

Parks, beaches, and other recreational facilities contribute \$730 billion per year to the U.S. economy, support nearly 6.5 million jobs, and contribute to cleaner air and water and higher property values. Despite record spending on parks at the state and local level, the acreage of parkland per resident in urban areas is declining. While significant investments are being made in the National Park Service for its 2016 centennial, the agency's facilities still face a \$7 billion maintenance backlog.

PUBLIC FACILITIES

PUBLIC PARKS AND RECREATION

FACTS
ABOUT

PUBLIC FACILITIES

PUBLIC PARKS AND RECREATION

2009
GRADE

C-

RAISING THE GRADES

SOLUTIONS

THAT WILL WORK **NOW**

A = Exceptional
B = Good
C = Mediocre
D = Poor
F = Failing

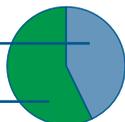
AMERICA'S
INFRASTRUCTURE
G.P.A.

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ESTIMATED 5-YEAR FUNDING REQUIREMENTS FOR PUBLIC PARKS AND RECREATION

Total investment needs
\$85 BILLION

Estimated spending
\$36.835 BILLION
Projected shortfall
\$48.17 BILLION



- ★ **CREATE** partnerships between public agencies and private recreation and conservation groups to provide benefits to the public at a lower cost;
- ★ **ADOPT** regional planning approaches that recognize recreation use and demand trends to maximize the use of limited funds for park acquisition and maintenance. Care must be taken to avoid overextending limited operation and maintenance budgets by creating too many new properties;
- ★ **ESTABLISH** state and local dedicated funding sources for parks and recreation facilities to ensure consistent future funding;
- ★ **CONTINUE** to increase federal leadership through programs like the Centennial Initiative and the Land and Water Conservation Fund to meet growing population demands for outdoor recreation opportunities;
- ★ **ESTABLISH** a federal commission to study ways to improve access to recreation in the United States. A bipartisan commission could assess use and demand of outdoor recreational facilities and better track the spending and effectiveness of federal investments in parks and recreation facilities.

CONDITION

State/Local Parks

Americans frequent their state and local parks more often than national parks. State parks entertained more than 730 million visitors during the period July 2006 through June 2007, and the vast majority (90.9%) were day visitors. During this time, states acquired 56,681 acres of parkland and spent more than \$463 million on new construction of state park improvements to accommodate growing populations.¹

States and territories received nearly \$28 million in federal funds in 2007 through the Land and Water Conservation Fund Program. However, they reported more than \$15 billion in unmet needs, a significant increase over the amount reported in 2006.²

The 75 largest cities in the U.S., home to more than 51 million Americans, reported spending just under \$5 billion in fiscal year 2006 on urban park and recreation facilities and programming, adding more than 5,000 acres of green space. Despite such record spending, the amount of parkland per resident has declined due to rapid

increases in population. In 2006, the 60 largest cities averaged 18.88 acres of parkland per 1,000 residents. In 2007, that number fell to 16.72 acres per 1,000 residents.³ As suburban areas become more densely populated with infill developments, parkland will become more important in maintaining residents' health, safety, and stable property values.

Parks enjoy broad public support. Even in the current troubling economic environment, voters in November 2008 approved a record amount of new funding measures for parks and open space. Voters supported 62 of 87 (71%) conservation finance ballot measures, representing a commitment to spend \$7.3 billion on parks and open space. The \$8.4 billion total approved by ballot measures in all of 2008 is the highest single-year amount in 10 years.⁴

Parks spending may be an easy target for budget hawks, but in reality state spending on parks represents a miniscule part of overall expenditures—0.231% on average. California's percentage was the highest in the country, but is still less than 1% of the overall state budget (0.979%).¹ A lack of consistent data to track usage of state and local parks makes it difficult to determine unmet needs and to benchmark against other states and communities.

