

December 2023

Single and not ready to mingle: The potential gentrification of student housing

Anna L. Peters

University of Florida, annaleapeters@gmail.com

Lou L. Sabina

Stetson University, lsabina@stetson.edu

Maureen M. McClure

University of Pittsburgh, mmcclure@pitt.edu

See next page for additional authors

Follow this and additional works at: <https://digitalcommons.usf.edu/jger>



Part of the [University Extension Commons](#), and the [Urban Studies and Planning Commons](#)

This Refereed Article is brought to you for free and open access by the M3 Center at the University of South Florida Sarasota-Manatee at Digital Commons @ University of South Florida. It has been accepted for inclusion in Journal of Global Education and Research by an authorized editor of Digital Commons @ University of South Florida. For more information, please contact scholarcommons@usf.edu.

Recommended Citation

Peters, A. L., Sabina, L. L., McClure, M. M., Sabina, K. L., McLaren-Turner, C., & Silver, M. (2023). Single and not ready to mingle: The potential gentrification of student housing. *Journal of Global Education and Research*, 7(3), 199-213. <https://www.doi.org/10.5038/2577-509X.7.3.1170>

Corresponding Author

Lou L. Sabina, Lou L. Sabina, Stetson University, 421 North Woodland Blvd, DeLand, FL 32723

Revisions

Submission date: May 12, 2020; 1st Revision: Aug. 22, 2020; 2nd Revision: May 30, 2021; 3rd Revision: Dec. 8, 2021; 4th Revision: Aug. 31, 2022; Acceptance: Sep. 15, 2022

Single and not ready to mingle: The potential gentrification of student housing

Authors

Anna L. Peters, Lou L. Sabina, Maureen M. McClure, Kiara L. Sabina, Claudine McLaren-Turner, and Marcus Silver

Single and Not Ready to Mingle: The Potential Gentrification of Student Housing

Anna Peters¹, Lou L. Sabina², Maureen M. McClure³, Claudine McLaren Turner⁴, and Marcus Silver⁵

College of Education
University of Florida, United States
¹apeters3@stetson.edu

College of Arts and Sciences
Stetson University, United States
²lsabina@stetson.edu

School of Education
University of Pittsburgh, United States
³mmclure@pitt.edu

College of Community Innovation and Education
University of Central Florida, United States
⁴claudine.turner@ucf.edu
⁵marcus.silver@ucf.edu

Abstract

As higher education tuition continues to rise in the United States and globally, other costs impacting students, such as fees, parking, and housing, are rising at a similar pace. Concurrently, more higher education institutions are focusing on creating boutique experiences for students, including the option for single-unit housing. This paper analyzed the costs associated with single-unit housing at the ten largest college campuses in the United States compared to the costs associated with multi-unit housing and off-campus living. The changes in preferences for students associated with their college experiences, when partnered with higher costs of living and off-campus housing, create an unsolvable, wicked problem.

Keywords: single-unit housing, residence life, student affairs, demography, wicked problems

The cost of attendance at higher education institutions has increased dramatically over the past two decades (Archibald & Feldman, 2008; Thelin, 2013). Hess (2019) noted that from 2008 to 2018, the average tuition at four-year public colleges had increased by 37%. However, the dramatic increase in cost cannot be attributed solely to the cost of tuition. A growing trend within residence life at higher education institutions is the inclusion of *boutique* features—luxury-style features included to entice students to live in on-campus accommodations (Doyle et al., 2019; Steinberg & Brodie, 2011; Wheeler, 2014). Historically, living on campus was a tremendous advantage to save money over the cost of living off-campus (Barshay, 2015; Minsky, 2016); however, this may no longer be the case, and as such, cost-based decisions may be negligible.

Boutique features have increased the cost of living on campus dramatically. Students have not struck against the increasing cost of on-campus housing as they have toward tuition costs. Indeed, students

seem unwilling to negotiate the comfort to which they grew accustomed in their permanent homes. That unwillingness forces students to decide how much they are willing to pay to maintain the comforts of home.

This paper compares the costs of the most expensive housing option (single occupancy) to the least expensive (double, triple, or quad) at twenty higher education institutions across the United States. Our paper also explores comparative costs between public and private institutions, where housing costs greatly differ. The purpose of this paper was to examine the phenomena of expensive on-campus housing when (a) the cost of college continues to increase at a rate surpassing the national inflation rate; (b) student debt continues to rise—not only for tuition, but also for other college and non-college expenses; and (c) single-unit housing is naturally the most preferred choice.

