



making room

student housing for a new generation

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university of st. thomas, guinan hall & mixed-use garage — 300 beds, 850 cars

university of houston, calhoun graduate & professional lofts — 744 units, 984 beds

university of texas health science center student apartments & garage — 306 units, 350 beds, 424 cars

stephen f. austin state university residence hall & garage — 400 beds, 1,000 cars

texas a&m university campus pointe student housing — 252 units, 432 beds

angelo state university mixed-use residential village — 192 units, 452 beds

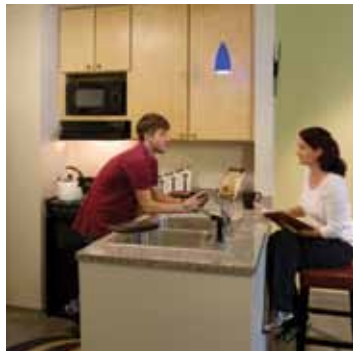
texas state university, residence life north housing dormitory — 612 beds

ashwin's medical college student housing kathmandu, nepal — 500 beds

sam houston state university residence hall — 306 beds

university of central arkansas residence hall — 350 beds

university of texas at san antonio student housing, phase III — 618 beds



making room student housing for a new generation

Wes Good, Kathleen Irwin, and Nicola Springer

As the number of students entering college continues to rise, so too does the demand for on-campus housing and the list of amenities residence halls must offer to compete for prospective students. Overcrowded and outdated facilities have become commonplace, forcing many students off campus after their freshman year because of physical capacity, amenities, or a combination of the two. Recognizing that student academic performance is enhanced by the on-campus living experience, universities across the nation are investing millions of dollars not only to renovate existing student housing and construct new facilities accordingly, but also to elevate the perception of the on-campus living environment as a whole. The college dormitory as we know it is has become a thing of the past.

today's college freshman

Most students representing the Classes of 2011-2013 were born around 1989-91. Some facts about these soon-to-be college graduates:

- What Berlin Wall? It never existed during their life.
- Bottled water has always been available to them.
- Gas stations have never fixed flats, but most serve cappuccino.
- Humvees (minus artillery) have always been available to the public.
- They have never "rolled down" a car window.
- Instead of using email they're always texting 1 n other.
- They have grown up in a politically correct universe in which multi-culturalism has been a given.
- Tattoos, once thought "lower class," are, to them, quite chic.
- U2 has always been more than a spy plane.
- Babies have always had a Social Security Number.
- Multi-grain chips have always been a "healthy" junk food.
- They have never used a card catalog to find a book.
- Tiananmen Square is a 2008 Olympics venue, not the scene of a massacre.
- They get more information from Jon Stewart and Stephen Colbert than the newspaper.
- Food packaging has always included nutritional labeling.
- Pete Rose has never played baseball as far as they know.
- They will encounter roughly equal numbers of female and male professors in the classroom.
- Reality shows have always been on TV.
- Roommates, few of whom have ever shared a bedroom, have already checked out each other on Facebook.

Excerpted from Beloit College's Mindset Lists for the Classes of 2011, 2012, and 2013

<https://campus.beloit.edu/mindset/insert year.php>, accessed 21 June 2010

Today's college freshman is far different, demographically, than just ten years ago, and is a virtual stranger to those of the 60s and 70s when much of the existing student housing across the country was constructed. As the first of the Baby Boomers reached college age, high-rise structures housing large numbers of students sprang up in record time across the country to meet an unprecedented demand for student housing. Most of these students grew up sharing a bedroom with siblings or served in the military prior to attending college, so the shared room/communal bath model was not as foreign a concept as it may seem today.

Residence hall design of this era took on variations of the International Style, typically consisting of double occupancy rooms served by double-loaded corridors that were anchored by community bathroom facilities. Social lounges and study spaces often served up to 60 residents per floor, and were kept to a minimum because they were non revenue-generating.

"The needs and desires of students and their families have changed over the past 10 years, more so than in any other period I have seen."

