



TO ENSURE GOOD SOUND QUALITY, ALL ATTENDEES WILL BE MUTED DURING THE WEBINAR.

TO ASK A QUESTION: TYPE YOUR QUESTION IN TO THE QUESTION BOX ON YOUR CONTROL PANEL. YARDI MATRIX STAFF WILL REVIEW AND PRESENT YOUR QUESTION TO THE SPEAKERS AS TIME ALLOWS.

TODAY'S WEBINAR IS BEING RECORDED AND WILL BE MADE AVAILABLE SHORTLY.

YARDI MATRIX STUDENT HOUSING NATIONAL OUTLOOK



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- 1. Opening Remarks
- 2. Value Proposition of Student Housing
- 3. COVID-19 Impact on Universities
- 4. What Will Fall Look Like?
- 5. Student Housing Fundamentals
- 6. Quick Product Update





Opening Remarks

With this webinar we are officially launching our Student Housing data service!







Yardi Matrix House View July 2020

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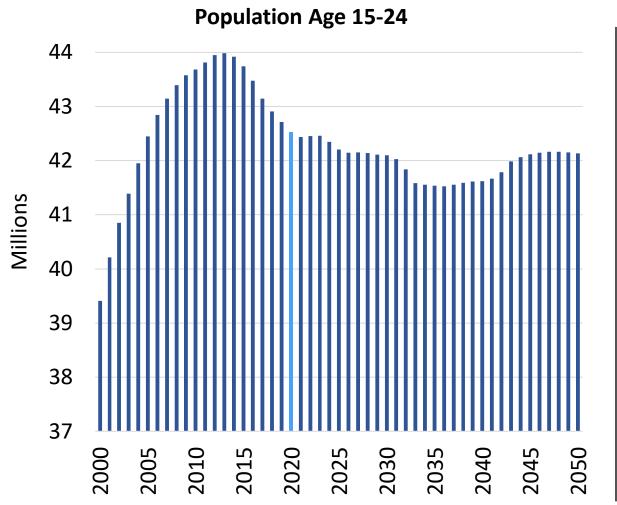
- Universities are struggling financially, with state funding cuts and less international and out-of-state students, who
 typically pay a premium
- Schools are forced to rely more on tuition and most universities have decided to reopen, but some separation seems to be occurring (e.g. Harvard)
- Students seem to want to go back to campus based on pre-lease data, regardless of in-person vs. online instruction
- National pre-lease for 2020 is only 2.9% below 2019 levels and there is great divergence across universities, regardless of fall plans (i.e. University of Pittsburgh and Utah State University well above 2019 levels, while University of Memphis and Rutgers University – New Brunswick not doing so well)
- The college experience will change significantly, with less gatherings, online and in-person instruction, mandatory face masks, etc. which raises the question, is an expensive college education worth it?
- While certain universities may struggle, we remain fairly optimistic for the dedicated student housing industry as a whole
 - Demand is still there from students wanting to come to campus, and with less dorm capacity, these students will need to find off-campus housing
 - COVID-19 may slow projects in early stages of development another positive for the industry

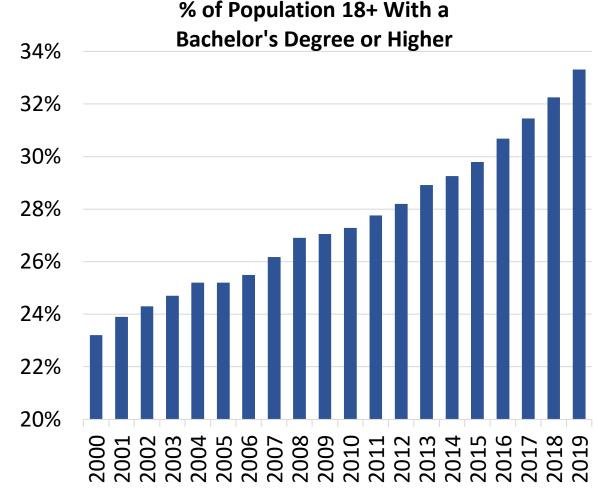
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Value Proposition of Student Housing

We Are Only in the Beginning Phase of a Decline in College-Age Population, But a Greater Percentage Values a College Education

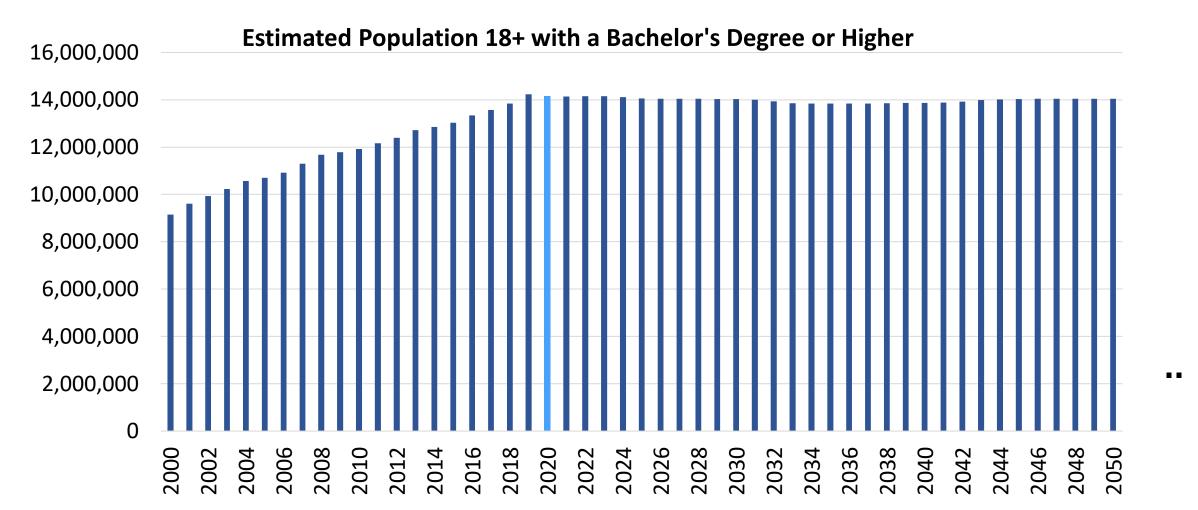




Source: Yardi Matrix; U.S. Census Bureau (BOC), Current Population Survey



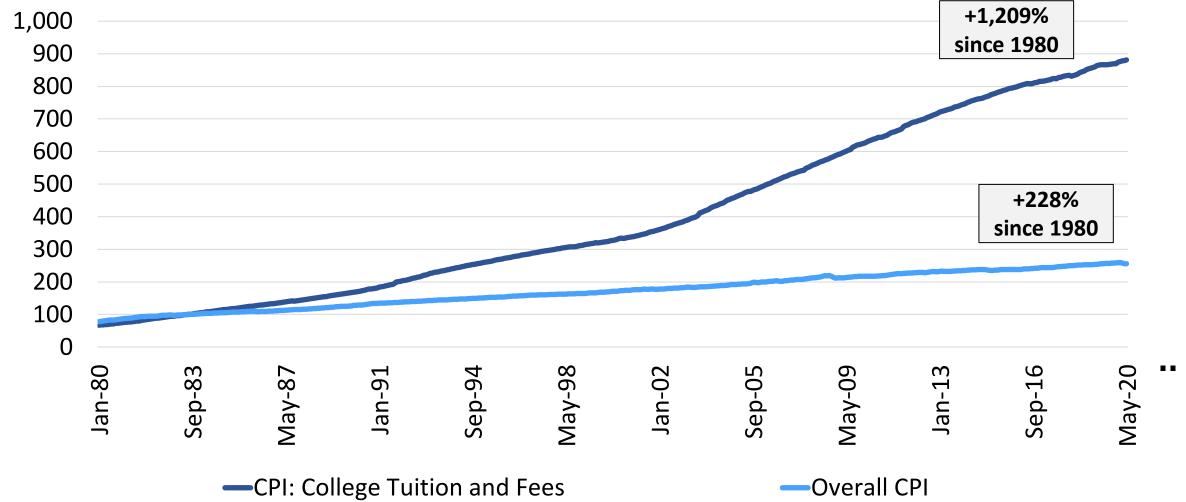
The Result Is a Leveling of People Going to College Through 2050