Review of Relevant Literature

It is important to consider the context of the average American family household, and how family preferences influence student housing demand. As of 2018, the U.S. Census Bureau counted 83.48 million families in the United States and the average family consisted of 3.14 persons in 2018—down from 3.68 persons in 1968 (United States Census Bureau, 2022). This data infers that many students grew up in households as an only child or with only one other sibling; and that today's children are growing up with limited communal living arrangements (e.g., sharing a bedroom). When asked what increases their anxiety regarding college preparation, many high school seniors reported having to share a room with someone as an extreme stressor (Hicks & Heastie, 2008). Some parents have subscribed to the *money is no object* belief when it comes to their children's college experience. This belief, combined with an increased commitment to the *debt culture* in the United States, means that parents are taking out the maximum amount in college loans without concern for the extra thousands of dollars added to the debt load, as long as their children can have a better college experience (Dellande et al., 2016). This mindset is leading students to develop a similar disregard for their accumulating student loan debt. Indeed, these priorities lead to selecting the highest standard of living option available.

Three factors shape a related American economic context. First is the rise of local real estate values (Chingos et al., 2017). Institutions price student housing according to competing options off-campus. If off-campus housing is high, on-campus housing will reflect these prices. As residential property values rise, rental market rates also tend to increase. The second factor is the rise of income inequality. Students from upper- and middle-class backgrounds are more likely to take on more debt to maintain the standard of living to which they grew accustomed while living at home. This is done with the understanding that their lower incomes as students are temporary, and their income post-graduation will increase (Davies & Lea, 1995). However, this creates a barrier for students coming from lower income backgrounds. The third factor is the spending habits of Millennials and Generation Z students (Beale & Cude, 2017; DeVaney, 2015). Millennials and Generation Z students from households with *helicopter parents* (parents who are excessively involved in their children's lives) demonstrate a lack of financial literacy. This is caused by parental over-involvement in their children's finances and decision-making process, resulting in students not having a realistic appraisal of their financial situation (Letkiewicz et al., 2019). Additionally, Generation Z's belief that they will make more money in the future justifies their acceptance of more debt now. In essence, they embrace acquiring debt because they anticipate a large long-term return on their short-term investment (current indebtedness). Junior Achievement USA (2019) noted that 24% of all millennials believe their student loan debt will ultimately be forgiven, which may

indicate limited concerns in maximizing student loans to obtain a more positive college experience. Student loan forgiveness is a recurring campaign issue addressed by political candidates and served as a major negotiating factor in bills related to the response to the COVID-19 pandemic, including the CARES Act, which provided emergency funding to schools during the pandemic (CARES Act, 2020).

College administrators believe that living on campus increases student performance and retention, a belief supported by research (Garg et al., 2014; Muslim et al., 2012; Ong et al., 2013). As performance funding becomes more of a factor in college funding across the United States, student retention has become a high priority across all of higher education (Dougherty & Reddy, 2011). Social, emotional, external, and family support are the leading indicators for student retention. If students feel like they belong, they are going to want to stay (O’Keeffe, 2013). Living on campus can provide that level of social and academic support for students; and positive experiences with student housing increase student retention (Schudde, 2011).

There is a legitimate demand for single rooms and campuses are responding to this need, building more (with or without private bathrooms) to cater to this trend (Burns, 2019; Wheeler, 2014). It would be more efficient for campuses to build two-bedroom residence halls (and allow for a higher student capacity). However, this trend illustrates that students would rather pay more for the single rooms. Institutions can construct their buildings and price their singles in a way that can make a building full of singles generate the same amount of income as a building full of doubles.

Theoretical Framework—Wicked Problem Theory

Wicked problem theory originated in the 1970s in response to challenges associated with urban planning and development (Rittel & Webber, 1973). It was defined as

a social or cultural problem that is difficult or impossible to solve for as many as four reasons: incomplete or contradictory knowledge, the number of people and opinions involved, the large economic burden, and the interconnected nature of these problems with other problems (Kolko, 2012, p. 10).

Wicked problem theory generally occurs with important problems made unique by the high levels of unknown risk and outcomes and by the interdependent variables that are so deeply entwined, it is “impossible to tease out causality” (McClure, 2018, p. 91). Social programs and public welfare have multiple consequences in the decisions that are made. Equally important is that wicked problems may not have an optimal solution. They are problems which are not easily solved. Implications based on planning decisions have the potential to impact multiple generations without knowing if the decision was correct. Examples of wicked problems based on planning and decision-making could include hiring faculty for a program that may be relevant in the current year but may not be relevant twenty years into the future; or designing buildings that are architecturally sound in the current day but may not accommodate future needs.

