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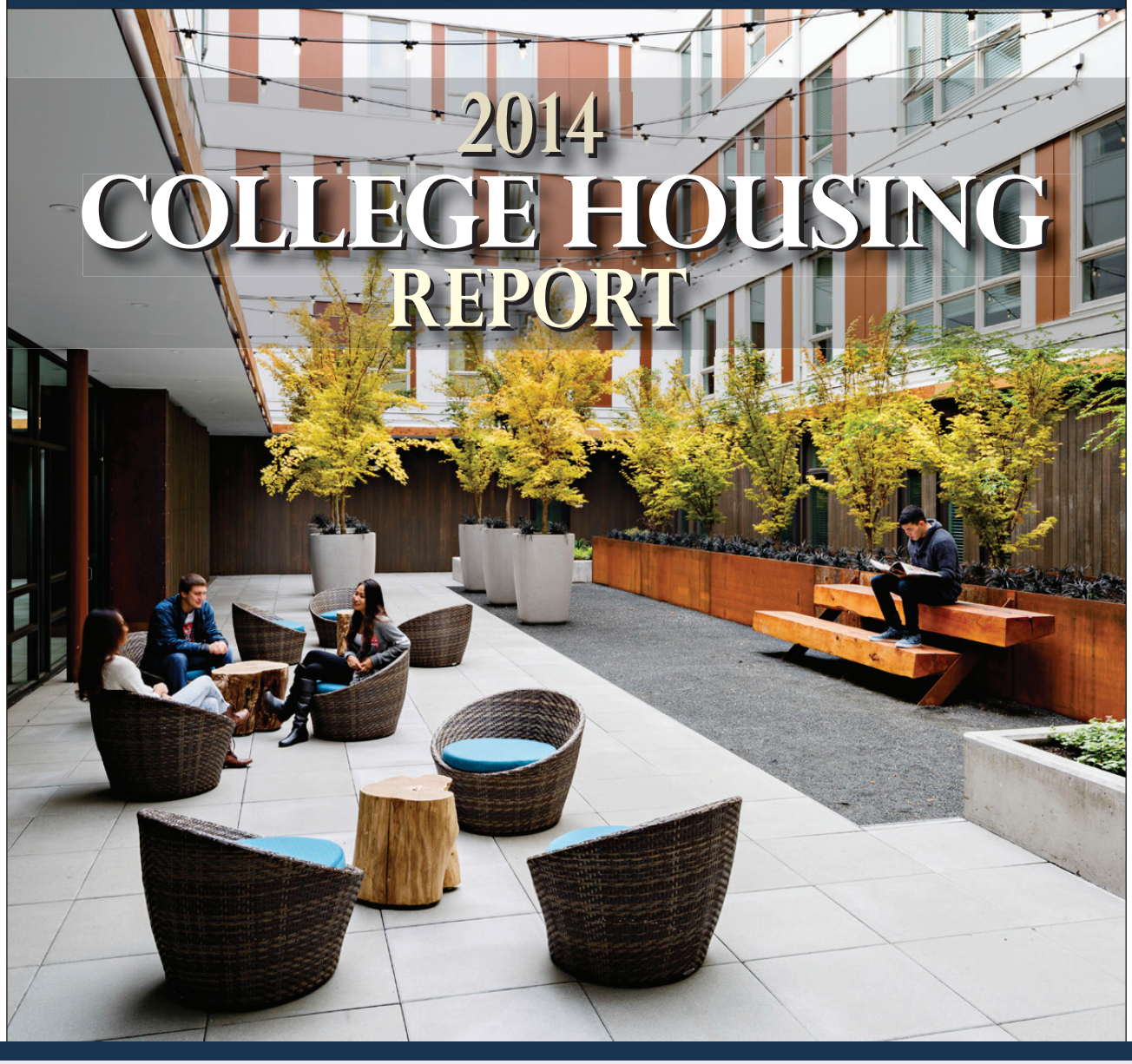
2014 COLLEGE HOUSING REPORT



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LIVING ON CAMPUS

A HOME AWAY FROM HOME

The quality, appearance, location and features of residence halls comprise a valuable marketing tool for institutions, as students look closely at these facilities when selecting their college or university.

