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Structural Changes in Student Housing Demand

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About NMHC

Based in Washington, DC, the National Multifamily Housing Council (NMHC) is a national association representing the interests of the larger and most prominent apartment firms in the U.S. NMHC's members are the principal officers of firms engaged in all aspects of the apartment industry, including ownership, development, management and financing. NMHC advocates on behalf of rental housing, conducts apartment-related research, encourages the exchange of strategic business information and promotes the desirability of apartment living. Nearly one-third of Americans rent their housing, and almost 15 percent live in apartments (defined here as buildings with five or more units). For more information, contact NMHC at 202-974-2300, email the Council at info@nmhc.org, or visit NMHC's website at http://www.nmhc.org

About the NMHC Research Foundation

In 2016, NMHC formed a non-profit 501(c)(3) research foundation to produce research that will further support the apartment industry's business interests. The work supported by the NMHC Research Foundation raises the industry's standard of performance and encourage worldwide investment in the sector. The NMHC Research Foundation funds unique and original research on a wide range of topics, including issues related to development and redevelopment activity, affordable and workforce housing, demographics, tax policy, regulatory environment, and zoning and land use, among others.

In 2018, NMHC formed the Student Housing Research Fund as part of the NMHC Research Foundation to conduct research focused on the student housing industry to address the paucity and narrowness of research in the industry.

For more information, visit www.nmhc.org/Research-Foundation.

About the Authors

This white paper was prepared by Eigen 10 Advisors, LLC, which provides commercial real estate consulting services in the areas of market and investment analyses, capital formation, investor communications, asset and partner due diligence, portfolio strategy and data analytics.

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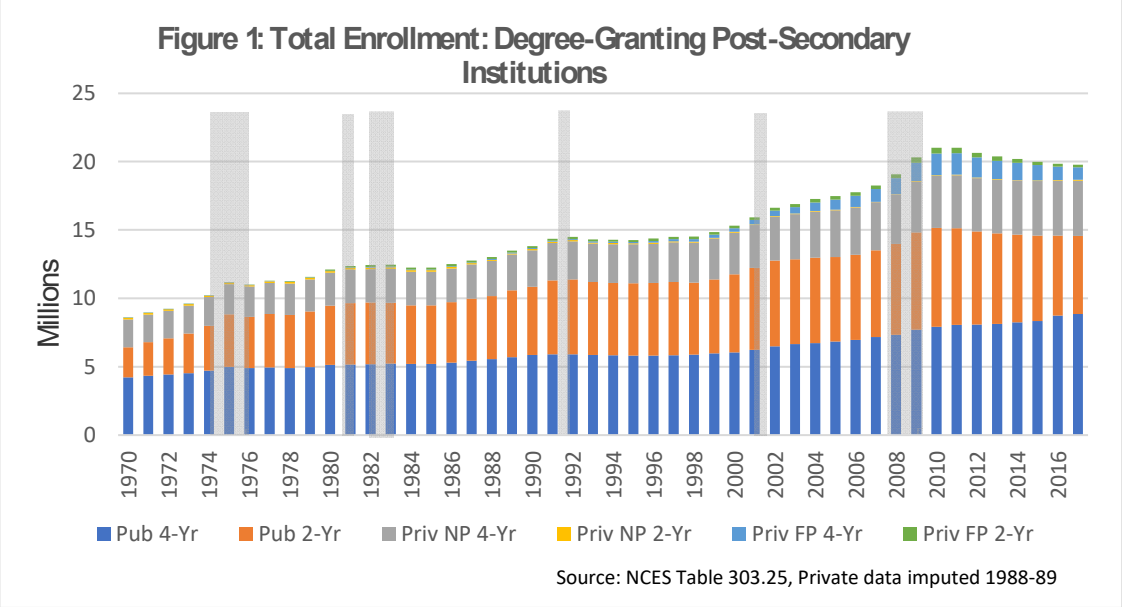
Executive Summary

Student housing has historically experienced recession-proof demand as measured by enrollment in public four-year universities, which has grown at an average annual pace of 2.1% over the past 10 years. That is **more than double both population growth and employment growth** over that time period. This paper examines the structural, demographic and economic forces that will influence future demand for student housing. Among our key findings are:

- An estimated **46 million people will reach college age in the next 10 years, creating continued demand for student housing.**
- **Gen Z, a smaller cohort than the aging millennials, will put downward pressure on enrollment growth going forward**.
- The smaller population base, combined with the recent recession, will cause uneven growth in university enrollment. This will **benefit sophisticated student housing operators** who can identify schools that will continue to have long-term positive enrollment and balanced new housing supply.
- An analysis of the fastest growing universities from 2010 to 2017 indicated a wide range of enrollment growth. High-growth universities are characterized by:
  - Positive demographic growth
  - Wealthy population bases
  - Ability to attract students from a wider geographic base (out of state or foreign)
  - Affordability (most are public schools)
  - Quality academic programs that retain students
  - A range of acceptance rates, although lower acceptance rates offset some demographic risk, as they could be raised if application rates decline with little effect on quality
- **Future demand is expected to remain concentrated geographically since 22% of 5- to 19-year-olds live in two states—California and Texas**.
- **Affordability will continue to be important**. First, growth segments of student demographics are from lower-income segments. Second, the current recession has already generated announcements of government funding cuts to universities. Past recessions have resulted in escalating tuition rates to replace reduced government funding. This, in turn, puts pressure on student budgets for housing.
- **Distance education is here to stay, but it will not replace traditional public four-year programs**. Online offerings are increasingly common in post-secondary education. While low-quality private for-profit schools initially dominated this space, some high-quality public universities had already started to move into it pre-COVID. The pandemic has accelerated this distance learning trend. Women, minorities and students with dependents are more likely to use distance learning. The lower cost of online programs may extend educational attainment to students who would not otherwise attend public four-year universities.

Recession Demand Remains Steady, but Demographic Changes Present Challenge and Opportunity

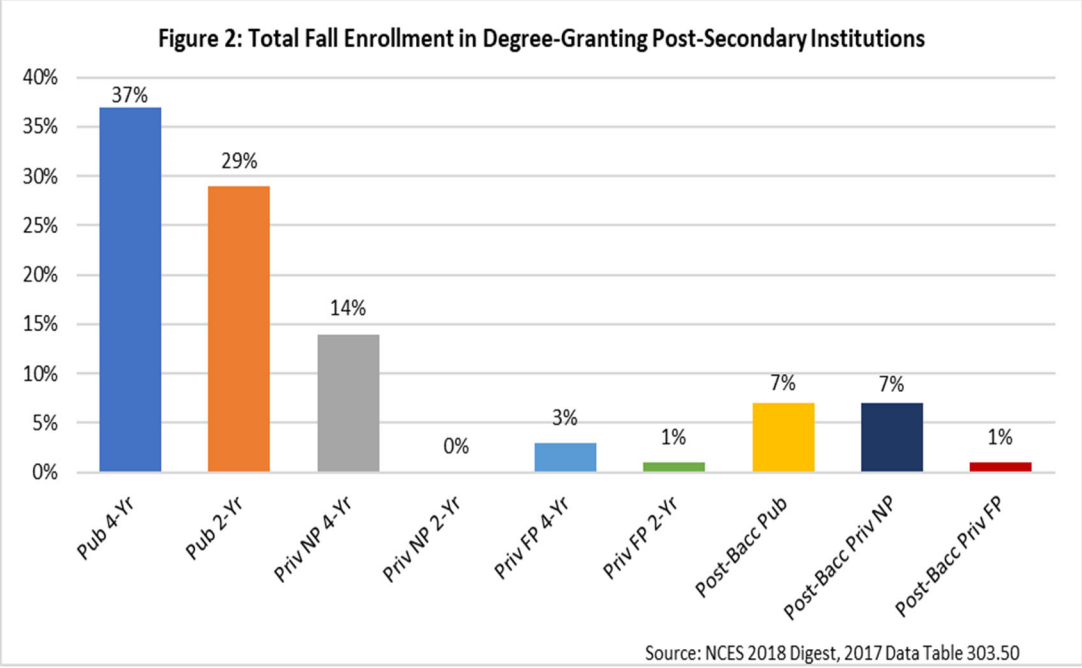
Enrollment in four-year public universities increased 24% over the past decade, adding 1.7 million new students to the public education rosters.[1] Unlike most other property types, demand for student housing, as represented by four-year public enrollment, has remained relatively steady, even through multiple recessions (see Figure 1, in which recessions are in gray bars). Additionally, the average annual enrollment growth rate in four-year public universities averaged 2.1% from 2007 to 2017.[2] That is more than double the rates of both population growth (0.7%) and employment growth (0.6%) over that time period.[3]



Current Enrollment in Degree-Granting Post-Secondary Institutions

Only 37% (7.4 million) of the total post-secondary student population are enrolled in public four-year baccalaureate programs (see Figure 2).[4] As discussed later in the paper, adoption of technology—accelerated by the COVID-19 pandemic—combined with volatility in other educational formats, particularly private, for-profit schools, may create a new avenue of growth for public four-year universities going forward.

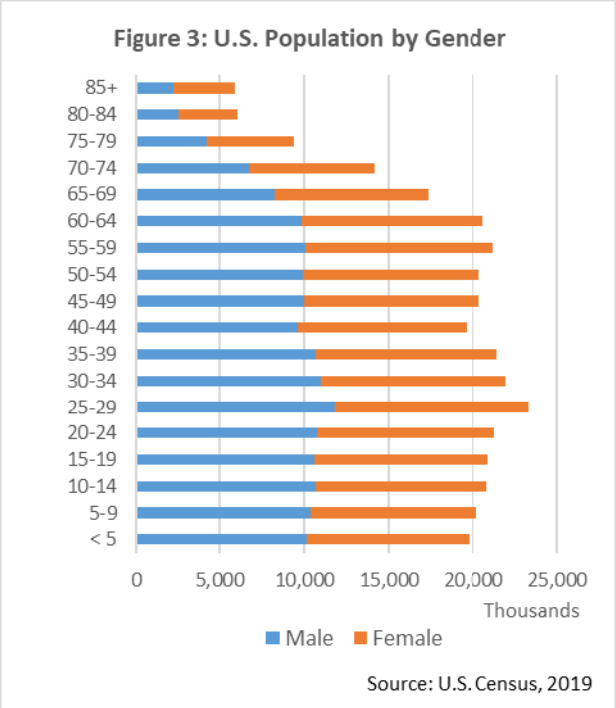
Of the 19.8 million people enrolled in U.S. degree-granting post-secondary institutions, 16.8 million are in undergraduate or baccalaureate programs.[5] Another 3 million are in graduate or post-baccalaureate programs. The U.S. population is also increasingly educated, as the percent of population with bachelor's degrees increased from 17.7% in 2010 to 20% in 2018.[6] Those with a graduate or professional degree increased from 10.4% to 12.6%.



