GROWTH and DISPARITY

A Decade of U.S. Public School Construction

BEST
Building Educational Success Together

FOREWORD

Our country has long struggled to improve public education and achieve equity in public schools. The condition of public school facilities was highlighted as a social justice issue in the 1954 *Brown* v. *Board of Education* challenge to segregation and poignantly described in 1991 by Jonathan Kozol in his book, *Savage Inequalities*. But inadequate facilities are still largely unrecognized as an education quality issue in standards reform, teacher quality, new school creation, choice or other education improvement movements or efforts. In addition, the important role public school quality—including building quality—plays in neighborhood and community revitalization is just beginning to be understood.

As a collaborative of organizations engaged in education reform, community development, historic preservation, and social justice, Building Educational Success Together (BEST) works at the nexus of education quality and school facilities and community vitality and school facilities. This research was designed to help us and others better understand the scale, scope and distribution of school building investment so we can ensure that policy, practice and funding are aligned to the schools and communities with the greatest need.

This report has good news and troubling news. It reveals what is known in many local communities: school construction and building improvements have been booming. Local school districts and a number of states are planning, designing and building and renovating some public school buildings of exceptional quality and at the same time, working hard to bring existing schools up to code and into good repair. Where enrollment has been growing, school districts have adding new schools and classrooms to ensure appropriate class sizes and an adequate environment for teaching and learning.

But our analysis also reaffirms our worst suspicions: Despite record spending on school construction, low-income and minority students, who already experience disadvantages, have had far less investment in their school facilities than their more affluent, white counterparts and the conditions for these students continues to be substandard.

The BEST partners believe that every child deserves the programs, people and the place—the school buildings—that will support his or her efforts to prepare for a lifetime of health, work, family and civic responsibility. Likewise, educators deserve a safe, healthy and inspiring place to work. And every community deserves a public school around which it can build and sustain neighborhoods and community connections. But in many places, especially where children are in the most need, this is still not the case, despite record spending on school buildings over the last decade.

Mary W. Filardo
Executive Director

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EXECUTIVE SUMMARY

In 1995, a federal report by the General Accounting Office (GAO) estimated that $112 billion was needed to bring the nation's school facilities into good repair. Subsequent studies estimated it would take more than $320 billion to build new schools to handle swelling enrollments, renovate aging buildings, and equip all buildings with the technologies needed to prepare students for success in the 21st century. By far, though, the most troubling findings were that the academically neediest students—minorities and impoverished students—were most likely to attend the most decrepit facilities.

Now, for the first time ever, this report provides a comprehensive analysis of who has benefited from school construction spending across the nation. In this report, the Building Educational Success Together (BEST) research team looks at how much was spent, what was accomplished, and which students and communities saw benefits. The analysis looks at the decade from 1995, when the GAO report was first released, through 2004, the most current information available.

We found ***unprecedented spending and growth*** in school facility construction across the country:

- The U.S. Census of Governments report that public school districts spent $504 billion (2005 dollars) in capital expenditures. Adding interest, the total comes to nearly **$600 billion**.

- Public school districts spent more than $304 billion (2005 dollars) in bricks and mortar, "hard costs" for public school construction contracts according to data collected by McGraw-Hill Construction.

- Over this decade, public school districts built **more than 12,000 new schools** and managed **more than 130,000 renovation and other improvement projects** to address health, safety, technology, access for students with disabilities, educational enhancement and other needs.

- While most states increased their school construction expenditures during the last decade, the states with successful court cases that challenged school facility inequities spent, on average, an additional $158 per student annually.

But this report confirms what many educators and communities have suspected for years: **these billions of dollars spent on facilities have not been equally available to affluent and low-income communities and for minority and white students.**

- The least affluent school districts made the lowest investment ($4,800 per student), while the most affluent districts made the highest investment ($9,361 per student);

- The money spent on schools serving low-income students was more likely to fund basic repairs, such as new roofs or asbestos removal, while schools in more affluent districts were more likely to receive funds for educational enhancements such as science labs or performing arts centers;

- The lowest investment ($4,140 per student) was made in the poorest communities, while the highest investment ($11,500 per student) was made in the high-income communities;

- School districts with predominantly minority student enrollment invested the least ($5,172 per student), while school districts with predominantly white student enrollment spent the most ($7,102 per student).

Overall, the schools in poor condition 10 years ago received the least investment in their facilities, even as the nation's schools have seen record spending on school facilities.

The inadequacy of funding in low-income districts and communities and the disparity in who benefited from this spending would not be of such importance if the condition, design, and use of school buildings did not affect the quality of education. An increasing body of research indicates that poor building conditions such as a lack of temperature control, poor indoor air quality, insufficient daylight, overcrowded classrooms, and a lack of specialty classrooms are obstacles to academic achievement.

Although the plight of students in the country's most decrepit school buildings has not been entirely ignored, federal and state policies to address the problems have been inadequate. The scale, scope and distribution of school construction spending need to be better understood and monitored. Improving the quality of school facilities should be part of state education policy and funding.

This report is a step in recognizing the tremendous opportunity and challenge of providing the highest quality education and the highest quality school buildings to all our children.

OUR PUBLIC EDUCATION INFRASTRUCTURE

The Condition of America's Public School Buildings

When the U.S. Government Accounting Office (GAO) released a groundbreaking series of reports in the mid-1990s, it was the first time that the physical conditions of America's school facilities were detailed. The GAO found that 25 million children attended schools in buildings with at least one unsatisfactory condition. Further, one-third of all public school buildings in the country—about 25,000, serving nearly 14 million children—were in a serious state of disrepair. These most decrepit schools served primarily minority and low-income students.

The GAO estimated the average cost to bring schools into good repair was $1.7 million each—a national total they pegged at $112 billion ($163 billion in today's dollars). But while the report estimated the cost to bring existing schools into good repair, it did not estimate the cost to build new schools to meet the growing enrollments or to update and modernize schools to incorporate technology or other educational enhancements.

In 2000, in an attempt to more fully evaluate the need for public school building infrastructure, the National Educational Association (NEA) conducted a study of state building needs and estimated that $322 billion was needed to repair existing schools and build new schools with adequate technology to support student educational needs.

However, the GAO and NEA grossly underestimated the need for school improvements and new construction. Even as we have spent record amounts on school construction, there continues to be millions of students in substandard and crowded school conditions. Currently, there is no reliable measure of how much money is needed to provide all children with adequate public school facilities. No public agency is monitoring school conditions nationally, and many states do not have a way to evaluate the extent or level of need at the state level. We know from our work in our BEST partner communities and states that school districts are falling short and billions more are needed.

Education Quality and the Condition of School Buildings

Recent research has confirmed what many educators have held as common sense—the quality of a school facility has an impact on student's experiences and ultimately on their educational achievement. The research on school building conditions and student outcomes finds a consistent relationship between poor facilities and poor performance: **when school facilities are clean, in good repair, and designed to support high academic standards, there will be higher student achievement, independent of student socio-economic status.** There is growing evidence supporting these findings:

- The cognitive requirements for learning and teaching — motivation, energy, attention, hearing, and seeing—are affected by the physical surroundings where they take place (Schneider 2002);

- The amount of natural light, the indoor air quality, the temperature, and the cleanliness of schools and classrooms all impact student learning (Earthman 2004);

- Overcrowded schools lead to higher absenteeism rates for both students and teachers and have detrimental effects on children's ability to learn and perform well (PolicyLink 2005);

- Poor building conditions greatly increase the likelihood that teachers will leave their school; a troubling fact given the need for more and better teachers in the most disadvantaged schools (Buckley et. al 2004).

If school facilities are unsafe, unhealthy and unable to support technology for the delivery of curriculum or services needed to succeed, minority and low-income children are further disadvantaged.

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Community Vitality and School Buildings

Research has also confirmed that public schools affect communities and their economic strength (Weiss 2004). Schools influence the reputation, quality of life, and vitality of neighborhoods. Conversely, the quality, vitality, and support of a neighborhood affects local schools. Because school facility improvements mean an influx of capital dollars into a neighborhood, there is great potential to positively impact that community. Evidence increasingly supports the following:

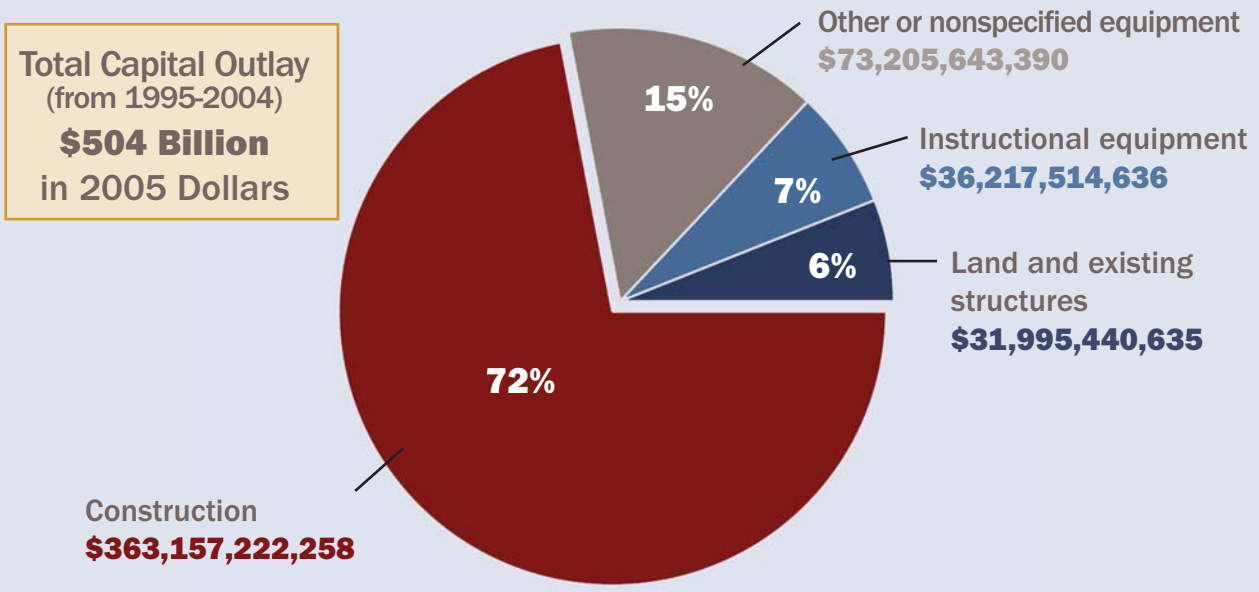
- School quality has a direct and positive impact on residential property values (Kane, et al. 2003);
- School quality helps determine a locality's quality of life and can affect the ability of an area to attract businesses and workers (Salveson and Renski 2002);
- Investments in the construction and maintenance of school facilities inject money into local economies through job creation and supply purchases (Economics Center for Education and Research 2003);
- New or well-maintained school facilities can help revitalize distressed neighborhoods (Local Government Commission 2002);
- The activities that occur in and around school buildings can help build neighborhood social capital and affect student achievement (Blank, et al. 2003).

SCHOOL CONSTRUCTION GROWTH 1995-2004

Across the country, public school district spending on school construction—both building new schools and upgrading existing schools—has grown steadily over the last decade. Of the 17,468 school districts in the United States, nearly three-quarters had school construction projects during the years from 1995 to 2004. Not since the post-World War II baby boom has the nation seen such investment in public K-12 school buildings.

According to the U.S. Census of Governments, school districts reported spending **$504 billion** (in 2005 construction dollars) in capital expenditures from 1995 to 2004.