National Parks

During the second half of the 20th century, the National Park Service (NPS) suffered from stagnant budget appropriations, even as popularity and use skyrocketed. The result was an estimated \$6.1

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TABLE 13.1 ★ Acres of Protected Land

REGION	TOTAL ACRES PROTECTED	PROTECTED ACRES PER CAPITA	% OF REGION PROTECTED
Mid-Atlantic	10,304,151.6	0.18	9.2%
Midwest	30,139,330.5	0.45	6.3%
New England	4,839,352.7	0.34	12.0%
Rocky Mountain	95,015,799.3	9.06	29.0%
Southeast	28,960,508.7	0.44	9.7%
Southwest	37,250,994.8	1.04	10.3%
West	267,143,832.8	5.21	41.5%
Total	473,653,970.5	1.57	20.5%

SOURCE National Trust for Public Land, Conservation Almanac

billion maintenance backlog by the beginning of the 21st century. The NPS consists of 391 units covering 84 million acres in 49 states, the District of Columbia, and 5 territories. National parks entertained more than 274 million visitors in fiscal year 2007, up from 266 million in 2003.

To address the staggering maintenance backlog, the Bush administration first undertook a comprehensive effort to inventory its assets and better manage improvements. It also committed \$4.9 billion over 5 years to directly address park facilities and maintenance beginning in fiscal year 2002. The NPS received \$2.39 billion in 2008.

In 2006, the Bush administration established the Centennial Initiative, aimed at

preparing for the 100th anniversary of the founding of the NPS. The Centennial Initiative provides federal matching funds to supplement private donations to enhance parks across the country according to the NPS strategic goals.⁵

Beaches

The United States has more than 84,000 miles of coastline that includes invaluable economic, environmental, and recreational resources. Coastal areas receive about 85% of tourist-related revenues in the U.S., contributing an estimated \$322 billion annually to the economy.⁶ Nearly one quarter of our coastline is suffering from erosion and yet the federal government has no policy to assess and

address the most critically eroded shorelines.⁷ As the rate of coastal erosion has increased, federal expenditures to repair erosion have actually decreased, exposing lives, infrastructure, and environmental resources to the hazards associated with increasingly strong storms.

U.S. Army Corps of Engineers Facilities

The U.S. Army Corps of Engineers is the largest federal provider of outdoor recreational services. More than 4,200 recreation areas are located on Corps-managed lands in 42 states. About 1,800 of these areas are operated and maintained by other entities, such as state and local governments, under leases or license agreements.

The vast majority (70%) of Corps sites are located within 50 miles of a major metropolitan area, making recreation opportunities easily accessible to many Americans. Corps facilities entertained 372 million visits in 2007, resulting in \$13 billion in total trip expenses and \$5 billion in durable goods, including \$8 billion spent by visitors in communities around Corps lakes. This recreation contributes approximately \$22.4 billion to the national economy and supports around 350,000 jobs.

The condition of Corps-managed recreation areas as well as those of its partners is a growing concern. More than 90% of Corps lake projects were constructed before 1980 and more than 30% are at least 50 years old. Flat budgets in recent years have led to the partial or full closure of 74 recreational areas in five states. This has led to a \$4.25 million loss in eco-

nomie benefits to the local communities. Further, Corps recreational areas have not kept pace with changes in equipment and use patterns of today's diverse population. New uses for Corps lakes, such as sailboarding, were never anticipated when most Corps facilities were designed.⁸

RESILIENCE

Parks are an important asset to the nation's economy and environment. With limited funds available, little or no attention is currently paid to the resilience of the national park system. Balancing site security with access is taxing and often unsuccessful. A failure to protect these national treasures will strongly affect the heritage and identity of future generations. Future investments must address life-cycle maintenance, security, risk management, and system robustness.

CONCLUSION

Parks serve many roles in the lives of Americans, providing recreation opportunities, jobs, and economic development as well as increased property values for adjacent private properties. Yet funding sources are inconsistent, and park facilities in many areas suffer from neglect—especially in times of tight budgets—even as their popularity and demand soars. Our federally funded national parks are not immune to these problems, suffering from deferred maintenance despite the rising numbers of visitors. At the state and local level, dedicated sources of revenue for parks and open spaces need to be identi-