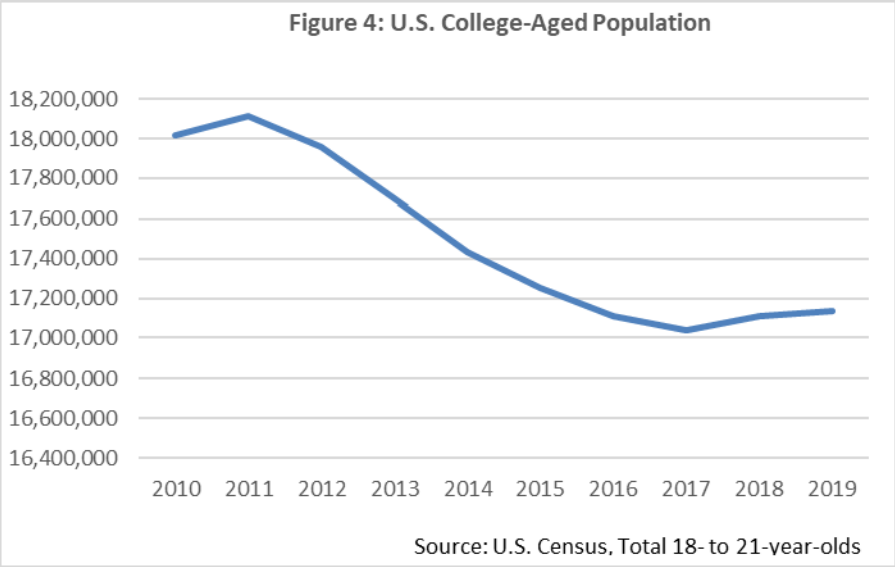
Future Student Enrollment Will Be Strong, But Its Composition Will Change, Making Affordability More Important

46 million people will reach college age in the U.S. over the next 10 years.[7] This demographic trend predicts that demand for student housing will remain robust, since this is only a slight decline from the peak decade of the previous generation. However, the demographic profile of students will change considerably, so student housing owners will need to be more discerning.

A smaller age cohort will put downward pressure on enrollment trends. Like many other developed countries, U.S. population growth is slowing as young adults continue to postpone marriage and family formation. The millennials,[8] now 24 to 40 years old, are the largest population cohort in the U.S., as shown in Figure 3. At 71.2 million people, they were a driving force in university enrollments from 2000 to 2010. However, they are now generally past college age and are followed by a smaller age cohort, Gen Z. This should cause overall school enrollment growth to slow.[9]

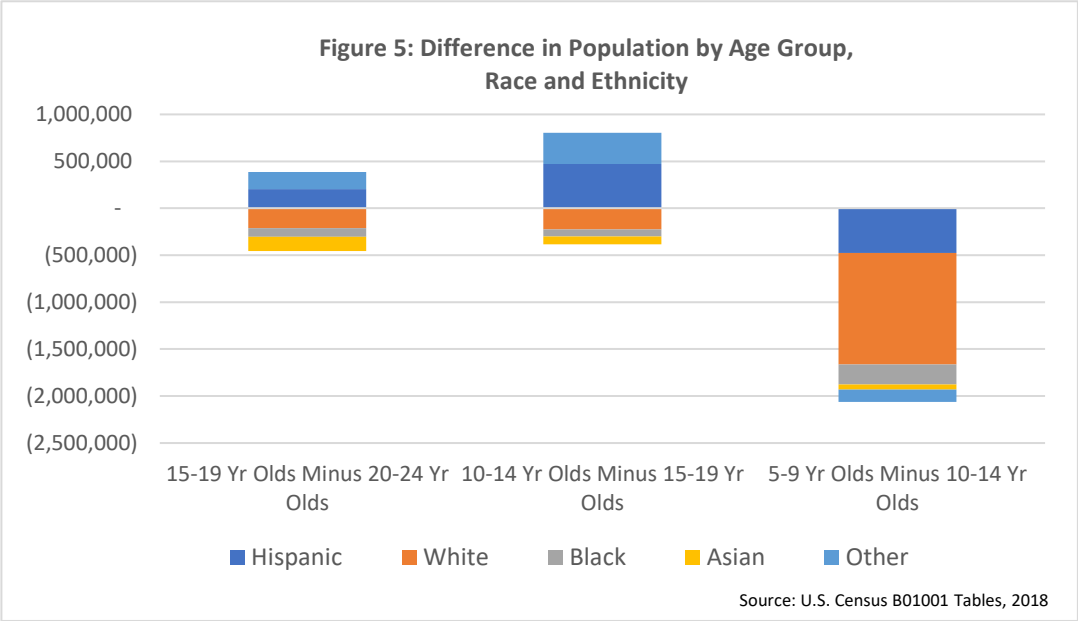


Enrollment trends are mainly impacted by two variables: (1) the size of the population (especially 18- to 24-year-olds, who make up the majority of the post-secondary student population), and (2) the percentage of 18- to 24-year-olds enrolled in higher education. As the millennials aged, the number of high school graduates peaked in 2012 at 3.2 million and has been just below 3 million in most years since then.[10] (See Figure 4).[11] Meanwhile, the percentage of high school graduates attending college peaked at 70.1% in 2009 and then stabilized at a range of 63% to 66%.[12] **Absent new in-migration, the U.S. college-aged population will shrink over the next 15 years.[13]**



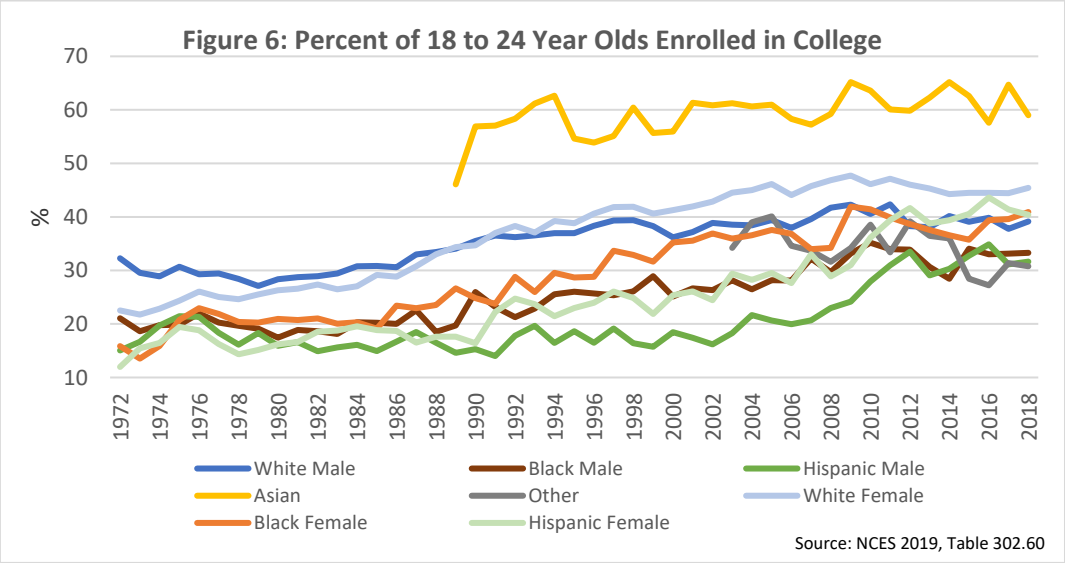
Diversity Matters

Gen Z is more diverse than prior generations. One in four members of this generation are Hispanic,[14] 14% are Black and 5% are Asian.[15] Over the next five years, all net growth in the college-aged population will be from people identifying as Hispanic and Other[16] races. As the younger generations age into the college-aged cohort, however, the college-aged population will decline across all segments of race, with the largest decline in the white segment (see Figure 5). [17]

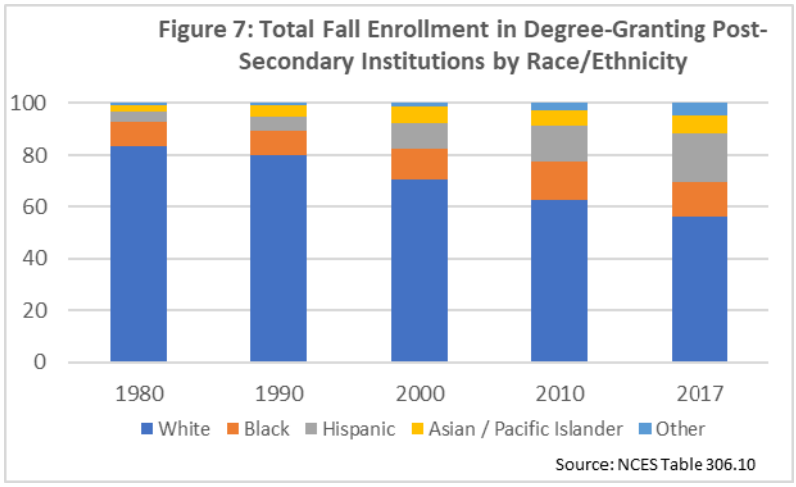


Fortunately for post-secondary institutions, enrollment rates for the Hispanic population are rising, which should offset some of the decline in the overall college-age population. Enrollment rates of Hispanic 18- to 24-year-olds rose from 27% in 2007 to 36% in 2018, as shown in Figure 6. The Black population (all ages) has made similar strides in educational attainment over the long run, particularly for Black females who now have a college enrollment rate of 41%, higher than the 39% enrollment rate of white men.

In fact, enrollment rates for females across all race/ethnicities are now higher than men. The widest disparity is found between Hispanic women and men; the 2018 enrollment rate was 40.4% for females and 31.6% for males. Interestingly, the enrollment rates for males across races and ethnicity has been flat or down over the past few years. The Asian enrollment rate is the highest, averaging 62% from 2013 to 2018, but it has not increased.[18]



As a result of changing demographics and educational attainment trends, the general student population also continues to become more diverse (see Figure 7). In 2017, white students accounted for 56% of the student population, down from 62.6% in 2010.[19] Over that same time period, Hispanic enrollment increased from 13.5% to 18.9% of the total. Students identifying as two or more races increased from 1.6% to 3.7% and Black enrollment dropped from 15% to 13.6%.



The increased diversity of the student population could make affordability more important since the median income is only $51,400 for Hispanic households and $41,361 for Black households, compared to non-Hispanic white households ($70,642) and Asian households ($87,194).[20]

Competition and Distance Learning

As new technology enabled distance education, enrollment in for-profit four-year schools exploded from 257,885 in 2000 to 1.6 million in 2010.[21] For-profit entrepreneurs benefited from this because they were faster to integrate new learning formats and offered easier enrollment standards, access to loans, and urban office locations that were more convenient to visit. By 2017, 82.1% of all students in for-profit four-year universities took at least one distance education course, and 71% learned exclusively through distance education courses. 58% learned exclusively through distance learning and resided out of state. In comparison, only 31.8% of all public four-year students took any distance education courses, 10.3% took courses exclusively through distance education and 2.1% were out of state and exclusively distance learners.[22]

Distance learning is not just limited to for-profit schools, however. The number of undergraduate students enrolled in distance learning (which includes online classes) has almost tripled since the early 2000s. In 2003-04, 15.6% of undergraduate students took a distance learning class. In 2015-16 that number had risen to 43.1%. The number of students whose entire program is through distance education more than doubled from 4.9% to 10.8%.[23]

Women have historically participated in distance learning at higher rates than their male counterparts. During the 2015-16 school year, 45.7% of undergraduate women took some distance learning classes, up from 17% in 2003-04. The percentage of women who completed their entire degree program online jumped to 12.1% in 2015-16 from 5.4% in 2003-04. For comparison, 39.7% of undergraduate men took some distance learning in the 2015-16 school year, up from 13.6% in 2003-04. Furthermore, only 9.2% of men took their entire degree program online in 2015-16, up from 4.3% in 2003-04.[24]

Distance and online learning are much more prevalent for students over 30. 53.8% of those undergraduate students took an online class in 2015-16, and 24.9% took an entire degree program online. For those aged 15 to 23 years old, the numbers are 36.6% (some distance learning) and 3.5% (exclusively online). Students with dependents (both married and unmarried) report the highest percentage of some online learning—52.5% of unmarried students with dependents and 57.8% of married students with dependents. The numbers are 22.9% and 27.1% respectively for entirely online degree programs.[25]

Public four-year schools are not exempt from online learning. As of the 2015-16 school year, 43.6% of public four-year undergraduate students had taken at least one online class and 6.1% took their entire undergraduate degree program online.[26] In 2020, the COVID-19 pandemic pushed online learning into the forefront of education at both secondary and post-secondary institutions. One survey showed that 75% of students were unhappy with the quality of their e-learning during the COVID crisis,[27] but lack of planning as

instructors and schools scrambled to put online tools in place in a matter of days was certainly a factor.