By *Paul Abramson*

FOUR HIGH SCHOOL SENIORS with whom I spoke recently indicated that in choosing a college, two factors that weighed most heavily in their final choice was the overall cost and where they would be living.

They are not unusual. The quality, safety and programs of residence halls have become a major factor in attracting students. It is not surprising, under the circumstances, that in a review of college buildings under construction last year, I found more residence halls than buildings of any other type, the median residence hall was larger than the median building of any other type and, while they still cost less per square foot than academic, athletic, research and student service buildings, because of their size the cost has been creeping steadily up.

Each year, editors at *College Planning & Management* use information provided by Market Data Retrieval, a Dun & Bradstreet Company, to locate college residence hall projects underway or being planned. To the extent possible, sources at the colleges or at their architectural firms are identified and sent a one-page questionnaire asking for detailed information on the size, cost and location of these projects and about the amenities they contain. Information provided on these questionnaires is the basic input for this report. Some sources provide only partial information.

Information on 52 projects was provided for this 13th annual study of college residence hall construction. Each of the 52 opened in 2013 or is opening in 2014. Together they will house 19,000 students in 8,000,000 square feet, at a total cost of more than $2 billion. All of these numbers are greater than those found a year ago… but each year's survey includes different projects and different colleges, so while year-to-year comparisons may be tempting and interesting, they do not necessarily provide any indication of trends.

Table 1 shows summary information on the 52 projects, and also examines them in terms of their size, location and governance.

The median residence hall reported this year houses 370 students, costs slightly more than $34 million and encompasses 118,000 square feet. Cost per student averaged $79,892, significantly higher than a year ago but, as said before, year-to-year comparisons are tricky because there is no control or consistency from year to year on the reporting institutions.

Median cost per square foot was $236.13, and space allocated per bed in the median project was 333 square feet (calculated by dividing the entire size of the building by the number of students housed), very close to the 336 reported last year. Because much more than sleeping accommodations is included in the overall size of a residence hall, this figure does not truly reflect the space per room or bed. After all, if a suite of classrooms is included in the building (and almost 61 percent of residence halls include classrooms), that will increase greatly the square feet assigned per student without affecting the actual space of the sleeping quarters.

RESIDENCE HALL SIZE

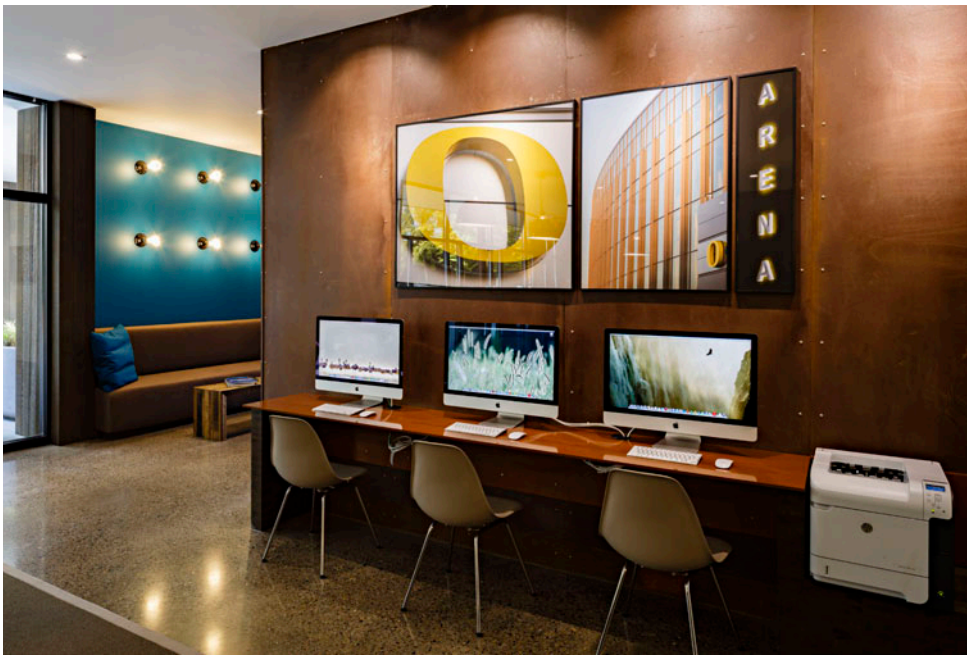
Eleven of the residence halls reported this year house fewer than 250 students. They range from 54 to 211 students. Four of the eleven are at private colleges, and three of the four smallest are on private college campuses. Though they are small, they are