RAISING THE GRADES CASE STUDIES

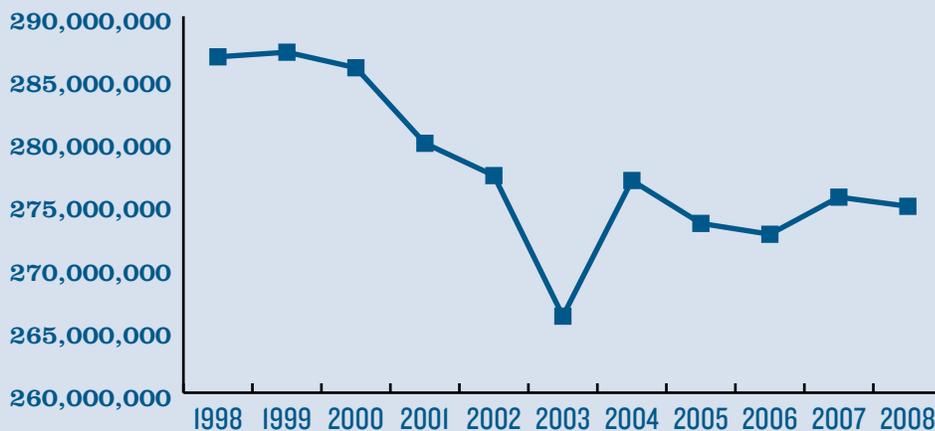
UNITED STATES ★ The Trust for Public Land

The Trust for Public Land has partnered with state and local governments across the country to set aside and restore parkland, both in urban and rural areas. From schoolyards in New York City to clean water initiatives in Minnesota and urban trails in Atlanta, they have worked to raise funds from private sources and pass bond referenda to support creation and rehabilitation of open spaces.⁹ RIGHT: The Trust for Public Land formed an ongoing partnership with the New York City Department of Education and several other



public and private donors to rehabilitate schoolyards across the city, including this one in the Red Hook section of Brooklyn. *Photo courtesy of Julieth Rivera, Trust for Public Land.*

FIGURE 13.1 ★ Visits to National Parks



SOURCE National Park Service

UNITED STATES ★ The National Park Service

At the close of the 20th century our treasured national parks were suffering from years of flat budgets and deferred maintenance. Administrators in Washington, D.C., and other regions could not even estimate accurately the total maintenance backlog, which the Government Accountability Office estimated at \$5 billion in 1998, but has been reported as high as \$9 billion. In 2001, the National Park Service embarked on developing an asset management program to inventory and assess the conditions of its structures, roads and other facilities, and then establish a program of rehabilitation and maintenance. Since then, significant strides have been made in reducing the maintenance backlog, and the National Park Service has set goals to quantify its success in this area.⁵

PORTLAND, OR ★ State-Local Government Partnerships



Partnerships between state and local government entities that share common recreation goals can help maximize limited funds, especially in concentrated urban environments. For example, Portland's Parks and Recreation Department shares facilities with school districts, coordinates land and water resource management and use with other regional agencies and raises money for equipment and facilities by partnering with corporations and other nonprofit groups.¹⁰ *PHOTOS, TOP TO BOTTOM: Students in Portland, Oregon help clean up the Elk Rock Island Natural Area. Created from an outmoded road that separated the waterfront area from the rest of the city, Portland, Oregon's Waterfront Park exemplifies the city's success in creating multi-purpose recreation areas. Photos courtesy of Portland Department of Parks and Recreation.*