***Figure 1:** Public School Construction Dominates School District Capital Outlay on Education*



Source: U.S. Census of Governments

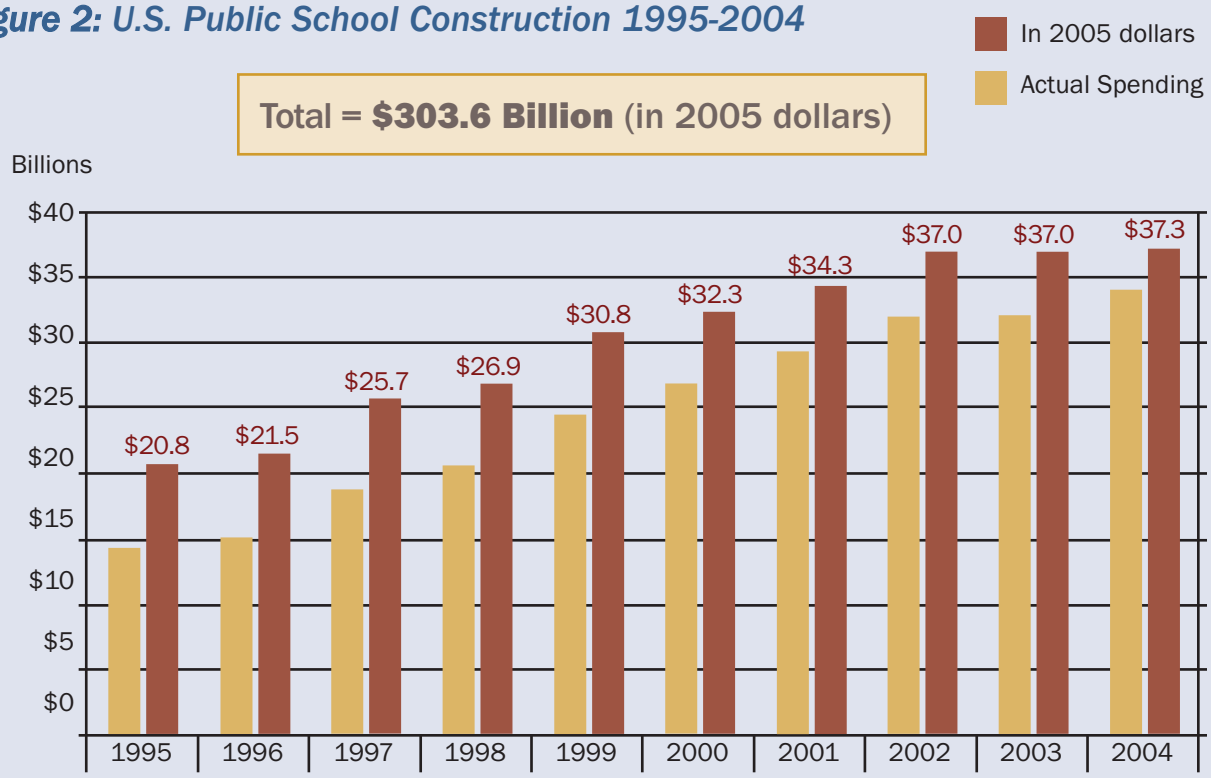
School districts and states fund the bricks and mortar "hard costs" of actual construction and the "soft costs" of project planning, design, engineering, and project management as part of capital budgets reported in "total capital outlay." Capital funds also pay for land acquisition, furniture, fixtures, instructional and non-instructional equipment, and other related fees and costs. As illustrated in Figure 1, the vast majority of capital outlay is for school construction contracts.

But capital outlay is not the only cost to school districts. Because capital dollars are borrowed, districts must pay interest on these funds. The interest and principal is repaid from the operating budgets of the school district or state. School districts reported to the U.S. Census of

Governments that they paid $85 billion in interest during the period from 1995 to 2004. Including interest, the total spending for public K-12 capital outlay from 1995 through 2004 was **nearly $600 billion.** (Table 1 on page 37 includes the state-by-state information of capital outlay.) As staggering as this sum seems, it was not enough to provide adequate facilities for all students.

While the national total is important, education is a state and local responsibility and a wide variation exists between school districts in how much and what kinds of capital expenditures on schools they experienced. The U.S. Census of Governments provides school totals for capital outlay, but they do not provide project-level details on how the construction funds were spent. Because of this, BEST approached McGraw-Hill Construction, a leading provider of information on the construction industry, for national, project-level data for the past decade. McGraw-Hill Construction documented 146,559 pre-K-12 public school construction starts from 1995-2004 valued individually at more than $100,000 each. The total value of bricks-and-mortar hard costs was $304 billion (in 2005 dollars). The balance of this report uses McGraw-Hill data for analysis (see Appendix A for methodology).

***Figure 2:** U.S. Public School Construction 1995-2004*



Source: McGraw-Hill Construction

Spending rose most sharply between 1998 and 2002, from $26.9 billion to $37 billion. It was made possible by a strong economy in the late 1990s, coupled with the passage of many local school construction bonds and increased state investment in building and reno-

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vating schools. However, between 2002 and 2004, spending leveled off at about $37 billion. The economic downturn in 2001 has tempered spending, although many school districts continue to spend funds that were approved before the recession because of the continuing need for school facility improvements.

The average enrollment of public school students in the United States between 1995 and 2004 was about 46.6 million. This translates into a 10-year national average expenditure of $6,519 per student per year—$652 per student per year of school construction expenditures. While this has been a substantial investment, because of intense enrollment growth, deferred maintenance, and new educational program demands, this level of funding has been inadequate for many districts.

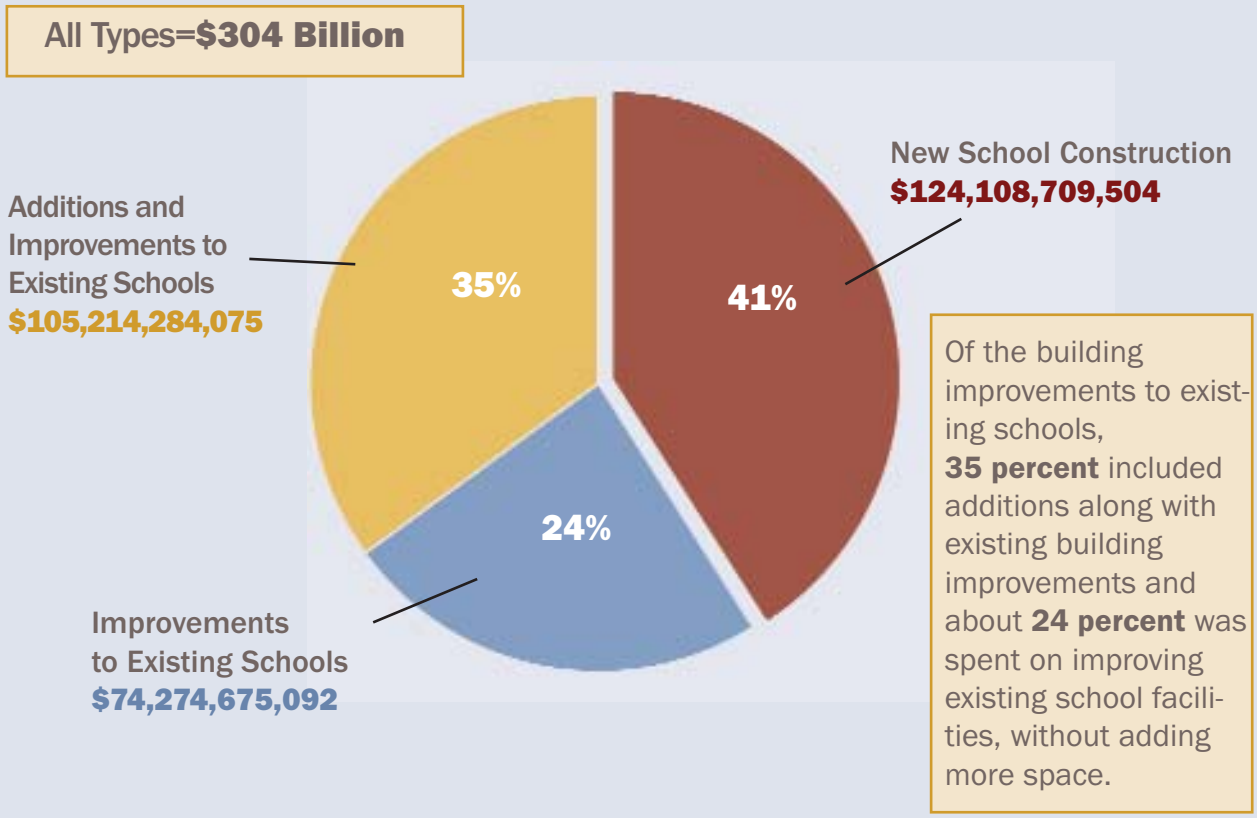
Spending on school construction nearly doubled from 1995 through 2004 as shown in Figure 2. School districts spent more than $20 billion dollars in 1995 on construction. By 2002, school districts were spending record-breaking totals—more than $37 billion annually on hard construction expenses alone.

School Construction Projects: Building New and Fixing Old

There was a tremendous variety of school construction projects across the country from 1995 to 2004. Figure 3 shows that about $179 billion or 60 percent of construction money was spent to expand or upgrade existing schools. The other $124 billion, or 40 percent, was spent to build entirely new schools (see Table 2 on page 38 for state-by-state totals).

The new construction spending went for contracts to build a total of 12,467 new schools. Most of these schools were built to meet enrollment growth demands. However, some new schools were built to replace existing schools that school districts believed were beyond repair.

Figure 3: Nearly Half of Construction Spending Goes for New Schools



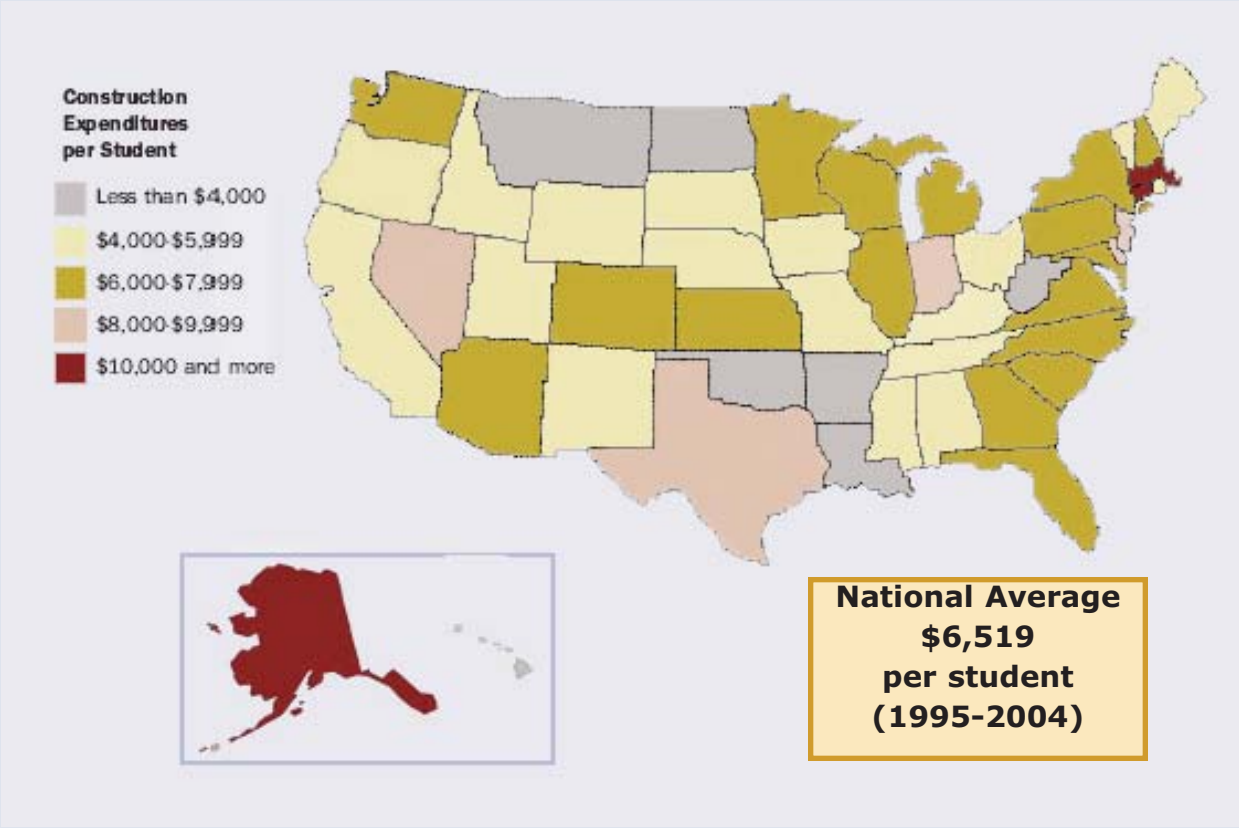
Source: McGraw-Hill Construction; National Center for Education Statistics

Of the building improvements to existing schools, 35 percent included additions and improvements to existing schools Only 25 percent was spent to just improve existing schools without adding more space.

