

Trends in Undergraduate Student Housing

Process and Product

by **Rena Cheskis-Gold and Alexandra Delaney Danahy**

BACKGROUND

A number of factors have influenced the pace and quantity of residential construction and renovation on college and university campuses. The full-time undergraduate student population in degree-granting institutions grew 45 percent nationwide (National Center for Education Statistics 2011) during the 2000s at the same time that much college housing reached the end of its functional life. [1]

Undergraduate college culture has also begun to change, in that colleges are now seeking to increase the number of students living on campus in order to promote a sense of community and to foster collaboration among students and with faculty (and, sometimes, to appease the residents of neighborhoods around campus who do not want undergraduates as their neighbors). Some upperclass students who previously preferred off-campus housing now prefer the convenience of on-campus living as long as it can provide them with privacy and independence at an affordable price. A variety of research studies, including our own, has shown that it is a competitive advantage for schools to provide quality housing for a significant portion of their students, as housing availability and options have been shown to play a role in students' (and their families') admissions decisions.

Housing availability and options have been shown to play a role in students' admissions decisions.

In providing research, data, and analysis related to college housing strategy over the past 10 years, we have observed that colleges' reasons for providing housing have evolved and deepened and that students' needs and preferences have also changed. In preparation for renovation or new construction, we have worked with college housing professionals and architects to spearhead a thoughtful process of documenting both physical and residential-life program needs. In this article, we discuss the essential steps in a data-driven exploration process. Then, based on our conversations with public and private college housing professionals and architects, we present some of the college housing trends that they have observed or generated.

PART 1: DATA-DRIVEN PLANNING AND PROGRAMMING FOR HOUSING

GOALS

A data-driven strategic housing process always begins with stakeholders defining the core issues related to why residential construction or renovation is needed. There may be multiple goals involved, such as a facilities goal of bringing buildings up to code, an admissions goal of providing housing that is competitive with peer housing, or a student-life goal of providing increasingly independent housing options from class year to class year. It is important that all stakeholders share an understanding of the project's mission and goals, including project constraints, challenges, and opportunities; any numeric goals to provide a certain number of beds or to house a certain percentage of students; and the importance of housing in aiding recruitment, assisting with retention, and creating community. Another important question concerns whether there are priority populations who would benefit most from housing, such as first-year students, upperclass students, students in specific schools, or international students.

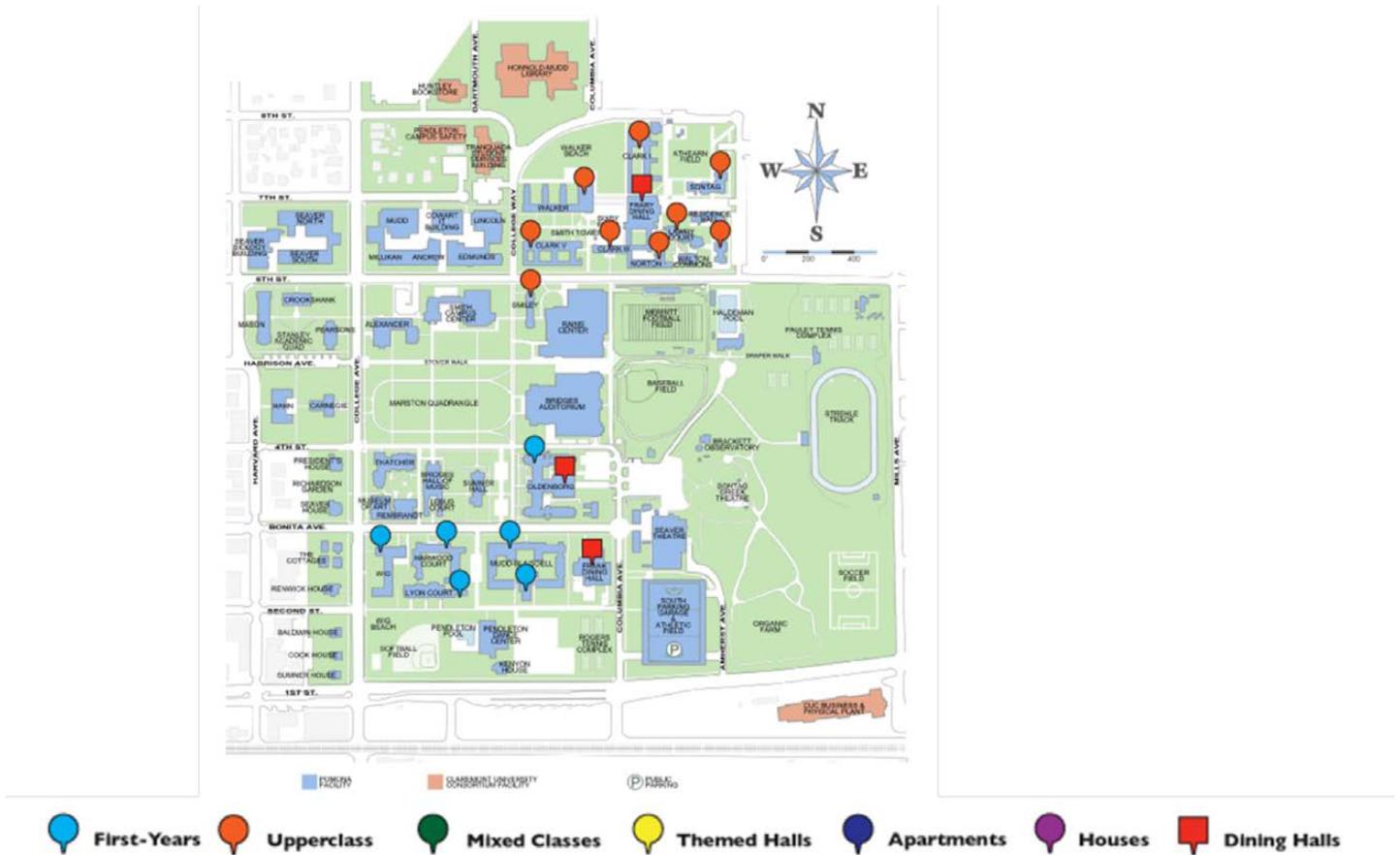
We recommend an interview process with stakeholders to give each of them an opportunity to express their opinions on a set list of issues, followed by a rigorous comparing and contrasting of their comments.