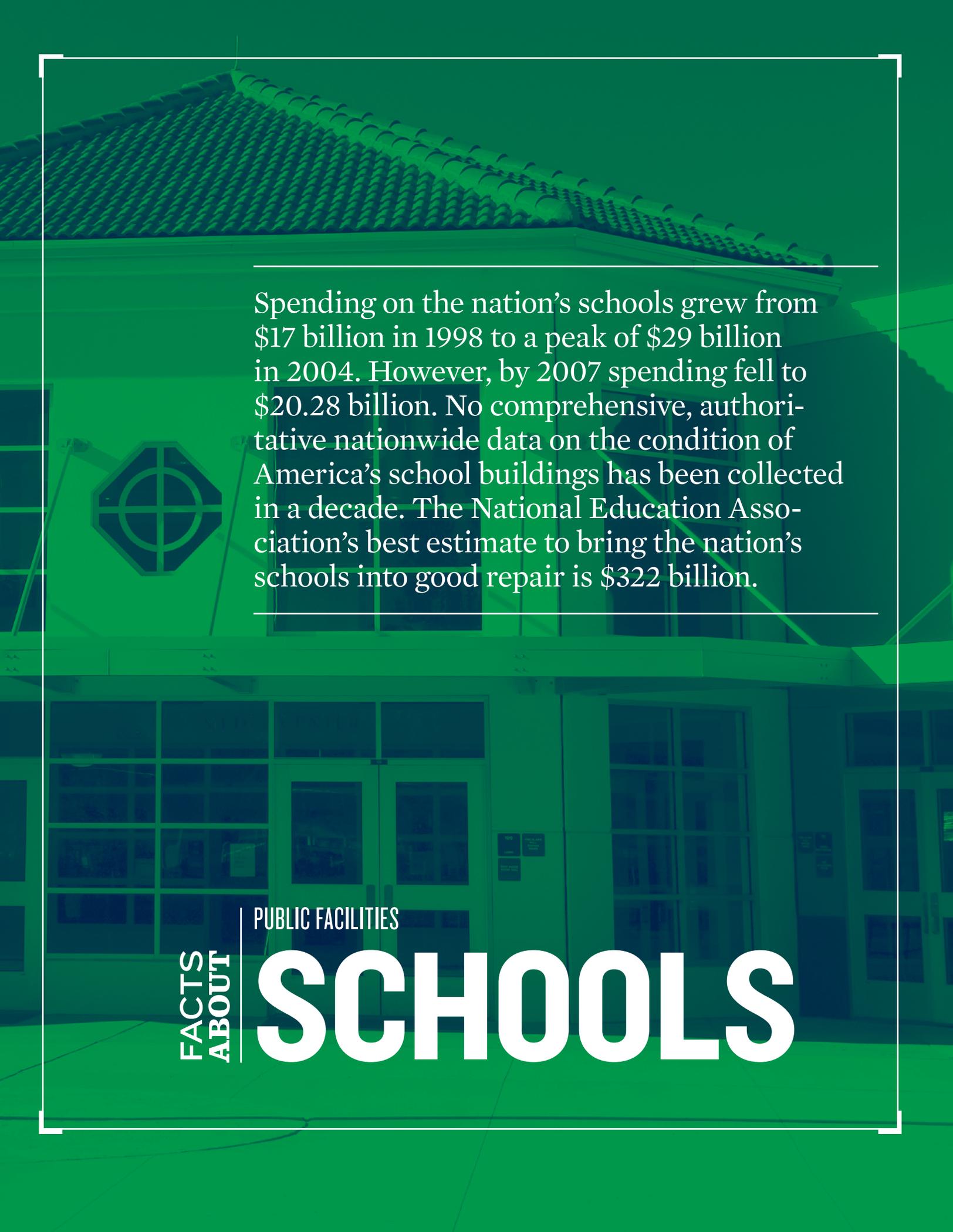
fied to ensure quality facilities for future generations. The National Park System should continue its Centennial Initiative to increase investment in park improvements leading up to the 100th anniversary in 2016. In addition, parks at all levels will benefit from a comprehensive assessment of usage and needs by an independent commission. ★

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Spending on the nation's schools grew from \$17 billion in 1998 to a peak of \$29 billion in 2004. However, by 2007 spending fell to \$20.28 billion. No comprehensive, authoritative nationwide data on the condition of America's school buildings has been collected in a decade. The National Education Association's best estimate to bring the nation's schools into good repair is \$322 billion.