TABLE 1: Cost & Size of Residence Halls

	Cost of Total Project*	Number of Students	Size of Project (sq. ft.)	Cost per Bed	Cost per Sq. Ft.	Sq. Ft. per Bed
All Reporting Colleges (sample size 52)	$34,050,000	370	117,983	$79,892	$236.13	333.3
<250 beds (sample size 11)	$14,350,000	182	61,500	$82,358	$238.21	365.9
251-500 beds (sample size 13)	$32,750,000	360	134,222	$90,124	$253.54	338.6
>500 beds (sample size 15)	$49,373,527	709	202,000	$73,701	$226.24	303.4
Median Northeast (sample size 14)	$46,850,000	529	180,250	$115,720	$306.80	323.4
Median Midwest (sample size 9)	$28,350,000	300	100,000	$91,153	$238.84	341.2
Median Southeast (sample size 13)	$22,000,000	370	115,315	$74,785	$216.67	330.9
Median Mountain States (sample size 10)	$33,750,000	425	104,500	$65,129	$210.80	301.5
Median West Coast (sample size 6)	$65,000,000	800	96,772	$84,343	$360.08	310.6
Median Private (sample size 10)	$19,350,000	165	79,334	$86,187	$254.04	443.5
Median Public (sample size 42)	$35,323,151	442	134,325	$79,892	$241.89	318.0

*All figures are medians for sample shown. Each median was determined independently so figures may not add up.

To read this table: The median cost among 52 reported residence halls was $34,050,000. The median cost among 11 with fewer than 250 beds was $14,350,000. Cost per student bed at smaller residences was $82,358; It was $73,701 at those with 500-plus beds.



not inexpensive. The median cost per student among these small residences is $82,358. They provide almost 366 square feet per student, more than is provided at the larger projects.

There are 13 reports on residence halls with 250 to 500 students. Their median cost was $32.8 million and the median number of students 360. In terms of cost per student, and cost per square foot, these medium-sized residence halls appear to be the most expensive.

Larger residence halls (15 reported) house more than 500 students each, with the median at 709 beds. The largest reported this year was designed to house 1,500 students. The median space for the 15 large residence halls was 303 square feet per bed. Cost per student was $73,701, far less than the smaller residences. These larger projects ranged in total cost from $22 million to $210 million. Their cost per square foot and per bed were lower than the small or medium-sized residences. It should be noted that 13 of the institutions responding to the survey did not indicate the number of students to be housed.

LOCATION, LOCATION, LOCATION

Does the location of the college have an effect on the cost of residence halls? To examine this, we divided the reporting colleges roughly into five regions of the nation. Fourteen were located in the Northeast, including New England, New York, Pennsylvania and south to Delaware. Thirteen were in the Southeast (basically south from Virginia). Another nine are in the Midwest — including the traditional Big Ten states — and 10 are in the Mountain states and Texas. The other six were located along the west coast, from Alaska to California.

As expected, it costs more to build on the west coast than anywhere else ($360 per square foot), but the Northeast runs a close second. Colleges located in the Mountain states and Texas cost the least per square foot (a median of $210.80), somewhat less than those in the Southeast.