School Construction Spending by State

States spending totals on public school construction varied significantly over the past decade. (Figure 4 shows a national map of school construction spending by student.) To understand the variation among states, we took the total expenditures for each state from 1995 to 2004 and divided these by the average enrollment of that state during the same period. (See Table 2 on page 38 for the table of state-by-state spending.) The national average per student of $6,519 was more than three times higher than Montana, the lowest-spending state, which spent only $2,004 per student, and slightly less than half the spending of Alaska, the highest-spending state, which spent $12,842 per student.

Figure 4: Public School Investment Varied from State to State



Source: McGraw-Hill Construction

The states that spent the most money per student on school construction were: Alaska ($12,842), Connecticut ($11,345), Massachusetts ($10,735), and Nevada ($9,910), the state with the highest student enrollment growth. These were followed by Delaware ($9,344), New Jersey ($8,718), Indiana ($8,353), and Texas ($8,030).

The lowest spending states were Montana ($2,004), West Virginia ($2,771), Hawaii ($2,918) and Louisiana ($3,008). The inadequate spending on school facilities prior to the devastation of schools by Hurricane Katrina has created a problem for the Gulf region, particularly in Louisiana, which had the lowest spending per student of any state in the region. The Federal Emergency Management Assistance (FEMA) Program provides funds to school districts only to bring schools up to pre-disaster levels. This is completely inadequate, particularly for New Orleans, which had school buildings that were entirely substandard before Katrina.

Of the 11 states with the most student enrollment growth throughout 1995 and 2004, all except California and Colorado spent more than the national average per student.

State-by-state comparisons pose a challenge because the cost of construction varies widely across states and even within states. For example, Alaska spent more money per student than any other state; however, construction materials and labor there are nearly 30 percent higher than the national average. In Texas, however, the cost of materials is close to the national average, but labor is often more than 30 percent lower than the national average. This means that some states get more value for the same amount of money. Within states, labor and material costs in central cities tend to be higher than in outlying areas further exacerbating problems in many low-income school districts. In this report, we do not adjust expenditures for regional construction cost indices.

Construction spending in all states with declining student enrollments (13 states and the District of Columbia) was below the national average. Of these, Montana, West Virginia, Louisiana, and Hawaii each spent less than half the national average per student.

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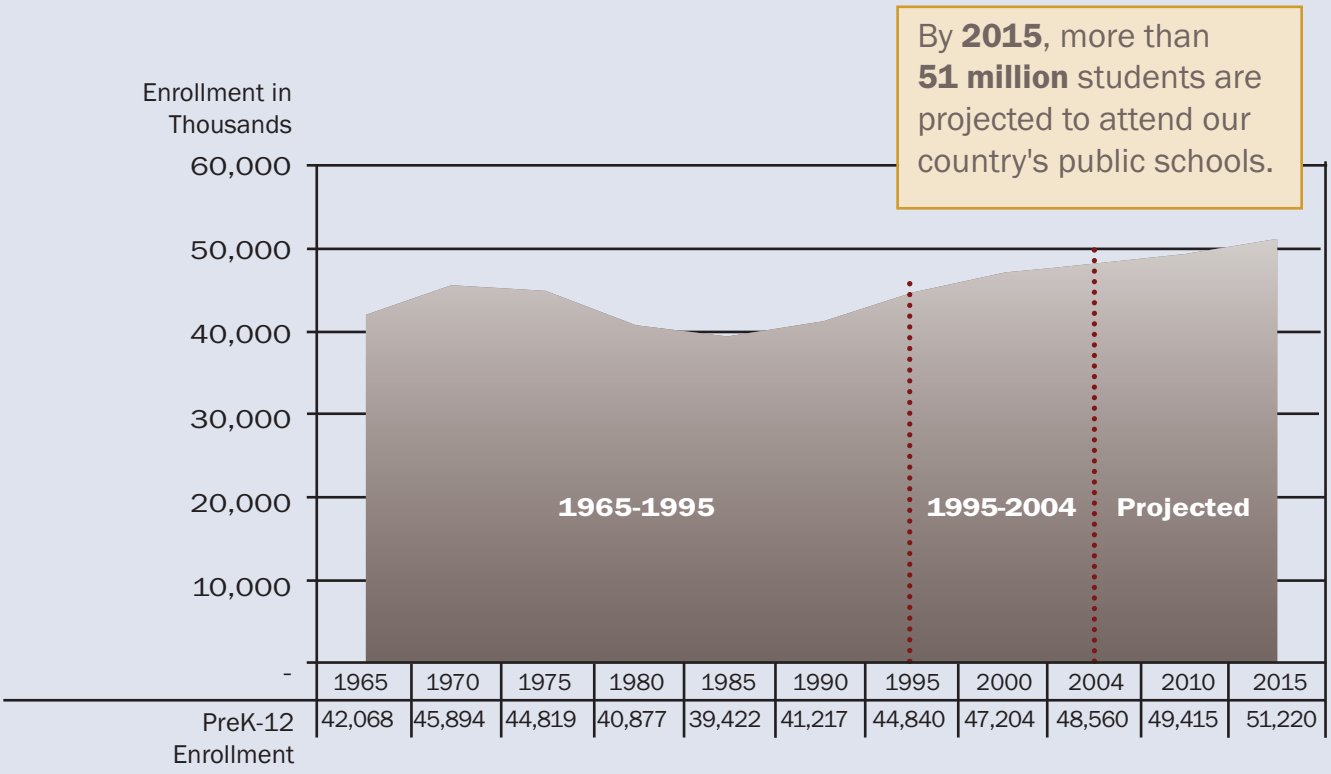
Enrollment Growth Fuels New School Construction

The U.S. public K-12 enrollment increased dramatically in the last decade. Between 1995 and 2004, the enrollment increase was more than 30 percent greater than the enrollment increase in the 30 years from 1965 and 1995. In 2004, more than 48 million students attended public schools in the U.S. (See figure 5; NCES 2006).

The population of school-aged children and subsequent public school enrollment rates increased starting in the 1970s as children of the baby boomers entered school. Immigration to the U.S. has also brought large numbers of children into the public schools in recent decades. In addition, early childhood education has expanded and public schools are serving more 3- and 4-year-olds and extending the years that public education is available to children. Enrollment gains can also be attributed to the increases in comprehensive programs and services for mentally and physically disabled students who previously might not have attended conventional public schools.

Figure 5: U.S. Public School Enrollment is Projected to Continue Rising



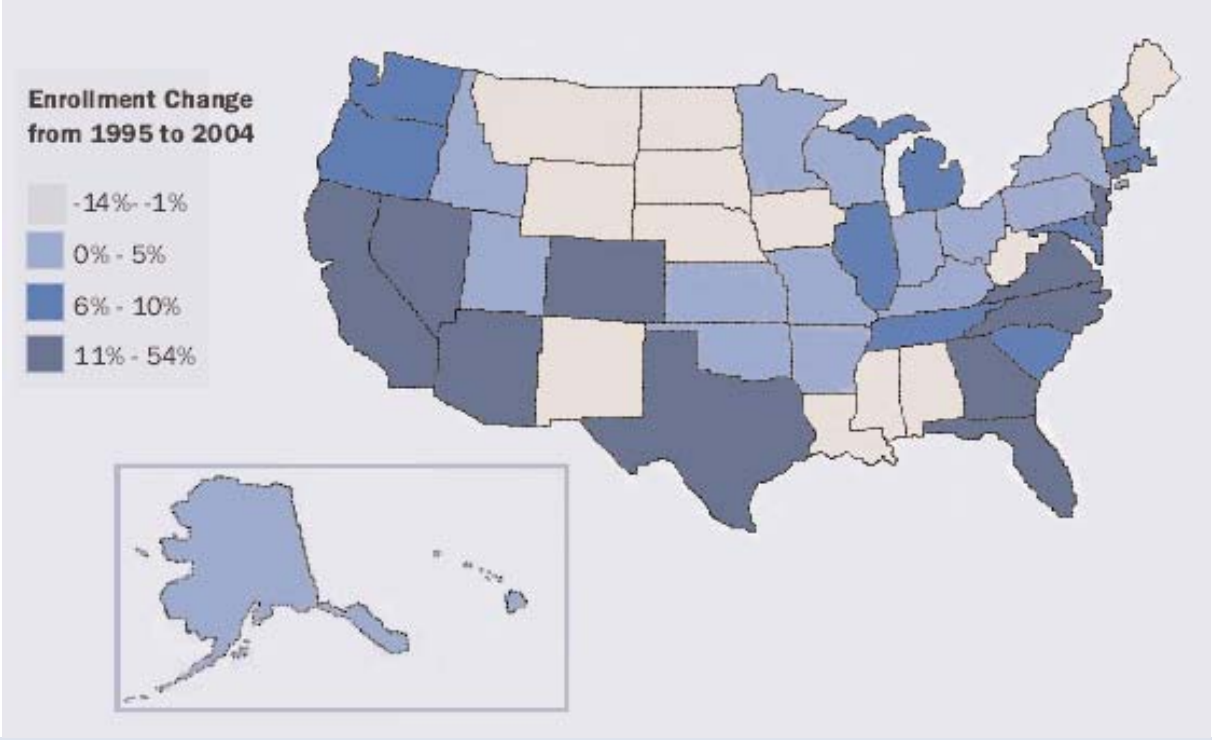
Source: National Center for Education Statistics, 2006

In addition to overall student enrollment increases, many states saw significant gains in their immigrant populations which has increased school enrollments. More than 15 million immigrants entered the U.S. during the 1990s. As would be expected, the number of children in the U.S. with immigrant parents is on the rise—immigrants now exceed 35 million and their children number over 15 million (The Urban Institute 2006).

According to the 2000 Census, the states with the most foreign-born residents are: California, New York, Texas, Florida, Illinois, New Jersey, and Georgia. These states saw the most gains largely because immigrants tend to settle in large metropolitan areas with ample job opportunities (Frey 2003). They also tend to settle where other immigrants of similar origins have already set up local immigrant communities, which have also traditionally been larger cities and metropolitan areas.

During the last decade, most states saw at least moderate enrollment growth which followed population trends across the U.S. The greatest booms in student population since 1995 have mostly been in western and southeastern states, including: Nevada, Arizona, California, Colorado, and Texas, as shown in Figure 6. East of the Mississippi River, the states with the largest enrollment increases were on the Atlantic coast: Florida, Georgia and North Carolina in the South, New Jersey, Virginia and Delaware in the Mid-Atlantic, and Connecticut in New England.