ADMINISTRATIVE DATA ANALYSIS

Reviewing existing data will help the planning team refine its goals and priorities. From a facilities point of view, it is important to conduct a building inventory and assessment. Then, an intensive analysis of student demographics can help the team understand exactly which groups are currently living in school housing or off campus. Combining registrar data on background demographic characteristics with housing data creates a powerful student population database for analysis.

Mapping is an excellent visual tool for depicting an institution's facilities and demographic stories as it can show the different types of housing options available on and off campus as well as the types of students who choose them. The example of a facilities map of Pomona College (figure 1) shows clearly the strong divide between the first-year and upperclass residential areas of campus.

Figure 1 Example of Benchmarking with Maps



Source: ©2012 Demographic Perspectives, LLC.

Lessons learned from examining student demographics might be that architecture students prefer living in the rougher, emerging areas of the city rather than in traditional on-campus housing or that international students of all classes, when given the option, prefer units with kitchens. Another lesson might be that a school’s inventory does not match well with its student population; for example, too many traditional doubles may not satisfy the needs of upperclass students.

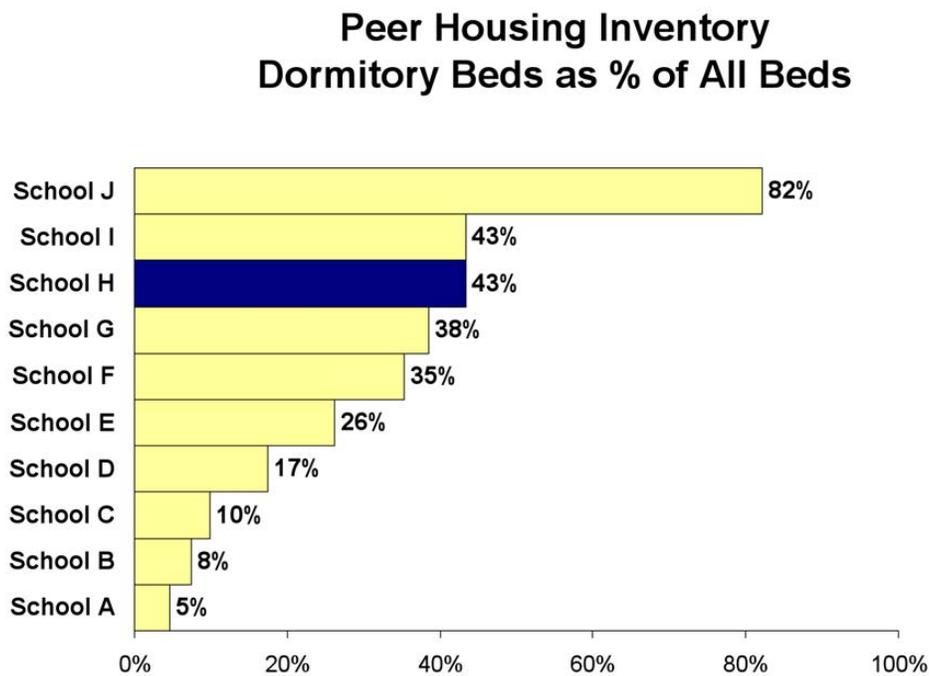
BENCHMARKING AND BEST PRACTICES [2]

Benchmarking using different groups of peers can inform a planning team about the range of existing and planned residential facilities and provide a vocabulary and conceptual framework for studying the issues involved. There are many different types of peers, such as admissions peers, similar system peers, structural peers, consortial peers, and aspirational peers, each of which accounts for certain aspects of institutional competitiveness. While not intended as a rigid planning constraint, benchmarking provides a framework for evaluating the competitive advantages to be obtained from planning concepts under consideration and helps keep planning teams from overlooking important concerns.