In the Northeast, the median residence hall cost almost $47 million, or $115,720 per student and $306.80 per square foot. These residences provided 323 square feet per student, slightly below the national average. Colleges in the Midwest tended to be smaller than those in the Northeast and provided somewhat more space per student.

In the Southeast, the median project cost just $22 million and $74,785 per student. Median cost for construction in this region is $216.67 per square foot — which allows them to provide more space per student — but in fact they do not match the space provided to students in the Midwest.

Construction costs in Texas and the Mountain states have risen tremendously in the last few years, but still lag behind the rest of the nation. Reporting colleges in these regions kept their costs somewhat in line by providing less space per student than those in the rest of the nation.

PUBLIC AND PRIVATE

Officials at 10 private colleges provided information for this study, compared to 42 public colleges. The private colleges constructed significantly smaller residence halls (the largest accommodated 340 students) and, therefore, obviously, they cost less ($19.4 million, compared to $35.3 million among public colleges) and were physically smaller (79,334 square feet was the median size of the private college residence halls; the median public residence was 134,325 square feet). However, in terms of cost per student, cost per square foot and space per bed, the private colleges reporting this year spent more and provided more than did the public institutions.

AMENITIES

Table 2 takes a look at some of the amenities provided in residence halls nationally. We asked colleges about 12 possible amenities (spaces or services provided in addition to residence rooms). Previously we had also asked about laundry facilities, kitchens for student use, vending machines and air conditioning, but found that they were included in virtually every project.

The same is true now with wireless networking — once rare, it is now everywhere — and card access to buildings is available in better than 95 percent of reporting residences. The use of card keys for individual rooms still lags, but almost half the reporting projects use them.

Video surveillance of the exterior is now used at 70 percent of the projects (the other 30 percent may have video associated with other projects so that it is not needed at the residence building), and more than half now use video surveillance inside residences. The issue of personal privacy seems to have taken a backseat to security in residences as in so many other parts of our lives.

HOW THE COSTS ARE DIVIDED

While the bulk of the cost for any residence hall construction is for the building itself, a key question in analyzing projects is the additional amount paid for work beyond the actual construction, including fees, furnishings and furniture, site work, etc. This is not an easy breakdown to obtain.

For one, many architects (who provide information on construction costs) are not involved in purchasing furniture and furnishings. Architects also have a handle on their fees, but not on

TABLE 2: How Is the Money Divided?

	Percentage of residence halls incorporating given features
ATM	4.3%
Fitness Room	13.0%
Dining Hall	13.0%
Computer Center	21.7%
Classrooms	60.9%
Card Access to Building	95.7%
Card Access to Rooms	47.8%
Video Surveillance (Internal)	56.5%
Video Surveillance (External)	69.6%
Rooms Carpeted	65.2%
Assembly/Study Areas	87.0%
Wireless Network	100.0%

PHOTOS © BENJAMIN BENSCHNEIDER, COURTESY OF MAHLUM ARCHITECTS / UNIVERSITY OF WASHINGTON, WEST CAMPUS HOUSING - PHASE 1

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the fees of attorneys, bond market experts and other consultants the college may use. Moreover, some colleges' "other expenses" are far more encompassing than others, so even when full information is obtained, it may not be comparable. Despite all these obstacles, it is useful to try to determine how total cost of a residence hall project is divided. **Table 3** looks at that.

Respondents at 14 colleges were able to provide their full and best possible information on how the total dollars were split at their institutions. As **Table 3** shows, the median spent almost 81.3 percent of the cost on construction itself. Another 4.2 percent went to furniture and furnishings, while 8.8 percent was allocated for fees. This category has been climbing steadily, with one project allocating 14.3 percent, and the top one-third all indicating that fees took more than 11 percent of total cost. The catchall "other" (which should include site preparation but not the cost of purchasing a site) accounted for $5.70 of every $100 spent.