There are some indications that online learning is here to stay in some format. First, attending university is expensive. The average total cost for a four-year baccalaureate degree is $99,476 at public four-year institutions and $207,496 at private non-profit schools.[28] Pre-COVID, some universities had already started rolling out high-quality online education programs that are much less expensive. For example, Georgia Tech created an online master's in computer science in 2014, which at $7,000, costs one-sixth of its in-person program. It is now the largest computer science program in the country with 10,000 students enrolled. The University of Illinois created an online MBA in 2015 at a cost of $22,000, which is significantly lower than other programs at the university. MIT also created online courses pre-COVID.[29]

Online programs are highly unlikely to replace the university experience over the long term for those attending four-year public schools. A May 2020 survey of students at 491 institutions in 47 states indicated that 89% intended to enroll in the fall, 59% were ready to attend classes in person and 53% felt ready to live on or near campus.[30] By July, still in the midst of the pandemic, a second survey indicated that 76% of students were ready to return to campus.[31]

While online programs cannot replace the experience of attending a four-year college or the experience of hands-on labs and in-person instructors, they do extend educational programs to a broader potential student base, providing a good alternative for some portion of the population. They may also offer students an opportunity to accumulate credits at a lower cost.

Admission requirements are important. Lax admission requirements were another factor that led to the demise of for-profit schools. In 2006, 51% of four-year, for-profit institutions had open enrollment policies. Only 41% of those open-enrollment, first-time degree seekers returned the following year. Furthermore, only 32% of open-enrollment, for-profit students graduated, 0.3% transferred out and 66% unenrolled or their status was unknown.[32]

While the statistics improve somewhat for for-profit schools with tighter admission standards, the results remain abysmal across the spectrum, with 31% graduating and 64% unenrolled/unknown.[33] Consequently open admissions enrollment fell precipitously from 2014 to 2016 and accounted for almost all of the enrollment decline in for-profit universities.[34] Total for-profit enrollment fell from 1.6 million in 2010 to 829,060 by 2018 as the for-profit model began to unravel.

The decline is important, because 83% of students in for-profit schools are in four-year programs and 61% are full time (55% of four-year for-profit students are full time),[35] so the majority of students appear to be attempting to attain a degree. The enrollment decline disproportionately impacted women, who account for nearly two-thirds of for-profit enrollment, compared to 55% of non-profit four-year universities, and the Black

population, which accounts for 29% of for-profit enrollment, compared to 11% of non-profit four-year universities as of 2018. [36]

Two-year institutions faced similar criticism. With abysmal performance records, governments stopped funding many underperforming schools after the 2008 recession. This resulted in public two-year enrollment dropping from a peak of 7.2 million in 2010 to 5.5 million in 2018. Performance continues to remain subpar with only 32.6% of students in two-year institutions completing a program within three years as of 2015.[37]

Economic Distress Plays a Role

Typically rising post-secondary enrollment rates in the face of rising unemployment have given student housing property owners a buffer to economic distress. In the last economic cycle, unemployment rates bottomed at 4.4% in 2006 and peaked at 9.9% in 2009.[38] During that time, the percent of 18- to 24-year-olds enrolled in college rose from 37.3% in 2006 to a peak of 42% in 2011. Enrollment rates have held in the 40-41% range since then.[39]

Notwithstanding the higher recession-level enrollment rates, the 2008 economic crisis severely impacted the financial state of the education system because most public post-secondary schools rely on state funding to fund part of their budget.[40] **As states sought to close the budget gap created by the 2008 recession, their funding of public four-year universities dropped from 27% of revenues in 2007-08 to 21% in 2010-11.** State funding did not return to 2007-08 levels until 2015-16, and in some states, it has never returned to pre–2008 recession levels.

Schools made up for the gap in revenues by raising tuition and fees. Over the past decade, tuition, fees, and room and board increased by 27% for all four-year public schools.[41] That includes a 30% increase for tuition and fees and a 30% increase for dormitory rooms.[42] Fees generally increase more rapidly after recessions, rising, for example, by an average of 4.8% per year from 2008 through the 2011-12 school year compared to the average 1.2% in the years following.

Schools accepted more international students. There are nearly one million international students (5% of total enrollment) enrolled in U.S. degree-granting institutions. This is up from 782,891 (3.8%) in 2012 and 528,692 (3.5%) during the 2000-01 school year.[43] In comparison, the number of U.S. students spending time studying abroad has risen 37.6% over the past decade. In 2006-07, 242,000 students studied abroad. A decade later, that number had risen to 333,000. Looking at the distribution of the students' academic standing, one-third are juniors and 27% are seniors.[44] If fewer upper-class students go abroad due to COVID or general

costs, this may slightly increase demand for off-campus student housing at U.S institutions, at least in the near term.

Private schools' higher tuition costs came under pressure after the 2008 downturn. Grants and scholarships, which remained steady for first-time, full-time degree-/certificate-seeking students at public schools after the 2008 recession, increased from 42% of tuition revenues in 2009 for private non-profit schools to 45% in 2015, and from 16% to 21%[45] for private for-profit schools. This put further downward pressure on total revenues, particularly since tuition accounts for 94% of revenues for private for-profit schools.[46]

Unfortunately, financial aid has not kept up with the increase in costs. The net price for first-time, full-time students at four-year institutions increased from $15,900 in 2009-10 to $17,750 in 2015-16. The net price for public institutions has increased from $11,070 to $13,110. The cost for private non-profit schools has risen from $21,780 to $25,720.[47]

The extremely high unemployment rates in the 2020 recession (which reached 14.7% in April 2020) could put monetary stress on both potential students as well as schools. This, in turn, could put upward pressure on tuition rates and downward pressure on enrollment rates.

Type of School and Geography Matters

Enrollment is much steadier at public and non-profit, four-year universities. The number of students attending all four-year institutions continues to rise, reaching 13.8 million in 2017, a 4% increase since 2010. Part-time enrollment increased by 10% over that same time period. Growth rates at public universities, however, are even stronger. Their full-time enrollment is up 9% since 2010, and their part-time enrollment has increased 20%.[48]

Notably, there are significant gender differences in the growth figures for part-time enrollment. Male part-time enrollment increased 25%, compared to 17% for females. While part-time females still outnumber males by almost 400,000, that gap is shrinking.[49]

The relationship between state support for higher education and enrollment increases is modest. For example, between 2008 and 2018, Illinois had the greatest increase in state and local support for public higher education,[50] yet the state had the seventh largest *decline* in enrollment in terms of age.[51] Meanwhile, California ranked seventh in enrollment increase (which was closer to flat than strong growth) despite having the third largest increase in state and local funding. Oklahoma and Pennsylvania showed some of the biggest declines in funding and had significant enrollment declines.

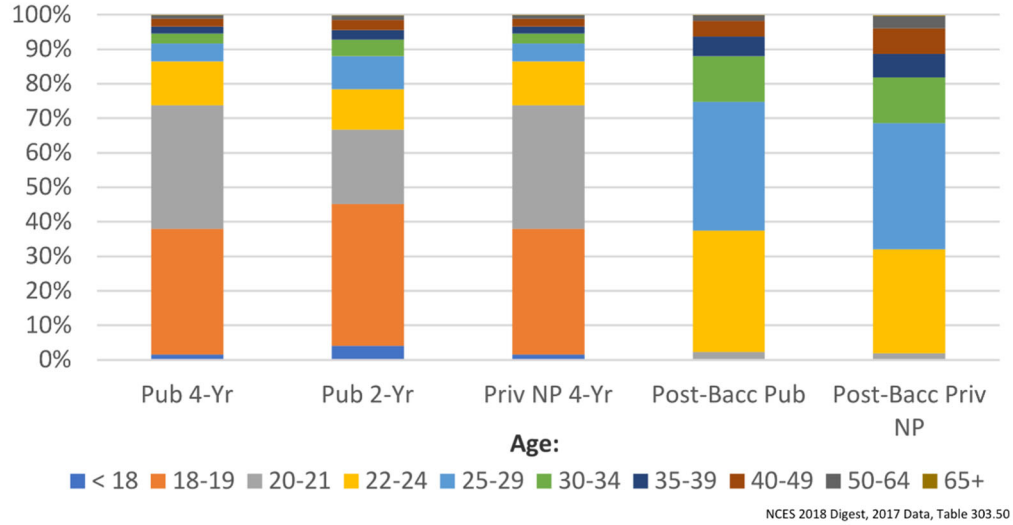
As discussed later in the paper, a majority of students attend college in their home state. Surprisingly, the relationship between the growth rate of the 18- to 24-year-old population in a

state and the growth rate of post-secondary enrollment in that state is weak, at a 0.10 correlation. Given the lower tuition rates for in-state public two-year and four-year schools, one would expect to see an increase in post-secondary enrollment in states with an increase in 18- to 24-year-olds. The data does not reflect this, however, suggesting that other factors are important for driving student enrollment in addition to age demographics. Some of the weak correlation could be a function of timing. With knowledge of the demographic trends, schools may slowly increase the size of the student body in anticipation of the upcoming enrollment boom, thus weakening the correlation. Conversely, schools can adjust to lower application rates by adjusting the acceptance rate.

Enrollment by Age Varies by Institution Type

As shown in Figure 8, student age varies by type of institution. Public four-year baccalaureate schools, which include 7.4 million students, are the largest component of post-secondary enrollment and typically cater to full-time students (who comprise 74% of total students). 76% of the public four-year baccalaureate students are between the ages of 18 and 24. Private non-profit four-year schools have similar enrollment trends with 74% of students between 18 to 24 years old.