Boutique Housing as a Wicked Problem

Wicked problems, according to Rittel and Webber (1973), “are ill-defined and rely upon elusive political judgement for resolution” (p. 160). They cycle repeatedly, with different variables and constraints applied to them. University dilemmas created by mutual interests in both affordable housing and profit maximization are examples of a wicked problem. Attempts to solve facilities planning and construction issues—including housing accommodations—can have long-lasting

consequences, as one cannot simply move a building or easily repurpose it. Further, residential life issues at higher education institutions have long-lasting consequences for students who are not privy to the higher-level decisions university administrators made but must, nonetheless, live with the consequences. As such, facilities and construction planning decisions require careful consideration.

Building affordable housing units may not be in the best financial interests of higher education institutions. The explosive growth of the college student population across the United States has produced a great demand for affordable housing units. Institutions are sometimes unable to generate the capital necessary to construct new residence halls that will meet demand (Weissman, 2021). The resulting gap between demand and supply can be filled by private corporations that seize the opportunity to capitalize on an investment by partnering with non-profit colleges and universities to build profitable housing units. Higher education institutions and their corporate partners plan and construct residence halls with boutique features to attract students to universities, enticing them to live on-campus where luxury provides an enhanced student experience (Daniel, 2022).

Boutique housing constitutes a policy problem within higher education institutions. There is a contradiction between students' understanding that one could minimize student loan debt and their inelastic attitudes towards single rooms and other luxury features. While student loan debt is often cited as one of the largest barriers for millennials to purchase a home and reach other financial goals (Giovanetti, 2021; Nova, 2021), the stress of sharing a room throughout their college career appears to outweigh the stress of managing increased student loan debt later in life.

Equity issues among students and long-lasting consequences complicate this policy problem, making it a wicked problem. Although higher education is meant to create equity in our society, expensive housing options create an economic barrier for students. Increasingly, institutions require that students (usually first-year students) live on-campus if they live beyond a certain radius from the institution. Exceptions are usually made for students who are not attending college for the first time, students who are married, or students with certain financial or medical hardships. For example, the live-on requirement at Ohio State University (Ohio State University, 2022) states that all unmarried, full-time students enrolling within two years of their high school graduation must live on campus, although exceptions are made for married students and students planning on living with parents or other close relatives. These on-campus living requirements create challenges for students who do not live near the university they plan to attend and who cannot opt into less expensive off-campus housing options. While students living in urban areas near a university may have the option to live at home while attending the local university, students from rural areas who must relocate to attend a university then bear the cost of expensive on-campus living options in addition to the cost of tuition.

Boutique housing is also a wicked problem because of its long-lasting consequences. Once luxury housing units are constructed, they cannot be converted easily to affordable housing units; the buildings will remain with the institution for the life of the building (typically defined as 30+ years). Further complicating housing is the current COVID-19 crisis, which has already been deemed as a wicked problem (Auld et al., 2021) by political science and public administration scholars. There is a possibility that double, triple, and quad housing arrangements may decline, or even cease to exist, further challenging housing needs at campuses which may lack area for future development.

The interconnectedness of these challenges with student housing affirms this as a wicked problem. Campus space is finite, equity issues remain a constant consideration in higher education, and higher

education institutions, both public and private, have increased their efforts to create unique and one-of-a-kind experiences for on-campus students. Higher education institutions must innovate in their housing options to keep up with their competitors.

Methods

The purpose of this quantitative study was to focus on the financial choices associated with boutique luxury student accommodation in higher education. This included the choices and impacts associated with boutique luxury housing. The authors chose the 10 largest universities and their closest private institution to complete this analysis. Given the purpose, the following research questions were posed:

- What are the costs of room and board for both single occupancy dormitory rooms and double, triple, or quad occupancy rooms at the ten largest universities in the United States?
- How do these costs compare to the cost of room and board at private higher education institutions geographically closest to them?
- What is the overall difference in cost between the single occupancy housing option and the multiple occupancy housing option?
- What is the overall difference in price for each option over one academic year and over four academic years?

The research questions were answered by examining data collected from the websites of the ten largest institutions in the United States, the Bureau of Economic Analysis, and *Numbeo* to compare the costs of room and board for single occupancy and double or triple occupancy dormitory rooms at U.S. colleges and universities. The following is an explanation of the data used to construct a framework that addresses the contradictions generated by boutique, single-room housing as an institutional priority versus growing student debt problems.

