	167.4	\$38,745,600	1,200	225,000

in the national picture.

Area A districts completed \$1.7 billion worth of construction in 2011. Less than half of Area A's construction money (44.5 percent) was spent on new school buildings in 2011, with the balance devoted to additions (23.8 percent) and retrofit. Almost half the area's construction activity (47.8 percent) involves elementary schools. High schools account for 39 percent of the funding.

Despite spending almost 45 percent of its money on new buildings, relatively few new schools were opened. Those that were, however, tended to be costly (the median high school cost \$59 million) and construction generally runs close to \$300 per square foot. Both figures are well above national medians and even above the recorded spending of the top quartile of schools in the United States. Based on total dollars spent and average cost, indications are that about 20 entirely new school buildings were completed last year in the Northeast (Area A).

**Area B** districts completed \$3.4 billion of school construction in 2011, accounting for more than one-quarter of all

school construction activity in the United States. Area B encompasses three heavily populated and growing regions, including **Region 3** (Delaware, Maryland, Virginia and West Virginia along with the District of Columbia), **Region 4** (North Carolina, South Carolina, Kentucky and Tennessee) and **Region 5** (Alabama, Florida, Georgia and Mississippi).

More than 65 percent of the area's spending is on new schools, with the balance pretty evenly split between adding space and fixing up and improving existing space. It is interesting to note that some districts in Florida, that for at least 30 years have spent almost all of their funds on new buildings, are now going back to existing buildings and upgrading them.

In terms of new construction, Area B's costs are very close to the national median, whether measured in terms of cost per square foot or per student or by space per student. Since Area B encompasses high-cost areas around our nation's capital and other major urban areas, and also rural Mississippi, Georgia, Tennessee and Kentucky, it is not surprising that overall its costs are close to the national median.

Based on total dollars spent and average cost, indications are that about 90 entirely new school buildings were completed last year in Area B.

**Area C** is made up of three regions in the Midwest. **Region 6** consists of Michigan, Ohio and Indiana. **Region 7** includes Illinois, Wisconsin and Minnesota, while **Region 8** encompasses Iowa, Missouri, Nebraska and Kansas. The 10 states together are responsible for about 16 percent of the nation's school construction spending.

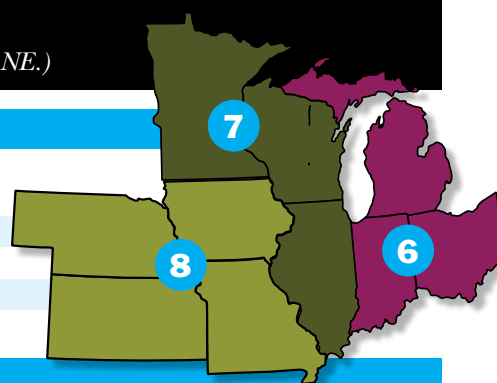
In terms of population growth, most of these states tend to be settled and relatively stable, so it stands to reason that more than 50 percent of their school spending is on additions to and retrofit of existing school buildings. Only in Region 8 is there more emphasis on new school buildings. Overall Area C spends more than half its construction dollars on high schools.

In spending on new buildings, Area C tends to fall below the national medians, closer to the low quartile, a little surprising considering that many of the states are considered high-cost. The likely explanation is that many of the reported new schools are located in Region 8 where

# C

## REGIONS 6, 7 & 8

(Region 6: IN, OH, MI. Region 7: IL, MN, WI. Region 8: IA, KS, MO, NE.)



### How Much Was Spent in 2011? (\$000s)

	New Schools	Additions	Renovations	Total	% of Nation
Region 6	\$421,890	\$164,126	\$274,551	\$860,567	7.0%
Region 7	\$204,996	\$170,882	\$194,563	\$570,441	4.7%
Region 8	\$273,497	\$164,030	\$101,628	\$539,155	4.4%
<b>Area C</b>	<b>\$900,383</b>	<b>\$499,038</b>	<b>\$570,742</b>	<b>\$1,970,163</b>	<b>16.1%</b>
<b>% of Total</b>	<b>45.7%</b>	<b>25.3%</b>	<b>29.0%</b>		