Figure 8: Full-Time Total Fall Enrollment in Degree-Granting Post-Secondary Institutions, by Age

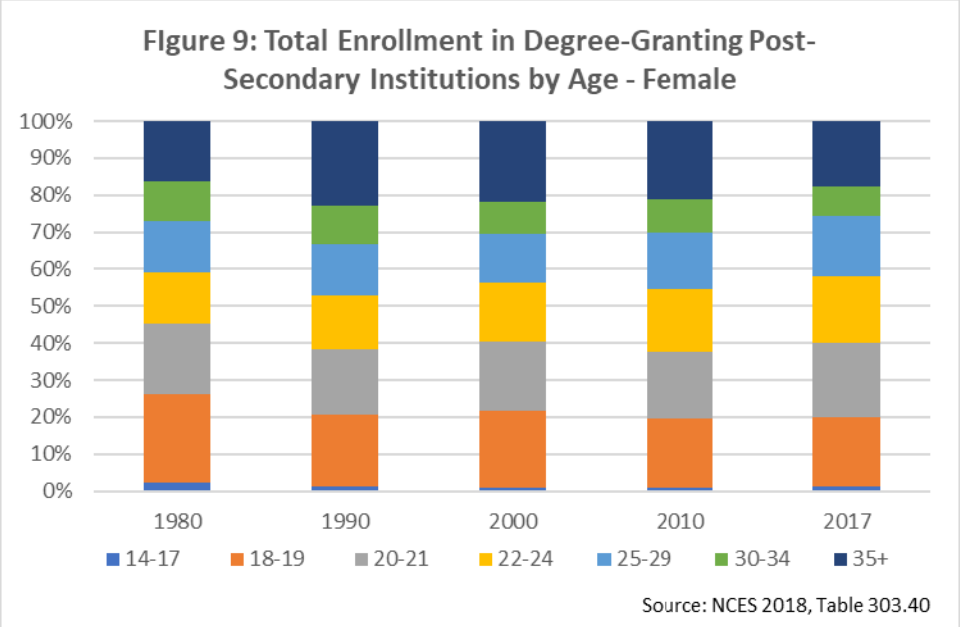


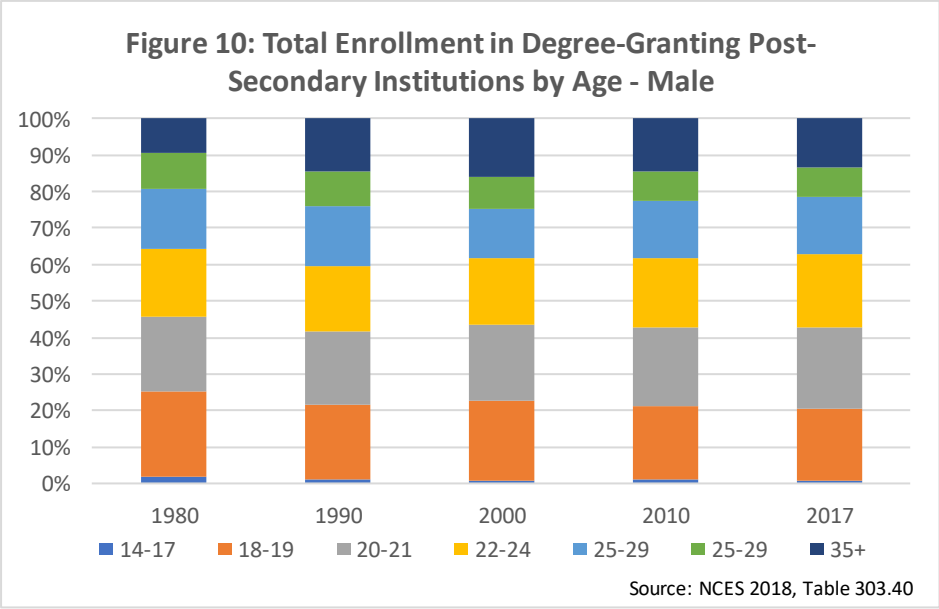
NCES 2018 Digest, 2017 Data, Table 303.50

Public two-year schools are the second most common type of post-secondary education, with 5.7 million undergraduate students. This cohort is younger. First, it has a significant component of students who are under 18 years old. This age group increased from 7.1% of students in 2013 to 13.2% in 2017,[52] an indication of growing flex formats that allow

high school students to take courses at community colleges that count for college credit. In fact, only 35% of two-year public students are full time. Another 54% of two-year public undergraduate students are aged 18 to 24. Post-baccalaureate students, including 3 million students, are older, with 70% aged 22 to 34.

We see little significant variance in these trends by age since 2000 (see Figures 9 and 10). Women, who account for 60% of post-baccalaureate students and 63% of part-time students,[53] tend to be older. Fully 26% are older than 30 years old, compared to 21% of men.[54]





College-Aged Population is Geographically Concentrated

Location is another critical factor to be considered. Of the 19.8 million students enrolled in degree-granting post-secondary institutions, 50% are enrolled in just nine states and 75% are enrolled in the top 20 states, as shown in Table 1.

Table 1: Location of Students in Post-Secondary Institutions

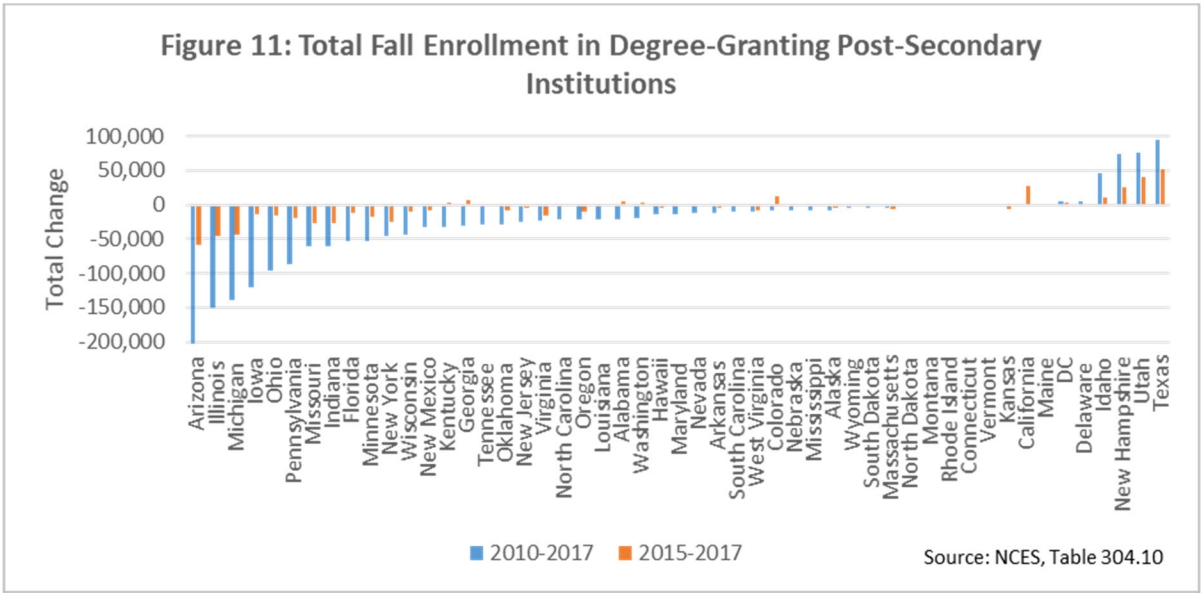
State	Enrollment	% of Total	Cumulative % of Total
US	**19,765,598**		
California	2,714,051	14%	14%
Texas	1,630,516	8%	22%
New York	1,260,240	6%	28%
Florida	1,071,484	5%	34%
Illinois	757,002	4%	38%
Pennsylvania	717,289	4%	41%
Ohio	649,687	3%	45%
Arizona	591,626	3%	48%
North Carolina	563,831	3%	50%
Michigan	558,053	3%	53%
Virginia	554,212	3%	56%
Georgia	538,124	3%	59%
Massachusetts	503,508	3%	61%
New Jersey	419,037	2%	63%
Minnesota	412,966	2%	65%
Indiana	398,804	2%	67%
Missouri	383,489	2%	69%
Washington	367,944	2%	71%
Maryland	364,207	2%	73%
Colorado	360,236	2%	75%

Source: NCES Table 304.10

Enrollment growth is even more concentrated because of the U.S. population's aging dynamics. As shown in Figure 11, most states experienced a decline in enrollment in recent years. However, a few outliers in unexpected places experienced growth. For example, New Hampshire enrollment increased 97.5% from 2010 to 2017. All the growth can be attributed to Southern New Hampshire University, where enrollment increased 1,000%. Almost all of the additional enrollment was online, however, not on-campus. As schools change formats, there may be an opportunity to capture some of this online growth. For example, if an online school has a weekly in-residence program, there may be an opportunity to provide temporary student housing. Other states with large enrollment *increases*

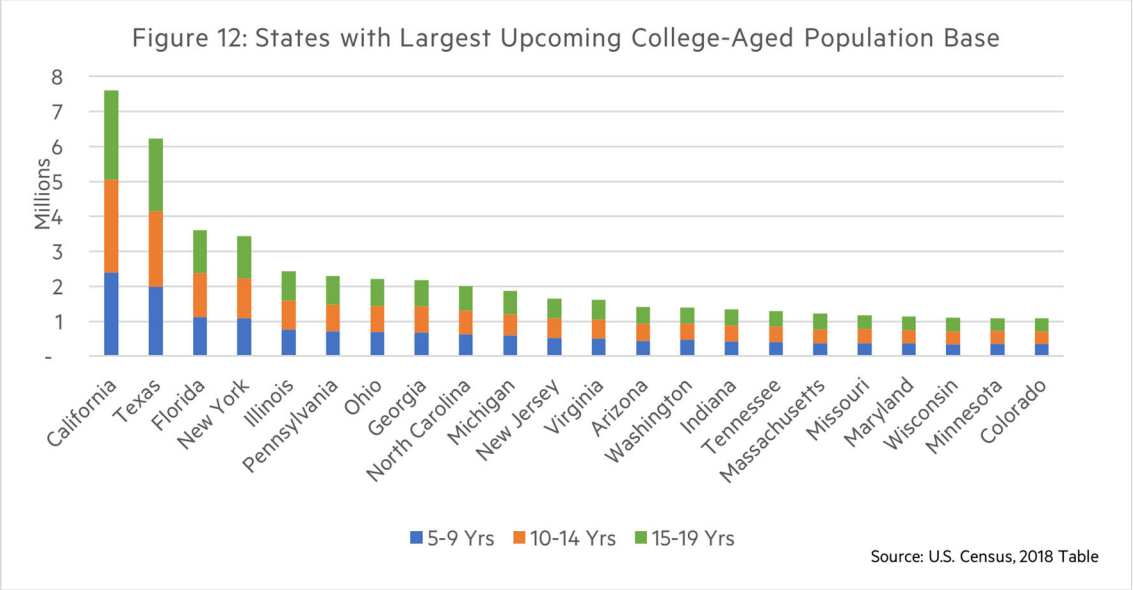
are Texas, Utah and Idaho. Utah's growth was largely from another online school, Western Governors University.[55]

States with significant *decreases* in enrollment include Iowa, Michigan, Illinois and Arizona. Two for-profit entities explain Iowa and Arizona. Enrollment at Kaplan University in Davenport, IA decreased by 57% from 2010 to 2017, and in Arizona the University of Phoenix's enrollment fell by 67%. Large declines also occurred at several community colleges in Arizona. Although the focus of this paper is student housing, it is important to understand trends and outliers in the broader higher education ecosystem. Investors seeing headlines might not understand all the nuances, so knowing the facts allows the managers of housing providers to explain these facts to them.[56]