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ESTIMATED 5-YEAR FUNDING REQUIREMENTS FOR SCHOOLS

Total investment needs
\$160 BILLION

Estimated spending
\$125 BILLION

Projected shortfall
\$35 BILLION



- ★ **PUBLISH** regular updates of the Department of Education report *Condition of America's Public School Facilities: 1999* to ensure a clear view of conditions nationwide;
- ★ **EXPAND** federal tax credits to support increased use of school construction bonds;
- ★ **CONTINUE** and **INCREASE** federal grants for high-poverty, high-need school districts;
- ★ **ENCOURAGE** school districts to explore alternative financing, including lease financing and financing/ownership/use arrangements, to facilitate construction;
- ★ **ENCOURAGE** school districts to adopt regular, comprehensive construction and maintenance programs;
- ★ **INCREASE** the emphasis on research and development for design and construction to meet the rapidly changing teaching environment;
- ★ **ESTABLISH** a federal, multiyear capital budget for public works infrastructure construction and rehabilitation similar to those used by state and local governments;
- ★ **ENCOURAGE** the use of life-cycle cost analysis principles to evaluate the total costs of projects;
- ★ **CONSIDER** direct federal funding for school construction.

CONDITIONS

Assessing the conditions of the nation's public school facilities remains a difficult process. There have been no comprehensive federal reports since the Department of Education report *Condition of America's Public School Facilities: 1999*.⁴ That report provided a detailed snapshot of conditions across the nation and concluded that a substantial number of schools are in poor condition. The report concluded that \$127 billion was needed to bring the nation's schools into good operating condition. An earlier report by the General Accounting Office (February 1995) concluded that one-third of the nation's schools needed extensive repair or replacement and that \$112 billion was needed to bring the nation's public schools into an overall good condition.¹³

Some effort has been made. In 2005, the National Center for Education Statistics

surveyed public school principals to determine the extent to which various environmental factors interfered with classroom instruction. A majority of respondents—44%—reported at least some interference: 33% reported minor interference; 9% reported moderate interference, and 1% reported major interference. The survey also found that while 15% of schools are overcrowded, 30% of students attend schools that are overcrowded. The report also noted that 37% of schools use portable buildings. However, this report lacks the detail of the earlier report and does not include estimates of needs or costs.¹²

The lack of adequate information has been noted at several levels. At a hearing of the House Education and Labor Committee in February of 2008, Representative Bob Etheridge (D) of North Carolina noted that “part of the problem we have had grappling with this problem from the federal level is a lack of reliable numbers

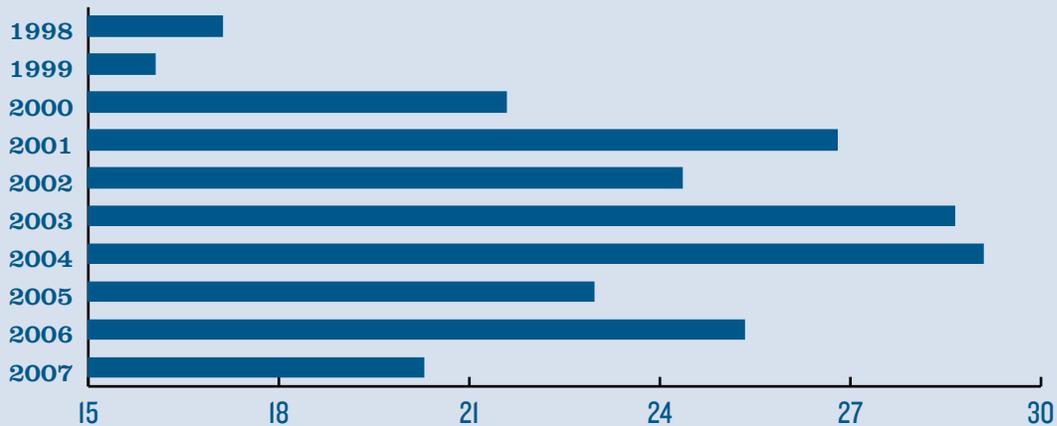
RAISING THE GRADES CASE STUDIES

PORTLAND, OR ★ Seismic Retrofits



Nearly half of Oregon's schools—most built prior to 1960, 10 years before statewide seismic building codes were adopted—are at risk of collapse if the state experiences a major earthquake along the Cascadia Fault. In 2005, voters approved a \$1-billion bond measure to seismically retrofit schools and other high-risk facilities by 2032.¹⁴ *Photo courtesy of Portland Public Schools.*

FIGURE 14.1 ★ School Construction in Billions of Dollars: 1998–2007



SOURCE 34th Annual Official Education Construction Report

in real time.”⁶ Even at the state level adequate numbers are hard to find.