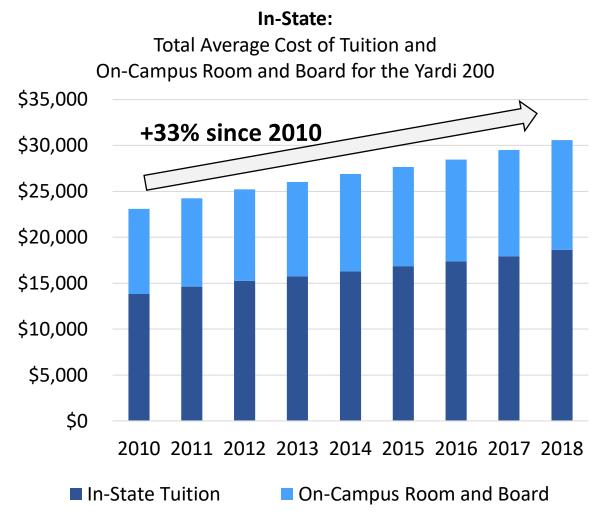
Source: Yardi Matrix; U.S. Census Bureau (BOC), Current Population Survey

Growth in the College Tuition and Fees Component of CPI Increased Over 5x More Than Overall CPI Since 1980



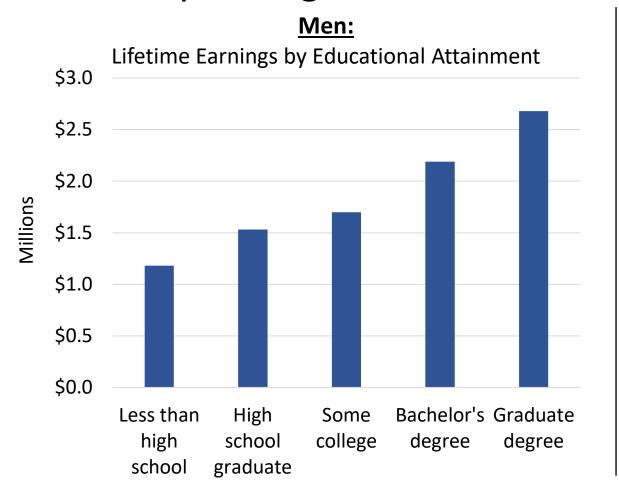


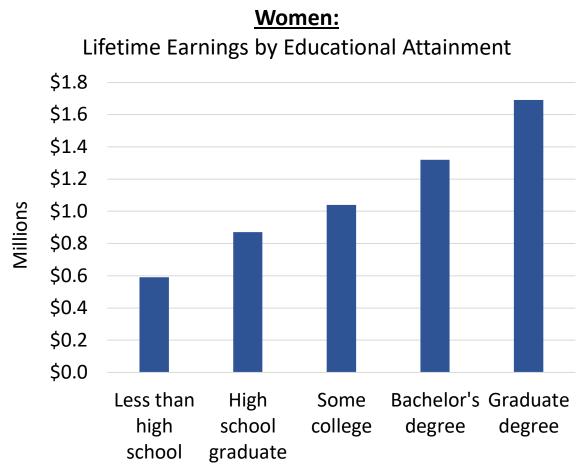
Average Cost of Tuition Plus On-Campus Room and Board Increased at the Same Rate for In- vs. Out-of-State Since 2010



Out-of-State: Total Average Cost of Tuition and On-Campus Room and Board for the Yardi 200 \$50,000 \$45,000 +32% since 2010 \$40,000 \$35,000 \$30,000 \$25,000 \$20,000 \$15,000 \$10,000 \$5,000 \$0 2010 2011 2012 2013 2014 2015 2016 2017 2018 Out-of-State Tuition On-Campus Room and Board

A College Education is Worth the Investment: The Return on a Bachelor's Degree is About 3-5x Depending on In- or Out-of-State University and Gender





^{*}Adjusted for key socio-demographic variables that influence earnings and the probability of college completion
Source: Yardi Matrix; Tamborini, Christopher R., ChangHwan Kim, and Arthur Sakamoto. 2015. "Education and Lifetime Earnings in the United States." Demography 52: 1383–1407.



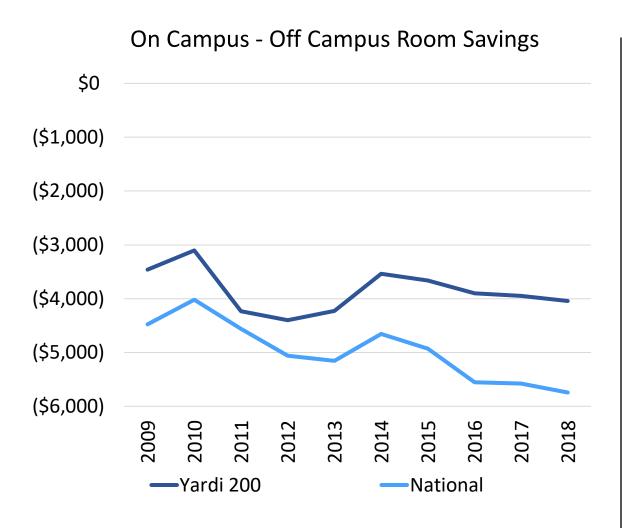
A College Education Has Become a Luxury Good

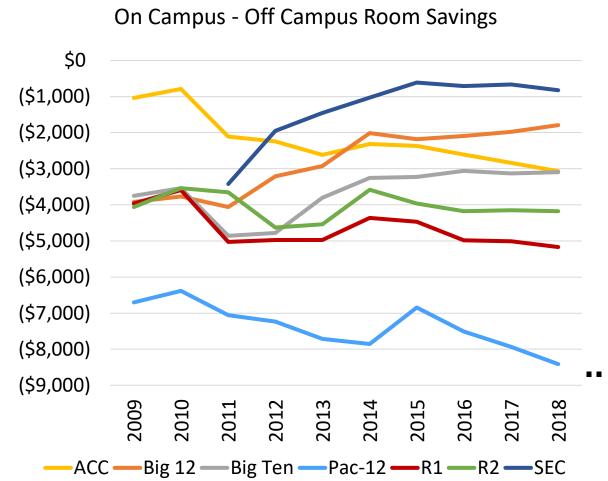
- The off-campus dedicated student housing industry is positioned to serve the top 10% of households, which are exposed to the total retail price of a college education
- Example: In 2018, the cost of in-state tuition and an off-campus room for Duke University was about \$65K, while the cost for University of North Carolina-Chapel Hill was \$17K a \$48K difference PER YEAR in the same state
 - As a parent, you could pitch UNC to your child, and tell them they can stay in the coolest apartment with the most amenities, and you would still save more money
 - Assumes lifetime earnings of Duke does not exceed
 3x that of a UNC graduate
- Off-campus dedicated student housing is tailored to instate parents or extremely affluent people

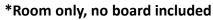




Room Savings of Living Off-Campus: Purpose-Built Student Housing Isn't Cheap, But It's Higher Quality







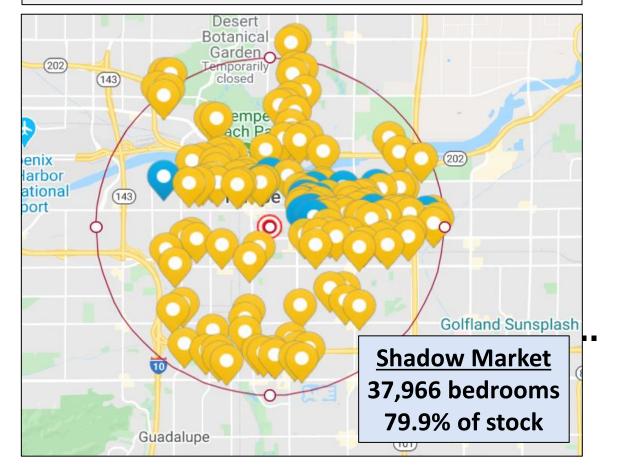


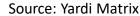
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Arizona State University – Tempe: Shadow Market *This is Your Competition!*

