

2019 FACILITIES & CONSTRUCTION BRIEF

AN OVERVIEW OF THE EDUCATION CONSTRUCTION SCENE

WHILE THERE IS MUCH WE CAN'T PREDICT, THERE ARE A FEW THINGS WE KNOW FOR SURE. We know that the population of the U.S. is growing and along with it the enrollment in our K-12 schools. We know that there is a growing need for an educated workforce, affecting the enrollment of colleges and universities nationwide. We know that there is an ongoing deferred maintenance problem and a need to invest in the improvement of existing facilities. We also know that the construction and renovation of educational facilities is finally on the rise.

The following information is provided to give you a brief

overview of what we know based on available data and a survey of our readers. In past reports, we've provided national medians on specific facility types, but this year accurate data was scarce, the sample size too small, and the project scope too varied. What you find here are the trends in population and enrollment, the trends in overall education construction spending, and the results of our reader survey—giving you an overview of the trends in facilities and construction.

The *SP&M/CP&M* Editorial Team

CHANGES IN POPULATION AFFECT ENROLLMENT

POPULATION CHANGE

- One birth every 8 seconds
- One death every 11 seconds
- One international migrant (net) every 34 seconds
- Net gain of one person every 19 seconds

States in the South and West continued to lead in population growth. Nationally, the U.S. population grew by 0.6 percent. Nevada and Idaho were the fastest-growing states, both increasing by about 2.1 percent. In addition, Utah grew by 1.9 percent, Arizona by 1.7 percent, and Florida and Washington by 1.5 percent. Nine states lost population last year. New York had the largest numeric decline, losing 48,510 people. Texas had the largest numeric growth over the last year, with an increase of 379,128 people.

ENROLLMENT PROJECTIONS

ELEMENTARY AND SECONDARY

Total public and private elementary and secondary school enrollment was 56 million in fall 2014, the last year of actual public school data. Between fall 2014 and fall 2026, an increase of 3 percent is expected. Public school enrollments are projected to be higher in 2026 than in 2014 for the South and West, and be lower for the Northeast and Midwest.

- Enrollment in prekindergarten through grade 8 is projected to increase 2 percent between 2014 and 2026.
- Enrollment in grades 9-12 is projected to increase 2 percent between 2014 and 2026.
- Public elementary and secondary enrollment is projected to increase 3 percent nationally, reflecting a 5-percent decrease in the Northeast, a 3-percent decrease in the Midwest, an 8-percent increase in the South, and a 4-percent increase in the West.

GROWTH BY NUMBER (2017 to 2018)

| State | 2018 Population | Growth |
|----------------|-----------------|---------|
| Texas | 28,701,845 | 379,128 |
| Florida | 21,299,325 | 322,513 |
| California | 39,557,045 | 157,696 |
| Arizona | 7,171,646 | 122,770 |
| North Carolina | 10,383,620 | 112,820 |
| Washington | 7,535,591 | 110,159 |
| Georgia | 10,519,475 | 106,420 |
| Colorado | 5,695,564 | 79,662 |
| South Carolina | 5,084,127 | 62,908 |
| Nevada | 3,034,392 | 61,987 |

Source: U.S. Census Bureau

DEGREE-GRANTING POSTSECONDARY

Total enrollment in degree-granting institutions is expected to increase 13 percent between fall of 2015, the last year of actual data, and fall 2026.

- Enrollment in degree-granting postsecondary institutions of students who are 18 to 24 years old is projected to increase 17 percent between 2015 and 2026.
- Enrollment in degree-granting postsecondary institutions of students who are 25 to 34 years old is projected to increase 11 percent between 2015 and 2026.
- Enrollment in degree-granting postsecondary institutions of students who are 35 years and older is projected to increase 4 percent between 2015 and 2026.
- Enrollment of males in degree-granting postsecondary institutions is projected to increase 11 percent between 2015 and 2026 to 9.7 million.
- Enrollment of females in degree-granting postsecondary institutions is projected to increase 15 percent between 2015 and 2026 to 13 million.