Research on best practices and emerging topics can complement traditional benchmarking by looking beyond peer-group boundaries so as not to miss pertinent concepts. Reviewing practices at a wider group of schools can even create new opportunities for leadership among a school’s own peers.

Benchmarking and best-practices research can be quantitative, as shown in figure 2 (e.g., percentage of students housed, number of buildings, percentage of overall beds in suites or apartments, room fees) or qualitative, as shown in figure 3 (e.g., list of amenities included in none-some-all of residences, campuses with first-year-only housing, campuses that incorporate faculty office or residential space into residence halls).

Figure 2 **Example of Quantitative Benchmarking**



Source: ©2010 Demographic Perspectives, LLC.

Figure 3 Example of Qualitative Benchmarking

Res Life Unit Mix				
School	Traditional Res Halls	Suites	Apts.	Family-Like Houses
School A	X	X		
School B	X	X	X	X
School C	X		X	X
School D	X	X	X	

Class Mix				
School	1st-Year Separate	1st-Year Limited	Mixed Classes	Upper Classes
School A	X			X
School B	X			X
School C	1st-2nd			3rd-4th
School D		X		

Source: ©2012 Demographic Perspectives, LLC.

DEMAND ANALYSIS AND TEST-MARKETING OF NEW IDEAS

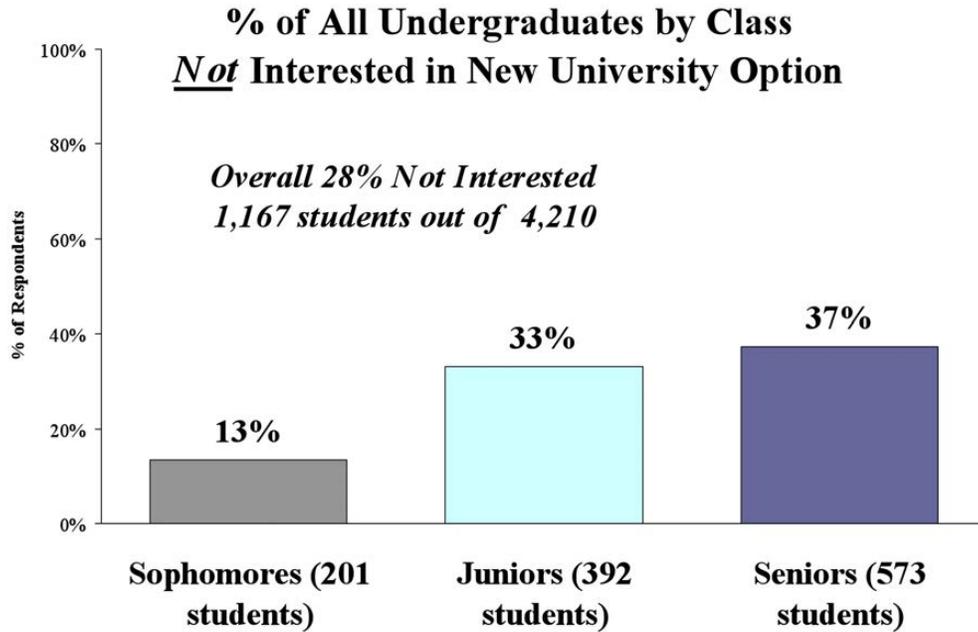
To assess housing demand, there are two types of methodologies employed: surveys and focus groups. When a representative view of student behavior or opinion is needed, efforts should be made to develop and administer a high-quality professional survey that attracts a high student response rate. A quality survey accomplishes three tasks:

- Provides baseline data on all students as well as significant subgroups of students;
- Conveys a message that the institution is undergoing a housing planning effort; and
- Gathers in students as stakeholders in the housing planning process.

The latter is particularly important if more student input is needed as the planning process progresses.