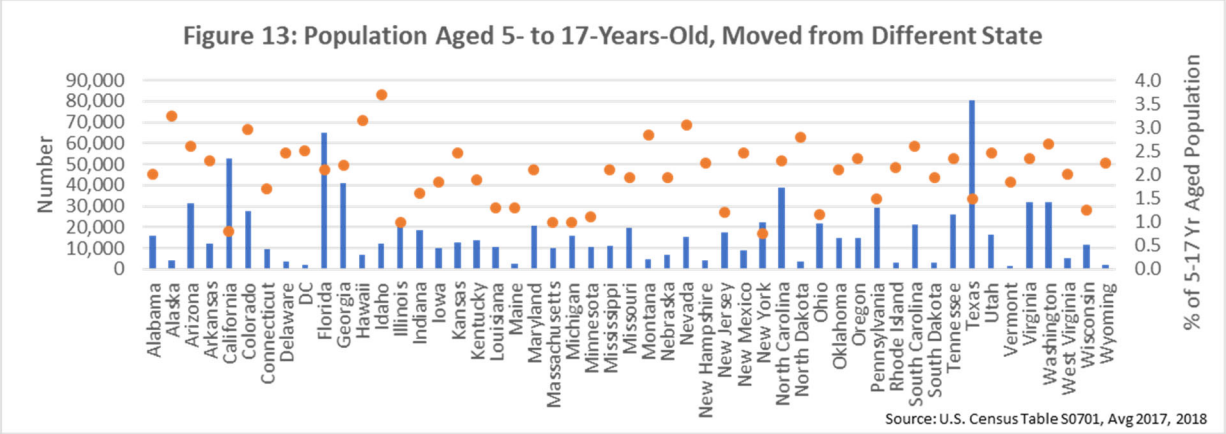


Going forward, demand is expected to remain concentrated geographically, since 22% of 5- to 19-year-olds live in two states—California and Texas (see Figure 12).[57] The top five states, which are rounded out with Florida, New York and Illinois, account for 37% of the 5 to 19 age cohort, and the top 10 states account for 51% of that age cohort.[58]

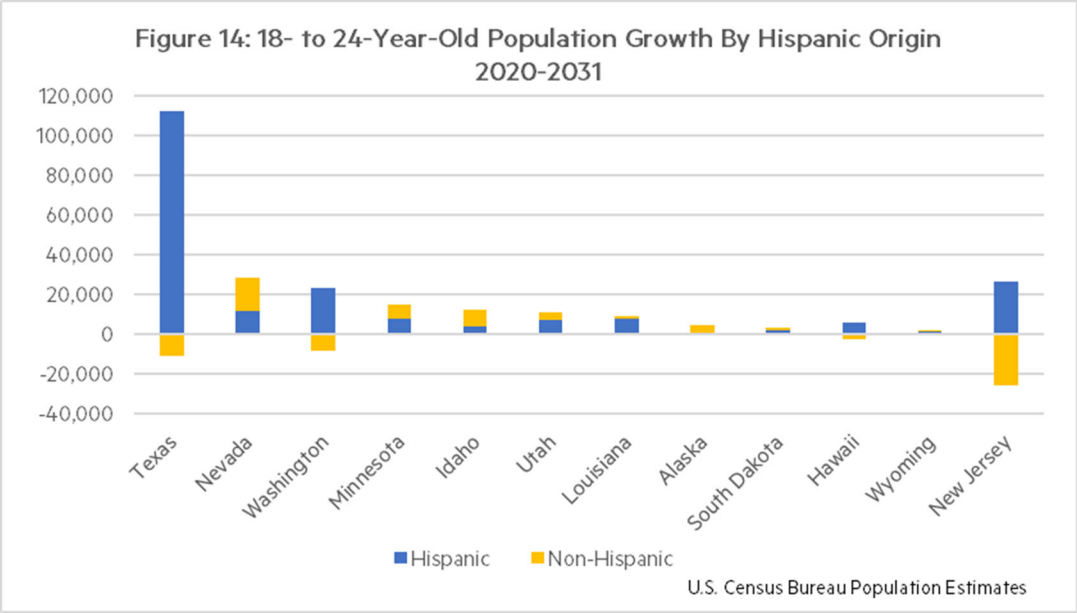
California and Texas will account for the majority of growth in college-aged students in the near-term as measured by the difference in the 10- to 14-year-old age cohort (as of 2018) and the 15- to 19-year-old age cohort.[59] California will add another 88,000 people to the 15- to 19-year age cohort by 2023, while Texas will add 102,000. Other states that will add at least 10,000 in this cohort by the end of 2023 include Arizona (11,400), Florida (10,600), Minnesota (14,000), Nevada (19,300), New Jersey (16,800), Utah (20,800) and Washington (15,600). However, in the five years following 2023, all states will lose population in the 15- to 19-year-old age segment.



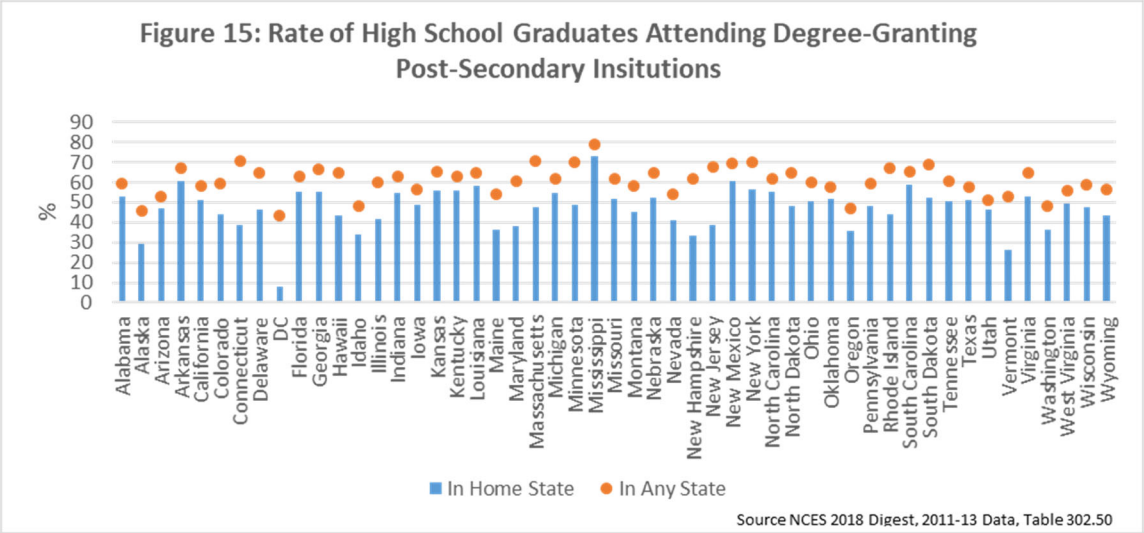
While these figures could be impacted somewhat by in-migration from other states, Census data shows that most states have in-migration rates of only 1% to 3% of the total population aged 5 to 17. States with the largest number of 5- to 17-year-olds that have migrated into the state include Texas, Florida, California, Georgia and North Carolina (see Figure 13). In-migrants from out of state account for 3% or more of 5- to 19-year-olds in Idaho, Hawaii, Alaska, Nevada, Montana and Colorado.



Student populations will also become more diverse since population growth will primarily come from Hispanic segments of the population. Figure 14 shows projected population growth by state of Hispanic college entrants over the next 10 years[60] for states ranked by total growth in the college-aged population.[61] As noted earlier, a large portion of near-term growth across most states will come from people of Hispanic origin, although longer-term population growth turns negative across all states and race/ethnicity breakdowns.



Most high school graduates who attend college go to a university in their home state (50%), while only 11.7% attend school in another state.[62] However, those figures vary widely by state (see Figure 15).



Students in smaller states, particularly in more densely populated parts of the East Coast, tend to attend school out of state (e.g. Connecticut, DC, New Hampshire, New Jersey and Vermont), whereas students in the South tend to attend schools in their home state (e.g. Alabama, Arizona, Arkansas, Florida, Indiana, Kansas, Kentucky, Louisiana, Michigan, Mississippi, North and South Carolina, Oklahoma, Utah and West Virginia).

Thus, some of the decline in student population due to corresponding declines in age cohorts could be offset by in-migration from other states. We reviewed the 5- to 9-year-old cohort in each state compared to the 20- to 24-year-old cohort to see where population

declines will be most significant. A few states have a larger 5- to 9-year-old cohort than 20- to 24-year-old cohort. These states, which include Alaska, Hawaii, Idaho, Maryland, Minnesota, Nevada, Oklahoma, South Dakota, Texas, Utah and Wyoming, do not necessarily need in-migration, at least for this age segment.

On the other hand, states with smaller 5- to 9-year-old cohorts than 20- to 24-year-old cohorts will need in-migration to make up that difference. We compared the in-migration pace needed to make up the difference to the actual percentage of the population who moved from other states as of 2018, in order to see if there is a precedent for the level of migration needed to make up the difference. In a few states, current migration patterns do tend to support the level of migration needed to offset declines in state population by age group. These states include Delaware, DC, Louisiana and Washington. The remaining states do not currently show migration patterns that will offset the smaller upcoming age cohorts. States with the biggest deficits (most likely to face student population declines) are highly concentrated in the Northeast and include Vermont, Rhode Island, North Dakota, New Hampshire, Massachusetts and Connecticut.

Top Growth Universities

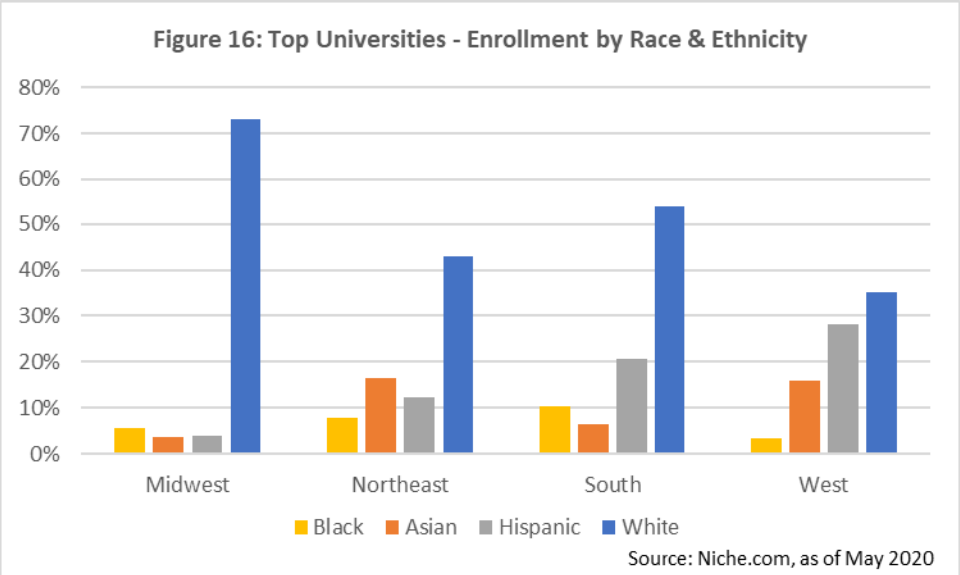
We reviewed the enrollment trends of 311 public and private schools. Appendix A shows characteristics of the top 50 schools with the highest enrollment growth trends from 2010 to 2017, excluding schools that are primarily online and/or have 100% acceptance rates. **Of these schools, 14 are in California, eight are in Texas, four are in Georgia, three are in Arizona** and two each are in the following states: Alabama, Florida, New Jersey, New York, and South Carolina.[63]

These high-growth schools are generally public schools (46 of 50) with fairly good academics (33 have an academic score of B+ or better[64]) and an ability to retain students (average retention of full-time first-year students is 85%). Only 15 of the schools on the list have acceptance rates of less than 50%. The median acceptance rate is 63%.