| ENROLLMENT PROJECTIONS (In Thousands) | | | | | | | | | | | |
|---------------------------------------|--------|--------|---------------|--------|--------|----------------|---------|---------|-------------------------------|--------|---------|
| Year | All | pK-12 | pK-12: Public | | | pK-12: Private | | | Degree-Granting Postsecondary | | |
| | | | Total | pK-8 | 9-12 | Total | pK-8 | 9-12 | Total | Public | Private |
| 2006 | 73,066 | 55,307 | 49,316 | 34,235 | 15,081 | **5,991 | **4,631 | **1,360 | 17,759 | 13,180 | 4,579 |
| 2011 | 75,800 | 54,790 | 49,522 | 34,773 | 14,749 | 5,268 | 3,977 | 1,291 | 21,011 | 15,116 | 5,894 |
| *2016 | 76,044 | 55,859 | 50,625 | 35,514 | 15,111 | 5,234 | 3,918 | 1,316 | 20,185 | 14,844 | 5,341 |
| *2021 | 77,875 | 56,216 | 51,152 | 35,639 | 15,513 | 5,064 | 3,855 | 1,210 | 21,659 | 15,910 | 5,749 |
| *2026 | 79,465 | 56,834 | 51,738 | 36,362 | 15,376 | 5,096 | 3,942 | 1,154 | 22,263 | 16,642 | 5,990 |

*Projected; ** Estimated

Source: National Center for Education Statistics, Projections of Education Statistics to 2026.

Note: Projections do not assume changes in policies or attitudes that may affect enrollment levels.

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EDUCATIONAL CONSTRUCTION SPENDING

The total dollar value of education construction work done in the U.S. (including all 50 states and the District of Columbia) is estimated to have exceeded \$98.9 billion in 2018. That is a 9-percent increase from the actual amount spent on education construction in 2017.

| YEAR | TOTAL (Millions of Dollars) |
|------|--------------------------------|
| 2004 | \$ 74,251 |
| 2005 | \$ 79,687 |
| 2006 | \$ 84,929 |
| 2007 | \$ 96,758 |
| 2008 | \$ 104,891 |
| 2009 | \$ 103,203 |
| 2010 | \$ 88,405 |
| 2011 | \$ 84,986 |
| 2012 | \$ 84,673 |
| 2013 | \$ 79,059 |
| 2014 | \$ 79,681 |
| 2015 | \$ 83,518 |
| 2016 | \$ 91,953 |
| 2017 | \$ 90,734 |
| 2018 | \$ 98,891 |

IT'S TIME TO MODERNIZE AMERICA'S PUBLIC SCHOOL INFRASTRUCTURE

EVERY WEEKDAY, 56 million children and adults set foot in a public school. That is one in six of all Americans. Half of these schools need some form of repair, especially in urban and rural areas.

More than one in four of the nearly 100,000 public K-12 schools in the United States, are in poor or unsatisfactory condition. Finding additional funding for fixing these school facilities is inherently challenging. The federal government provides almost no support for this vital part of the country's infrastructure.

Public schools are the second largest sector of America's infrastructure, after roads and highways. Local communities and states spend \$49 billion a year on capital investment in public school buildings. But that's \$38 billion a year less than they need.

Some states do what they can to help. Some don't or cannot. This investment gap impacts education, health, safety, security, the environment, and, ultimately, the future of our country.

Recent polls indicate that a majority of Americans strongly support investing more in public infrastructure. President Trump and many members of Congress have made infrastructure a top legislative priority. A one-time federal invest-

ment of \$100 billion over 10 years for locally controlled public schools would benefit children, families, and communities across America.

This investment would result in better schools, thousands of local construction jobs in every state, broadband for rural communities, lower costs for school maintenance and operations, stronger local economies, and resilient public facilities ready to serve in time of disasters. And it can be done in a way that does not diminish local control of public schools.