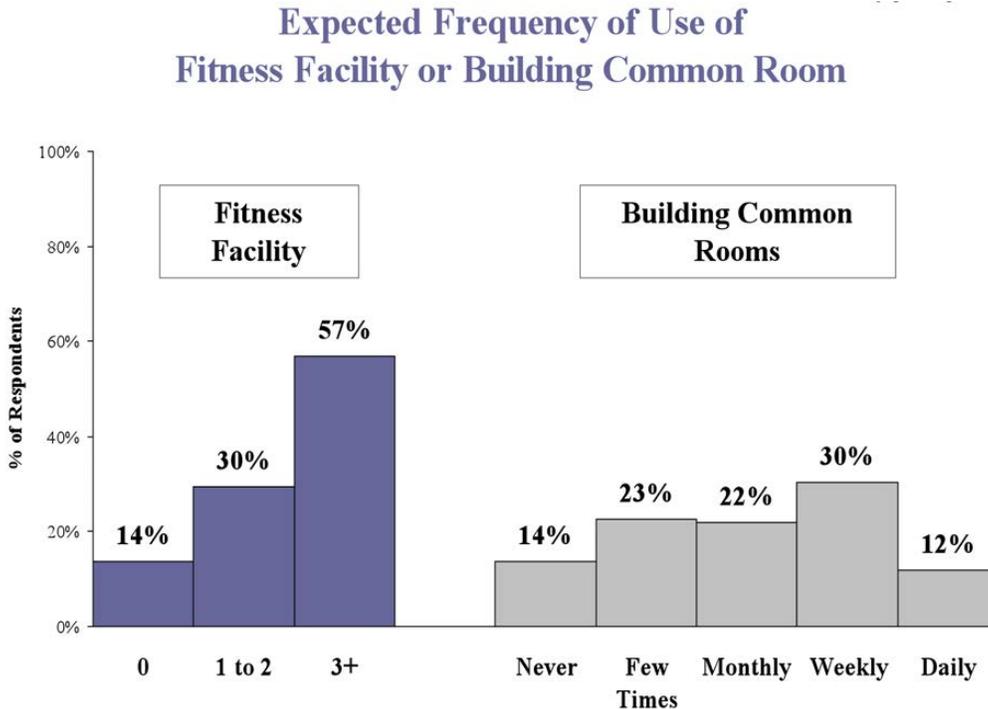
The simplest of surveys assesses the number of students who might be interested in a specific type of housing at a specific location and price point. A more valuable survey parses the demand by groups of students who are more or less likely to be interested in the proposed housing and by the specific housing features that are most desired, as shown in figure 4 (e.g., locations and transportation options; unit types; unit, building, and community amenities). If the goal of a survey is to test-market new options, as shown in figure 5, then it is helpful to have architectural images of building concept designs and room layouts built into the survey. Some ideas to test-market might include new locations for housing, utilization of common spaces (such as game rooms or small fitness rooms), or willingness to accept a small efficiency kitchen in an apartment over a larger full kitchen.

Figure 4 Example of Survey Demand Data



Source: ©2010 Demographic Perspectives, LLC.

Figure 5 Example of Test-Marketing of New Options



Source: ©2010 Demographic Perspectives, LLC.

If the goal of a survey is to make the case for more housing, then it is wise to assess the early part of the housing story: was housing an important aspect in choosing to apply to a school, in accepting an offer, in initially acclimating to school, and in retention? And, what were students' initial perceptions of the school's housing compared to peer housing, and what were their expectations for where they would live (e.g., on or off campus, Greek housing) throughout their years in school? A representative survey can also tell the story at one point in time of which students requested certain types of housing and the proportion who got what they wanted. This is particularly valuable if administrative data on housing requests and fulfillment are lacking.

Focus groups can be conducted at different points in the planning process. Information learned from a focus group is not meant to be representative of all students; rather, it represents a range of responses from those students most interested in the topic. Focus groups are best for dealing with complex topics and for providing quotes that add color to statistics. To make the case for housing, for example, a focus group might delve deeply into the students' and their parents' thought processes about the purpose of housing while at college and their willingness to pay for certain aspects of housing. Focus groups cannot generate demand statistics (e.g., the percentage interested in said housing), but they can help to develop an understanding of which student markets the housing will attract.

At a later stage in the planning process, after a demand study or upon completion of concept designs, focus groups are an excellent way to get detailed input on the housing product and finishes. For example, building a sample room and having students react to flooring, lighting, furniture style and placement, and room dimensions can lead to conclusions such as "students prefer more space in suite bedrooms and less space in suite common spaces" or "students do not want a washing machine in their room if it takes up space and could be located instead in a common area on their building floor."

A focus group is a group interview. The exciting part of a focus group comes when the collective group generates ideas that an individual might not have considered. However, there are times when an individual interview with a student is more appropriate, such as when there are private or difficult topics to be discussed (e.g., support for mixed gender bathrooms, the difficulties of living with roommates).