***Figure 6:** Greatest Increase in Public School Enrollment Change in Southwest and Southeast*

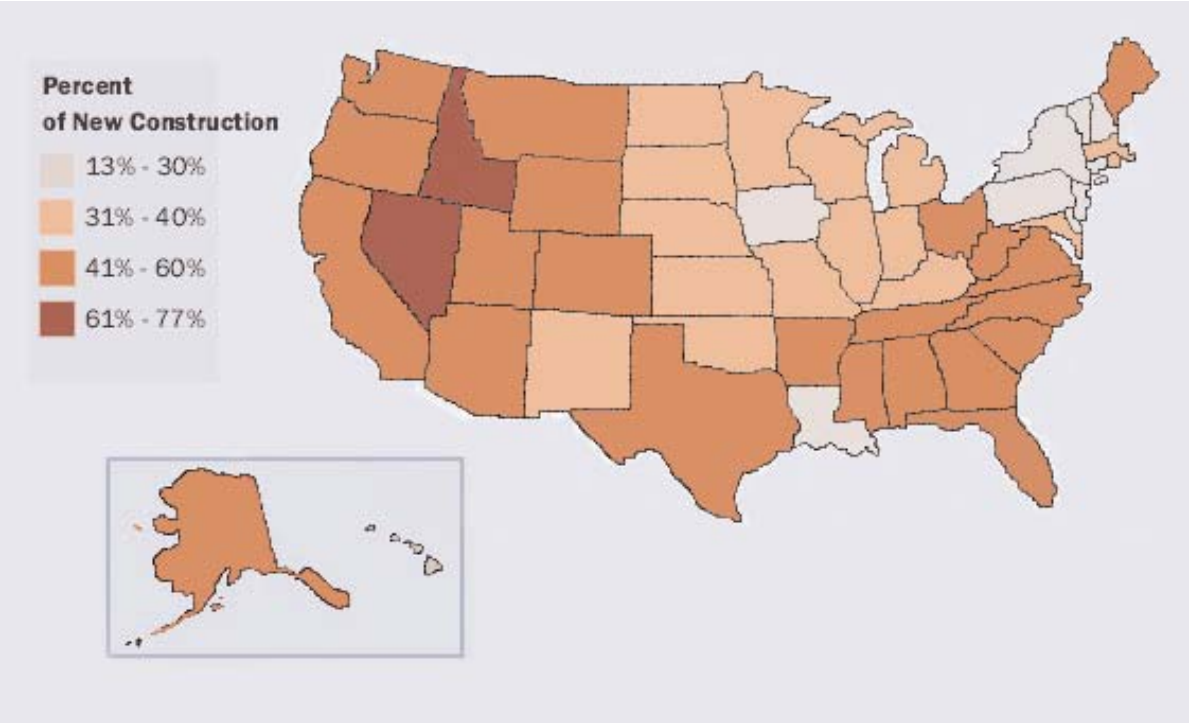


Source: National Center for Education Statistics

Student enrollments also grew, although at a more moderate pace, in the Pacific Northwest, in Midwestern states, particularly Michigan and Illinois, and in the mid-Atlantic region.

Districts built thousands of new schools to meet the demands of this enrollment growth. Figure 7 shows the percentage of total school construction dollars that each state spent on new school construction.

Figure 7: New Construction Dominates Western and Southern States



Source: McGraw-Hill Construction; National Center for Education Statistics

Comparing enrollment growth (Figure 6) with spending on new schools (Figure 7) reveals trends and discrepancies. **The largest expenditures on new schools were not always made in the states that saw the greatest enrollment growth.** Idaho and Nevada spent the largest share of their school construction expenditures on new construction—more than 60 percent, well over the national average. However, these two states differ in terms of enrollment growth. Nevada has had the fastest-growing enrollment, but Idaho's enrollment has been stable. Idaho's school building program, a policy resulting from a school finance ruling that required the state to improve its school facilities, favors new construction over renovation.

In the East, New Jersey and Connecticut had the greatest increase in student enrollment between 1995 and 2004, but like their neighbors, spent little on new school construction. Districts are challenged to find affordable and environmentally safe sites in this densely populated, once highly industrial, part of the northeast.

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Poor Conditions, New Codes and Practices Spur Renovations

The vast majority of school construction funding was for improvements and additions to existing buildings. Years of deferred maintenance and normal wear-and-tear put the nation's aging school infrastructure in need of massive investment. School facilities require constant care and maintenance. Without this, health and safety problems arise in both old and new buildings. But while some health and safety problems are found only in older buildings—asbestos and lead paint, for example, other problems such as mold and poor indoor air quality can be found in old or new buildings. All school buildings see significant use over the years, and roofs, windows, doors, furniture, and heating, ventilation and air-conditioning equipment need replacing at the end of their expected life, no matter how well maintained.

Further, building codes and materials have changed dramatically. For instance, there is a much greater understanding of the need to conserve energy and incorporate environmentally responsible elements into buildings. There are also basic features, now considered standard, that were not a part of design and construction of earlier generations. For example, heating, ventilation and air conditioning systems have advanced over the decades. Even in the school buildings of the 1960s, there was far less electrical capacity built into schools and the wiring to support current technology simply is not there.

There is also greater use of special techniques and materials to help school buildings withstand natural disasters. For example, windows in Florida schools must meet higher wind resistances to guard against hurricane damage and injuries. California schools must comply with the Field Act, which has stringent structural codes to protect occupants from the effects of earthquakes. Because schools become refuge centers in times of emergency, new security and safety measures are required for school construction and these policies support schools in this important civic role.

But beyond basic maintenance, repairs and improvements, other factors fueling the need for school building improvements are changes in educational standards, curriculum, and teaching. The average age of our country's school buildings is now more than 40 years, and they were built to accommodate teaching practices and the community needs of earlier generations. Educational programs have changed to include early-childhood education, smaller class sizes, social services and supports for students, programs for severely disabled students, and the use of new instructional technologies. Many schools are also now being designed or reconfigured for use by members of the community outside of regular school hours. Joint-use schools—which might share a library, gym, theater, or swimming pool, with the community, for example—require different designs.

The Need for Continued Spending and Growth

Since 1996 California voters have passed state K-12 school construction bonds totaling more than $30 billion. When combined with local district matching bonds, this represents $60 billion for elementary and secondary school construction and related costs.

California is not alone in the need to maintain, and even increase, the level of funding for school construction. The state of New Jersey has estimated that it needs another $13 billion to meet the needs of school districts over the next 5 years. The District of Columbia is considering a $4.5 billion plan to modernize and replace public schools over the next 15 years. New York City will be spending more than $9 billion in state funds on new construction. Illinois is debating a new school construction bond program that would total between $1 billion and $2 billion.

Although there has been tremendous growth in school construction spending over the last decade, the scale and scope of facility needs are so large that more funding is needed for school districts to relieve overcrowding and repair and modernize existing schools.

But it’s not only the level of capital spending that matters,it also matters where these dollars go.

SCHOOL CONSTRUCTION DISPARITY, 1995-2004

Ten years ago, the GAO study found that one-third of the nation's school buildings were in a serious state of disrepair. What was disturbing then was the great disparity in who attended the country's most dilapidated school buildings. What is disturbing now is that after the biggest school building boom—undertaken during strong economic times, with low inflation and increasing spending in public education—**there is no sign that the disparity documented by the GAO in 1995 has been alleviated.**

What was true in 1995 is still true today: **a school with large minority enrollment, in a district with a high percentage of students from low-income families, is still most likely to be in the worst physical condition.**

The higher the percentage of low-income students in a district, the less money was spent on school facilities. Over the last decade, the most disadvantaged students received about half the funding for their school buildings as their wealthier peers. And even though all students are held to the same academic standards under state and federal education policy, students with the greatest disadvantages must overcome far more than their more affluent counterparts to meet those same standards.

To understand the distribution of funding since the 1995 study, the BEST research team analyzed the per student funding by family income level in public school districts, per student funding of projects by median household income by community zip code, and per pupil funding by the racial and ethnic composition of school districts.

In 1996, the GAO reported that schools with the greatest numbers of students qualifying for free or reduced-priced lunch also reported the most inadequate buildings. Schools with 70 percent or more of their students qualifying for free or reduced-priced lunch reported that 41 percent of their buildings were inadequate. Schools with fewer than 20 percent of their students qualifying for free or reduced-price lunch reported only 25.1 percent of their buildings as inadequate.

School District Spending by Family Income

To analyze how school construction spending was distributed by family income, school districts were classified into five categories (quintiles) based on the percentage of a district's students that qualify for free or reduced-priced lunch. For the 2006-2007 school year, children who are eligible for free or reduced-price school lunches must come from families with an income of less than $37,000 for a family of four (U.S. Department of Agriculture 2006).

To analyze how school construction was distributed by family income, school districts were classified into five categories based on the percentage of a district's students that qualify for free or reduced-priced lunch. The quintiles are as follows:

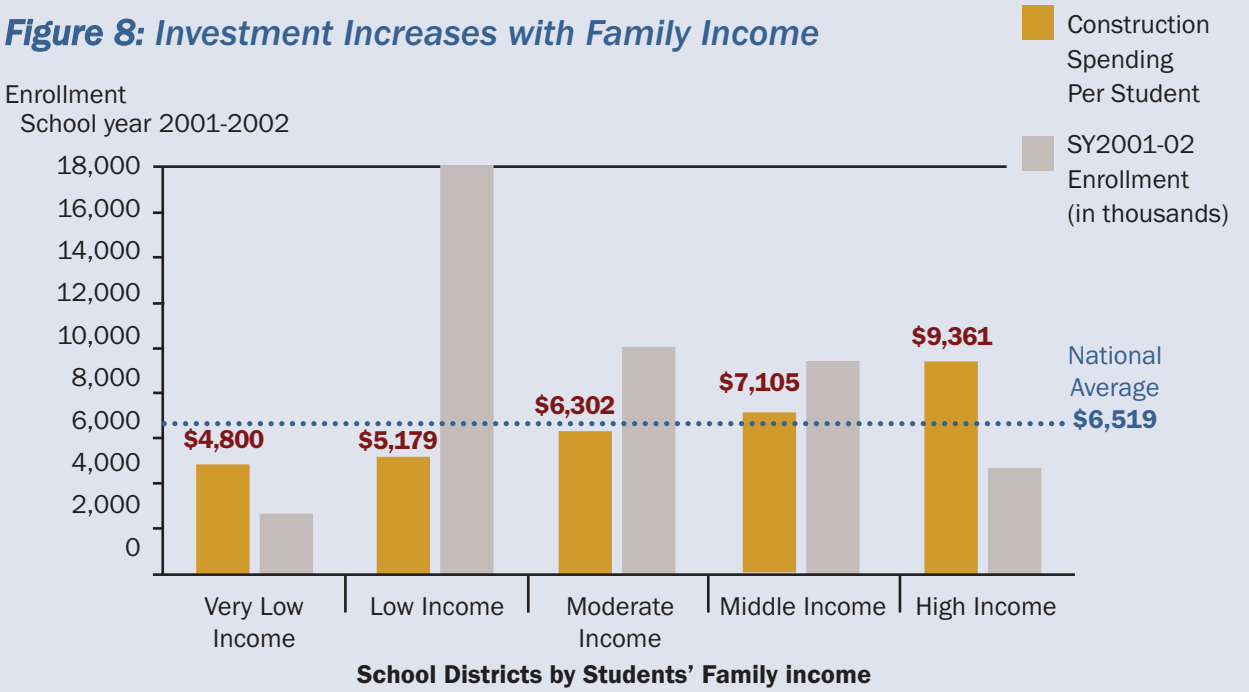
- Very Low Income: More than 75 percent of students qualify for lunch subsidies
- Low Income: 40 to 75 percent of students qualify for lunch subsidies
- Moderate Income: 25 to 40 percent of students qualify for lunch subsidies
- Middle Income: 10 to 25 percent of students qualify for lunch subsidies
- High Income: Less than 10 percent of students qualify for lunch subsidies

Just over 18 million students attend public schools in school districts where 40 to 75 percent of students qualify for school lunch subsidies, but the majority of students attend public school in districts where less than 40 percent of students qualify for lunch subsidies.

The yellow columns in Figure 8 display the distribution of students by school district percentages of students who are eligible for free and reduced priced lunch.

As evident in Figure 8, school districts with 75 percent or more of their students qualifying for free or reduced-price lunch received the least facility expenditures per student—an average of $4,800 per student. The school districts with the fewest students qualifying for free or reduced-price lunch, less than 10 percent, spent the most money per student—an average of $9,361. Overall, the higher the percentage of low-income students in a district, the less money was spent on school facilities.