Dedicated Student Housing Desert Botanical Garden (202) Tempe Beach Park enix larbor ational port Golfland Sunenlash **Dedicated Student Housing** 9,527 bedrooms **20.1%** of stock Guadalupe (101)

Dedicated Student Housing + Shadow Market









ASU – Tempe: Rents Higher Closer to Campus, But Growth Happening Farther From Campus



Distance	Jun-19	Jun-20	Growth
0.25	no properties	no properties	N/A
0.50	\$936	\$984	5.1%
0.75	\$914	\$958	4.8%
1.00	\$878	\$927	5.6%
1.25	\$878	\$927	5.6%
1.50	\$838	\$899	7.3%
1.75	\$838	\$899	7.3%
2.00	\$804	\$868	8.0%
2.50	\$804	\$868	8.0%
3.00	\$795	\$859	8.1%

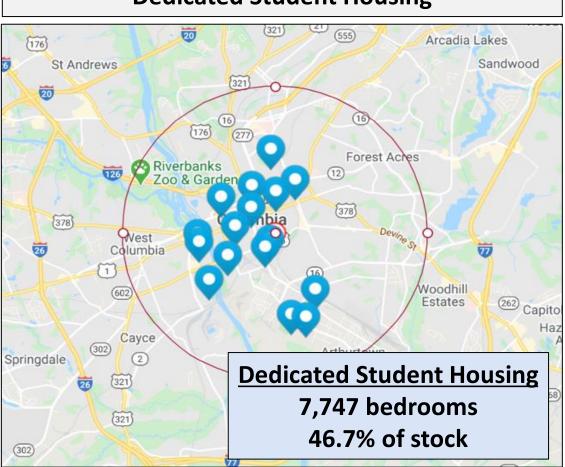


*Mixed age assets

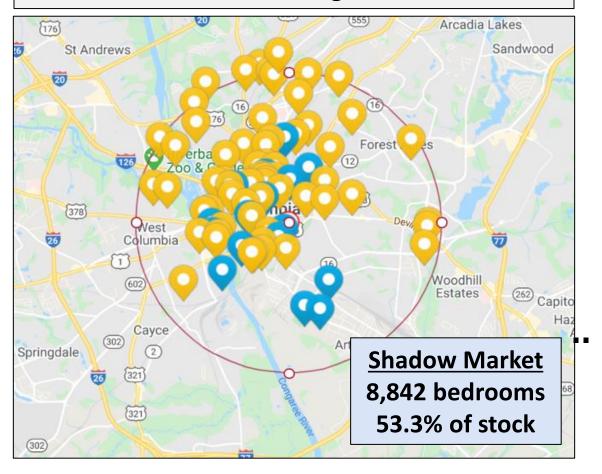
Source: Yardi Matrix; asu.edu

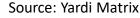
University of South Carolina-Columbia: Shadow Market This is Your Competition!

Dedicated Student Housing



Dedicated Student Housing + Shadow Market









U of SC – Columbia: Rents Higher Closer to Campus, But Growth Happening Farther From Campus

South Carolina

Distance	Jun-19	Jun-20	Growth
0.25	no properties	no properties	N/A
0.50	\$1,054	\$1,022	-3.0%
0.75	\$908	\$902	-0.7%
1.00	\$865	\$868	0.3%
1.25	\$865	\$868	0.3%
1.50	\$852	\$860	0.9%
1.75	\$795	\$803	1.0%
2.00	\$779	\$787	1.0%
2.50	\$744	\$756	1.6%
3.00	\$744	\$756	1.6%

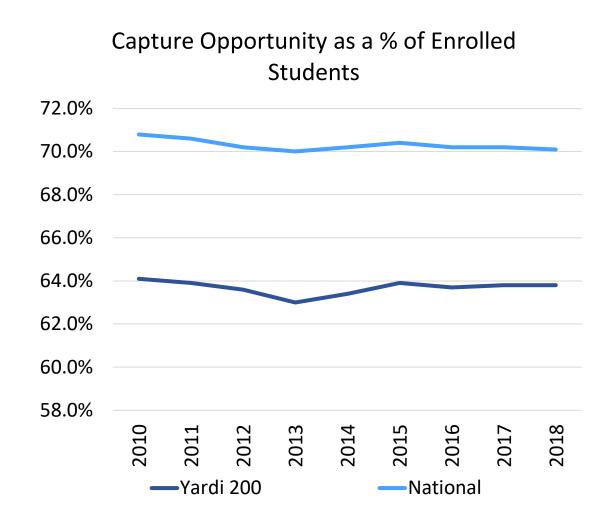


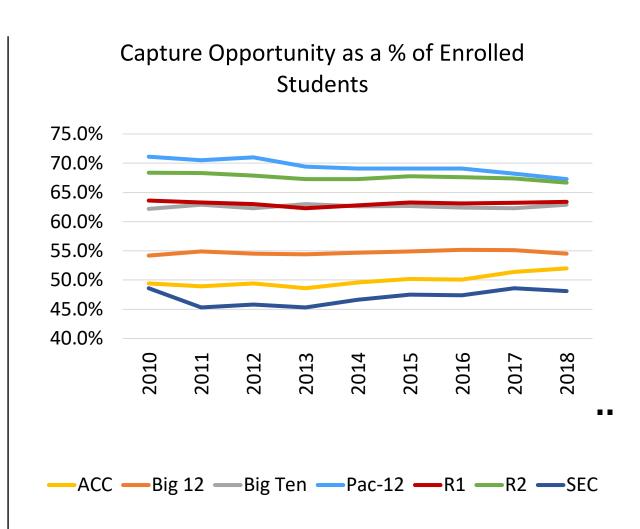
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Source: Yardi Matrix; sc.edu

Most Students are Using the Shadow Market











COVID-19 Impact on Universities



State Analysis – Impact on Universities, Housing and Ability to Pay for a College Education

- The vitality of a state's economy, governance and fiscal situation is a powerful driver of the ability of the state to support higher education and the ability of high-income earners in that state to send their kids to good state schools (at in-state tuition), enables freeing of \$ to pay for luxury off-campus housing
- State schools that have been able to attract high paying out of state/international students also subsidize
 in-state tuition. This funding source may be under threat, hence the state government's fiscal situation
 becomes an important factor
- This favors the South and West (like the overall economy) and to a lesser degree the Midwest. Much less so the Northeast, Illinois and California
- Off-campus housing not common among private colleges; a function of state supported higher education

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Weaker Universities Will Face Significant Problems Absorbing COVID-19 Related Exposure (Immediate Financial Obstacles)

Won't bring in money from athletics, conferences on campus and summer camps

- The Big Ten and PAC-12 are moving all fall sports to a conference-only model
- The Ivy League announced there will be no fall sports this year

At the same time, universities faced additional expenses while getting online classes up and running

Additional software purchases, training for professors, etc.