### Where Was the Money Spent?

	Total (\$000s)	Percentage of total devoted by type of school		
		Elementary	Middle	High
Region 6	\$860,567	29.2%	26.6%	41.0%
Region 7	\$570,441	28.1%	12.3%	59.6%
Region 8	\$539,155	30.8%	10.6%	58.5%
<b>Area C</b>	<b>\$1,970,163</b>	<b>29.3%</b>	<b>18.1%</b>	<b>51.2%</b>

### Area C Spending for NEW SCHOOLS Only

	Cost/ Sq. Ft.	Cost/ Student	Sq. Ft./ Student	Median Cost (\$000s)	Median No. Students	Median Size (Sq. Ft.)
Elementary	\$153.73	\$22,222	140.0	\$10,000,000	453	67,000
Middle/JHS	\$159.79	\$27,083	153.0	\$18,600,000	700	117,000
High School	\$177.60	\$29,738	171.8	\$26,187,500	763	157,660

costs tend to be lower. The schools tend to be smaller than elsewhere (elementary schools average 453 students) but provide more space per student. Based on total dollars spent and average cost, indications are that about 55 entirely new school buildings were completed last year in Area C.

**Area D**, including Regions 9 and 10, stretches from Louisiana to Montana and from North Dakota to New Mexico. It encompasses plains, mountains and bayous, but most of all, it includes Texas, probably the single most active school construction state in the nation.

Area D is responsible for 20.8 percent of all school construction nationally, with 80 percent of that in **Region 9** (Arkansas, Louisiana, Oklahoma and Texas). **Region 10** includes Colorado, Montana, New Mexico, North Dakota, South Dakota, Utah and Wyoming, seven lightly populated but growing states. More than 60 percent of Area D's school construction dollars are spent on new school buildings.

Elementary and high schools each get more than one-third of the area's funding and middle schools receive almost 24 percent. About 2.6 percent of the area's

spending is on district projects, not unexpected in sparsely populated areas where one building may accommodate all of a district's children.

In terms of new schools, costs and space per student tend to fall at or below national medians. Middle schools in these regions seem to get a little more attention being larger, holding more students and being more expensive than the national medians. Most of the new schools in Area D are constructed in Texas. Based on total dollars spent and average cost, indications are that about 75 entirely new school buildings were completed last year in Area D.

**Area E** includes **Region 11** (the states of Arizona, California, Hawaii and Nevada) and **Region 12**, the Pacific Northwest with Alaska, Idaho, Oregon and Washington. Area E is responsible for 21.4 percent of all school construction spending in the United States. A great deal of that activity is centered in California. More than 56 percent of the area's spending is on new school buildings, and more than half of all funds are spent on high school projects.

In terms of new schools, costs, particularly measured in terms of dollars per

square foot, greatly exceed the national average and even the top quartile nationally. High school projects cost \$40 per square foot more than those in Area A (the northeast) which is usually the highest cost construction area.

In a large part, this is because schools on the west coast provide significantly less space per student than those in the rest of the nation, relying on benign weather in much of Region 11 and having students move between classes by walking outside rather than through corridors. Less space per student, but just as much teaching space and equipment, drive up the square foot costs of these buildings.

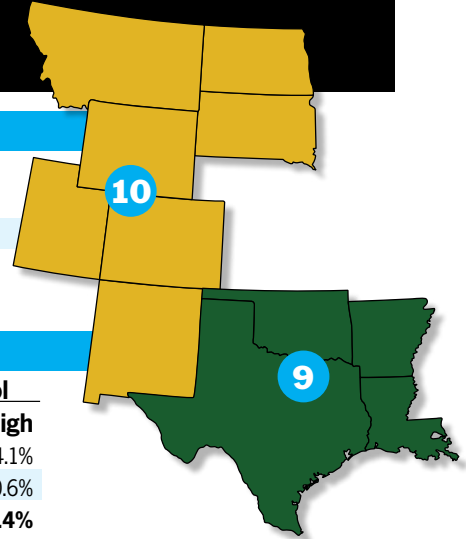
Based on total dollars spent and average cost, indications are that about 55 entirely new school buildings were completed last year in Area E. [N/A](#)

>> This Construction Report and the accompanying tables, etc., were compiled by **Paul Abramson**, education industry consultant for *School Planning & Management* magazine and the president of Stanton Leggett & Associates, an education consulting firm based in Mamaroneck, N.Y. He can be reached at [intelled@aol.com](mailto:intelled@aol.com).