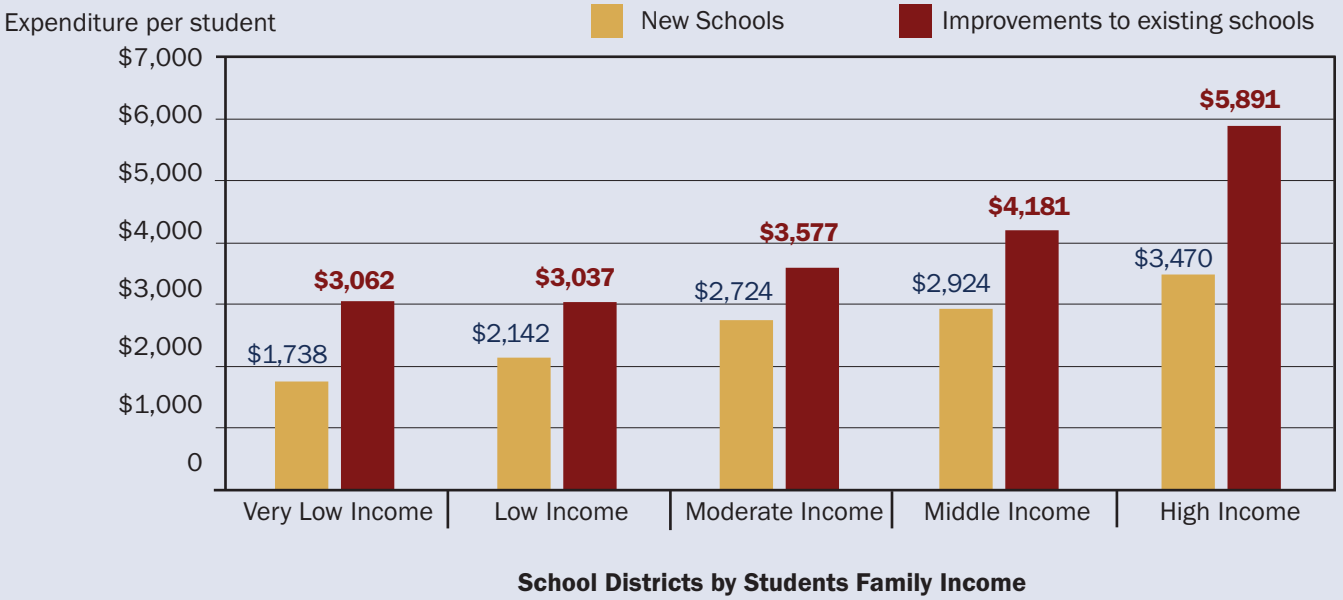
***Figure 8:** Investment Increases with Family Income*



Source: McGraw-Hill Construction; National Center for Education Statistics

Interestingly, as illustrated in Figure 9, the more affluent school districts spent more money per student on improvements and additions to existing buildings than on new construction. The disparity in construction spending between high- and low-income school districts is found in both new construction and renovation.

***Figure 9:** Disparity is Greater on Spending for Improvements to Existing Schools*



Source:McGraw-Hill Construction; National Center for Education Statistics

Comparing the types of projects undertaken in existing schools by more affluent school districts to projects in existing schools in low-income districts shows that the disparity in expenditures was defined both by the quantity of the projects and by the difference in the scope of work done. Not only did students in lower-income school districts receive less money, but the money their schools received was likely to fund basic repairs. But in more affluent school districts, the money was more likely spent to upgrade science labs, performing arts centers and make other educational enhancements.

Most projects that took place in very low income school districts were health- and safety-related projects, often the result of poorly maintained school buildings. Examples include the "warm, safe, and dry" initiative of the Cleveland Municipal School District and the basic health and safety projects of the Abbott School Districts in New Jersey, where roof and boiler replacements, asbestos abatement, and other basic improvements consumed the vast majority of construction dollars. In contrast, in the high-income districts, projects in existing schools were much more likely to entail modernizing a science lab, adding a performing arts center, or investing in other facility improvements that enhance the quality of education. By modernizing their buildings, affluent districts are further increasing the educational amenities available to their students, while poorer school districts are struggling just to keep their students dry.

21st Century School Fund

School District Spending by Community Household Income

Because school districts can cover hundreds of square miles and include many types of communities, an analysis of school construction spending at the school district level can mask important variations in spending, particularly in states with county school districts such as Florida and Georgia. To try to understand what is happening at the neighborhood and project level, we analyzed the McGraw-Hill data by project zip code and Census 2000 median household income at the zip code level. In the U.S., there are nearly 18,000 school districts and almost 35,000 five-digit zip codes.

Zip code areas were divided into five categories according to their median household income:

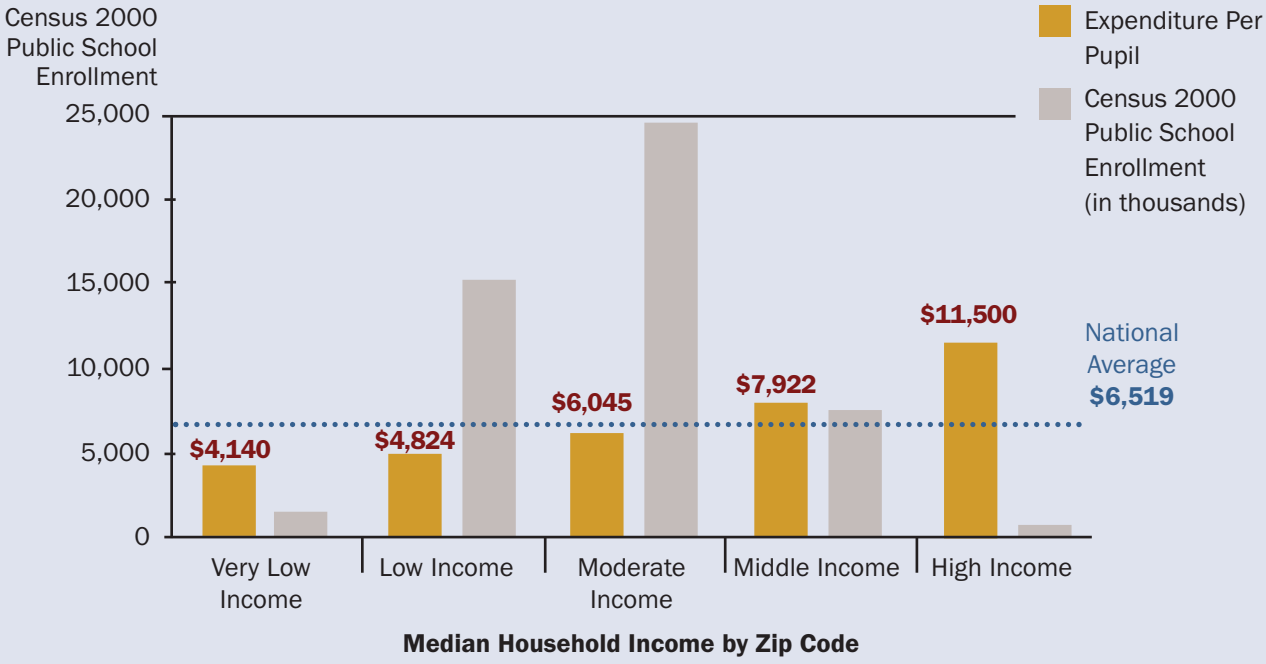
- Very Low Income (Less than $20,000)
- Low Income ($20,000 to $34,999)
- Moderate Income ($35,000 to $59,999)
- Middle Income ($60,000 to $99,999)
- High Income ($100,000 and more)

In 2003, about half of all public school students in the country lived in moderate-income communities with median household incomes between $35,000 and less than $60,000. Only 1 percent of students live in high-income communities with median household incomes of $100,000 or more, and more than 30 percent of students live in low- or very-low-income neighborhoods with median household incomes of less than $35,000.

As Figure 10 shows, the lowest investment ($4,140 per student) was made in the poorest communities, while the highest investment ($11,500 per student) was made in high-income communities. Overall, the more affluent a community, the more funds were spent per student on school construction.

It is interesting to note that the disparity in construction spending is greater by community household income (Figure 10), than by school district family income (Figure 9). This suggests that disparity within school districts is masked in a district level analysis. Low-income students may be getting an even smaller share of school construction investment than is represented by school district level analysis. This will be analyzed further in subsequent studies by BEST.

Figure 10: Disparity Increases with Household Income



Source: McGraw-Hill Construction; U.S. Census Bureau, Census 2000 Summary File 3 (SF3)

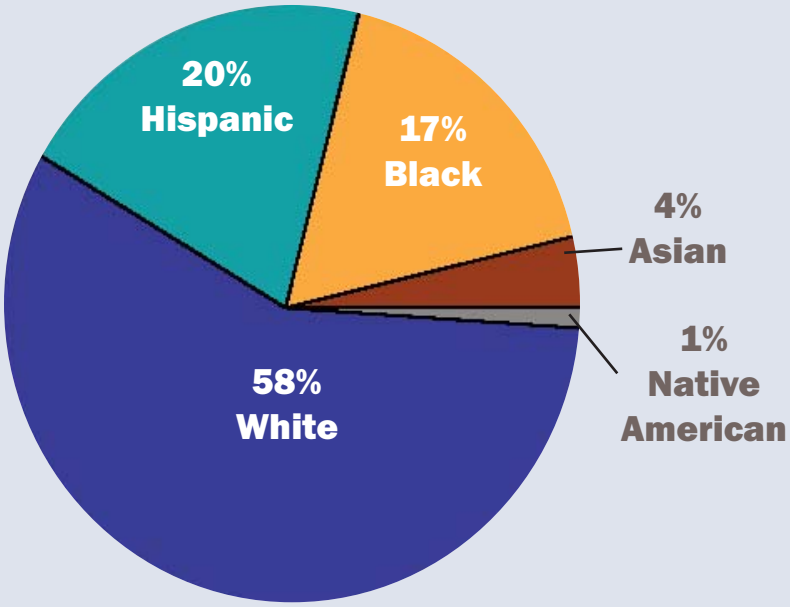
School District Spending by Race and Ethnicity

The minority enrollment in public schools is changing. In 2003, Hispanic students became the largest minority in public schools. The 2003-2004 distribution of students by race is illustrated in Figure 11.

Many of our nation's school districts are racially diverse, a condition made possible by desegregation in the 1950s and immigration, which has accelerated since the 1970s.

In 1996 the GAO reported that individual schools with higher proportions of minority students were most likely to report inadequate building conditions: 42 percent of the schools where more than half of the students were minorities were reported as being inadequate.
Conversely, only 28 percent of schools that had very few minority students were reported as inadequate.