Many students are requesting refunds from their universities for room, board and partial tuition

- Many universities refunded students for meal expenses and student activities that were cancelled, but not tuition
 - Rutgers University spent \$50 million to refund students for unused dining, housing and parking
- There are now dozens of lawsuits with claims that tuition was meant for an in-person, not online, college experience
- Are students paying for credits toward their college degree, or is monetary value placed on the "college experience"?
 - o Some universities are taking the position that tuition is paid for the degree, which students will still receive
 - However, this directly contradicts many universities that for years have touted that their on-campus experiences
 contribute significantly to the value of the education they provide
 - "The notion that higher education can be boiled down simply to education is a threat to their long-term business model." – Beth Akers, Economics21



Source: Yardi Matrix; NPR, "Can Colleges Survive Coronavirus? 'The Math Is Not Pretty'"; economics21.org, "Students Clash With Colleges Over Refunds for Semesters Lost to Coronavirus"; espn.com; npr.org

Weaker Universities Will Face Significant Problems Absorbing COVID-19 Related Exposure (*Potential* Future Financial Obstacles)

Higher expenses with cleaning + social distancing (half capacity dorms)

- Costs for protective gear, cleaning supplies and labor running into the millions of dollars for universities
- University of Central Florida: face coverings \$309K, hand sanitizer \$491K, ventilation systems \$500K, motion-sensor doors and plexiglass panels \$600K...and budgeting another \$3 million for labor and materials costs

State budget cuts and/or private endowments lost

- Montclair State University (NJ) state funding cut of \$12.3 million, about 25% of annual appropriation
- Missouri State University (MO) state funding cut of \$7.6 million, about 8.3% of annual appropriation
- The Nevada System of Higher Education proposed 4% cut to university budgets in 2020, and offered options of 6%, 10% and 14% cuts for next fiscal year
- California State University \$400 million cut & University of California \$363 million cut (about 10% of budget for each)

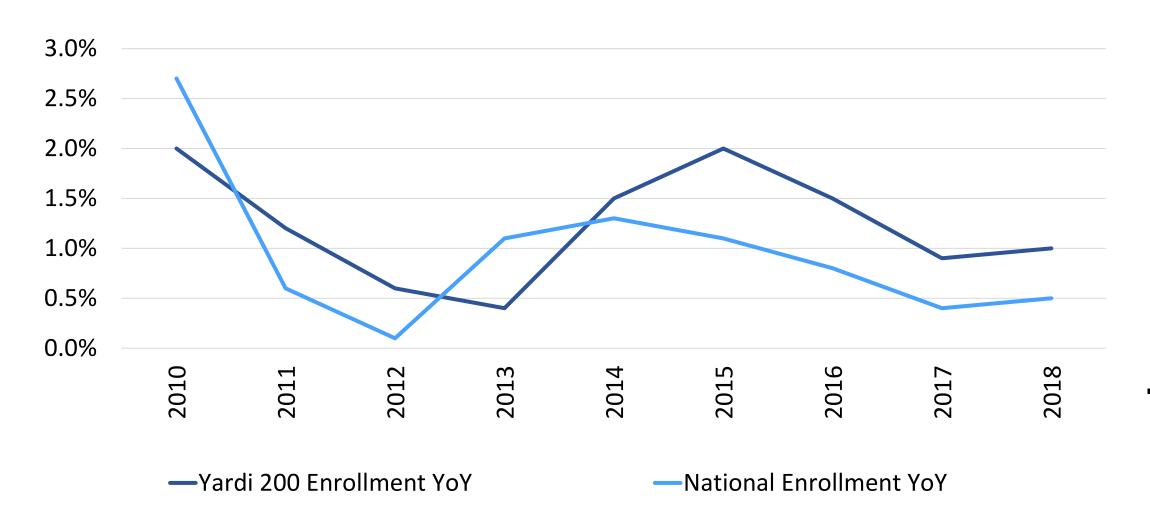
Potential for significant declines in enrollment due to numerous factors

- Fewer international students amid visa and travel concerns (study abroad students staying home could offset impact)
- Families were hit hard financially and cannot afford universities and/or students aren't happy with losing the experience aspect of going to college
 - Can result in students taking a gap year, going to community college, going to an in-state school or skipping university entirely



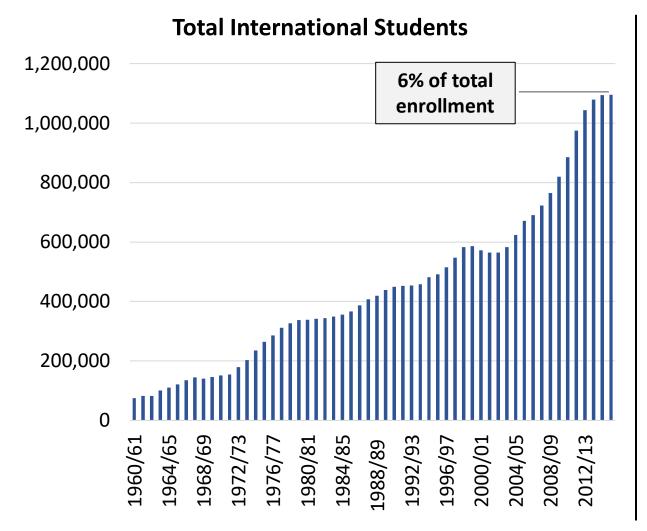


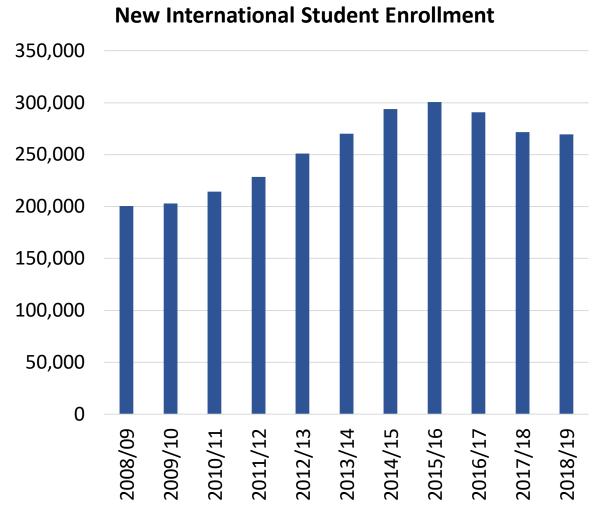
Year-Over-Year Enrollment is Positive but Trailing Down for the Past Few Years – Will Likely Decrease More in 2020





Although New International Student Enrollment Has Been Dropping, Int'l Students Are Making Up a Larger Portion of Enrollment





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Source: Yardi Matrix; iie.org; Open Doors



International Enrollment Will Likely Decrease Due to Travel Restrictions and Health Concerns

Universities with a heavy reliance on *international* student enrollment are at risk

University (From Yardi 200)	% International Freshmen Students
University of Rochester	37%
Boston University	24%
University of California-Irvine	20%
University of California-Davis	20%
New York University	19%
Emory University	18%
Carnegie Mellon University	18%
University of Chicago	17%
Northeastern University	16%
University of Washington-Seattle Campus	16%

University (From Yardi 200)	# International Freshmen Students
University of California-Davis	1,290
University of Washington-Seattle	1,179
University of California-Irvine	1,176
New York University	1,153
University of California-San Diego	1,034
Ohio State University-Main	942
University of Illinois at Urbana-Champaign	936
Boston University	855
University of California-Berkeley	847
Pennsylvania State University-Main Campus	805



Freshmen Students are Looking at Schools Closer to Home – A Loss of Out-of-State Tuition Could Hurt Some Universities

Public universities with a heavy reliance on <u>out-of-state</u> student enrollment are at risk

University (From Yardi 200)	% Out-of-State Freshmen Students
University of Vermont	76%
The University of Alabama	64%
North Dakota State University-Main Campus	64%
Arizona State University-Skysong	64%
University of North Dakota	61%
University of New Hampshire-Main Campus	58%
University of Rhode Island	58%
University of Delaware	57%
University of Mississippi	56%
Montana State University	53%

University (From Yardi 200)	# Out-of-State Freshmen Students
The University of Alabama	4,259
Purdue University-Main Campus	3,178
University of Arizona	3,104
University of Colorado Boulder	3,002
Arizona State University-Tempe	2,954
University of Michigan-Ann Arbor	2,849
Indiana University-Bloomington	2,822
Pennsylvania State University-Main Campus	2,774
University of South Carolina-Columbia	2,765
University of Delaware	2,698



Students Looking at Colleges Closer to Home and Community Colleges in Response to Economic Conditions and Health Concerns

Colleges Closer to Home

- Many students want to be closer to home in case there is a second wave forcing classes to go online again, and for the cheaper rate of in-state tuition
- As of early June, commitments for state residents were up:
 - The University of Texas at Arlington: 26% over last year
 - Ohio State University: 20% over last year
 - Western Kentucky University: 20% over last year
- Even if enrollment stays stable, it may be less profitable with more in-state students