These schools are relatively affordable—23 have a net price per year of less than $15,000 and only six have a net price of over $20,000 per year. 84% of students at these schools receive financial aid, with a median financial aid package of $9,666.[65] While household incomes vary, **these are fairly wealthy student population bases.** On average, 23% of student households have a household income of $110,000 or more. In only six schools do the $110,000 households make up less than 10% of the student population. Overall, these are typical four-year public schools with 87% of undergraduates full time, 76% aged less than 22 and 53% female. All of them offer study abroad programs, and 21 offer evening degree programs. Pre-COVID, none offered distance education programs.

On average 20% of students at these schools are from out of state and 5% are international. There are some significant variations by school on these metrics. 18 schools attract more than 25% of their student body from out of state, and 11 attract more than 40%. 11 schools on the list attract at least 10% of their students from out of the country. **In aggregate, one in four students at these schools are either out-of-state or foreign students.** Understanding who is enrolling and what their needs may be (e.g. potentially the need for extra storage for out-of-state and foreign students) is increasingly important as the student housing landscape becomes more competitive and students have additional choices for living arrangements.[66]

There is also a large divergence in enrollment demographics by race as shown in Figure 16. Schools in the West region tend to be highly diverse. At the other extreme, more than 70% of the student population in Midwestern schools is white.



On average, only 24% of students at these schools live in university-owned housing. In only 10 schools do more than a third of students live in university housing. Dorm quality is considered by students to be fair with a B- score in Niche.com surveys. Only seven universities received a dorm quality rating of A or better. On-campus housing costs, on average, $7,181 per year, but this cost ranges from around $4,000 to $13,000 per year depending on location.

Broader Trends by University Type

A number of schools in the larger databases experienced declining enrollment trends. As a broad generalization, many of the schools with the largest declines in enrollment were for-profit universities. Five of the 12 for-profit, four-year universities in the NCES data experienced enrollment declines greater than 25% from 2010 to 2017. Looking at the private non-profit schools, only one of the 35 schools had an enrollment decline greater than 20%.[67]

Within the public university community, the performance of two- and four-year schools was bifurcated. 15 of 79 two-year schools had enrollment declines greater than 20%, but six showed increases greater than 20%. By contrast, there are 201 four-year schools. 33 had enrollment increases greater than 20%, while six declined by more than 20%. Most of the significant gainers were not state flagship universities. Instead, they were regional or commuter schools that have transitioned or are transitioning to a more campus-like setting. Many of the schools that gained enrollment are in the South and the West, but some schools in the Midwest and Northeast also posted significant enrollment increases.

While for-profit and online schools are not traditional targets for student housing, their data is included in certain metrics and news stories. Understanding the trends in these schools is important, especially since some of that online activity is a leading indicator for the more traditional universities that student housing investors target. Grand Canyon University and Chamberlain University, for example, were the two private for-profit schools with the largest enrollment gains from 2010 to 2017. Both increased enrollment gains of greater than 25,000 students. Meanwhile, the University of Phoenix lost over 200,000 students during that time period. DeVry University, Ashford University and Kaplan University, Davenport Campus also experienced enrollment declines greater than 20,000 students. Almost all the overall enrollment change in the data came from online students.

Within the private non-profit group, Southern New Hampshire posted the greatest enrollment increase with the addition of more than 82,000 students. As previously mentioned, most of this was related to online enrollment. Other schools in this group with big gains include Western Governors University, Brigham Young University, Idaho (BYU-Idaho)[68] and Liberty University. That has led to the dramatic increase in on-campus enrollment. Both Liberty and BYU have generated significant increases in on-campus populations in addition to a growth in online enrollment.

Ivy Tech Community College is the largest singly accredited statewide community college system in the country. Their 200,000–person student population is spread over 40 locations. Over the past eight years it has added more than 50,000 students to the student body. Other two-year community colleges with significant enrollment gains include Lone Star College System and Saint Louis Community College. Within the four-year schools,

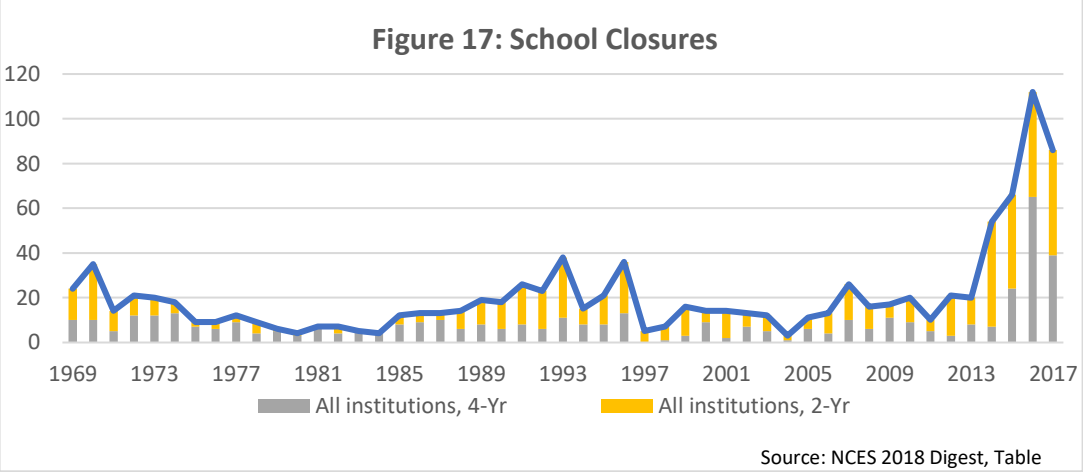
University of Maryland, Texas A&M-College Station, Florida International, Rutgers and University of Texas at Arlington and at Dallas all added more than 10,000 students.[69]

Data from RealPage, which comprises a slightly different data set than NCES, shows a similar trend of Southern and Western states recording the greatest growth. Arizona State shows the greatest growth over a 10-year period ending with 2018 fall enrollment.[70] They are followed by University of Central Florida, University of Texas-Arlington, Texas A&M, Kennesaw State University and University of Texas-Dallas. Six of the 15 schools are based in Texas. Florida and Georgia are the only other states in the top 15 with more than one school.

Looking at schools with enrollment declines, Southern Illinois experienced the greatest enrollment decline from 2010 to 2017, followed by Akron and Eastern Illinois. Within the bottom 15 are three Michigan schools, two Illinois schools and two Ohio schools. All the other schools hail from the Midwest or Northeast except for New Mexico State and Middle Tennessee State.

A similar pattern holds in the data when looking at percentage gain rather than student enrollment. The biggest outlier is the University of Massachusetts-Lowell, whose student body has grown by 34% over the past decade. That is the only high-growth school outside of the South and West.

Looking back as far as the data goes, there have always been schools that close. Most years, anywhere from 10 to 30 schools close (see Figure 17). Since the 2014-15 school year the rate of closures has accelerated. During the 2014-15 school year, 54 schools closed. 47 of those schools were two-year—the highest total going back to 1969 and matched in 2016-17 and 2017-18—and seven were four-year. Of the 54 closed schools, 49 were for-profit institutions. The number of closures rose to 66 the following year and peaked in 2016-17 at 112. The number of closures fell to 86 in 2017-18, which is the second highest total in the series. A large majority of the closings were for-profit institutions. The crackdown previously discussed that impacted enrollment also led to significant closures.[71]



Data for 2018-19 is not yet available, but anecdotal evidence suggests that the number of school closures remained high. If the number of schools continues to shrink, this could benefit existing schools nearby. If the supply of schools falls faster than demand, enrollment and housing needs at the remaining schools could increase.

Even though most of the schools that closed were for-profit, the number of non-profit institutions that closed in 2016-17 and 2017-18 were the highest the data series has seen. There was a similar spike in closures for non-profit schools in the early 1990s, before the number of closures declined.

Conclusion

With 46 million people reaching college age in the next 10 years, there will continue to be significant demand for student housing. However, successful student housing operators will need to focus more than ever on university operating models, market demographics, pricing metrics and amenities that create profitable housing models. These may not necessarily be the highest-priced or best-amenitized units. In fact, the COVID-19 pandemic will likely have long-lasting implications on the student housing market, primarily in the form of reduced state budgets for public schools, the most consistent generators of student housing demand. This will likely put upward pressure on tuition rates, which will create higher demand for affordable housing.

The COVID-19 pandemic also pushed universities quickly into online and distance-learning models. While e-learning has proven to increase enrollment rates historically, particularly through privately funded schools, it has yet to prove as either a highly successful educational tool or a successful business model. A number of high-quality schools had started testing online models well before COVID-19 struck, however.

The combination of a smaller demographic cohort, rising tuition and online learning will push universities into a new operating realm, beyond even the aftermath of the 2008 Great Financial Crisis. Affordable and quality housing may be a differentiator for schools that will need to draw students from a broader trade area or to compete for a declining college-aged population. This may be more feasible in markets that maintain supply-demand balances and where public-private partnerships can mediate university costs in delivering quality housing.