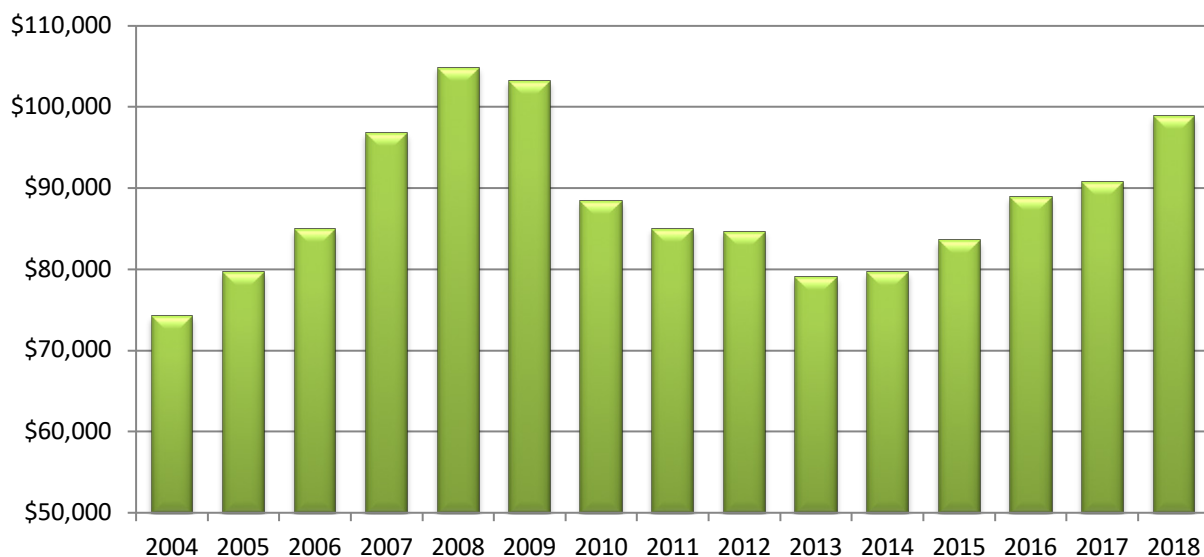
There are a number of groups and organizations that are working to get the president and Congress to include public schools in any federal infrastructure legislation. One of them is the [Re] Build America's School Infrastructure Coalition (BASIC), which includes non-partisan organizations and individuals who support federal funding to help underserved public school districts modernize their facilities.

To find out more about this infrastructure issue or to get involved, visit www.buildUSschools.org.

— Information in this article is used, with permission, from the 21st Century School Fund—www.21csf.org.