Even among these 14, there were differences about what should be counted where, so **Table 3** also shows the range of responses. Thus, construction accounted for as much as 89.9 percent of one college's costs and as little as 72.6 percent at another. Similar variations from the norm are shown for furniture and furnishings, fees and other expenses. Somebody could do a significant service for college construction by creating standard definitions for the various categories of spending.

OWNERS AND OPERATORS

Table 3 also breaks all reporting colleges into two groups — those where the residence halls will be owned by private operators and those where they will be operated by private companies. Almost 83 percent of the residence halls included in the study will be owned by the college; the balance will be owned by private contractors who constructed them for the college. When it comes to managing the buildings, 91.3 percent will be managed and operated by the college, whether the college or a private entity owns the building. There were no significant differences by size of project, location or governance.

TABLE 3: How Is the Money Divided?

	Median	Range	
		Low	High
Construction	81.3%	72.6%	89.9%
Furniture & Furnishings	4.2%	2.3%	5.6%
Fees	8.8%	3.9%	14.3%
Other	5.7%	0.5%	18.1%
Who owns the building?			
College	82.6%		
Private Company	17.4%		
Who will operate the building?			
College	91.3%		
Private Company	8.7%		

To read this table: The median residence hall reported put 81.3 percent of its total cost into construction, 4.2 percent in furniture and furnishings and spent 8.8 percent in fees. One project held construction costs to 72.6 percent of total cost and another spent 89.9 percent on construction alone.

STUDENT ACCOMMODATIONS

The word "suites" is often used to describe the accommodations for students, but what is a suite, how many students use it and what does it include? To try to get a better handle on this, we posed a series of questions on how students were housed and how bathroom facilities were allocated. The compiled answers to these questions are shown in **Table 4**.

Our question asked what percentage of students would be housed in individual rooms, suites/apartments for two people, or suites/apartments for four to eight persons. As **Table 4** shows, on a national basis (with responses coming from 52 residence halls), a little better than half the students being accommodated will be housed in two-person suites. The balance is split between individual rooms (15.3 percent) and larger suites with four to eight persons (30.9 percent). That is a change from the group of residence halls reporting over the last two years where more emphasis was on smaller housing units. It is not clear, but it appears that suites housing four or more students are gaining some favor. Is this because students want more roommates or because these larger suites can provide space more economically?

TABLE 4: Residence Hall Accomodations

Sleeping Arrangements	
Percentage of students in	
One-person rooms	15.3%
Two-person rooms	53.7%
Four- to eight-person rooms	30.9%
Bathroom arrangements	
Number of students sharing bathrooms	
One or two	39.0%
Three or four	25.3%
More than four	35.7%

BATHROOM FACILITIES

The availability of bathrooms may be a more significant way to analyze residence hall accommodations, and throughout the last two

years there has been a swing towards providing larger facilities shared by more students. Thirty-nine percent of students will share their bathrooms with just one other person. Presumably, occupants of two-person rooms will often have toilet facilities of their own. But one year ago the report was that 65 percent of students would share bathrooms with just one other and only 15 percent would share with more than four. This year more than twice as many students will be using larger facilities shared with many other students. This may be a reflection of rising costs that are leading architects and planners to provide fewer bathroom spaces and encourage students to share them.

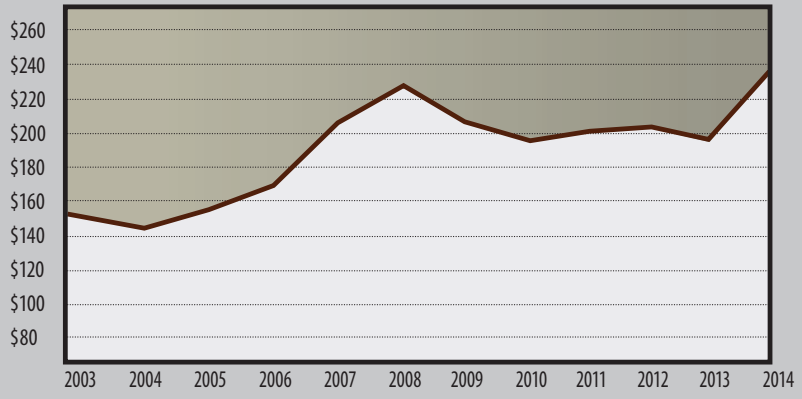
A DOZEN YEARS OF COLLEGE RESIDENTIAL CONSTRUCTION