The following facts illustrate the scope of the nation’s K–12 public school enterprise. In the 2008–2009 school year:

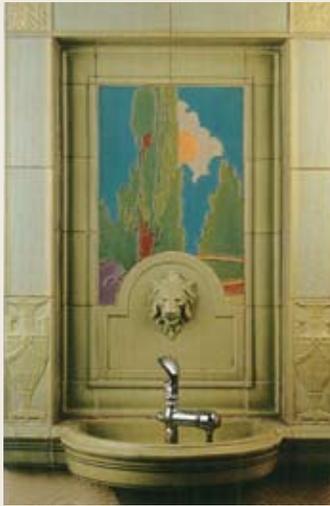
- ★ 49.8 million students are enrolled in public elementary and secondary schools;
- ★ Public schools employ about 3.3 million teachers;
- ★ There are 14,200 public school districts containing about 97,000 public schools;
- ★ Expenditures for public elementary and secondary schools are about \$519 billion;
- ★ The national average spending per student in the 2005–2006 school year is about \$10,418, up from \$9,154 per student.⁶

Despite increasing federal mandates on school performance, school facilities

in the United States are primarily a local responsibility and there is ample evidence that local communities are struggling to meet this responsibility. In 31 states, lawsuits have challenged the adequacy or equity of public education and have included facilities as elements of their cases.⁷

While detailed conditions and needs numbers do not exist, we do have up-to-date numbers on spending levels. According to the American School and University’s *34th Annual Official Education Construction Report*, school construction completed in 2007 (which included both new construction and renovations) totaled more than \$20.2 billion. That is down from a peak of \$29 billion in 2004. The downward trend is expected to continue: with \$52.7 billion in funding is projected between 2008 and 2010. This represents a

CINCINNATI, OH ★ School Modernization Program



Cincinnati Public Schools, Ohio's third-largest public school district, has approximately 70 schools spread across a 90-square-mile area. Beginning in 2002, it embarked on a major, 10-year long initiative to upgrade its educational facilities, turning them into modern 21st century learning environments. In addition to tearing down schools that were outmoded and/or underutilized, ongoing construction projects include both new buildings and extensive renovations of often architecturally significant older buildings, all carried out under the district's \$985 million Facilities Master Plan. *Photo courtesy of Cincinnati Public Schools, photo by Robert Flischel.*

significant decrease from the \$68.4 billion spent between 2005 and 2007.¹

Engineering News-Record reports that despite the record breaking demands of student population growth, market conditions threaten to delay or kill projects and programs that until very recently seemed economically feasible. The cause is problems in the financial sector and declining revenues for states and local governments. Examples cited included delays on 12 major school construction projects in Maine, and the decision not to build an elementary school in Cumberland County, North Carolina, because of the failure to find buyers for the county's construction bonds.⁹

Examples of the coming slowdown include the recently released budget in New York City, which contained a reduc-

tion in construction of new schools from the 76 announced in 2003 to 42 following the latest round of budget cuts.

Other estimates include \$9 billion needed for new construction and \$3.5 billion needed for modernization of public school facilities in California⁸ and \$9.7 billion needed statewide between 2008 and 2012 for school facilities in North Carolina.¹⁸

While spending is decreasing, the trend in school enrollment continues to rise. There were 48.9 million public school students in school year 2005–2006, up from 48.1 million in the 2002–2003 school year. According to the National Center for Education Statistics, public and private school enrollments will grow 7% from 2007–2016.⁶