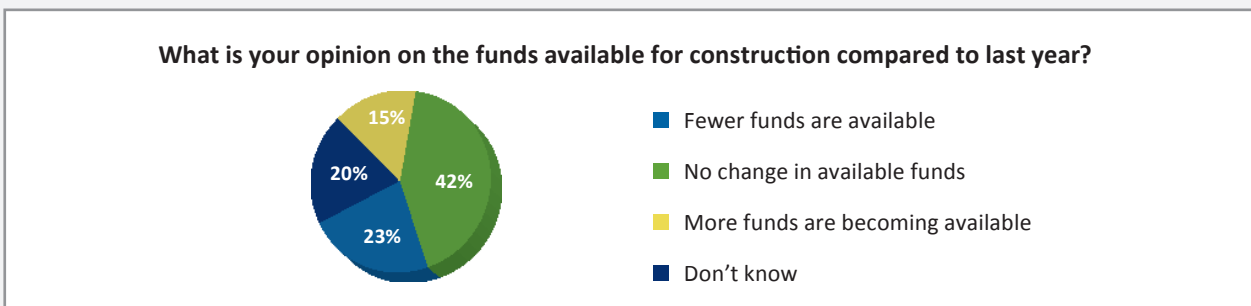
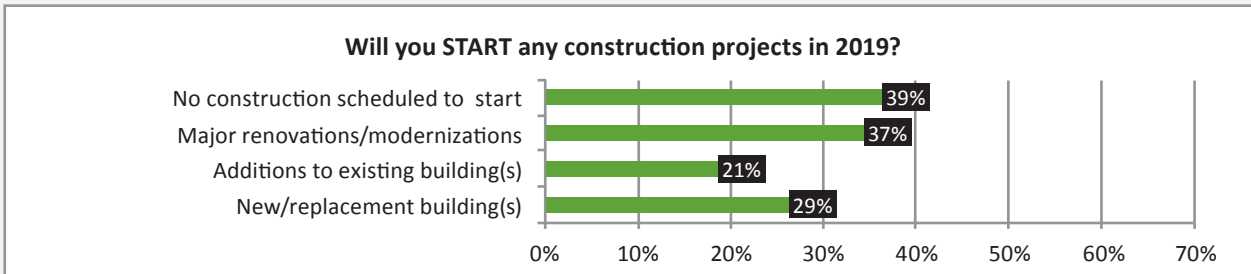
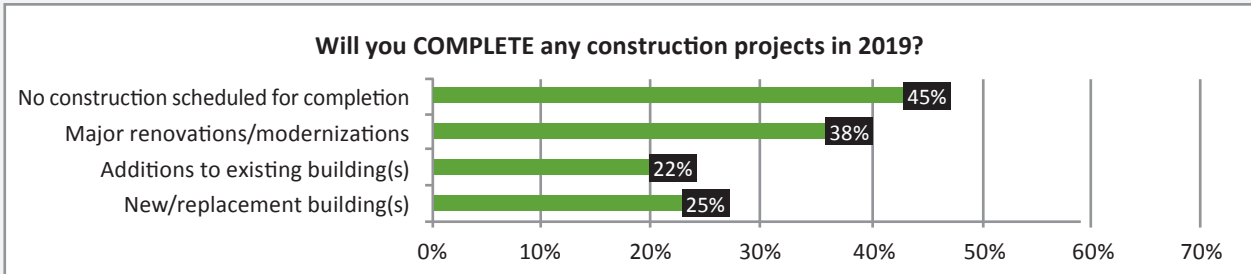
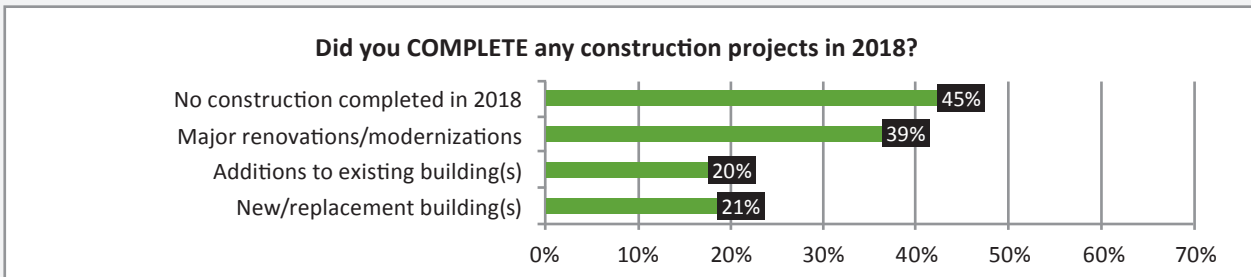
Educational construction spending includes expenditures for new buildings and structures, additions, renovations, rehabilitations, major replacements (such as the complete replacement of a roof or heating system); mechanical and electrical installations; site preparation, and outside construction of fixed structures or facilities such as sidewalks, parking lots, and utility connections. Educational facilities include preschools, primary/secondary schools, higher education facilities, trade schools, training facilities, and other educational spaces including museums and libraries.

EDUCATION CONSTRUCTION (Millions of Dollars)



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SURVEY ON SCHOOL CONSTRUCTION



Survey Respondents: 123 pK-12 school districts responded to this survey among 44 states.

KEY TAKEAWAYS

- Fifty-five percent of districts surveyed completed construction in 2018.
- Fifty-five percent of districts surveyed are planning to start construction projects in 2019.
- Major renovations and modernizations are the major focus of projects completed in 2018 and expected to be started in 2019.
- Most institutions surveyed—65 percent—believe that there will either be no change or fewer funds available for construction projects in 2019.