Every year, for the last 12 years, *College Planning & Management* has conducted a survey of residence halls that had just opened or were about to be opened. Information is sought on their size, cost and amenities. Each year, 40 to 50 cooperating institutions and their architects provide that basic data. Since there is no control over who responds, where they are located, college size or governance, year-to-year comparisons can be dangerous. But with 12 years of data in the bank, it is possible to draw some conclusions.

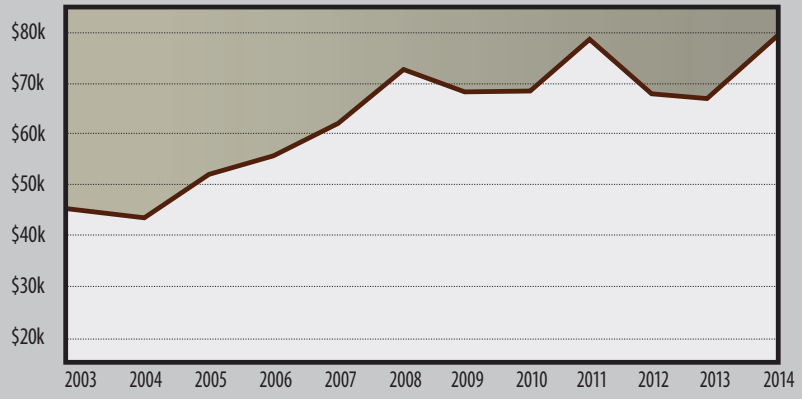
During those 12 years, data was collected on 519 residence hall projects housing 208,000 students in 70 million square feet of buildings. Total estimated cost of the projects exceeds $17 billion. Many more residence halls were opened in the period, but chose not to share information with their colleagues. We have no way to measure those projects, but based on incidental information that can and has been collected, total residence hall construction over the last dozen years certainly reached $40 billion.

Among other findings, the cost of residence halls has risen but perhaps not as much as might be expected. From 2003 through 2008, cost per square foot rose relatively rapidly **(see Graph A)** from $148 to $231, but since then costs had fallen and, among reporting projects, stabilized nationally around $200 per square foot. The Recession started in 2008 and, as a result, there may have been more competition for construction contracts, holding costs down. Whatever it was, the projects reported this year have jumped in cost to

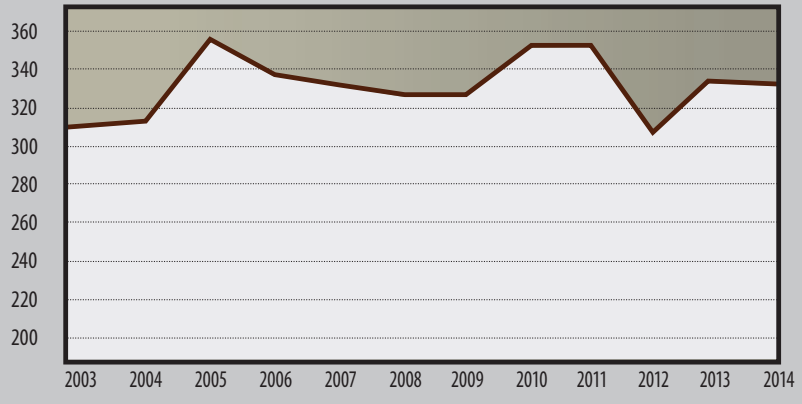
GRAPH A: Median Cost per Sq. Ft.