— Connie Carson, 2006-2007 President of the Association of College and University Housing Officers-International

Universities are employing new design strategies, and in some cases, a whole new attitude toward campus residential life in order to remain competitive in a market where private developers have caught the attention of college students by providing luxurious apartments off campus. Of residence halls currently being planned, 78.9% will be college-owned or operated, leaving approximately 21% developed by outside parties.¹

An increasing number of institutions are realizing the benefits, both to students and in terms of energy savings, of building green, which is becoming a determining factor

in a student's housing choice. *The Princeton Review's* 2009 College Hopes & Worries Survey asked 15,722 respondents, "If you (your child) had a way to compare colleges based on their commitment to environmental issues (from academic offerings to practices concerning energy use, recycling, etc.), how much would this contribute to your (your child's) decision to apply to or attend a school?" 66% said they would favor such information and 24% said it would "Strongly" or "Very Much" contribute to their assessment of a school.²

kids these days

Undergraduates

Ranging in age between 18-24, today's typical college student desires more privacy, a sense of independence, and an environment with all the technological conveniences of home. The majority of freshmen now entering college have never had to share a bedroom or bathroom.

Additionally, they have matured in a rapidly advancing technological age where personal computers, Internet, and instant connectivity are a way of life. They have always had access to the World Wide Web and "Google" has always been in their vocabulary. Technology is not a luxury; it is essential. They are more consumer-oriented than in the past, and will likely be "shopping" their future residence.

Nonetheless, students' needs for a sense of community and a "home away from home" have not changed over the decades. In addition to greater amenities, schools are focusing more on easing the transition for incoming freshmen, many of whom are leaving home for the first time to live with a roommate they have never met, and are now having to learn how to do their own laundry, be responsible for their finances, and maintain their grades,

all without parental guidance. To facilitate this transition, dormitories are now being designed as part of residential communities that support domestic life, social activity, and provide 24/7 access to necessary services.

Graduate and Professional Students

Across the nation, universities are seeing an increased demand for on-campus graduate and professional student housing, whose current availability suffers from many of the same plights as undergraduate residence halls — lack of amenities, lack of capacity, and a facility designed for a different generation of students.

Graduate enrollment has increased about 67% between 1985 and 2007.³

Today's graduate student will likely be looking for affordable housing, as housing prices, particularly on urban campuses, have increased. Also, many graduate students are international, having never been to the university's city,

Private community kitchens and social spaces in residence halls allow for intimate get-togethers, small classes, and group study sessions.





Berkeley that they have devoted a blog to it, complete with a short documentary film detailing the economic plight of graduate students trying to make ends meet.⁴

Community College Students

Though not traditionally considered conducive to fostering residential life, community colleges are exploring the benefits of on-campus housing. While the majority of community colleges remain commuter schools, a growing number are offering housing to a limited percentage of their student population.

26.1% of public community colleges and 39.9% of independent community colleges offer on-campus housing.⁵

Norma Kent, the spokeswoman for the American Association of Community Colleges, said that although “nobody’s documented the full picture, it is our sense there is increased interest and growth in campus housing at community colleges. With more traditional-age students enrolling at community colleges for a variety of reasons, colleges and students seem more receptive to on-campus housing. They want that college experience.”⁶

53% of today’s community college students are at least 22 years old, with the average age being 29.⁵

Much like the graduate student, the community college student is typically older than the undergraduate student and often supports a family while attending college. Accordingly, the majority of student housing on community college campuses is a mix of apartment-style units and common dormitory-style housing to satisfy the generationally diverse student population.

schools of thought

Changing demographics and preferences have undoubtedly shaped residence hall design. More specifically, these factors include the recent suburban flight, the academic and social benefits recognized from an integrated living/learning environment, increased security, and the academic, environmental, and economic benefits of sustainable buildings.

Moving Up

Suburban flight and a return to urban living is occurring in many large cities across the U.S. and has become a trend in student housing as well. People are seeking a more urban, hip environment. Also because of limited available open land, residence hall population is becoming more dense; facilities are growing up rather than out. As student population continues to rise, we will see more residential high-rises popping up on campuses across the U.S.