Community Colleges

- Community college enrollment typically spikes during economic downturns
- COVID-19 may draw more students who don't want to travel/live in a dorm to enroll at community colleges
- This school year will likely look different, even for universities that plan to open in the fall. Students may prefer to go to community colleges for a year to save money and knock out some gateway courses

Small private colleges will suffer more from enrollment crunch – rely more on tuition and fee revenue than public colleges (about 82% vs. 38% of revenue from tuition and fees, according to Fitch Ratings)

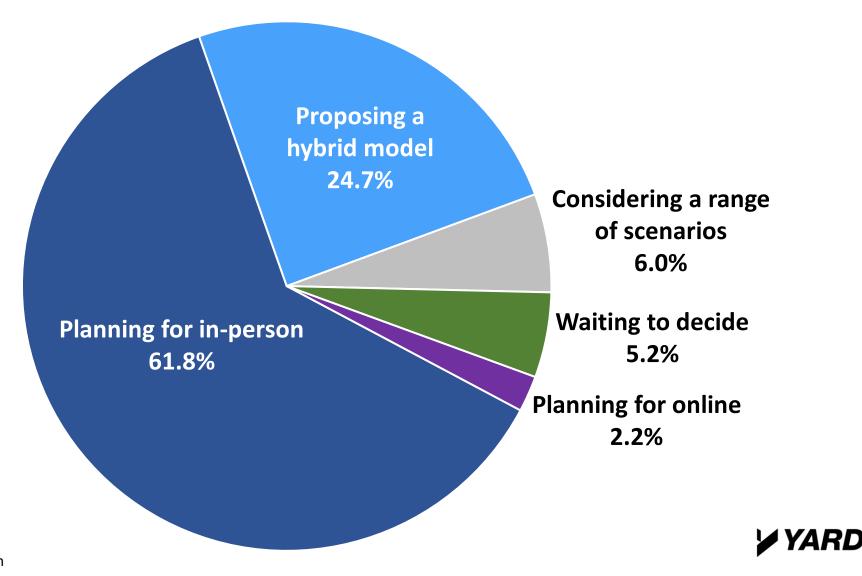




What Will Fall Look Like?



Students Want to Come Back to Campus and Universities Need the Revenue



*As of July 7

Source: Yardi Matrix; The Chronicle of Higher Education

How Are Universities Going to Handle In-Person Fall Instruction?

- Dorm capacity will be cut significantly to allow for students to social distance
- Large lectures will either be held online or have alternating attendance days. Small classes will often still be held in-person. Many classes will have hybrid scenarios of both online and in-person
- Increased cleaning and testing protocols will be in place.
 Face masks will be required in most settings inside, but encouraged everywhere on campus





Specific University Plan Examples – In-Person

Purdue University

- On-campus instruction Aug. 24-Nov. 24, without the usual fall break. The balance of the semester will be completed remotely
- Students/faculty will be tested for COVID-19 prior to coming on campus and masks are required during class and other indoor settings
- To promote social distancing, residence hall capacity will be reduced by over 800 and dining halls will be carry-out only
- A substantial number of rooms will be set aside to quarantine students who test positive for COVID-19 on campus
- Online option available for students who cannot or choose not to come to campus for the fall 2020 semester
- Classroom occupancy will be reduced by approximately 50% and large classroom occupancy will be limited to 150 students

Pennsylvania State University

- Classes will be held Aug. 24.-Nov. 20, with the remainder of the semester and final exams to take place virtually
- The university may also install plexiglass shields in high contact areas and enforce one-way traffic directions in high-density areas
- Classrooms will allow for social distancing and some non-classroom spaces will be repurposed for instruction
- Flexible mix of in-person, remote and online instruction, with all classes of more than 250 students delivered online
- · While indoors or near others on campus, face masks must be worn and social distancing of at least six feet is required

University of Iowa

- Classes will begin Aug. 24 and will move to online-only after Thanksgiving. Campus will stay open during period of online instruction
- Students, faculty and staff will be required to wear face coverings inside and practice social distancing
- Classes that have 50 or more students will be held online. Classes less than 50 will be conducted in-person whenever possible
- Dorms will open as normal, with some rooms set aside for isolation and common spaces reconfigured or closed for social distancing
- Dining will have physical barriers between students and staff when possible, with touchless payment systems and online ordering
- Hallways could be converted to one-way traffic and additional barriers and touchless door openers will be installed around campus



Source: Yardi Matrix; protectpurdue.edu; news.psu.edu; kcrg.com

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Specific University Plan Examples – Hybrid



University of Michigan

- In-person classes will be offered Aug. 24-Nov. 20. Classes and final exams will be held remotely until the next semester.
- Students will be able to choose in-person, remote, or mixed instruction classes, and the university plans to provide a "robust set of fully remote classes." According to the plan, "generally, large classes will be held remotely, small classes will be held in person, and medium-size classes will be a hybrid of the two."
- Social distancing measures will be put in place, and face masks will be required
- Dorms and dining halls will also reopen, with restrictions

Temple University

- In-person classes will be offered Aug. 24-Nov. 20. Classes and final exams will be held remotely until the next semester
- There will be a blend of in-person and online instruction. Very large classes will occur online and in various break-out sessions. Other classes will occur in-person and in hybrid fashion. Temple will be prepared to move to primarily online instruction at any point should it be required
- There will be new protocols for keeping buildings clean enhanced campus testing
- Everyone must wear face coverings in buildings, and face masks are encouraged everywhere on campus. The university will provide masks for those that need them

Arizona State University

- In-person classes will be offered starting Aug. 20, with fall break cancelled
- The university is working on plans to reduce attendance in classrooms by half on alternating days. Those not attending in person on assigned days will participate in class through ASU Sync remote learning using live lectures via Zoom
- During the semester, all buildings will receive a thorough cleaning once per day and high-touch surfaces will be cleaned twice daily
- Everyone, including faculty, staff, students and visitors, will be required to wear face coverings in classrooms, labs, offices and community spaces



Reduced Capacity of Dorms to Promote Social Distancing – Fueling Additional Off-Campus Dedicated Student Housing Demand

We are tracking university announcements for their plans regarding dorm capacity for the <u>Yardi 200 Universities</u>. This will eventually be part of the product for Matrix customers to search.

University	Dorm Plans
Eastern Michigan University	There will be a single room option guarantee for every student who requests one
Emory University	A maximum of 2 students will be allowed per room
George Mason University	Dorm capacity will be cut about 25% to roughly 4,500 beds
George Washington University	Will reduce the density of its dorms by shedding bunk beds
Indiana University-Bloomington	Most residence hall rooms on campus will be single occupancy
Massachusetts Institute of Technology	Every undergraduate living on campus will have an individual room
San Diego State University	Will operate dorms at about 54% of normal capacity
University of Illinois-Chicago	Residence hall occupancy will be limited to 2 students per room
University of Maryland-College Park	Triples and quads will become doubles
University of Minnesota-Twin Cities	No more than 2 people occupying rooms
University of North Carolina-Greensboro	Some reduction in capacity for health risk students, and set aside for quarantine
University of North Carolina-Wilmington	Only those at health risk will have separate rooms
University of Wisconsin-Madison	Rooms will be single or double occupancy



What Can be Gleaned from Liberty University's Spring 2020 Experience?