GRAPH B: Median Cost per Bed



GRAPH C: Median Sq. Ft. per Bed



$236 per square foot, the highest ever.

Median cost per bed over the first two years of the study was about $45,000 **(see Graph B)**. Five years later it had stabilized, around $69,000 per student. Among the current group, the median cost is $79,892 per student, a significant increase.

The space allocated per bed over 12 years **(see Graph C)** averages out at 333 square feet. This year's median, 333 square feet, fits with that pattern. That does not mean every bed is in an area of 333 square feet. The calculation was made by dividing the total space of the residence hall by the number of students to be accommodated. Most residence halls today include significant additional space, including TV rooms, study rooms, laundry rooms, computer centers, kitchens and social space. In calculating space per bed (or student), the total size of the residence hall, with all of its facilities, corridors and similar spaces, is calculated and then divided by the number of students to be housed.

The 2014 Campus Housing Report and the accompanying tables and graphs were compiled by ***Paul Abramson****, education industry consultant for* College Planning & Management *magazine and the president of Stanton Leggett & Associates, an education consulting firm based in Mamaroneck, NY. He can be reached at* intelled@aol.com.

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THE 21ST CENTURY PROJECT

Rose Avenue Residence Hall
Indiana University – Bloomington

By *Patrick H. Connor*

THE ACUHO-I 21ST CENTURY PROJECT is a multi-phased initiative that re-imagines the future of campus housing. Launched in 2005, the 21st Century Project (*www.acuho-i.org/21stcentury*) has convened a summit of leaders in the college housing profession, hosted two design showcase competitions and published books. It has also been the subject of a number of magazine articles and webinars.

The 21st Century Project is guided by the belief that it is no longer enough for college housing simply to provide students four walls and a bed. Current and future students demand more from their residential experience. Administrators have realized that unique, functional, and technologically advanced living experience can attract and retain students.

Now, eight years later, the residence hall of the future is the residence hall of the now. Three campuses have constructed and renovated residence halls following the tenants of the 21st Century Project and are successfully serving students in innovative halls that are flexible, community-oriented, sustainable and technology-enabled. One of these projects is on the campus of Indiana University – Bloomington.

A 21ST CENTURY REALITY

In August 2013, 440 students moved into Rose Avenue Residence Hall, a $38-million construction project located on the Indiana University – Bloomington campus. Rose Avenue features four double rooms assigned to bathrooms controlled by card access with storage lockers for each student, two-person suites with shared baths and single rooms with private baths. Each residential wing has multiple locations dedicated to supporting group interactions. Students, along with their families, were excited to be living in this new facility, but were wholly unaware of the unique process undertaken to create the residence hall they would call their home for the 2013-2014 academic year.

The 21st Century Project was launched out of conversations between project coordinator, Michael Coakley, then director of Housing at Northern Illinois University; Jason Wills of American Campus Communities; and architects Jane Wright (Hanbury, Evans, Wright, Vlattas + Company) and Jim Curtin (Solomon, Cardwell, Buenz [SCB] Architecture). How could a paradigm shift occur from an approach of residence hall design decisions being made by isolated campus stakeholders to a collaborative approach of informed decisions based on the voices of a multitude of campus constituents? This question was addressed at the 21st Century Project Summit, a two-day event bringing together in one place college presidents, provosts, financial officers, heads of student affairs and housing programs, faculty, designers, architects, vendors and students, who were asked to analyze trends, evaluate information and envision where the housing field should be in 25 to 30 years. Many issues were discussed under the guidance of moderators, and the 100 participants eventually identified four primary categories, labeled "community," "flexibility," "technology" and "sustainability" as critical in framing the conceptual tenets for future thinking.