***Figure 11:** Public School Students by Race/Ethnicity, 2003-04*



Source: National Center for Education Statistics

This finding is consistent with changes in neighborhoods. In their recent paper, "Understanding Diverse Neighborhoods in an Era of Demographic Change," researchers Margery Turner and Julie Fenderson (2006) write:

> *Both city and suburban neighborhoods today exhibit more diversity—along lines of race, ethnicity, nativity, and income—than is commonly recognized. For example, more than half of all neighborhoods in the 100 largest metro areas nationwide (56.6 percent) are home to significant numbers of whites, minorities, and immigrants, with no single racial or ethnic group dominating the minority population.*
>
> *But at the same time, a substantial share of neighborhoods remain either exclusive—occupied predominantly by affluent, native-born whites, or isolated—occupied predominantly by lower-income minorities and immigrants.*

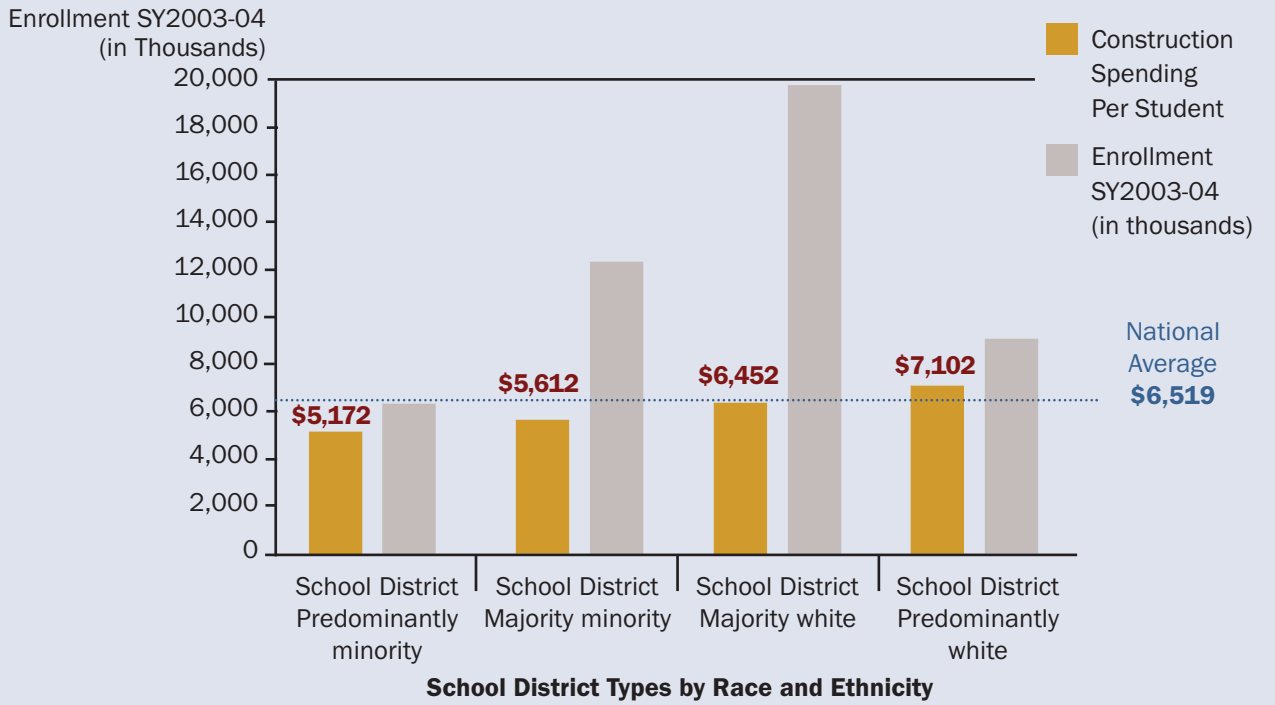
Like neighborhoods, there is growing diversity in school districts. But while school districts may be more diverse, individual schools within a district can be an entirely different story. Many of our schools have student populations that are less diverse, by race and/or income, than the communities they serve.

In our analysis of school construction investment by race and ethnicity, we have used the typologies developed by Turner and Fenderson (2006) to report the racial and ethnic diversity in school districts. Using this typology, school districts are divided into four different types of districts:

- Predominantly minority: population is less than 10 percent non-Hispanic white
- Majority minority: population is 10 to 50 percent non-Hispanic white
- Majority White: population is 50 to 90 percent non-Hispanic white
- Predominantly white: population is more than 90 percent non-Hispanic white

Nineteen percent of the nation's 48 million public school students attend schools in districts that are more than 90 percent white. Although 60 percent of the nation's public school students still attend public school districts that are majority white, 40 percent attend public school districts that have majority-minority populations.

Figure 12: Minority Districts Fall Behind



Source: McGraw-Hill Construction; National Center for Education Statistics

Spending on school construction from 1995 through 2004 ranged from an average of $5,172 per student in the districts with the highest concentration of minority students to $7,102 per student in districts with the highest concentration of white students. The higher average expenditures occurred in schools that were predominantly white. Schools with high percentages of minorities received the lowest average expenditures per student.

Overall, about 60 percent of school districts in the U.S. have student populations of at least 50 percent white. ***On average, the school districts with the largest enrollments of white students had significantly higher spending on their school facilities over the last decade than school districts where minorities make up the majority of student enrollments.***

Interestingly, our analysis reveals that the disparity by race is less than the disparity by both family and community income (Figures 9, 10 and 11). This suggests that a substantial number of minority children are affluent enough or attend school districts with enough affluent children to benefit from a higher level of investment than would be likely in more economically isolated and poor districts.

Progress Toward Greater Equity and Adequacy

States and local school districts have been spending ever-increasing amounts for new schools and to improve and expand existing school buildings. But many states have been forced into doing so. During the last 20 years, an increasing number of lawsuits have challenged the distribution of state funding for facilities. Many of these lawsuits have included a challenge to the disparities found in school facility conditions that lead to unsafe and inadequate facilities disproportionately attended by low-income students. Currently, 24 states are named in cases challenging public school financing; in total, 35 states have seen cases involving school facilities funding (National Access Network 2006).

To evaluate the impact these cases have had had on school construction spending, we analyzed the 1995-2004 McGraw-Hill construction start data by comparing the per-student expenditures before and two years after successful school facility finance lawsuit decisions (Buckley 2005).

While most states increased school construction expenditures during this time, the states with successful court cases spent, on average, an additional $158 per student annually than states with unsuccessful cases or no facility-related cases at all (for a discussion of the methodology, see Appendix A). To illustrate the significance of $158, the median annual facility expenditure per student in 2004 was $680. An increase of $158 is 23 percent more than the median construction expenditures per student. Therefore, the lawsuits appear to be having a significant impact on the amount of funding for school construction.

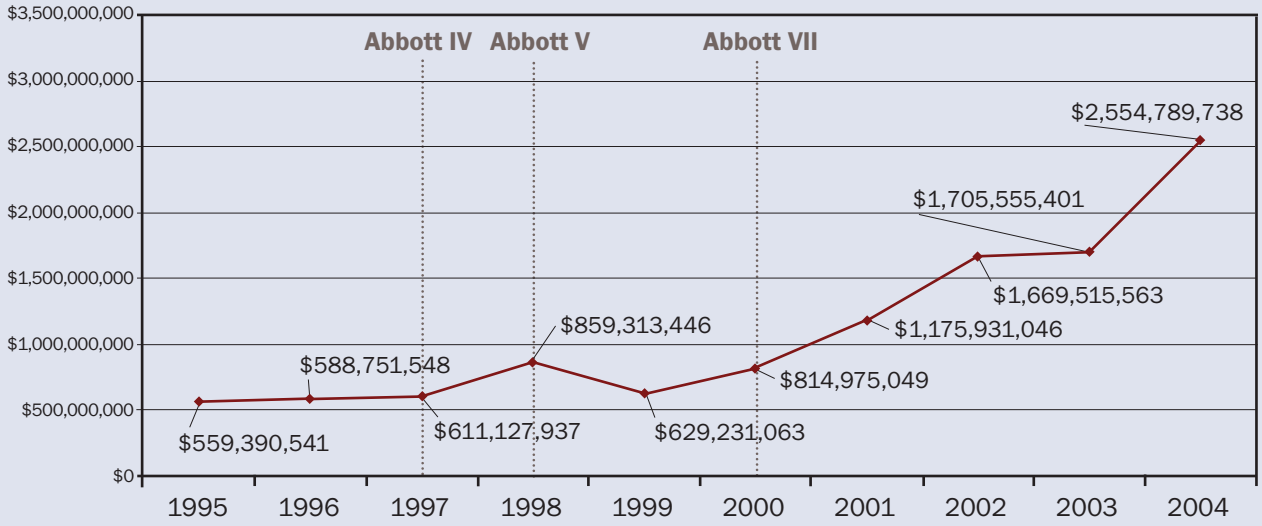
New Jersey's Abbott Decisions Show Potential to Alleviate Disparities

New Jersey's *Abbott* v. *Burke* ruling—which led to new school construction policies—was one of the first statewide school finance decisions to include remedies for inadequate school facilities as a way to address pervasive inequities in a state school finance system. The original 1985 state supreme court ruling and subsequent rulings through the 1990s cited the poor condition and overcrowding of the school buildings in the state's poorest areas as evidence of severe inequities between school districts with large percentages of students from low-income families and their wealthier counterparts.

As a result of the court actions, the state made wholesale changes to its education system, including a new funding formula, core curriculum, a statewide preschool initiative, and programs for at-risk students. After determining that facilities were vital to building a more equitable education system, the state also implemented a large-scale plan to build and better maintain facilities, particularly in the neediest districts.

In 2000, the state allocated $8.6 billion—$6 billion for the lowest income, Abbott School Districts and $2.6 billion for other high need districts—for new school construction and renovations. The state authorized the Economic Development Authority and then the Schools Construction Corporation (SCC), to oversee the work. More than 500 projects were scheduled. Figure 13 illustrates the dramatic impact of the court decisions on school construction spending in New Jersey.

***Figure 13:** New Jersey Construction Spending Increases with Court Rulings*

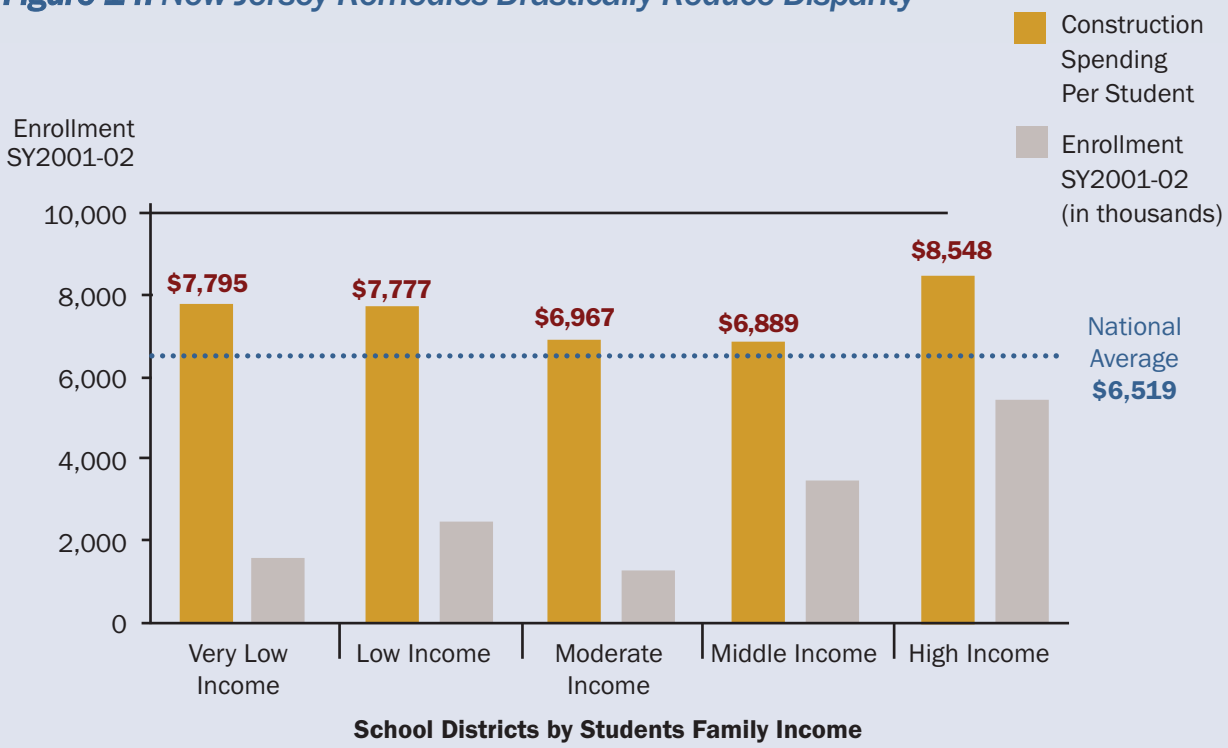


Expenditures in 2005 Dollars

Source: McGraw-Hill Construction

About a quarter of New Jersey's students come from low-income or moderately low-income households. The Abbott decision and subsequent New Jersey School Construction Corporation funds targeted these districts. As Figure 14 shows, the Abbott districts received, on average, nearly as much per-student funding as the high-wealth districts—$7,795 per low-income student and $7,777 per moderately low-income student, compared to $8,548 per high-income student. An average of $6,889 was spent on each student from middle-income households, and $6,967 was spent on each student from moderate-income families.