President of Liberty University announced that students would be able to return to campus after spring break

- Plans for in-person classes had to be abandoned due to a ban on gatherings of more than 100 people students were able to stay in their dorms and take their classes online
- Limited dining options were available for take-out only and tents were set up for students to retrieve meals
- Annex I, a former hotel property owned by the university, was set up to quarantine anyone who had symptoms before they can get medical attention
- Extra precautions were put in place to clean high-touch surfaces on campus
- Students were able to return to campus to live in their dorms or clean them out
- Of the 1,900 students who initially returned to campus, more than 800 had left
- Many of the returning students did not have another safe place to live, did not otherwise have access to high-speed internet, did not want to potentially endanger elderly relatives, or were international students

Results: One student tested positive (did not live on campus) & four employees also tested positive

- Two surprise visits from state health inspectors found no violations
- Liberty students filed a class-action lawsuit alleging that Liberty and Mr. Falwell had "placed students at severe physical risk and refused to refund thousands of dollars in fees owed to them for the spring 2020 semester"
- It is unknown whether any cases in the Central Virginia health district, which surrounds Lynchburg and Liberty are linked to returning Liberty students









Other Universities Stayed Open This Past Spring, Too

Other Schools Provided the Opportunity for Students to Remain On Campus:

- University of California, Los Angeles (UCLA) Limited accommodations are available to students in need of housing and dining during the unprecedented period.
- Texas A&M University All on-campus residence halls and apartments remained open.
 Any resident that chose to continue to live on campus for the remainder of the semester to maintain employment, use their dining plan, use Wi-Fi/computer labs was welcome to. Residence hall occupancy was about 20% (<1,900 students).</p>
- Arizona State University (ASU) University housing remained open for those who must stay and essential services were provided to students who remained on campus.
- Virginia Tech The Blacksburg, VA campus remained open after spring break was over.



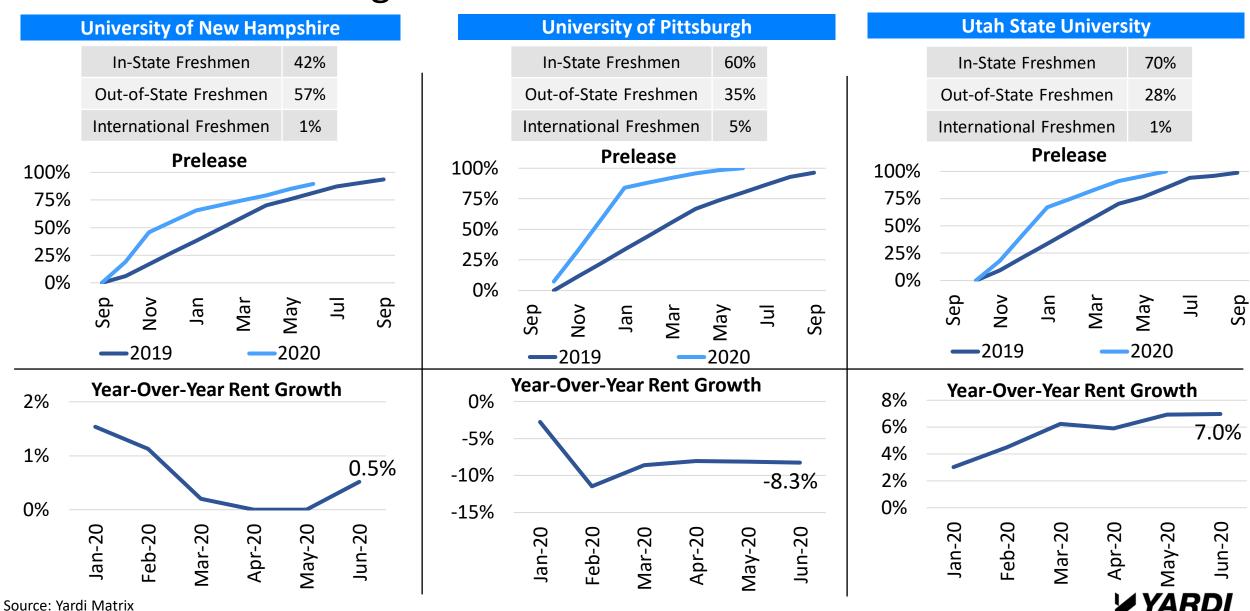




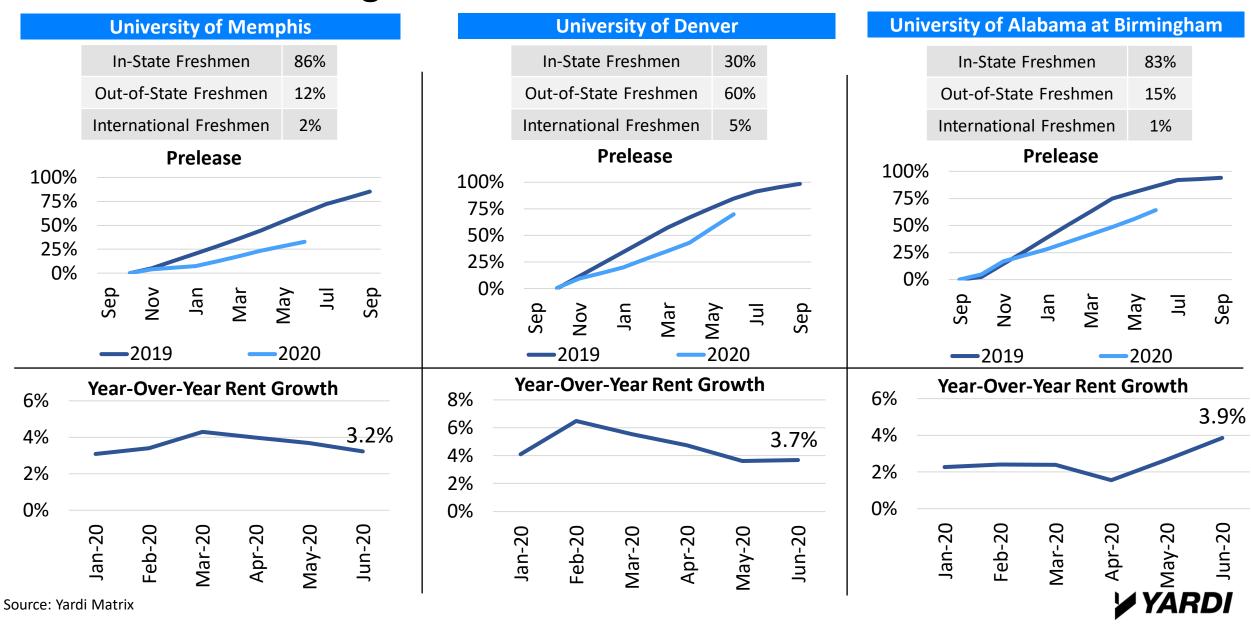




2020 Preleasing for In-Person Universities *Better* Than 2019



2020 Preleasing for In-Person Universities *Below* 2019 Levels



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Universities Planning for Online-Only as of July 7th



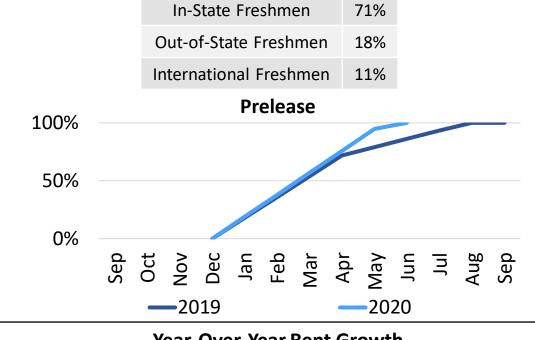
Bakersfield College	California State University-San Marcos	San Diego State University
Bellevue College	California State University-Stanislaus	Santa Monica College
Bowdoin College	Cypress College	Skyline College
California State University-Bakersfield	Eastern Washington University	Soka University of America
California State University-Channel Islands	Foothill College	Southern New Hampshire University
California State University-Chico	Fuller Theological Seminary	Swarthmore College
California State University-Dominguez Hills	Gratz College	Texas College
California State University-East Bay	Hampton University	University of California-Irvine
California State University-Fullerton	Harvard University	University of California-Los Angeles
California State University-Long Beach	Iliff School of Theology	University of Massachusetts-Boston
California State University-Los Angeles	MiraCosta College	University of Southern California
California State University-Monterey Bay	Pacific School of Religion	Valencia College
California State University-Northridge	Rutgers University-Camden	Wayne State University
California State University-Sacramento	Rutgers University-New Brunswick	Wilmington University
California State University-San Bernardino	Rutgers University-Newark	Zaytuna College



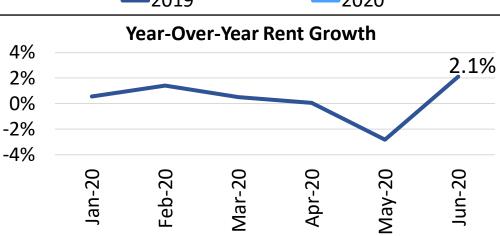
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2020 Preleasing for Online Universities Better Than 2019