# D

## REGIONS 9 & 10

(Region 9: AR, LA, OK, TX. Region 10: CO, MT, ND, NM, SD, UT, WY.)



### How Much Was Spent in 2011? (\$000s)

	New Schools	Additions	Renovations	Total	% of Nation
Region 9	\$1,272,466	\$377,919	\$397,174	\$2,047,559	16.7%
Region 10	\$267,414	\$106,640	\$125,163	\$499,217	4.1%
<b>Area D</b>	<b>\$1,539,880</b>	<b>\$484,559</b>	<b>\$522,337</b>	<b>\$2,546,776</b>	<b>20.8%</b>
<b>% of Total</b>	<b>60.5%</b>	<b>19.0%</b>	<b>20.5%</b>		

### Where Was the Money Spent?

	Total (\$000s)	Percentage of total devoted by type of school		
		Elementary	Middle	High
Region 9	\$2,047,559	38.2%	25.3%	34.1%
Region 10	\$499,217	39.3%	17.5%	40.6%
<b>Area D</b>	<b>\$2,546,776</b>	<b>38.4%</b>	<b>23.8%</b>	<b>35.4%</b>

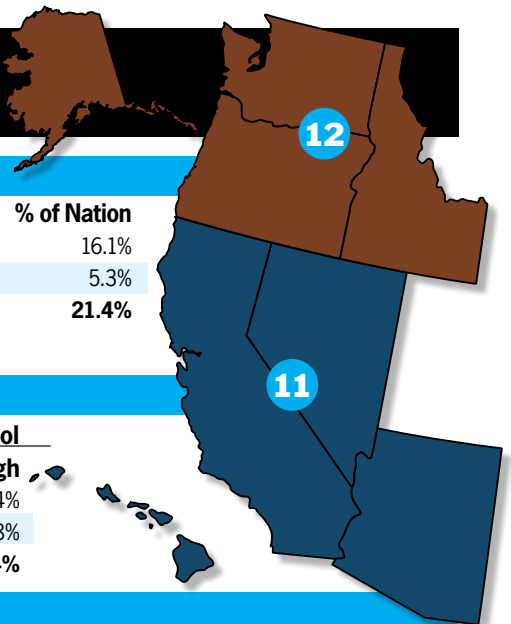
### Area D Spending for NEW SCHOOLS Only

	Cost/ Sq. Ft.	Cost/ Student	Sq. Ft./ Student	Median Cost (\$000s)	Median No. Students	Median Size (Sq. Ft.)
Elementary	\$154.08	\$21,213	129.7	\$15,236,000	750	92,750
Middle/JHS	\$212.77	\$28,000	130.2	27,030,450	950	115,708
High School	\$189.47	\$40,000	160.0	\$34,500,000	800	200,000

# E

## REGIONS 11 & 12

(Region 11: AZ, CA, HI, NV. Region 12: AK, ID, OR, WA.)



### How Much Was Spent in 2011? (\$000s)

	New Schools	Additions	Renovations	Total	% of Nation
Region 11	\$1,171,244	\$557,812	\$237,373	\$1,966,429	16.1%
Region 12	\$295,505	\$149,307	\$198,199	\$643,011	5.3%
<b>Area E</b>	<b>\$1,466,749</b>	<b>\$707,119</b>	<b>\$435,572</b>	<b>\$2,609,440</b>	<b>21.4%</b>
<b>% of Total</b>	<b>56.2%</b>	<b>27.1%</b>	<b>16.7%</b>		

### Where Was the Money Spent?

	Total (\$000s)	Percentage of total devoted by type of school		
		Elementary	Middle	High
Region 11	\$1,966,429	22.5%	19.0%	58.4%
Region 12	\$643,011	35.4%	30.8%	33.8%
<b>Area E</b>	<b>\$2,609,440</b>	<b>25.7%</b>	<b>21.9%</b>	<b>52.4%</b>

### Area E Spending for NEW SCHOOLS Only

	Cost/ Sq. Ft.	Cost/ Student	Sq. Ft./ Student	Median Cost (\$000s)	Median No. Students	Median Size (Sq. Ft.)
Elementary	\$333.63	\$53,091	100.0	\$29,200,000	650	65,000
Middle/JHS	\$286.23	\$41,207	123.3	\$38,000,000	750	98,933
High School	\$333.33	\$42,037	121.6	\$56,750,000	1,500	206,136

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# SCHOOL

Planning & Management

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