Living-Learning Environments

Many universities agree that residence halls are the social nexus of campus life, and though secondary to academic programs, greatly impact a student’s choice of schools. Accordingly, universities are recognizing that residence halls must offer more — not only to compete for incoming students, but also to retain students on campus beyond their first year. New and newly-renovated residence halls foster a “living-learning” environment that combines domestic life with social activity and academics. Simply put, they provide the lifestyle students desire.

As part of a residential community, dormitories are now being designed to provide a multitude of functions that support this lifestyle. Convenience and access are top priority in programming and design, giving rise to

cyber cafés, coffee bars, retail stores and restaurants, sky lounges, small community kitchens for intimate dinner parties, multi-purpose meeting spaces (used for classrooms, student organization meetings, etc.), fitness centers, laundry lounges, study lounges, wireless internet access, and intimate study nooks — all within a tightly-knit community.

These auxiliary student services are also operating longer hours as demanded by students, who expect everyone to be as connected and instantly reachable as they are. The Society for College and University Planning stressed in a 2009 report that “Ubiquitous learning is here. Students no longer have to show up in a bricks-and-mortar building to achieve their learning goals; they’ve become ‘free agents.’”⁷

As evidence of the recent success of the living-learning concept, the Association of College and University Housing Officers now holds an annual Living-Learning Communities Conference that focuses on creating,

Students want to be connected 24/7 — communal spaces like this cyber café provide wireless internet and a casual work/social environment.



what's in a residence hall?

- laundry — **98%**
- study rooms — **78.4%**
- rooms air-conditioned — **84.3%**
- kitchens — **72.5%**
- vending — **80.4%**
- card access to building — **90.2%**
- tv rooms — **78.4%**
- rooms carpeted — **66.7%**
- external video surveillance — **84.3%**
- card access to rooms — **35.3%**
- computer centers — **27.5%**
- internal video surveillance — **60.8%**
- classrooms — **47.1%**
- fitness centers — **15.7%**
- ATMs — **19.6%**
- dining halls — **17.6%**

From *College Planning & Management's "Living on Campus, 2010 Annual Report on Student Housing,"* May 2010

quick facts

91,000 — median sq ft of residence halls built in 2009

351.2 — median sq ft/student of residence halls built in 2009

293 — median student capacity for residence halls built in 2009

\$194 — median cost/sq ft to build a residence hall in 2009

\$69,502 — median cost per student

\$19 million — median construction cost of residence halls built in 2009

From *College Planning & Management's "Living on Campus, 2010 Annual Report on Student Housing,"* May 2010

<http://www.peterli.com/cpm/pdfs/2010-College-Housing-Report.pdf>, accessed 21 June 2010

expanding and sustaining these environments on campus. It seems the delineation between classroom, dormitory, administration, and student services will continue to blur in the future as instant access and availability become even more a way of life.

Security

In light of campus violence over the past decade, facility security continues to be paramount for planners. Architects employ passive security measures such as longer sight lines and ample lighting to all areas, alleviating the need for more active systems. The challenge, however, is to strike a balance between designing the open spaces administrators desire for their ability to allow spontaneous encounters, and keeping those spaces secure. Card access has long been required for entrance into many residence halls, but card access into individual rooms is on the rise. Some of the upgrades being requested by housing officers include:

- Installing security cameras around residence halls
- Installing keycard systems for buildings
- Installing mass notification systems
- Increased lighting in area
- Installing security cameras in residence halls
- Installing keycard systems for rooms
- More security patrols
- Installing emergency communication kiosks, call boxes, panic alarms
- Adding security/reception posts at building entrances.