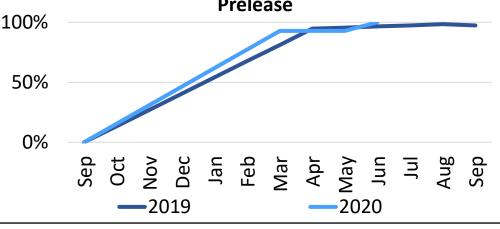




University of California – Los Angeles



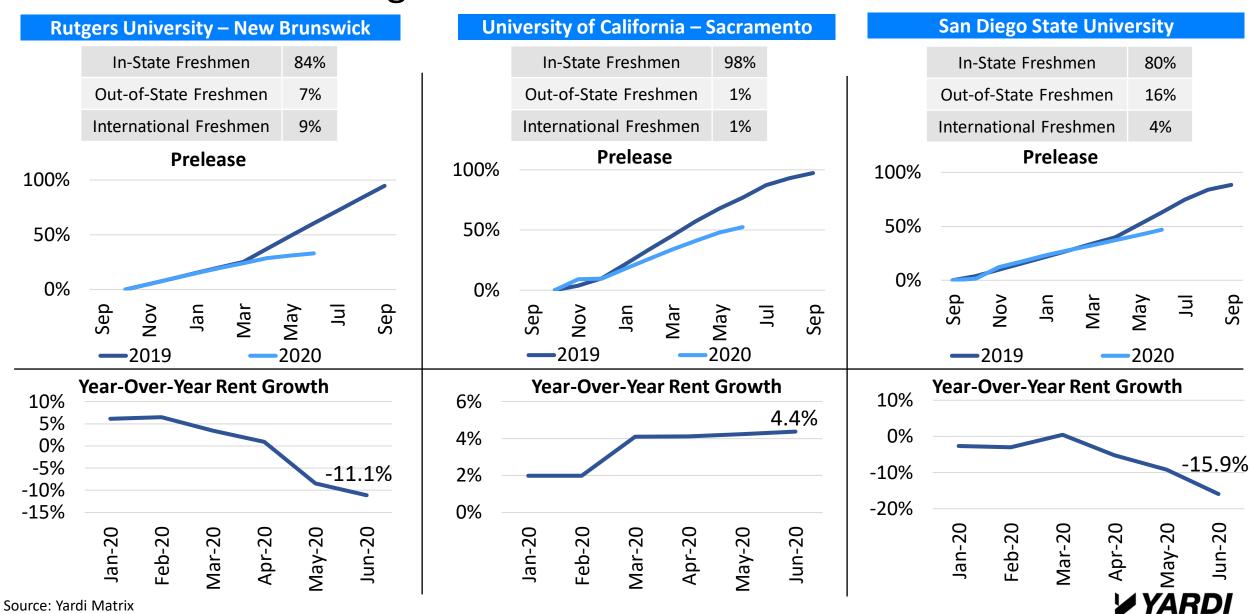








2020 Preleasing for Online Universities *Below* 2019 Levels





Student Housing Is Recession Proof but Is it Pandemic Proof?

Will likely be positive for student housing:

• Dorm capacity will likely be cut in half, pushing more students to look off-campus

Universities doing online instruction will be hit, but not too hard:

- Students will want to go back to campus even if their university is doing online-only instruction
 - Students want to get the experience/freedom of living on their own
 - Some find it easier to do online-learning if they aren't sharing the house with their entire family
 - Proof leases are still being signed at California State University campuses

What could curb this optimism:

- Second wave: likely won't have to shut down again due to new procedures and plans in place
- Long-term effects on enrollment: is the value proposition to come back to school worth it?

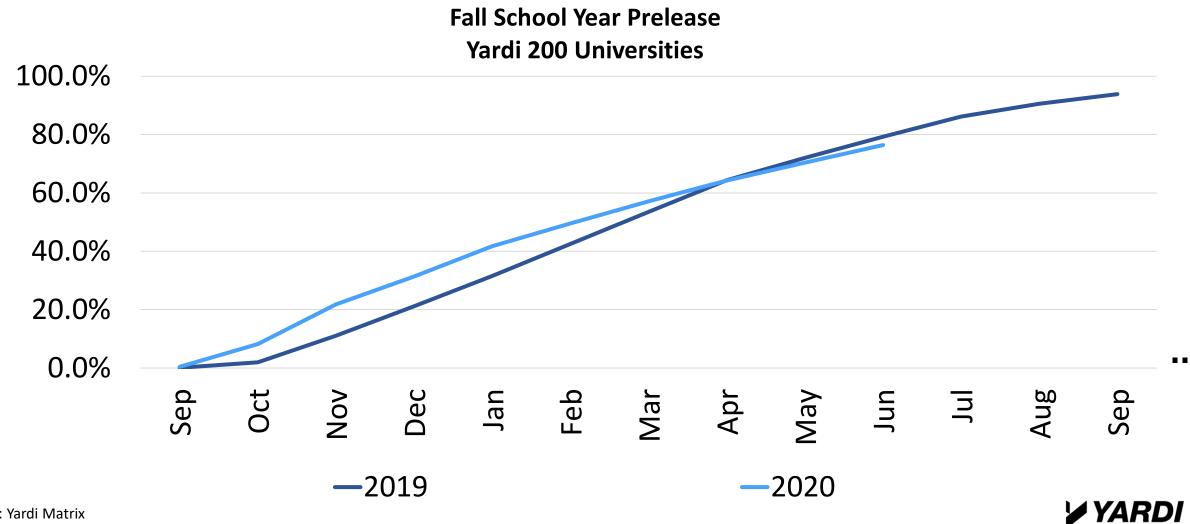
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Student Housing Fundamentals



2020 Preleasing Is On Par with Last Year – Off to a Great Start Given Coronavirus Uncertainty



Current Student Housing Supply Picture – Top 20 Universities with the Most Dedicated Student Housing

University	Bed Count	Capture Opportunity	University	Bed Count	Capture Opportunity
Texas A&M University-College Station	27,303	43.0%	University of South Carolina-Columbia	9,956	51.7%
Florida State University	24,755	23.3%	Auburn University	9,839	52.0%
Texas State University	17,937	36.4%	The University of Alabama	9,756	53.1%
University of Florida	17,644	45.6%	Arizona State University-Tempe	9,527	50.9%
University of Central Florida	15,812	59.9%	Louisiana State University	9,051	46.0%
Texas Tech University	15,045	39.2%	University of Arizona	8,904	68.1%
University of South Florida-Main Campus	13,102	55.7%	University of Minnesota-Twin Cities	8,820	68.2%
Georgia Southern University	11,424	33.8%	The University of Texas at San Antonio	8,682	60.3%
The University of Texas at Austin	11,389	62.4%	University of North Texas	7,985	62.9%
Michigan State University	9,988	47.4%	University of North Carolina at Charlotte	7,831	52.4%







Universities with the Most Dedicated Student Housing Bedrooms Under Construction

(Where we could find bedroom count from property plans)

University	Bed Count	Capture Opportunity	University	Bed Count	Capture Opportunity
Arizona State University-Tempe	1,850	50.9%	Texas State University	589	36.4%
California State University-Sacramento	1,250	81.4%	Coastal Carolina University	564	28.5%
The University of Texas at Austin	1,222	62.4%	University of Alabama at Birmingham	521	79.8%
Clemson University	994	49.3%	University of South Carolina-Columbia	504	51.7%
University of California-Merced	675	N/A	University of Florida	492	45.6%
North Carolina State University at Raleigh	665	51.3%	University of Arizona	482	68.1%
Kennesaw State University	656	71.1%	University of Washington-Seattle Campus	464	76.2%
University of South Florida-Main Campus	640	55.7%	California State University-Fresno	404	83.4%
Towson University	611	70.8%	The University of Texas at Dallas	370	75.8%
University of Louisville	591	65.0%	Ohio State University-Main Campus	274	68.2%