***Figure 14:** New Jersey Remedies Drastically Reduce Disparity*



Source: McGraw-Hill Construction; National Center for Education Statistics

Spending disparity in New Jersey is far less than the national average because of the policy changes brought by the court actions. New Jersey demonstrates that targeted state intervention can greatly remedy school facility spending disparities that ultimately impact the learning experiences of our children.

RECOMMENDATIONS AND CONCLUSION

Despite record investments in school construction, the students who were most likely to attend school in run-down buildings with health and safety issues 10 years ago are still most likely to attend precisely the same types of buildings today. While federal and state policies strive to set high academic standards for all children, we have allowed a double standard to exist in the quality of our children's school buildings. A shift in federal and state policy, funding and accountability is needed to support high quality school facilities.

Federal and State Policy

The federal government, while mandating new accountability measures, has provided no large-scale relief for school districts needing support for school facilities. The No Child Left Behind Act's major objective is to close achievement gaps and boost the performance of low-income and minority students. But while the law acknowledges the importance of teachers, governance, curriculum and standards, it is stunningly silent on educational facilities. Even at the state level, there is a dearth of policy and minimal involvement in providing adequate facilities for students and teachers.

At the Federal and State level we recommend:

Closing the disparity gap in school building quality should be an integral part of closing the achievement gap, and should be an explicit objective of state and federal educational law, including No Child Left Behind and other funding sources.

It is clear from the local and state work in which BEST partners are engaged, that individual school systems cannot meet the need for high quality school facilities without the help and participation of the entire community.

To support school districts, we recommend:

That public school facilities be incorporated into programs and funding of a wide range of federal and state agencies. For example:

- What can HUD do to ensure that when housing is developed, there is a plan and the ability to improve neighborhood schools as part of the community development?
- How can FEMA modify its aid so it can be combined with other funds to improve school facilities beyond their "pre-disaster" conditions?
- How might Homeland Security assist localities in their preparedness by helping school districts with the modifications needed for use of schools as shelters?

School Construction Funding

The operating budget of school districts is-on average-funded 9 percent from the federal government, 47 percent by the state and 44 percent by local revenues (U.S. Census Bureau). The federal government provides only minimal funding for school facilities. Other than E-rate funding for technology infrastructure, the only substantial federal funding is through the U.S. Department of Treasury tax credit to school districts through Qualified Zone Academy Bonds.

State funding for school construction varies. Some states assume all responsibility for school construction funding, but others provide virtually no funding. In some states, school districts fund capital projects and new construction through a reimbursement formula. This means school districts must have all of the necessary capital funds upfront before they can be reimbursed for the state's share. Such a system gives an obvious advantage to more affluent districts—a disparity that has increasingly been successfully challenged in court.

We recommend:

Construction and related capital outlay for schools should be funded from the federal and state governments in at least the same proportion as operating budget expenditures—9 percent from the federal government, targeted to the neediest children; and at least 47 percent from the states, again allocated on a needs basis, but in advance, rather than as a reimbursement.

Accountability

Unlike the operating budget, school district capital budgets are largely unstudied and therefore poorly understood. In the course of this study, for example, we sought to learn what proportion of school district capital outlay was funded locally and what proportion was funded by the state or other sources. We found no national database that allowed this comparison. Far greater accountability is required to support learning and teaching conditions in our school buildings and to monitor the funds spent providing facilities for children, educators and communities.

To understand how to reflect facility quality as an additional indicator for school quality, and to help guide decision-making and investment in public school facilities, more research is needed on the impact school facilities have on teaching and learning. We need greater understanding of the real conditions our students and teachers face, the ways school buildings and communities affect one another, and the costs and efficiencies of various design and building measures. Most fundamentally, good, basic information on school building inventory, design, utilization and condition is necessary.

We recommend:

- The National Center for Educational Statistics (NCES) expand the Common Core of Data (CCD) to include information on inventory, condition, design, utilization and funding of public school buildings.
- A consortium of educators, community developers, advocates, researchers, from the public and private sector develop a coherent research agenda to better understand the relationships between learning, teaching and the built environment of school facilities; and to document and evaluate policy and practice in the planning, siting, management, financing, design and construction of school facilities.
- Funds to support this research and subsequent change in policy and practice should be identified through public and private partnerships at the federal, state and local levels.

Conclusion

It is not an accident that communities that have the means to invest in their public school buildings do so. They improve and enhance their school facilities because it matters to the quality of education, the strength of their community, and the achievement and well-being of their children and teachers.

Though state funding and local funding for improving school infrastructure have increased dramatically, there has been no federal or national interest or intervention commensurate with the size of construction spending, extent of disparity, or level of need. At the state level there is too much variation in the involvement and responsibility taken by policy makers for the quality of school buildings.

To address these problems, we recommend a set of measures to ensure that public school buildings are healthy, safe, and educationally adequate for all students, teachers and families.

This report has illuminated the unprecedented spending and growth in the construction and renovation of our country's schools over the last decade. Yet, there is a tremendous disparity in who has benefited from the billions of public dollars invested. With new federal and state laws holding schools accountable for high student achievement, it is only fair that we give all students, especially the most disadvantaged, every opportunity they need to succeed.

The quality of our nation's public schools is a critical contributor to our country's prosperity and democracy. We must strive to provide our children with the highest quality education to compete in the global workforce and participate in civic life. Our communities need public places that connect us to our children and to each other. When we invest in good quality maintenance, design and construction, we are supporting educational opportunity, social equity, environmental responsibility, children's health, and community vitality, safety and security.

ABOUT **BEST**:

Under the leadership of the 21st Century School Fund and with support from the Ford Foundation, a group of local and national organizations working to improve public school facilities created Building Educational Success Together (BEST) in 2001. BEST is dedicated to identifying, developing and sharing experience and knowledge about policy and practices, to improve public school facilities but also to promote educational quality and community vitality.

The BEST partners have developed a five-part policy agenda:

1. Connect educational improvements and school facility improvements;
2. Engage communities and school staff in district-wide and school-specific facility planning;
3. Modify and build school facilities that support extensive community use;
4. Manage school facility maintenance and construction effectively, efficiently and fairly;
5. Fund school building maintenance and construction with stable and sufficient budgets that will ensure adequate facilities for all children.

BEST partners have also worked to better understand the impact of facility condition and design on learning and teaching, by researching and publishing the following reports:

- "Do School Facilities Affect Academic Outcomes?" (2002) - reviews the research on school building quality and academic outcomes, which finds consistent relationships between poor facility conditions and poor performance.
- "Linking School Facility Conditions to Teacher Satisfaction and Success" (2003) - finds that poor facility conditions make it more difficult for teachers to deliver an adequate education to their students, adversely affect teachers' health, and increase the likelihood that teachers will leave their school.
- "The Effects of School Facility Quality on Teacher Retention in Urban School Districts" (2004) - finds that school facility quality is an important predictor that teachers will leave their current position.
- "The Educational Adequacy of New Jersey Public School Facilities: Results from a Survey of Principals" (2004) - presents the results of a survey of New Jersey school principals, which revealed that a third felt that their facilities were in poor condition and those conditions impacted the curricula and course offerings as well as teacher recruitment and retention.
- "Los Angeles Unified School District School Facilities and Academic Performance" (2004) evaluates schools on 14 measures of compliance that included aspects of environment, safety, maintenance, and vehicular traffic and finds that there is a positive relationship between a school's compliance with health and safety regulations and its academic performance.
- "School Facility Investments in the Washington DC Metropolitan Area, 1995-2004" (2006) - tracks the expenditures on school facilities within the District of Columbia, and finds that the district's racially diverse schools often received more funding than the majority black schools and those with low percentages of white students.

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APPENDIX A: METHODOLOGY

BEST sought a reliable alternative source of data to assess the last decade of school capital spending since the 1995 findings by the GAO, however, there is no comprehensive public national database on public school facility conditions or school construction spending. While the federal government has shown little interest in the condition of the country's public school buildings, the private sector, as the primary provider of the labor, materials, and management for school construction, has had a stronger interest in this information.

McGraw Hill Construction, a segment of McGraw Hill Companies collects detailed project-level data on every building project valued at more than $100,000 undertaken by the nation's school districts. These "construction start" data reflect the contract value of each project and represent the construction "hard costs": the basic labor and material expenses of the project. The additional "soft costs" – such as site acquisition, architectural, engineering, project management and other fees – are not collected by McGraw-Hill. Hard costs typically account for about 70 percent of a project's total cost.

These proprietary McGraw Hill data are collected in real time for the purpose of informing construction industry manufacturers, contractors, and subcontractors of projects that will be under construction, so they can market their goods or services to the project owner and contractor. The 21st Century School Fund, the lead BEST partner, purchased a data set from McGraw Hill containing Pre-K-12 public school construction expenditures between 1995 and 2004.

There were 184,000 projects in the initial data set. BEST partners did a random comparison check of McGraw Hill project data to school facility data maintained and collected by BEST partners on school construction in their own regions and cities. The check was to determine if the basic project level data included in the McGraw Hill data set was complete and accurate for the cost and description. The 21st Century School Fund, the lead researcher for this report, also compared the McGraw-Hill cost data in aggregate to U.S. Census of Governments, Education finance data on public school district capital outlay that is collected as part of the Common Core of Data by the National Center for Education Statistics.

Through these comparisons, we determined that the totals were of high quality, although about 20% less than reported by the school districts themselves, and that the project level data was complete and accurate enough to work with, although we knew the data was not without shortcomings. Although we were satisfied with the accuracy of McGraw Hill Construction Starts, the format, layout and fields of this data set were not designed for research purposes. There were no formatted fields to indicate school name/identification or school district name/identification of the projects. After an initial clean up, a total of 146,559 projects were ultimately able to be used in this analysis.

BEST spent nearly a year cleaning and formatting the data to meet the needs for use in this analysis. The data was then linked to National Center for Education Statistics (NCES) Common Core Data (CCD) and U.S. Census data. These data were linked to the McGraw-Hill data using school information and zip code data.

In addition to basic totals and ratios prepared for this analysis, BEST partners were interested in the effects of litigation on school construction spending. Jack Buckley, PhD, used the McGraw Hill data to assess the impact of successful legal challenges to school finance practices on school construction expenditures when school facilities have been an element of the legal challenge. He analyzed the construction expenditures from states with successful finance cases which included a facilities element by analyzing the change in per pupil expenditures from the year of the case to two years after the last successful case. States with successful lawsuits were compared to a control group of 31 randomly selected states with either unsuccessful cases, cases that did not include facilities, or no cases at all. State expenditure data was compared the year of the successful decision to two years after the ruling. A differences-in-differences model via a robust regression of the differences in spending on an indicator variable for the successful court cases, an indicator if the state had had a successful court case earlier than the period for which spending data was available, and the level of per pupil construction spending at the first time point for each case. Although most of the states spent increasing amounts of money on school construction over the 10-year period, the states with successful facility court cases spent, on average, an additional $158 dollars per pupil ($p = .04$) two years after the successful court cases, than the states without successful cases or no cases at all.