ADDITIONAL PLANNING NOTES

Not all planning projects lead to building renovation or construction. Some notable examples are when benchmarking shows that an institution houses a higher percentage of students compared to its peers or when a student survey and/or administrative mapping shows that there is a trend for private-market housing to house a growing proportion of students. In each of these cases, the conclusion might be that less, not more, institutional housing is needed. Another example is when planning exercises lead to the conclusion that more off-campus housing services, such as a campus shuttle service, an online off-campus housing listing service, or organized social gatherings/study breaks, are a better use of institutional funds than bricks and mortar.

AFTER PROJECT IMPLEMENTATION: POST-OCCUPANCY ANALYSIS

A crucial step that is often overlooked is an assessment of whether the implementation plan actions aligned with the initial project goals. This is especially important if the plan involves more than one phase, as lessons learned from the first phase should be incorporated into the planning, programming, and implementation of the subsequent phases. There can be

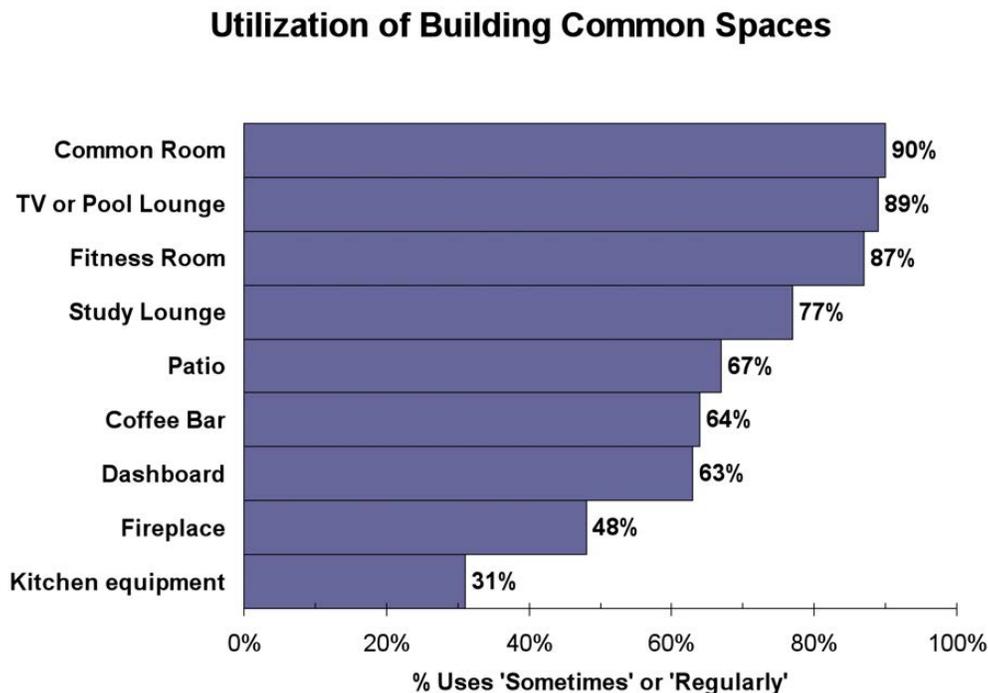
several assessment components: a cost and time assessment for renovation or construction, a facilities assessment, a physical program assessment, and a social program assessment (see, for example, figure 6). Sample questions for each type of assessment might be:

- Facilities: Does the building meet our sustainability and energy goals?
- Physical program: Did we build the correct number of beds to match our student population needs?
- Social program: Are the common spaces being appropriately used?

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It is obvious that every effort should be made to incorporate lessons learned from project outcomes into the planning and implementation of future projects. But these types of lessons can also affect the front end of a project, that is, how it is conceived, staffed, funded, scheduled, and managed.

Figure 6 **Example of Post-Occupancy Assessment**



Source: ©2010 Demographic Perspectives, LLC.

PART 2: TRENDS IN UNDERGRADUATE HOUSING PRODUCT

We identified an array of trends from our own research and then discussed each with a wide group of public and private college housing professionals and architects.

BUILDING MISSION AND LAYOUT: TIERED UNDERGRADUATE SOCIAL EXPERIENCE VIA HOUSING

Schools are increasingly providing a tiered social experience for their undergraduates through their housing options. Freshmen need staff support to help them acclimate to school, both academically and socially. Typically, they are offered double rooms and communal bathrooms, configurations that maximize social interaction (see figure 7). Rooms may be grouped in clusters. The building program should take into account significant space for residential staff.

Figure 7 **Freshly Updated Traditional Residence Hall Double**



Source: JCJ Architecture.

As many schools guarantee housing only for freshmen, many sophomores, who have no choice but to live off campus, struggle with maintaining appropriate academic and social interaction. Those who live on campus need almost as much support as freshmen, although they rarely receive as much staff attention. A next step in housing options for sophomores is suite living, which offers a grouping of single or double rooms with a common room.