Sustainability

As green buildings become more commonplace, an increasing number of students are requesting sustainable living environments. For many of these students, "reduce,

re-use, recycle" has always been part of their culture, so green living is not a foreign concept to them. Universities also benefit from green buildings through reduced energy costs, longer building life spans, and healthier work environments for staff, faculty and students. Environmental strategies are even becoming a distinguishing feature universities tout in their competition for enrollment. According to *Inside Higher Ed*, "Students at a growing number of colleges are voting to increase their own fees to start environmental sustainability funds."⁸ Such was the case at Oregon State University where 7 in 10 students voted in favor of an \$8.50 fee hike to purchase renewable energy credits to offset electricity consumed by the university. At press time for this article, there were 686 signatories for the American College & University Presidents' Climate Commitment.⁹

living spaces

In addition to greater amenities within residence halls, students desire flexibility and the ability to personalize their living space. Offering fewer furnishings, but of higher quality and with multiple uses, has proven appealing to students and sometimes, more economical for the university. Storage modules comprising a wardrobe, shelving system, and swinging screens, as well as loft bed and desk systems, can be configured to define a variety of live/work/sleep areas. Many of the residence halls aimed at older students, such as the **University of Houston Calhoun Lofts Graduate and Professional Housing** and the **University of Texas Health Science Center-Houston Student Apartments**, come unfurnished because many of these students already own furniture.

While furnishings may become more sparse, technology in living spaces will continue to increase. As reported in a 2009 study of online learning effectiveness by the U.S.





Department of Education, “Research on the learning outcomes of online education has demonstrated that it’s at least the equivalent, if not better, than the outcomes of just face-to-face courses. Blended learning provides the greatest benefits of all.”¹⁰ Furthermore, students today “will continue to demand that more learning be delivered asynchronously, via whatever electronic telecommunications device they have handy.”¹¹

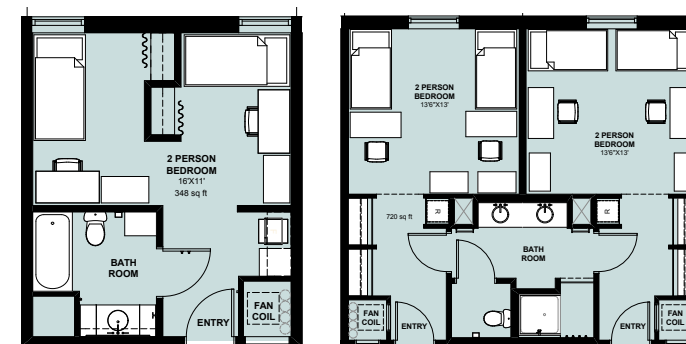
Some universities are even providing incoming freshman with mobile and handheld computers, with the intention that students will use them to receive homework alerts, answer in-class surveys and quizzes, and check their meal and account balances. “Because 93 percent of ACU students bring their own computers with them to college, we are choosing to take them to the next level by providing converged mobile devices” says CIO Kevin Roberts of Abilene Christian University in Abilene, Texas, where they provide all incoming freshmen with an Apple iPhone or iPod Touch.¹²

Traditional Room Layouts

The majority of existing dorm rooms are double occupancy, paired with either gang bathroom facilities serving up to 40 students per floor or suite bathrooms connecting two rooms — a situation leaving much to be desired. Until recently, students have had little choice and have opted to move off campus in search of better amenities and greater freedom.

Taking notice, universities are responding with a greater variety of room configurations to satisfy different lifestyles. Luxury and amenities are a higher priority than in the past — indeed, some new residence halls reflect influences of luxury hospitality and corporate design. At the barest minimum, all new rooms should be wired for Internet access and provide sufficient electrical capacity to support residents’ various appliances and computer equipment. A good rule of thumb is a “port per pillow,” meaning a computer connection for every resident, with 10-12 power outlets per student.

Traditional units, updated with basic amenities



- Extended counter space
- Tub/shower combo
- Fan coil units & plumbing chase accessible from exterior of unit
- 10’ ceilings in living areas
- Plan for micro-fridge
- 10-12 outlets per student
- 320 sq. ft. typical for double room

Apartment-style layouts



Apartment / Loft-Style Living

A common trend among new residence halls is apartment-style living with two, three, or four bedrooms converging on a shared living room and bathroom. This type of arrangement typically serves 4 to 8 students per unit, depending on the number of sleeping rooms per unit and whether they are single or double occupancy. Few of these units feature full kitchens, though most of them offer a small kitchen area with a sink and room for a small refrigerator and microwave. The inclusion of kitchenettes requires additional operations and maintenance considerations to accommodate increased venting and trash generation.