To respond to what could be done, two separate 21st Century Project design competitions were held to allow both professional and student architects to call on their creative energies to design what a student room might look like — a.k.a., "The Home" — and how these rooms might form a community that included

shared spaces — a.k.a., "The Block." Several "Blocks" would create "The Neighborhood," and finally "The Village" would be comprised of "Neighborhoods" around a central hub; perhaps a dining hall, student center or recreation center. Through these competitions, designers showed futuristic vision by incorporating elements such as stowable furniture, walls that could be moved to change the room configuration and bed capacity, integrated display screens, sustainable energy sources and rooms that student could change the color of with the flip of a switch.

ONE OF THREE — INDIANA UNIVERSITY

After being selected as one of three host sites in 2009 (along with Baylor University in Waco, TX, and Colorado College in Colorado Springs), Indiana University (IU) set out to follow the same creative process to envision a residential building that reflected the character of its students and campus architecture while intentionally focused on the four tenets (community, flexibility, technology and sustainability). Once funding for a residence hall project was approved by the institution's Board of Trustees, Patrick Connor, the director of the housing program, put in motion a day-long summit for 45 individuals, comprised of faculty, student affairs staff, academic advising and support staff, information technology staff, residential life staff and students. Two members of the original project team came to Bloomington to help moderate the IU summit, creating a vibrant exchange on what should be essential elements of the "Home," "Block" and "Neighborhood" in a residence hall that would be home to many future IU students. The core elements of what the campus envisioned, along with buzz of the 21st Century Project, led to eight inspired proposals from architectural teams selected to interview for Project Lead.

The firm of MSKTD & Associates, Inc., of Fort Wayne, IN, was selected to lead the IU project. They teamed with Mackey Mitchell Architects of St. Louis, who specialize in student housing, to develop a building program that incorporated the collective vision from IU's summit, along with hosting a series of design charrettes to test how the "Home," "Block," "Neighborhood" and possibly "Village" could come to fruition in this residence hall project. After more than a year of design, followed by 17 months of construction, Rose Avenue Residence Hall was ready to welcome the first set of building residents. Immediately, residents could see the importance of sustainability, as the residence hall was intentionally built around three mature Douglas fir trees.

BUILDING COMMUNITY

A core element of community was the inclusion of a variety of room types within the building. The 440 bed spaces are set up with 65 percent double occupancy and remaining 35 percent single occupancy. A key element of the building plan was looking at the "Block" concept, which led to a design where four double rooms shared a card-access bathroom for the eight assigned residents, which were paired with the mirror image of the four doubles/card-access bathroom, teamed within an open study lounge feature, creating a "Block" for 16 students. This core element is repeated 16 times within the facility. Based on feedback from older students that "they did not want to repeat their freshman year if [they] continued to live in residence halls," each residential wing has a series of single suites (two singles that share a bathroom and a small common space) to allow students who desire to return to the building the opportunity to increase their level of personal privacy but still

have access to the many other features of the building community.

Feeling that the residential wing design would support natural interactions for students, Connor points to other elements of the hall's design that intentionally created space where students could bump into each other and connect in the "Neighborhood."

"The glass-lined connector between the residential wings on the upper floors and open design and purposefully wide main stairwell and landings are community builders," he says. Both of these elements introduce abundant natural light through the window system in daytime and, when lighted in the evening, provide a sense of welcoming home students returning from a day spent on academic pursuits.

Finally, the first floor delivers the "Village" aspects through a coffee shop; classrooms; a media library, computer lab and group project space; an exercise room; conference room; game room; and a space for "town hall" meetings.

SUSTAINABILITY

The Rose Avenue Residence Hall design team anticipates a LEED Gold/Platinum certification. Occupancy sensors throughout the building, including in student rooms, promote energy savings. Domestic hot water solar panels are intended to provide most of the energy needed for the building's hot water supply. Centralized recycling supports students' investment in reducing material headed to landfills. The building laundry room is equipped with the most energy-efficient commercial equipment on the market.

The Rose Avenue Residence Hall was completed at a project cost of $252.47 per square foot and $86,363.64 per bed. The 440-bed project with program support space and service space is in an envelope of 150,512 gross square feet. CPM

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