Appendix A: Top Growth Schools

School	Region	MSA	State	University Type	2017 Enrollment	Enrollment Change 2017-2010	Enrollment Growth 2017/2010	Enrollment Growth 2017/2016	Enrollment Growth 2018/2017	Academic Quality Grade	Acceptance Rate	Net Price per Year	% Receiving Financial Aid	Avg Financial Aid	Full Time Retention Rate	Graduation Rate	Evening Degree Program?	Distance Education ?	Study Abroad?
Arizona State University	West	Tempe	AZ	Public	80,364	21,993	37.7%	4.6%	6.5%	A-	85%	$ 13,731	96%	$ 12,060	88%	69%	Y	N	Y
Texas A&M University	South	College Station	TX	Public	61,855	12,726	25.9%	2.3%	3.7%	A+	68%	$ 19,118	76%	$ 9,597	92%	82%	Y	N	Y
University of Texas - Rio Grande Valley - Brownsville	South	Brownsville	TN	Public	11,587	12,659	83.1%	0.5%	0.6%	B	81%	$ 4,319	93%	$ 9,277	76%	46%	Y	N	Y
Kennesaw State University	South	Kennesaw	GA	Public	35,846	12,394	52.8%	2.4%	-1.2%	B	58%	$ 17,618	91%	$ 6,170	79%	43%	Y	N	Y
Rutgers University - New Brunswick	Northeast	Piscataway	NJ	Public	49,577	10,665	27.4%	-1.1%	1.4%	A	60%	$ 16,295	69%	$ 14,107	93%	80%	Y	N	Y
University of Texas at Dallas	South	Richardson	TX	Public	27,642	10,514	61.4%	3.2%	4.0%	A-	69%	$ 9,989	77%	$ 14,566	88%	72%	N	N	Y
University of Central Florida	South	Orlando	FL	Public	65,698	9,463	16.8%	2.9%	3.6%	A-	43%	$ 13,016	90%	$ 8,057	90%	73%	N	N	Y
Florida International University	South	Miami	FL	Public	51,137	8,850	20.9%	0.3%	0.6%	B+	59%	$ 9,180	89%	$ 9,973	90%	58%	Y	N	Y
University of Southern California	West	Los Angeles	CA	Private	45,687	8,791	23.8%	4.1%	3.6%	A+	13%	$ 36,161	69%	$ 35,953	97%	92%	N	N	Y
University of Texas at Arlington	South	Arlington	TX	Public	41,712	8,737	26.5%	5.0%	1.9%	B+	80%	$ 12,277	91%	$ 10,281	74%	49%	Y	N	Y
Georgia Institute of Technology	South	Atlanta	GA	Public	29,376	8,656	41.8%	9.5%	11.4%	A+	22%	$ 16,950	79%	$ 12,716	97%	87%	Y	N	Y
University of Alabama	South	Tuscaloosa	AL	Public	38,563	8,436	28.0%	2.4%	-0.4%	A-	59%	$ 20,465	80%	$ 16,693	88%	72%	Y	N	Y
University of California - Irvine	West	Irvine	CA	Public	35,242	8,248	30.6%	7.6%	2.2%	A	29%	$ 15,014	68%	$ 18,605	93%	83%	N	N	Y
California State University - Los Angeles	West	Los Angeles	CA	Public	28,253	8,111	40.3%	1.5%	-2.0%	B-	42%	$ 4,403	94%	$ 10,252	82%	48%	N	N	Y
New York University	Northeast	New York	NY	Private	51,123	7,326	16.7%	1.1%	1.4%	A+	20%	$ 39,935	51%	$ 29,832	94%	85%	N	N	Y
Iowa State University	Midwest	Ames	IA	Public	35,993	7,311	25.5%	-1.0%	-2.8%	A-	91%	$ 14,643	89%	$ 7,990	87%	75%	Y	N	Y
Columbia University	Northeast	New York	NY	Private	32,429	7,221	28.6%	3.6%	1.9%	A+	6%	$ 21,220	58%	$ 53,284	98%	96%	N	N	Y
Rowan University	Northeast	Glassboro	NJ	Public	18,484	7,184	63.6%	6.4%	5.3%	B	73%	$ 21,535	84%	$ 9,523	84%	72%	N	N	Y
Oregon State University	West	Corvallis	OR	Public	30,896	7,135	30.0%	1.8%	0.3%	B+	81%	$ 18,625	86%	$ 8,170	84%	67%	N	N	Y
University of Houston	South	Houston	TX	Public	45,364	6,612	17.1%	3.6%	2.1%	A-	62%	$ 16,002	86%	$ 9,336	85%	59%	Y	N	Y
University of California - San Diego	West	LaJolla	CA	Public	35,772	6,596	22.6%	2.3%	5.9%	A	30%	$ 13,452	63%	$ 19,393	94%	86%	N	N	Y
University of Arkansas	South	Fayetteville	AR	Public	27,558	6,153	28.7%	1.3%	0.8%	A-	77%	$ 15,781	77%	$ 7,210	84%	66%	N	N	Y
Texas State University	South	San Marcos	TX	Public	38,666	6,094	18.7%	-0.4%	-0.1%	B	46%	$ 13,729	82%	$ 10,209	77%	55%	Y	N	Y
University of California - Berkeley	West	Berkeley	CA	Public	41,910	6,072	16.9%	4.3%	1.4%	A+	15%	$ 17,862	60%	$ 18,735	97%	91%	N	N	Y
University of California - Davis	West	Davis	CA	Public	37,278	5,886	18.8%	2.3%	2.0%	A	41%	$ 15,724	67%	$ 20,415	92%	86%	N	N	Y
Northern Arizona University	West	Flagstaff	AZ	Public	31,057	5,853	23.2%	2.3%	0.1%	B	83%	$ 14,882	94%	$ 10,562	73%	52%	N	N	Y
University of California - Los Angeles	West	Los Angeles	CA	Public	45,428	5,835	14.7%	1.1%	1.1%	A+	14%	$ 15,002	64%	$ 19,744	97%	91%	N	N	Y
University of Arizona	West	Tucson	AZ	Public	44,831	5,745	14.7%	2.8%	0.9%	A	84%	$ 15,594	92%	$ 12,043	81%	64%	Y	N	Y
Texas Tech University	South	Lubbock	TX	Public	36,996	5,359	16.9%	1.2%	3.3%	B+	71%	$ 15,531	78%	$ 7,454	85%	60%	Y	N	Y
California State Polytechnic University - Pomona	West	Pomona	CA	Public	25,894	5,147	24.8%	2.2%	2.1%	B	55%	$ 12,744	79%	$ 8,128	87%	71%	N	N	Y
University of South Carolina	South	Columbia	SC	Public	34,731	5,134	17.3%	1.9%	0.2%	A-	63%	$ 20,181	91%	$ 6,642	88%	77%	Y	N	Y
Clemson University	South	Clemson	SC	Public	24,387	4,934	25.4%	4.2%	2.3%	A	47%	$ 19,508	93%	$ 10,698	93%	83%	N	N	Y
University of Cincinnati	Midwest	Cincinnati	OH	Public	37,204	4,921	15.2%	1.5%	2.3%	A-	73%	$ 20,085	83%	$ 7,376	86%	68%	Y	N	Y
University of Mississippi	South	University	MS	Public	20,351	4,846	31.3%	-0.5%	-6.1%	B+	88%	$ 14,459	87%	$ 11,209	85%	64%	Y	N	Y
San Diego State University	West	San Diego	CA	Public	33,917	4,730	16.2%	0.4%	-0.1%	B+	35%	$ 14,568	60%	$ 8,006	89%	74%	N	N	Y
Auburn University	South	Auburn	AL	Public	29,776	4,698	18.7%	5.3%	2.2%	A-	75%	$ 23,205	75%	$ 9,634	90%	78%	N	N	Y
Old Dominion University	South	Norfolk	VA	Public	24,375	4,470	22.5%	0.2%	-0.8%	B-	87%	$ 15,917	93%	$ 7,692	79%	52%	Y	N	Y
Washington State University	West	Pullman	WA	Public	30,614	4,306	16.4%	1.6%	2.8%	A-	77%	$ 17,297	90%	$ 9,112	79%	59%	N	N	Y
University of North Carolina - Charlotte	South	Charlotte	NC	Public	29,317	4,254	17.0%	2.1%	1.3%	B+	67%	$ 14,987	74%	$ 7,737	82%	59%	Y	N	Y
California State University - Fresno	West	Fresno	CA	Public	25,168	4,236	20.2%	3.1%	-0.7%	B	58%	$ 6,771	90%	$ 10,233	81%	54%	N	N	Y
California State University - San Marcos	West	San Marcos	CA	Public	13,887	4,165	42.8%	5.7%	4.4%	B-	58%	$ 12,614	82%	$ 9,154	77%	55%	N	N	Y
Boise State University	West	Boise	ID	Public	24,154	4,162	20.8%	1.1%	5.7%	B	81%	$ 12,558	84%	$ 10,533	79%	46%	Y	N	Y
California State University - San Bernardino	West	San Bernardino	CA	Public	20,461	4,061	24.8%	-1.5%	-2.4%	B-	55%	$ 8,586	93%	$ 9,697	86%	57%	N	N	Y
University of North Georgia	South	Dahlonega	GA	Public	18,782	3,986	26.9%	3.1%	4.1%	B-	81%	$ 10,264	86%	$ 5,514	79%	34%	N	N	Y
University of Nevada - Reno	West	Reno	NV	Public	21,657	3,978	22.5%	1.4%	-0.9%	B+	88%	$ 15,723	89%	$ 6,548	81%	58%	N	N	Y
University of Texas at Tyler	South	Tyler	TX	Public	10,400	3,924	60.6%	5.7%	-1.9%	B	78%	$ 12,437	82%	$ 6,982	62%	45%	N	N	Y
California Polytechnic State University	West	San Luis Obispo	CA	Public	22,188	3,828	20.8%	4.1%	-1.7%	A	30%	$ 20,036	64%	$ 5,836	94%	82%	N	N	Y
Tarleton State University	South	Stephenville	TX	Public	13,019	3,679	39.4%	-0.3%	0.7%	B	55%	$ 12,352	89%	$ 8,002	70%	46%	Y	N	Y
California State University, East Bay	West	Hayward	CA	Public	16,538	3,649	28.3%	4.3%	-12.2%	C+	72%	$ 11,422	83%	$ 9,244	76%	48%	N	N	Y
Savannah College of Art & Design	South	Savannah	GA	Private	13,697	3,377	32.7%	6.5%	7.0%	B-	70%	$ 43,331	98%	$ 12,456	84%	68%	N	N	Y

Appendix A: Top Growth Schools (Additional Data)