An emerging trend is for schools to require sophomores to live on campus. If new housing is built to accommodate sophomores, then the school can continue to house the same proportion of upperclass students as before. However, if no new housing is provided for sophomores, then a larger number of upperclass students will need to live off campus in either school-owned units, developer-owned housing built especially for students, or private-market apartments or houses. Upperclass students are seeking apartment-style living and independence. While the campus culture may long have supported the notion that upperclass students will live off campus, schools have brought some back to campus by offering upperclass housing with amenities such as furnished apartments (see figure 8), apartment and building cleaning, the ability to use student billing to pay for housing along with tuition, and no separate bill-pay arrangements for utilities or phone/cable.

Figure 8 **On-Campus Apartment Interior**



Source: JCJ Architecture.

BUILDING MISSION AND LAYOUT: THEMED AND LIVING-LEARNING COMMUNITIES FOR UNDERGRADUATES

Residential learning communities have been in place in higher education for decades and, most recently, have appeared in different configurations as cluster colleges, residential colleges, and living-learning communities. It is crucial to understand how building spaces support the living-learning goals and outcomes, but there has been surprisingly little research in this area. [3]

At some schools, living-learning communities are only for first-year students, but other schools offer them throughout the undergraduate years. Thus, the program for the many types of student housing configurations needs to include spaces for living-learning activities.

Often, living-learning communities are located in the middle of traditional residence halls, and the community members are grouped together in a section of the hall around designated common spaces and lounges that help facilitate bonding and social programming. As a result, buildings may require both general and living-learning-designated common spaces.

The common spaces needed to support undergraduate living-learning communities vary with the specific program theme. For example, a “Healthy Living” community might require on-site space for student consultation with a university dietician and student health staff; an “International”-themed program might require a kitchen and dining space for regular internationally-themed dinners and get-togethers (see, for example, figure 9); and a “Green” community might have a rooftop garden. Many residential learning communities depend on establishing relationships between students and faculty, and one way of doing this is to provide housing for faculty within the complex (see, for example, figure 10). The community may require a range of faculty apartments in styles to match the needs of the different levels of junior or senior faculty.

Figure 9 **Mexican-Themed Study Lounge**



Source: Courtesy ARC/Architectural Resources Cambridge.

Figure 10 **Master's House in an Undergraduate Residence Hall**



Source: Courtesy Newman Architects.

BUILDING SUSTAINABILITY

LEED Silver certification is the norm for new student housing these days, and LEED Gold is nearly as prevalent. Schools are always looking for innovative ways to provide sustainable features, both to attract students who have a growing commitment to sustainability and to support campus goals for energy efficiency.

Some schools are adding sustainability as one of their themed living-learning communities, such as shown in figure 11. Students in this themed community may participate in sustainability activities both in their housing and in their academic coursework, with classes such as environmental science or environmental justice. At one school, a living-learning community provides an actual working greenhouse that students use for growing their own food and a demonstration kitchen for food preparation.

Figure 11 **Roof Solar Panels on GreenHouse Living Learning Center**



Source: ©Eppstein Uhen Architects.

Green roofs are a popular way to provide outdoor common spaces. In building lobbies, some schools have provided electronic or digital dashboards with measures of energy usage, sometimes to be used in a friendly, competitive way that lets students compare their building to others. Some schools are also providing individual in-unit thermostats.

OFF-CAMPUS HOUSING

Where there are appropriately priced apartments or small houses in the areas surrounding a school or within commuting distance, there has long been an unstated relationship between colleges and local landlords. Some schools have developed enhanced services to assist students in finding private-market, off-campus housing, such as online landlord listings, landlord ratings, or roommate exchanges.

Other schools have developed working relationships or partnerships with private developers to build and manage student housing. There are many different development structures, for example:

- Institution as purchaser or lessee of a privately developed housing complex.
- Institution as owner with a fee developer who develops housing.
- Institution as ground lessor to a developer who both builds and manages housing.
- Institution as equity partner to a private developer who builds housing.

(Each type of relationship between the institution and the private developer is guided by regulations of the IRS.)

From a residential-life point of view, some schools are acquiring or developing their own off-campus housing to provide additional housing options for upperclass students. These options can include traditional apartment buildings and small houses or new-style residence halls with full apartments and a wide array of common spaces to foster community. Off-campus apartment housing can provide a layer of independence for upperclass students while at the same time offering housing services that are more in line with student needs, such as a nine-month lease, payment of rent and utilities along with tuition, and a light layer of supervision by a resident advisor.

One growing option is to build what is known as vertical housing: a mixed-use building with retail space on the first floor, residential space on the upper floors, and, optionally, an underground parking garage (see figure 12). This type of building can create a sense of community for off-campus students, especially when the first-floor retail space contains a coffee shop or café that functions as a student hub.

Figure 12 **Mixed-Use (Vertical) Housing with First-Floor Retail**



Source: Courtesy Elkus Manfredi Architects; ©Brad Feinknopf.