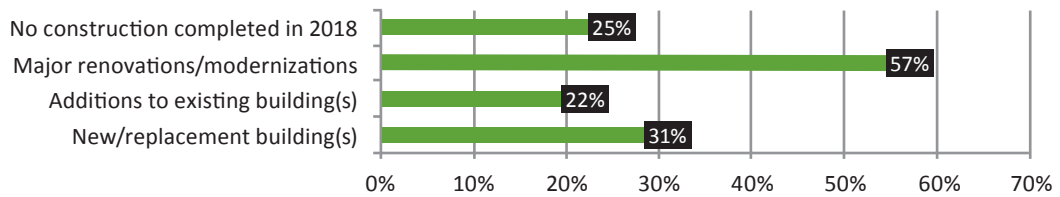
OTHER ISSUES FACING INSTITUTIONS

- Funding is the biggest issue.
- Increasing cost of construction and depleted labor pool.
- Preventative maintenance schedule and having staff abide and adhere to scheduling.
- Voter approval of bonds issues based on property taxes.
- State and local site/development requirements/codes.
- Keeping buildings operational without much funding.
- Availability of manpower for the various trades to complete their work.
- Getting plans approved at State Education Department in a timely period.
- Keeping pace with local growth and enrollment increase.
- Aging and outdated facilities.
- Preventative maintenance schedule and having staff abide and adhere to scheduling.
- Accountability issues with contractors, etc.
- Time management for project completion by the school start date in the fall.
- Safety, logistics, and continuing the educational program during construction/renovation.
- Lack of bidders.
- Community perception of the need for new construction, additions, and renovations.
- Prioritization—too many needs for available funds.
- Lack of long-term planning.

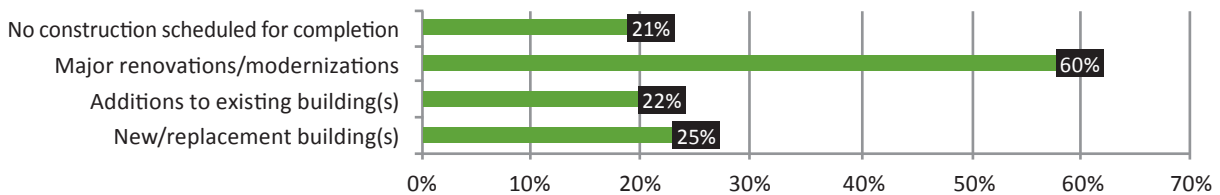
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SURVEY ON COLLEGE CONSTRUCTION

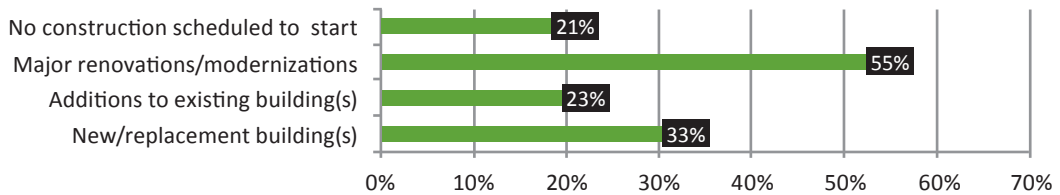
Did you COMPLETE any construction projects in 2018?



Will you COMPLETE any construction projects in 2019?



Will you START any construction projects in 2019?



What is your opinion on the funds available for construction compared to last year?



Survey Respondents: 215 colleges and universities responded to this survey among 44 states.

KEY TAKEAWAYS

- Seventy-five percent of institutions surveyed completed construction in 2018.
- Seventy-nine percent of institutions surveyed are planning to start construction projects in 2019.
- Major renovations and modernizations of existing facilities will continue to be the focus.
- While 22 percent of survey respondents feel that more funds for construction are becoming available (up from 18 percent last year), 33 percent (up slightly from last year's 29 percent) feel that fewer funds are available.

OTHER ISSUES FACING INSTITUTIONS

- Aging workforce/labor shortage in skilled trades. Increasing building complexity. Technical personnel are difficult to find.
- Aging equipment. Loss of qualified employees to other jobs that can pay higher wages.
- Getting Facilities to understand the importance of technology that is installed in the building.
- Finding qualified consultants who give non-self-serving advice; have a bigger picture in mind that complements the current work construction with best practices, good ROI, and life-cycle analysis prior to giving recommendations.
- Divisions between academic units and FM.
- Swing space to facilitate renewal and renovation on a growing campus.
- Compressed schedules impacting the quality of the finished product.
- Scheduling work around continuing academic requirements as well as continuing events on campus. Access to work in occupied buildings.
- Having the budget to accomplish deferred maintenance work, which is directly related to student enrollment. But, obviously, both of these challenges are directly related to funding.
- Capital funding. Facility, equipment, and infrastructure requests typically exceed available funding. Capacity of donors to give to new capital projects.
- Stakeholder focus and general communication issues.
- Old buildings. Prices of new equipment; HVAC is very expensive.