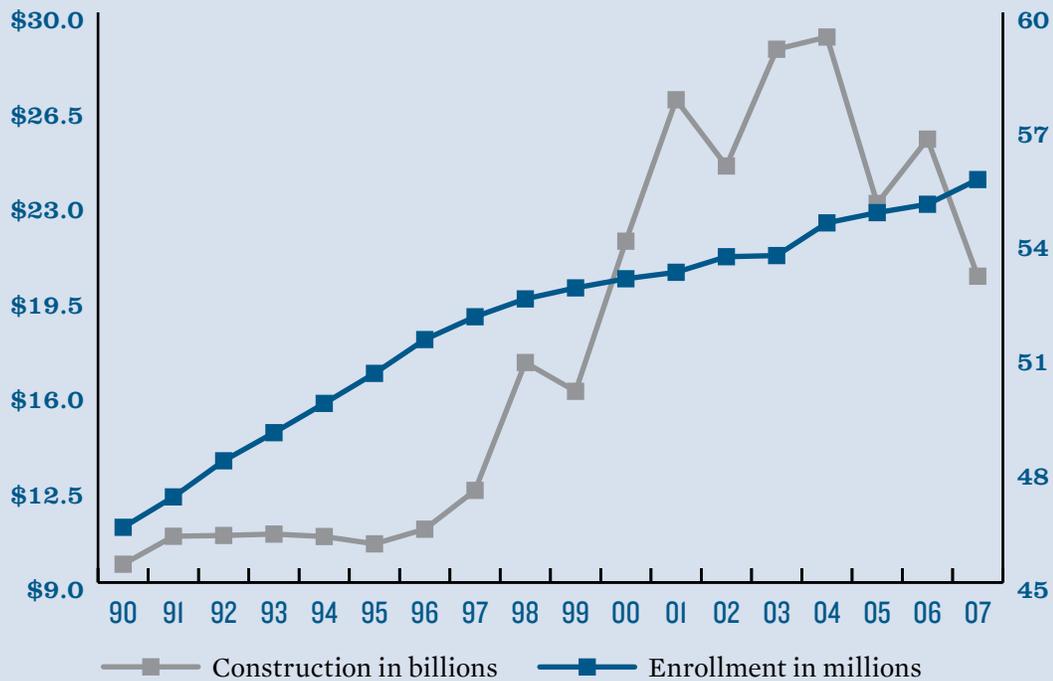
CAMDEN, NJ ★ Improvements to Camden High School

Scaffolding surrounding the 90-year-old Camden High School protects students and teachers from debris falling from the crumbling façade.¹⁵ To combat the dangers of deteriorating school buildings, a new agency, the New Jersey Schools Development Authority (NJSDA), was created in 2000 and is responsible for implementing an overhaul of the educational infrastructure of hundreds of schools in districts throughout all 21 counties of the State of New Jersey. The New Jersey Educational Facilities Construction and Financing Act, which created the NJSDA, authorized \$3.9 billion for school improvements.¹⁷

Photo courtesy of Camden City Public Schools.



FIGURE 14.2 ★ School Construction vs. Enrollment: 1990–2007



SOURCE 34th Annual Official Education Construction Report

Another major concern is that despite increases in spending for school facilities earlier in this decade, the money has disproportionately gone to the nation’s wealthiest school districts while the neediest students continue to endure the most decrepit facilities. A report by Building Education Success Together noted that over the decade of 1995 to 2004 public school districts built more than 12,000 new schools and managed more than 130,000 renovation and improvement projects. However, 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).³

RESILIENCE

The nation’s schools serve as pillars of local communities and often serve a dual purpose as disaster-relief shelters. As local governments hold the prime responsibility for funding schools, the economic downturn has had a negative impact on rehabilitation, modernization, and security improvements.

School facilities are not currently considered resilient because of decreased funding and increased capacity, the failure of designs

to adapt to the ever changing learning environment, and the lack of system redundancy.

In order to achieve continuous assurance of service, future investments should consider life-cycle maintenance, rapid recovery, alternative services, security, and condition and risk assessment.

CONCLUSION

A significant problem in determining the condition of the nation's schools is the lack of reliable information. No comprehensive, authoritative data have been collected in 10 years. Spending on school construction and modernization, for which data do exist, has trended positive for much of the last 10 years, increasing from \$17 billion in 1998 to a peak of \$29 billion in 2004. The trend since 2004, however, has reversed and was down to \$20.7 billion in 2007. Barring dramatic change in economic conditions, this downward trend will likely continue, coupled with the known needs of 10 years ago and increasing student enrollments, gives little hope for improvement. ★

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