Table 1: U.S. Census of Governments Public School Capital Outlay by State: 1995-2004

(Thousand dollars)

State	Capital Outlay (in 2005 dollars)					
	Total	Construction	Land and existing structures	Equipment		Interest on debt[1]
				Instructional	Other or nonspecified	
Alabama	$5,578,276	$4,294,572	$166,120	$466,177	$651,407	$695,465
Alaska	$2,193,385	$1,760,908	$206,676	$123,553	$102,248	$231,534
Arizona	$10,453,456	$7,199,758	$336,819	$1,063,059	$1,853,818	$2,453,069
Arkansas	$2,694,905	$1,045,699	$695,260	$330,438	$623,509	$549,888
California	$65,021,676	$45,434,396	$9,161,186	$3,902,452	$6,523,643	$4,740,076
Colorado	$8,537,061	$5,958,608	$398,407	$570,153	$1,609,893	$2,122,931
Connecticut	$3,968,193	$2,528,881	$563,855	$392,474	$482,980	$1,108,827
Delaware	$1,244,720	$1,003,318	-	$100,547	$134,837	$74,038
District of Columbia	$1,213,080	$1,011,690	$9,318	$37,069	$154,999	-
Florida	$31,222,025	$22,979,860	$1,616,863	$143,129	$6,482,173	$3,800,010
Georgia	$16,821,535	$12,744,410	$629,640	$1,225,488	$2,221,998	$1,608,902
Hawaii	$1,397,102	$956,330	$99,402	$225,316	$116,055	-
Idaho	$2,005,655	$1,608,401	-	$194,701	$202,553	$312,068
Illinois	$25,697,980	$19,045,529	-	$1,745,253	$4,907,198	$4,472,474
Indiana	$9,732,972	$5,628,524	$331,484	$268,469	$3,504,495	$535,009
Iowa	$4,450,163	$2,882,416	$111,326	$559,697	$896,724	$499,229
Kansas	$2,836,198	$1,047,975	$184,054	$709,001	$895,169	$965,555
Kentucky	$4,026,310	$2,425,358	$95,557	$1,050,741	$454,654	$929,300
Louisiana	$4,298,569	$2,429,072	$560,545	$690,760	$618,191	$973,346
Maine	$1,382,401	$568,629	$327,076	$162,963	$323,733	$353,193
Maryland	$7,980,462	$5,795,987	$247,781	$622,215	$1,314,479	$784,559
Massachusetts	$6,835,573	$5,250,621	$376,630	$601,007	$607,315	$2,058,315
Michigan	$21,509,245	$12,921,998	$2,631,099	$1,115,324	$4,840,824	$5,434,554
Minnesota	$11,598,672	$8,830,550	$493,017	$575,026	$1,700,075	$2,791,311
Mississippi	$3,812,590	$2,617,500	-	$411,905	$783,185	$524,297
Missouri	$8,225,380	$5,308,758	$594,507	$724,030	$1,598,084	$1,480,229
Montana	$797,134	$484,026	$28,716	$109,542	$174,850	$110,750
Nebraska	$3,330,512	$1,678,056	$174,861	$295,181	$1,182,413	$400,777
Nevada	$5,207,379	$4,178,553	$263,916	$477,256	$287,654	$1,182,116
New Hampshire	$1,749,703	$1,161,934	$318,104	$144,668	$124,997	$320,971
New Jersey	$15,215,015	$11,067,633	$1,855,066	$971,439	$1,320,878	$2,155,608
New Mexico	$3,617,303	$2,172,280	$768,625	$94,792	$581,606	$305,820
New York	$40,726,422	$34,923,272	$661,018	$2,317,142	$2,824,990	$7,563,824
North Carolina	$12,597,662	$9,749,931	$514,129	$1,005,983	$1,247,279	$2,013,762
North Dakota	$796,347	$446,625	$49,968	$122,401	$177,352	$70,419
Ohio	$17,792,043	$12,041,948	$493,319	$1,918,967	$3,337,808	$2,484,016
Oklahoma	$3,832,844	$2,097,564	$415,107	$567,591	$752,583	$401,280
Oregon	$4,953,719	$4,001,325	$97,445	$215,216	$639,733	$1,253,408
Pennsylvania	$20,775,891	$17,907,163	$97,999	$1,230,790	$1,539,939	$6,285,583
Rhode Island	$320,594	$97,863	$8,690	$108,043	$105,997	$197,511
South Carolina	$8,154,870	$5,762,724	$302,735	$556,232	$1,533,179	$1,214,488
South Dakota	$1,333,584	$811,878	-	$163,096	$347,918	$171,351
Tennessee	$7,526,725	$5,269,841	$200,966	$890,830	$1,165,087	$1,142,729
Texas	$49,217,076	$38,414,540	$1,812,056	$3,193,845	$5,796,635	$10,361,891
Utah	$4,424,676	$2,618,804	$677,338	$348,165	$780,369	$627,793
Vermont	$736,139	$497,793	$30,790	$94,485	$112,773	$121,780
Virginia	$11,467,549	$7,215,825	$1,506,265	$1,256,493	$1,488,967	$1,990,194
Washington	$12,636,480	$9,251,116	$713,548	$705,650	$1,966,167	$2,801,461
West Virginia	$1,883,172	$633,688	$562,430	$326,316	$360,738	$111,978
Wisconsin	$9,710,171	$6,807,924	$553,725	$956,100	$1,392,423	$2,053,096
Wyoming	$1,035,223	$585,170	$51,982	$136,346	$261,725	$94,200
Total	**$504,575,821**	**$363,157,222**	**$31,995,441**	**$36,217,515**	**$73,108,299**	**$79,142,295**

[1]Interest on debt was not adjusted to 2005 dollars

Source: U.S. Census of Governments, Public Elementary-Secondary Education Finance Data

Table 2: Student Spending State Rankings

Rank by Per Student Spending	State	Number of Projects	Total Construction 2005 Dollars	Average Enrollment (1995-2004)	10 Year Spending Per pupil (1995-2004)
41	Alabama	2,188	$3,495,085,075	741,630	$4,713
1	Alaska	891	$1,698,281,870	132,249	$12,842
19	Arizona	2,633	$5,898,588,445	854,493	$6,903
45	Arkansas	1,357	$1,655,017,807	452,323	$3,659
36	California	13,685	$29,292,337,527	5,955,466	$4,919
24	Colorado	1,172	$4,264,750,590	704,086	$6,057
2	Connecticut	2,700	$6,200,695,807	546,538	$11,345
5	Delaware	598	$1,054,165,366	112,813	$9,344
33	District of Columbia	75	$394,015,563	76,363	$5,160
18	Florida	6,036	$16,323,272,303	2,360,558	$6,915
15	Georgia	3,219	$9,992,765,976	1,406,306	$7,106
49	Hawaii	1,284	$542,375,177	185,879	$2,918
43	Idaho	767	$1,037,311,880	245,542	$4,225
10	Illinois	8,122	$15,005,419,279	2,017,559	$7,437
7	Indiana	2,938	$8,265,033,480	989,411	$8,353
37	Iowa	1,840	$2,429,055,415	494,674	$4,910
20	Kansas	1,718	$3,109,322,131	468,563	$6,636
35	Kentucky	2,100	$3,251,974,240	659,162	$4,933
48	Louisiana	2,977	$2,293,006,673	762,331	$3,008
34	Maine	815	$1,079,048,030	209,169	$5,159
23	Maryland	2,393	$5,143,562,710	838,348	$6,135
3	Massachusetts	5,299	$10,238,545,865	953,712	$10,735
13	Michigan	5,414	$12,493,484,791	1,708,466	$7,313
16	Minnesota	3,735	$5,955,408,304	846,364	$7,036
42	Mississippi	1,930	$2,191,380,013	500,165	$4,381
39	Missouri	2,703	$4,328,993,584	904,213	$4,788
51	Montana	238	$316,477,757	157,957	$2,004
32	Nebraska	972	$1,528,276,803	288,313	$5,301
4	Nevada	730	$3,154,978,463	318,363	$9,910
14	New Hampshire	629	$1,479,007,945	202,532	$7,303
6	New Jersey	7,236	$11,168,581,331	1,281,120	$8,718
26	New Mexico	1,633	$1,929,820,446	325,831	$5,923
11	New York	8,090	$20,989,380,690	2,855,664	$7,350
21	North Carolina	2,712	$8,324,295,929	1,262,196	$6,595
46	North Dakota	278	$403,532,498	112,647	$3,582
28	Ohio	6,047	$10,551,181,300	1,837,058	$5,744
47	Oklahoma	2,562	$2,023,496,104	622,197	$3,252
30	Oregon	1,716	$2,966,883,662	541,996	$5,474
12	Pennsylvania	7,076	$13,252,083,813	1,807,885	$7,330
44	Rhode Island	701	$624,089,397	154,714	$4,034
9	South Carolina	2,010	$5,304,430,320	668,498	$7,935
38	South Dakota	405	$659,630,837	134,920	$4,889
29	Tennessee	1,940	$5,161,581,531	909,306	$5,676
8	Texas	13,544	$32,038,667,412	3,989,798	$8,030
31	Utah	972	$2,629,894,014	482,940	$5,446
27	Vermont	324	$595,606,866	103,441	$5,758
17	Virginia	3,340	$7,913,064,201	1,128,291	$7,013
22	Washington	1,938	$6,422,919,653	991,251	$6,480
50	West Virginia	634	$816,281,999	294,536	$2,771
25	Wisconsin	1,849	$5,264,037,891	876,919	$6,003
40	Wyoming	394	$446,569,907	93,734	$4,764
	U.S. Total	**146,559**	**$303,597,668,671**	**46,568,487**	
	U.S. Average				**$6,519**

continued

State	% Change Enrollment 1995-2004	New School Construction 2005 Dollars	New Construction Per pupil	% of New Construction Spending
Alabama	-1%	$1,744,128,026	$2,352	50%
Alaska	5%	$754,690,396	$5,707	44%
Arizona	37%	$3,068,147,598	$3,591	52%
Arkansas	2%	$794,099,745	$1,756	48%
California	19%	$12,621,497,808	$2,119	43%
Colorado	18%	$2,147,827,889	$3,051	50%
Connecticut	14%	$1,614,333,941	$2,954	26%
Delaware	10%	$307,911,946	$2,729	29%
District of Columbia	-3%	$59,146,101	$775	15%
Florida	23%	$8,840,392,789	$3,745	54%
Georgia	20%	$5,861,056,606	$4,168	59%
Hawaii	0%	$154,987,693	$834	29%
Idaho	5%	$728,427,898	$2,967	70%
Illinois	10%	$4,932,277,299	$2,445	33%
Indiana	4%	$2,680,246,114	$2,709	32%
Iowa	-4%	$683,945,226	$1,383	28%
Kansas	2%	$1,159,701,531	$2,475	37%
Kentucky	1%	$1,273,322,192	$1,932	39%
Louisiana	-9%	$684,114,693	$897	30%
Maine	-5%	$445,492,107	$2,130	41%
Maryland	10%	$2,047,714,316	$2,443	40%
Massachusetts	10%	$3,831,111,541	$4,017	37%
Michigan	9%	$4,509,178,302	$2,639	36%
Minnesota	3%	$2,089,545,552	$2,469	35%
Mississippi	-2%	$906,837,441	$1,813	41%
Missouri	3%	$1,612,724,169	$1,784	37%
Montana	-10%	$131,381,725	$832	42%
Nebraska	-1%	$478,100,132	$1,658	31%
Nevada	54%	$2,416,875,127	$7,592	77%
New Hampshire	10%	$449,196,068	$2,218	30%
New Jersey	18%	$2,820,925,929	$2,202	25%
New Mexico	-1%	$701,405,728	$2,153	36%
New York	4%	$3,081,076,883	$1,079	15%
North Carolina	18%	$4,577,485,871	$3,627	55%
North Dakota	-14%	$139,060,320	$1,234	34%
Ohio	2%	$5,310,055,529	$2,891	50%
Oklahoma	3%	$628,530,923	$1,010	31%
Oregon	6%	$1,254,912,238	$2,315	42%
Pennsylvania	3%	$3,333,914,630	$1,844	25%
Rhode Island	8%	$198,123,660	$1,281	32%
South Carolina	8%	$2,813,911,098	$4,209	53%
South Dakota	-13%	$235,809,613	$1,748	36%
Tennessee	6%	$2,716,724,482	$2,988	53%
Texas	18%	$16,712,305,061	$4,189	52%
Utah	4%	$1,542,592,169	$3,194	59%
Vermont	-5%	$77,165,556	$746	13%
Virginia	12%	$3,799,678,818	$3,368	48%
Washington	9%	$2,668,334,276	$2,692	42%
West Virginia	-9%	$358,724,100	$1,218	44%
Wisconsin	2%	$1,856,172,594	$2,117	35%
Wyoming	-13%	$253,388,052	$2,703	57%
U.S. Total		**$124,108,709,504**		
U.S. Average	**10%**		**$2,665**	**41%**

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