Wide Range of Rent Growth Among Yardi 200 Universities

University – <u>Top</u> 15 of Yardi 200	June YOY Rent Growth	Capture Opportunity	University – <u>Bottom</u> 15 of Yardi 200	June YOY Rent Growth	Capture Opportunity
University of Massachusetts-Lowell	12.8%	71.8%	Northern Illinois University	-34.8%	70.4%
Wichita State University	10.1%	88.2%	University of California-Berkeley	-18.9%	76.7%
University of California-Santa Barbara	9.4%	59.1%	San Diego State University	-16.0%	79.5%
Oklahoma State University-Main Campus	8.5%	61.3%	Rutgers University-New Brunswick	-11.1%	67.5%
Brigham Young University-Provo	7.8%	61.7%	Duquesne University	-8.2%	39.3%
University of Southern California	7.4%	74.1%	University of Pittsburgh-Pittsburgh Campus	-8.2%	66.2%
Utah State University	7.1%	81.5%	University of Rochester	-5.5%	80.4%
Grand Valley State University	6.9%	47.4%	Texas A&M University-Corpus Christi	-5.2%	63.8%
University of Nevada-Las Vegas	6.5%	87.3%	The University of Texas Rio Grande Valley	-4.5%	91.4%
University of North Carolina at Greensboro	5.7%	35.4%	University of Missouri-St Louis	-4.0%	90.3%
University of Connecticut	5.6%	50.3%	University of Massachusetts-Amherst	-3.1%	51.9%
University of Colorado Boulder	5.4%	75.1%	Rochester Institute of Technology	-2.5%	45.9%
North Carolina A&T State University	5.4%	11.3%	University of Florida	-2.5%	45.6%
Arizona State University-Tempe	5.2%	50.9%	Ball State University	-2.4%	61.7%
University of Cincinnati-Main Campus	5.1%	73.9%	Eastern Michigan University	-2.3%	74.8%

^{*}Capture Opportunity = (Total Enrollment – On-Campus Dorm Capacity – Off-Campus Dedicated Student Housing) / Total Enrollment



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Potential Area of Distress – Loans Maturing in 2020



University	# Bedrooms
Indiana University-Bloomington	1,043
University of South Carolina-Columbia	924
Texas A & M University-College Station	916
Kennesaw State University	816
Huston-Tillotson University	810
Saint Edward's University	810
Bellarmine University	758
Simmons College of Kentucky	758
Spalding University	758
University of Louisville	758
Slippery Rock University of Pennsylvania	632
Southern Wesleyan University	590
Bowling Green State University-Main Campus	576
Middle Tennessee State University	512
California State University-Northridge	510
Los Angeles Academy of Figurative Art	510
Baylor University	431
Brigham Young University-Provo	404

University	# Bedrooms
Provo College	404
Rocky Mountain University of Health Professions	404
California State University-San Bernardino	370
Haskell Indian Nations University	236
University of Kansas	236
Louisiana State Agricultural & Mechanical College	196
University of Phoenix-Louisiana	196
Georgia Southern University	112
Florida Agricultural and Mechanical University	92
Florida State University	92
Augsburg University	84
Bethlehem College & Seminary	84
Dunwoody College of Technology	84
Institute of Production and Recording	84
Luther Seminary	84
Minneapolis College of Art and Design	84
North Central University	84
University of Minnesota-Twin Cities	84

<u>Red</u> = preleasing worse than 2019. <u>Green</u> = preleasing better than 2019. <u>Black</u> = preleasing within 1% of 2019.



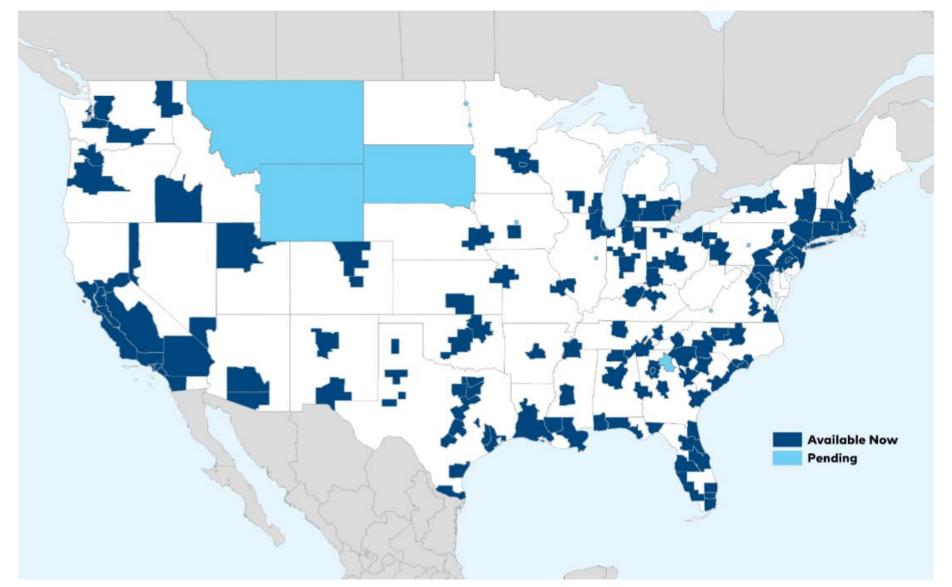
Quick Product Update

(The One and Only Plug You'll Ever Have to Live Through!)



Yardi Matrix Student Housing Universe









Yardi Matrix Student Housing Coverage

- Over 2,600 university profiles
- Dedicated student housing data on over 500 universities
- Over 600,000 bedrooms completed
- Over 13,500 bedrooms under construction
- Over 50 properties in each the planning and prospective phases
- Yardi 200: Includes all Power 5 + Carnegie R1 and R2 schools

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Yardi Matrix Student Housing Functionality

- Property search
- Conventional multifamily in the shadow market
- Loan information
- Owner and seller portfolios
- Existing stock and supply pipeline
- Capture rate
- Prelease curves
- Property detail
- Rental rates
- University profiles







Market Feedback: What Prospects Have Been Saying Since Product Launch

Key Areas Where Matrix Excels:

- Interpretation of school housing needs + capacity
- New supply pipeline
- Transparency into the shadow market
- Rent and prelease curves by the bedroom
- Ownership, sales and loan information





Yardi Matrix House View July 2020

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- Universities are struggling financially, with state funding cuts and less international and out-of-state students,
 who typically pay a premium
- Schools are forced to rely more on tuition and most universities have decided to reopen, but some separation seems to be occurring (e.g. Harvard)
- Students seem to want to go back to campus based on pre-lease data, regardless of in-person vs. online instruction
- National pre-lease for 2020 is only 2.9% below 2019 levels and there is great divergence across
 universities, regardless of fall plans (i.e. University of Pittsburgh and Utah State University well above 2019 levels,
 while University of Memphis and Rutgers University New Brunswick not doing so well)
- The college experience will change significantly, with less gatherings, online and in-person instruction, mandatory face masks, etc. which raises the question, is an expensive college education worth it?
- While certain universities may struggle, we remain fairly optimistic for the dedicated student housing industry as a whole
 - Demand is still there from students wanting to come to campus, and with less dorm capacity, these students will need to find off-campus housing
 - COVID-19 may slow projects in early stages of development another positive for the industry





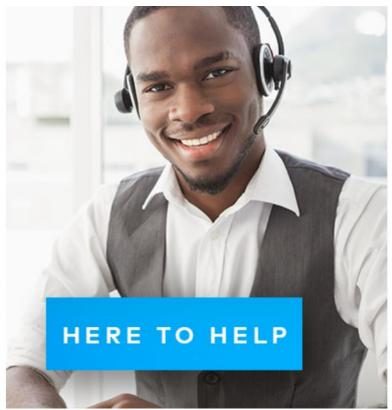
For More on Yardi's Capabilities

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Yardi's COVID-19 Resource Page:

https://www.yardi.com/coronavirus/













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THANK YOU

FOR ANY QUESTIONS PLEASE FEEL FREE TO CONTACT ME

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