School	Full Time Undergrad	Part Time Undergrad	% Full Time Undergrad	% <22 yrs old	% female	% Out of State	% Interntl	% HH Income > $110k	% Black	% Asian	% Hispanic	% White	Dorm Quality	% Undergrads in College Housing	Avg Housing Cost
Arizona State University	39,396	3,448	92%	78%	45%	33%	6%	17%	4%	7%	21%	50%	B	21%	$ 7,600
Texas A&M University	47,399	6,344	88%	79%	48%	5%	1%	28%	3%	7%	23%	62%	B	24%	na
University of Texas - Rio Grande Valley - Brownsville	19,128	5,550	78%	70%	57%	0%	1%	4%	0%	1%	90%	3%	NA	4%	na
Kennesaw State University	24,150	8,124	75%	67%	49%	13%	3%	24%	21%	5%	10%	55%	B+	18%	$ 5,850
Rutgers University - New Brunswick	34,052	1,987	94%	78%	50%	7%	9%	33%	7%	26%	13%	39%	C+	44%	$ 7,746
University of Texas at Dallas	16,691	3,181	84%	68%	43%	5%	3%	22%	6%	30%	19%	34%	B+	25%	$ 7,442
University of Central Florida	41,852	16,969	71%	70%	54%	7%	0%	18%	11%	6%	26%	48%	A-	19%	$ 5,400
Florida International University	27,906	20,912	57%	57%	57%	3%	12%	5%	13%	2%	67%	9%	B+	8%	$ 6,984
University of Southern California	19,194	713	96%	87%	52%	43%	15%	33%	4%	20%	14%	38%	A-	30%	$ 9,298
University of Texas at Arlington	19,326	15,146	56%	54%	54%	3%	4%	12%	16%	11%	27%	37%	B+	10%	$ 6,404
Georgia Institute of Technology	14,318	1,731	89%	83%	39%	37%	12%	30%	7%	21%	7%	48%	C+	53%	$ 6,652
University of Alabama	29,586	3,442	90%	85%	55%	64%	2%	28%	11%	1%	5%	77%	A	26%	$ 5,750
University of California - Irvine	29,251	485	98%	83%	52%	2%	20%	16%	2%	36%	26%	14%	B	41%	na
California State University - Los Angeles	20,748	3,475	86%	57%	58%	0%	1%	2%	4%	14%	65%	6%	NA	4%	$ 7,587
New York University	25,725	1,008	96%	89%	58%	53%	19%	37%	6%	19%	13%	31%	B	43%	$ 13,166
Iowa State University	27,929	1,692	94%	81%	43%	41%	3%	34%	3%	3%	5%	73%	B+	33%	$ 4,694
Columbia University	7,666	550	93%	76%	47%	65%	14%	43%	8%	17%	13%	37%	A	na	$ 8,412
Rowan University	14,043	2,077	87%	70%	45%	3%	1%	35%	10%	4%	10%	65%	C+	38%	$ 8,072
Oregon State University	18,591	7,108	72%	72%	46%	29%	2%	32%	2%	7%	9%	63%	C+	17%	$ 8,895
University of Houston	28,029	10,319	73%	73%	50%	2%	3%	16%	10%	22%	34%	25%	B-	19%	$ 5,224
University of California - San Diego	29,491	794	97%	78%	50%	7%	15%	14%	2%	34%	18%	19%	C+	39%	na
University of Arkansas	21,005	2,381	90%	85%	54%	49%	1%	28%	5%	3%	9%	75%	B+	26%	$ 7,090
Texas State University	28,042	6,145	82%	75%	59%	2%	0%	22%	10%	2%	37%	46%	B	19%	$ 6,820
University of California - Berkeley	29,570	1,283	96%	84%	53%	14%	14%	19%	2%	34%	16%	26%	D+	26%	na
University of California - Davis	29,967	751	98%	79%	61%	4%	20%	16%	2%	29%	21%	25%	A-	25%	na
Northern Arizona University	21,891	5,181	81%	76%	61%	33%	3%	18%	3%	2%	24%	57%	B-	43%	$ 5,576
University of California - Los Angeles	31,009	568	98%	85%	58%	18%	11%	18%	3%	28%	22%	26%	A	na	na
University of Arizona	29,027	5,126	85%	78%	53%	40%	3%	19%	4%	5%	27%	49%	B	20%	$ 7,550
Texas Tech University	27,648	4,309	87%	75%	47%	6%	2%	30%	6%	2%	27%	56%	B	24%	$ 5,442
California State Polytechnic University - Pomona	21,824	3,110	88%	62%	47%	2%	1%	15%	3%	22%	44%	16%	C+	10%	$ 9,766
University of South Carolina	25,633	1,100	96%	79%	53%	47%	1%	40%	9%	3%	5%	75%	B	29%	$ 6,530
Clemson University	18,971	698	96%	82%	49%	39%	1%	33%	7%	2%	4%	82%	B-	41%	$ 6,812
University of Cincinnati	22,990	3,772	86%	80%	47%	17%	1%	38%	8%	4%	3%	73%	B-	20%	$ 6,756
University of Mississippi	16,636	1,371	92%	78%	57%	56%	0%	16%	14%	2%	3%	76%	B+	32%	$ 6,140
San Diego State University	27,453	3,133	90%	72%	55%	16%	4%	27%	4%	13%	31%	33%	C+	15%	$ 11,054
Auburn University	22,460	2,168	91%	84%	50%	41%	1%	32%	6%	2%	3%	79%	B	20%	$ 7,860
Old Dominion University	15,003	4,369	77%	67%	55%	9%	1%	19%	30%	5%	9%	45%	C+	23%	$ 6,530
Washington State University	22,877	3,221	88%	73%	53%	20%	2%	25%	3%	6%	14%	60%	B+	24%	$ 6,900
University of North Carolina - Charlotte	21,025	3,362	86%	73%	46%	6%	1%	24%	17%	7%	10%	57%	A-	23%	$ 6,370
California State University - Fresno	19,369	2,756	88%	63%	60%	1%	1%	6%	3%	14%	51%	18%	NA	4%	$ 4,973
California State University - San Marcos	11,895	3,028	80%	63%	63%	3%	1%	14%	3%	10%	42%	26%	B	15%	$ 10,000
Boise State University	12,787	9,246	58%	69%	55%	45%	1%	16%	2%	2%	14%	73%	B	na	$ 4,662
California State University - San Bernardino	16,166	1,801	90%	59%	61%	0%	1%	6%	5%	5%	63%	12%	NA	8%	$ 6,606
University of North Georgia	13,243	5,798	70%	79%	56%	2%	1%	19%	4%	3%	12%	74%	B	na	$ 5,726
University of Nevada - Reno	15,200	2,730	85%	81%	53%	27%	1%	18%	3%	8%	20%	57%	B	15%	$ 6,360
University of Texas at Tyler	4,708	2,625	64%	51%	56%	2%	5%	28%	10%	4%	20%	58%	B-	19%	$ 6,171
California Polytechnic State University	20,333	765	96%	84%	49%	16%	1%	39%	1%	13%	17%	55%	B-	35%	$ 8,259
Tarleton State University	8,378	2,937	74%	74%	61%	1%	0%	20%	9%	1%	20%	65%	B+	35%	$ 5,660
California State University, East Bay	10,187	2,649	79%	48%	61%	1%	1%	9%	10%	23%	33%	16%	C+	na	$ 8,546
Savannah College of Art & Design	9,752	1,756	85%	72%	68%	69%	17%	35%	11%	6%	8%	53%	C+	na	$ 9,434

Citations

[1] NCES most recent available data, 2007 to 2017. Table 303.25.
[2] Ibid.
[3] NCES table 303.25, Federal Reserve Bank of St. Louis (FRED), Bureau of Labor Statistics, U.S. Census.
[4] NCES table 303.50
[5] Ibid.
[6] U.S. Census Bureau, Table S1501
[7] U.S. Census Bureau 2018 data table by single year age (cumulative total of population ages 7-17).
[8] Baby Boomers were born between 1946 and 1964; Gen X followed from 1965-1979; Gen Y (the Millennials) 1980-1994; and Gen Z is 1995-2015.
[9] While Gen Z is a smaller cohort than Gen Y (the Millennials), the difference is roughly 4 million people. That is less than the 6 million person drop from the Baby Boomers to Gen X.
[10] Table 302.10 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[11] The U.S. Census Bureau only provides data in the 18- to 21-year-old age increment, slightly different than the 18 to 24 age increment the NCES uses.
[12] Table 302.10 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[13] The 10- to 19-year-old population at 41.7 million people is 6.4% smaller than the 20- to 29-aged group. Similarly, the 0- to 9-year-old group is 4.1% smaller than the 10- to 19-year-old group. https://www.census.gov/data/tables/2019/demo/age-and-sex/2019-age-sex-composition.html.
[14] Note that Hispanic is counted as ethnicity, not race, by the U.S. Census, and thus it overlaps with counts of race (white, Black, Asian, etc.). 66% of the population is counted as white for the 5- to 9-year-old population as compared to 68% of the 20- to 24-year-old population.
[15] U.S. Census B01001 Tables, 2018
[16] The Census Bureau defines "Hispanic or Latino" as "a person of Cuban, Mexican, Puerto Rican, South or Central American or other Spanish culture or origin regardless of race."
[17] U.S. Census Bureau, Table S1501
[18] The Asian dataset is a smaller data series with higher volatility; gender breakdowns are unavailable.
[19] Table 306.10 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[20] 2018 data from U.S. Census Bureau, Current Population Survey, 1968 to 2019 Annual Social and Economic Supplements.
[21] Table 303.25 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[22] Table 311.15 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[23] Table 311.22 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[24] Table 311.22 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[25] Table 311.22 Digest of Education Statistics 2018, Institute of Education. National Center for Education Statistics.
[26] Table 311.22 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[27] "75% of College Students Unhappy with Quality of eLearning During COVID-19," Oneclass.com survey of 1,287 students at 45 colleges and universities. April 1, 2020.
[28] Table 3130.40 Digest of Education Statistics 2019, 2018-19 school year, Institute of Education Sciences: National Center for Education Statistics.
[29] "The Future of College Is Online, and It's Cheaper," Hans Taparia, *The New York Times*, May 25, 2020.

[30] "Are students ready to return to campus in the fall?", Peter Bacevice, et al., *University Business*, June 25, 2020.
[31] "Most students ready to return to campus amid pandemic," Cyrus Beschloss, *College Reaction*, July 15, 2020.
[32] Table 303.40 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[33] Table 326.15 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[34] Table 326.30 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[35] Table 303.60 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[36] Table 303.40 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[37] Table 326.25 Digest of Education Statistics 2019 tables, Institute of Education Sciences: National Center for Education Statistics.
[38] Quarterly Averages, Current Population Survey, Bureau of Labor Statistics, U.S. Department of Labor.
[39] Table 302.60 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[40] Student tuition and fees only account for 30% of revenues for four-year private non-profit universities and 21% at public universities. Four-year degree-granting institutions: Tables 333.10 and 333.40, Digest of Education Statistics 2019 tables, 2017-18 data; Institute of Education Sciences: National Center for Education Statistics.
[41] Table 330.10 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics. This table shows the change between the 2017-18 and 2007-08 school years in constant 2017-18 dollars.
[42] Table 330.10 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics. This table shows the change between the 2017-18 and 2007-08 school years in constant 2017-18 dollars.
[43] Table 310.20 and Table 306.60 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[44] Table 310.10 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[45] Table 331.30 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[46] Table 331.33 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[47] Table 331.30 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[48] Table 303.30 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[49] Ibid.
[50] RealPage Data
[51] Table 304.10 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[52] Includes part-time students who account for 65% of public, two-year undergraduate students.
[53] Table 303.80 Digest of Education Statistics 2019 tables, 2018 data, Institute of Education Sciences: National Center for Education Statistics.
[54] Table 303.40 Digest of Education Statistics 2019 tables, 2017 data, Institute of Education Sciences: National Center for Education Statistics.
[55] Table 312.20. Institute of Education Sciences: National Center for Education Statistics.
[56] Ibid.
[57] U.S. Census, 2018 Table S0101
[58] Ibid.
[59] Ibid.
[60] Estimated as the difference between the 6- to 12-year-old population and the 17- to 23-year-old population in each state in 2019.

[61] Estimated as the difference between the 6- to 12-year-old population and the 17- to 23-year-old population in each state in 2019.
[62] NCES 2018 Digest Table 302.50. Estimated rate of 2011-12 high school graduates attending degree-granting post-secondary institutions, by state, 2012.
[63] RealPage and university admissions offices.
[64] As measured by Niche.com based on acceptance rate, quality of professors, student reviews, and additional factors.
[65] Ibid.
[66] Ibid.
[67] Table 312.20, RealPage, university admissions offices and Niche.com.
[68] BYU-Idaho was formally known as Ricks Junior College until 2001 when BYU took it over.
[69] Table 312.20 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.
[70] Even though Arizona was one of the states with the largest decrease in enrollment, school selection is more important than state or region.
[71] Table 317.50 Digest of Education Statistics 2018, Institute of Education Sciences: National Center for Education Statistics.