UNITS

Unit trends can be found in several distinct areas, including room size, interior finishes, beds, and bathrooms.

- **ROOM SIZE.** Within units, room sizes vary significantly. As an example, within one school, undergraduate single rooms range in size from 80 square feet in older buildings to 160 square feet in newer and/or renovated buildings. An architect reports that the most typical demand for singles is 100 to 110 square feet, with a wider range of 90 to 140 square feet. In fact, depending on whether rooms are new construction or renovation, there is evidence of two opposite trends at work. In one trend, square footage in traditional singles and doubles continues to rise. In the other trend, square footage in single rooms within suites is pushed smaller and smaller, while more space is allocated to the associated common living rooms and bathrooms. The space and cost implications of varying room sizes are implicitly linked to the numbers of students to be housed, both currently and in the future.
- **INTERIOR FINISHES.** Architects and housing staff report that nicer interior finishes—thick carpeting, hardwood floors, unusual furnishings, and granite countertops—can sell on-campus housing. This may be important to a school that relies on its housing to attract students for admissions purposes or to a school that competes with off-campus, private-market housing for its upperclass students. Similar to the results of studies of urban public housing, nicer finishes are also linked to less vandalism of interior items. [4] Sometimes “new” is simply equated with “nice,” resulting in better care.
- **BEDS.** A number of schools are sizing new undergraduate units for double beds to accommodate students who have grown up in homes with their own rooms and double beds (see figure 13). Most schools have long offered extra-long twin beds to address the needs of tall students, but double beds serve the needs of both tall students and an overall population that is trending larger. We have documented double beds in traditional dormitory rooms, suites, and undergraduate apartment units at private institutions as well as in developer housing, but not at any public institutions. One architect, who works mainly with public institutions, said that although he has recommended sizing new rooms for double beds, schools are concerned with the difficulty of purchasing and managing both single and double beds. Another public system we queried viewed the issue of bed size not as one of student needs or preferences but rather as a demonstration of cultural mores; describing itself as a conservative institution, it chose to continue using single beds.

Figure 13 **Large Room Size with Double Beds**



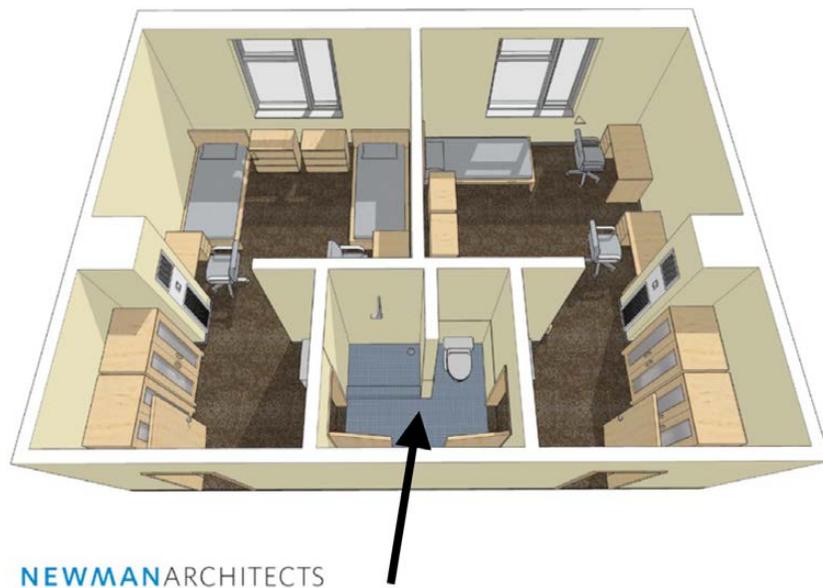
Source: ©Tim Buchman; courtesy Perkins Eastman.

Another interesting bed fact—some schools are raising the ceilings of their undergraduate rooms to accommodate lofting of beds and double-bunking; students like the extra space this creates, even in apartment-style units. By contrast, other schools are making conscious decisions to provide slightly larger rooms so that students will not need to stack their beds.

- **BATHROOMS.** The once utilitarian bathroom is a design of the past. Bathrooms are now both the symbol of undergraduate students' increased preference for privacy and schools' desire to help students socialize. Schools are still building centralized bathrooms, as they are believed to help students develop connections with their peers. Yet for many schools, communal bathrooms are only one part of an overall inventory of campus bathroom typologies that also includes semi-private and private bathrooms. These bathroom types usually relate to an overall tiered housing strategy that allows schools to offer students increasing opportunities for independent living each year. For instance, a school may provide communal bathrooms in residence halls for freshmen and sophomores and semi-private and/or private bathrooms in suites and apartments for juniors and seniors. (In general, there are vast differences between the housing that is provided for freshmen/sophomores and for juniors/seniors.)