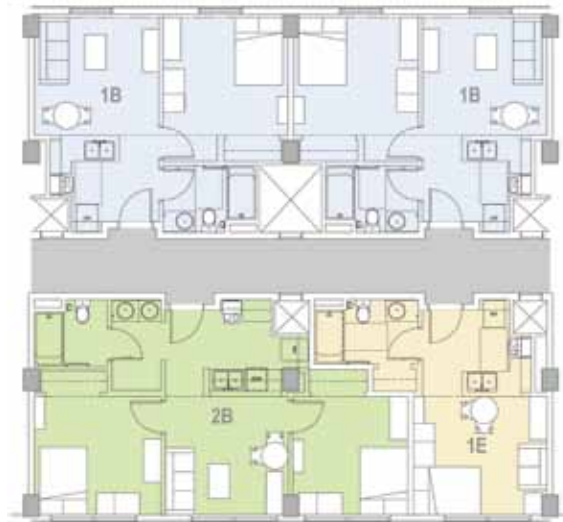
As student density increases, so too does the desire for a hip, trendy lifestyle. One of Kirksey's recent projects — [Calhoun Lofts at the University of Houston](#) — is following suit. The 10-story urban high-rise features 744 one-bedroom, two-bedroom and studio loft apartments (984 total beds) offered exclusively to graduate and professional students. The lofts were designed with an open, "raw" aesthetic, featuring high ceilings and exposed mechanical and structural systems. Each unit features living areas and full kitchens, which are relatively new concepts in residence hall design. In addition to the traditional common spaces such as a game room, student lounges and study areas, Calhoun Lofts offers a fitness center, a media room/theater, and a rooftop sky lounge and terrace that afford spectacular views of the city.

Residential Neighborhoods

Gaining in popularity due to its realized social benefits, the residential "neighborhood" concept combines traditional dormitory design with apartment-style living by applying a modern adaptation to the community bathroom. Instead of arranging rooms along double-loaded corridors with common spaces clustered at the ends of hallways, this



Graduate Loft Apartments



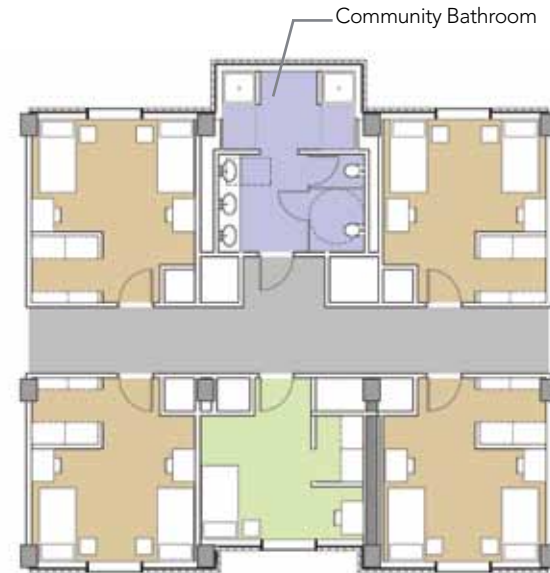
Studio, 1-Bedroom, and 2-Bedroom Apartments

approach accommodates 8-16 students, housed in doubles and singles, together in pods (neighborhoods) within the larger residence hall. A large bathroom with 2-4 sinks, showers and toilets serves each neighborhood. To foster student interaction, each neighborhood is situated around common areas that include lounge space, study areas, laundry facilities, and kitchenettes. Common areas are smaller and more intimate in size, yet greater in number to serve the different neighborhoods.

Single Occupancy

Having gained popularity in the 80s and 90s, the single-resident rooms are now being offered much less, as universities have realized the importance of socialization and its positive effects on students' academic performance

Residential Neighborhood



Double and Single Units with Community Bath

and general well-being. These rooms typically offer more square feet per resident to be able to accommodate an additional resident in the event that a special needs student requires live-in assistance or that the demand for student housing increases such that these rooms need to house two students. The majority of these private rooms are offered to upper classmen rather than freshmen, both as an incentive to older students to remain on campus and to encourage socialization among freshmen.

social spaces

While the living spaces probably have the most profound effect on students, the community spaces offer the greatest opportunity for their social development. Beyond

mere functional necessities, they are more importantly social places — places to see and be seen, places to gather, and places for recreation. Study lounges, laundry rooms, game rooms, and computer lounges are still very much a part of the residence hall, but their design and application have changed.

There is a current shift toward less living space and more community space. No longer are the social spaces just the cavernous multi-purpose rooms they once were. Designers are taking advantage of every nook and passageway to carve out more intimate and impromptu gathering spaces. Flexibility within social spaces is also critical, allowing universities to adapt to students' changing wants and adding longevity for the entire facility. What today serves as a small fitness area could be tomorrow's cyber café.

Multi-Function / Gathering

Multi-purpose rooms of varying sizes that can serve as study lounges and classrooms are desirable to accommodate both large and small groups. The larger spaces tend to be more social and are often used as meeting space and/or classroom space, which is particularly effective for colleges offering summer programs and conferences to have instructional space adjacent to the accommodations. These rooms are sometimes equipped with full kitchens to function as "party" rooms that can be reserved for students wanting to cook meals for parents/visitors or for small dinner parties. The underlying guideline is flexibility; these rooms should be designed for multiple functions, including conversion for additional sleeping rooms if necessary.

Laundry

Dormitory laundry rooms have gone beyond utility to actually simplify the chore and allow for socializing and

multitasking. As a general rule, these spaces should provide a pair of washers and dryers for every 30 to 35 students, should be conveniently located (within 200 feet if possible), and provide a sink, folding tables, trash cans, and hanging racks. Some campuses have expanded laundry room amenities to include exercise equipment, arcade or pinball machines, televisions, lounge furniture, and computer workstations.

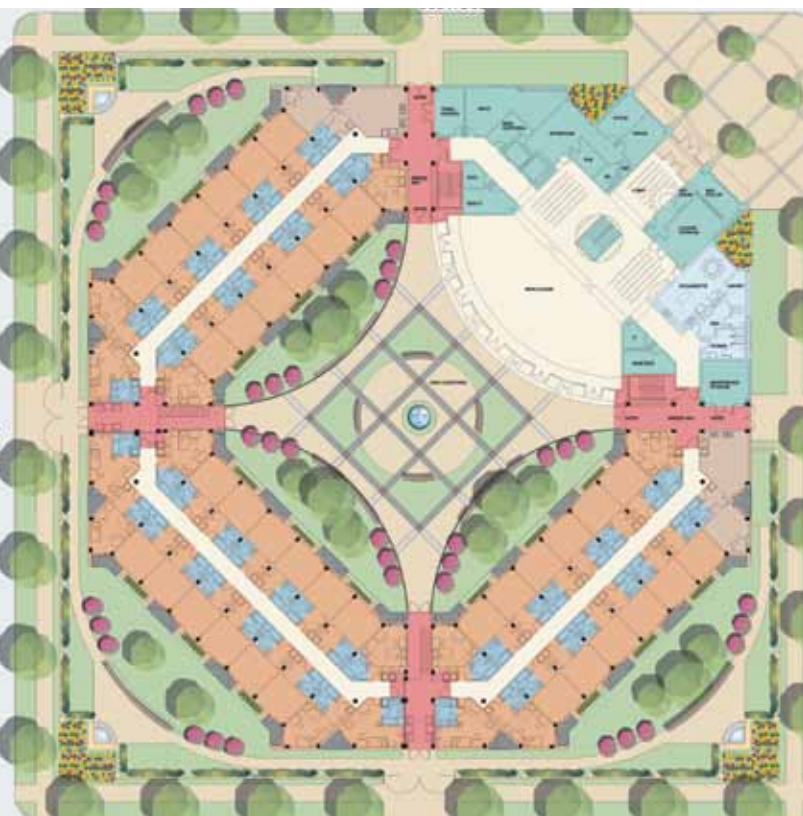
Dining

Dining areas have perhaps seen the most significant changes over the years. Smaller dorms no longer consider the traditional dining hall a programmatic requirement. With the shift in living spaces toward apartments/lofts and suites with kitchenettes, on-campus convenience stores, sometimes located in the residence hall, have proven beneficial.