Within suites and apartments, there is a range of bathroom configurations that includes private bathrooms for singles, Jack and Jill bathrooms between rooms (see figure 14), and multiple bathrooms within suites or apartments (each to serve two to three students). Some schools are planning for one bathroom per bedroom in apartment units, but this is not the norm. Putting toilets, showers, and sinks each in separate rooms is a way to provide some level of privacy for students without the expense of building one bathroom per student.

Figure 14 **Jack and Jill Bathroom**



Source: Courtesy Newman Architects.

MORE TRENDS AND WHAT'S NEXT

Do the trends presented here resonate with your experiences on the campuses you know? If you have examples of the trends we discussed that you would like to share—photos or descriptions—we would be pleased to add them to our collection. If your housing is entirely different from that described here, we would be interested to hear about that, too.

A related series of questions concerns how student housing will adapt and respond in the future to broader student trends such as remote learning and the growing numbers of community college students and older students who desire on-campus housing. Some other topics we would like to hear about include:

- Are there examples of innovative and cost-effective ways to build flexible unit layouts that can accommodate the changing demographic profiles of student bodies as well as new student needs or preferences?
- What types of housing are schools purchasing or building off campus?
- Given equivalent cost and location, will students prefer old buildings with spacious layouts or new buildings that are typically efficiently designed? How does this vary for different demographic groups of students?
- Is “build it and they will come” always true? Are there cautionary tales regarding design, school and community approvals, and tricky student preferences?

- How have schools successfully incorporated student residential communities on the edges of campus, and what, if any, trade-offs need to be offered to make this work?
- Building costs are high and land is scarce. What are the answers?

How will student housing adapt and respond in the future to broader student trends such as the growing numbers of community college students and older students who desire on-campus housing?

CONCLUSION

As colleges and universities seek to serve the residential needs of their current and future students, it is important to undertake a data-driven process. Taking the time to collect and analyze data from administrators and students through such methods as interviews, surveys, and focus groups helps ensure that schools provide housing that is aligned with the mission and goals and that students find attractive and suitable. In tandem with stakeholder research, benchmarking allows schools to remain competitive with peers and offers valuable lessons on the benefits and costs of features that may be appropriate for their existing or planned housing. As part of this planning phase, schools might consider emerging trends such as living-learning communities, sustainable design, off-campus housing arrangements with private developers, and larger bedrooms and beds. With a backbone of information, colleges and universities can make decisions about a residential program that is consistent with institutional mission and goals, that students are excited about, and that is competitive with peer schools.

NOTES

1. National Center for Education Statistics. 2011. Table 214. Total Undergraduate Fall Enrollment in Degree-Granting Institutions, by Attendance Status, Sex of Student, and Control of Institution: 1967 through 2010. *Digest of Education Statistics*. Washington, DC: U.S. Department of Education.
2. Thanks to Howard Hebel, Newman Architects, for concepts discussed in this section.
3. For example, the National Study of Living-Learning Programs, a product of the Survey Sciences Group, LLC, does not include any questions about building spaces in its student survey. Our own research regularly incorporates questions about the utilization of specific building features (e.g., lounges, terraces, study rooms, floor kitchens); the importance students assign to these spaces; their satisfaction with these spaces; and, most importantly, students' thoughts about how these spaces promote community.
4. The broken windows theory espoused first by James Q. Wilson and George L. Kelling in "Broken Windows" (*Atlantic Monthly*, March 1982) suggests that buildings that are in poor repair are a signal that no one cares, and more damage can soon be expected to follow. Many social psychology and criminology studies have tested this theory in both the affirmative and the opposite.

AUTHOR BIOGRAPHIES

Rena Cheskis-Gold is the founding principal researcher at Demographic Perspectives, LLC, a consulting firm that provides mission-driven demographic, survey, policy, and market research services for the higher education community. For more than 40 colleges and universities, she has provided custom data and analysis for strategy to be used in programmatic and physical planning initiatives (including housing plans and master planning efforts), new policy formulation, program assessment, accreditation, and other administrative decision making.

Ms. Cheskis-Gold teaches, speaks, and writes regularly on data-driven decision making for higher education planning, including a recent talk on housing trends at the Northeast ACUHO conference and as keynote speaker for the 2011 East Coast Conference on Faculty Housing. She has been a regular guest speaker on utilizing survey research for customer and stakeholder strategy at both the Harvard Business School and the Yale School of Management. She holds an MA in demography and population studies from Brown University and has completed doctoral preparation in the same program.

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Prior to working at Demographic Perspectives, she managed physical planning projects for A Better City, a Boston nonprofit, and Harvard University, where she served as a Harvard Presidential Fellow for the Allston Development Group (formerly Harvard Planning and Allston Initiative). She holds an MA in urban planning from Harvard University and a BA from Harvard College.