Here, students can purchase limited groceries and staples, allowing them to store snack foods and/or prepare basic meals in their room. Many schools are also opting to provide smaller "grills" or snack bars throughout the campus that are convenient to the residence halls and have extended dining hours. Food courts operated

Laundry rooms have become laundry "lounges," complete with gathering areas for studying or socializing.





by the university or outside vendors also give students greater menu options and faster service. This emerging trend away from communal dining is a direct result of the changing student preferences in favor of greater variety, independence, and flexibility.

A centrally-located dining hall at **Tarleton State University** offers a mix of dining options. A café and a convenience store are located at the main entrance to provide after-hours service. Access to these two areas is also provided off the lobby space, allowing people to visit without having to swipe a meal card.

Outdoor

Outdoor areas have become a more integrated part of campus residential life. Universities are creating a wider variety of designed spaces such as gazebos, courtyards, picnic areas with grills, and sports courts. Green roofs offer the dual benefit of an inviting outdoor space and increased sustainability and are a good option for urban housing facilities, which may have limited outdoor space. Some residence halls offer these amenities strictly for residents, while others recognize the social value of availing them for the greater student population.

outlook

As expected, student housing continues to be in high demand. Quality and amenities continue to be key focuses for university housing officials, although with the current economic situation and the rise of unemployment among the 18-30 age group, some universities are having trouble competing with nearby off-campus rentals. "Students are struggling financially and housing is the one thing that they do not need to finish college."¹¹

Of the universities surveyed by *College Planning and Management* magazine, 55.3% of respondents are either currently increasing their number of residence hall beds, or plan to do so within five years. 89.8% of respondents felt that the quality of their residence halls was either important or very important in determining whether a student would attend their institution.¹¹ As studies have found a direct relationship between living and learning environments, university housing officers have shifted their focus to student well-being. Over the next 3-5 years, however, they will be challenged with balancing the cost to students, accommodating fluctuating student expectations, and a lack of adequate funding.

"There will always be ups and downs in residence hall occupancy, so the university should consider what a space can be when it isn't housing students. They should plan for facilities that will serve students and the university for at least 20 years."

— Paul Abramson, Research Director for College Planning & Management Magazine and President of Educational Planning Firm, Stanton Leggett & Associates

Students value outdoor play spaces as much as their living and working spaces.





references

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12. **ACU News**, "ACU first university in nation to provide iPhone or iPod touch to all incoming freshmen"; http://www.acu.edu/news/2008/080225_iphone.html, accessed 21 June 2010

Projects highlighted in red throughout the article represent Kirksey student housing projects.

helpful links

- Association of College and University Housing Officers-International (ACUHO-I); www.acuho-i.org
 Society for College and University Planning (SCUP); www.scup.org
 National Association of College Auxiliary Services (NACAS); www.nacas.org
 American College & University Presidents' Climate Commitment; www.presidentsclimatecommitment.org
 Association for the Advancement of Sustainability in Higher Education (AASHE); www.aashe.org
 American Institute of Architects Committee on Architecture for Education; www.aia.org/cae_default
 National Clearinghouse for Educational Facilities; www.edfacilities.org
 Association of Physical Plant Administrators (APPA); www.appa.org
 Global Trade Association for the Education Industry; www.worlddidac.org
 U.S. Green Building Council (USGBC); www.usgbc.org

For more information, contact



Wes Good, AIA
 713 426 7522
wesg@kirksey.com



Nicola Springer, AIA, LEED AP
 713 426 7510
nicolas@kirksey.com



6909 Portwest Drive
Houston Texas 77024
713 850 9600

KIRKSEY.COM

TX Registered Architect #5236