Defining the cost of single- and multiple-occupancy dormitory rooms at U.S. colleges and universities entailed identifying the ten largest institutions in the United States, by enrollment, from US News and World Report (Wood, 2021). The ten private institutions geographically closest to each of the ten most populous institutions were also identified to facilitate cost comparison between private and public campus housing in the same area. Finally, document analysis (Bowen, 2009) was conducted to obtain the most current data available related to tuition and housing costs the websites of each of the twenty higher education institutions.

A *single room* is defined as a dormitory room that may have a bathroom or sink included within the room. It may be connected to other single rooms or *double/triple/quad* rooms within a suite. A *double/triple/quad* room is a room with two, three, or four students within the same room (this may also include a bathroom or sink within the room). An apartment-style single or double additionally contains a kitchen and living room within the unit.

Comparison of the room costs required consideration of the cost associated with basic living necessities, and cost of rent off-campus as these factors may potentially impact student spending patterns and quality of life. We reported the Bureau of Economic Analysis Regional Price Parity (RPP) by Metropolitan Statistical Area (MSA) to determine the cost of goods and rent at off-campus locations in each of the city's housing the ten pairs of institutions. "The RPP is an index that sets the national average cost of goods and services at 100, with a particular region's RPP showing how

the cost of living in that region compares on average” (Kiersz, 2016, p. 1). The U.S. average served as the baseline to compare how much more or less expensive housing in each city was compared to the U.S. national average. Additionally, the average price of goods was reported reflective of the spending habits of students using Numbeo, a crowd-sourced database with real-time updates. The items—a McDonald’s meal, a cup of cappuccino, a pair of jeans, and a pint of domestic beer—were strategically chosen to provide anecdotal evidence of changing costs by location, which may or may not have an impact on student cost of living.

Results

The characteristics of the ten largest universities in the United States—based on undergraduate enrollment as provided by US News and World Report (Wood, 2021)—and the ten private institutions closest to them are in Table 1 and Table 2, respectively. Included are the costs for the most expensive single room on-campus housing option and the most inexpensive double/triple/quad housing options for the 2018-2019 academic year. The cost of the most expensive single-occupancy room options at the ten largest universities ranged from \$4,236 per semester (\$8,472 annually or \$33,888 over four academic years) to \$9,309 per semester (\$18,618 annually or \$74,472 over four academic years). The cost of the least expensive multiple-occupancy room options at these same institutions ranged from \$1,885 per semester (\$3,770 annually or \$15,080 over four academic years) to \$5,625 per semester (\$11,250 annually or \$45,000 over four academic years). Similarly, the cost of the most expensive single-occupancy room options at the geographically closest private institutions ranged from \$3,050 per semester (\$6,100 annually or \$24,400 over four academic years) to \$6,000 per semester (\$12,000 annually or \$48,000 over four academic years). The cost of the least expensive multiple-occupancy room options at these same institutions ranged from \$1,775 per semester (\$3,550 annually or \$14,200 over four academic years) to \$3,750 per semester (\$7,500 annually or \$30,000 over four academic years).

Among the ten largest institutions, Michigan State University had the largest difference in cost between a single housing experience and double/triple/quad housing at \$4,191 a semester. \$4,191 a semester multiplied by 8 (four-year experience) totals \$33,528 for a single room. Ohio State University had the smallest difference in cost between a single housing experience and double/triple/quad housing at \$938 a semester. \$700 a semester multiplied by 8 (four-year experience) totals \$7,504 for a single room. The average cost of the most expensive room at the ten largest institutions was \$5,525 (semester) or \$44,200 (four-year experience). The average cost of the least expensive housing option was \$2,859 (semester) or \$22,872 (four-year experience). The average difference for a semester was \$2,666 or \$21,328 for the four-year experience (see Table 3).

Among the ten private institutions studied, Albion College had the largest difference in cost between a single-occupancy housing experience and double/triple/quad-occupancy housing at \$2,510 per semester, resulting in a savings of \$20,080 over the most expensive single-occupancy room.

Table 1. Characteristics at the 10 Largest Institutions by Undergraduate Enrollment (Fall 2018)

Institution Name	Undergraduate Enrollment	In-State Tuition Cost (Without Housing)	Cost of Most Expensive Single Room	Cost of Cheapest Double/Triple/Quad Room	Price Difference
University of Central Florida	55,756	\$ 3,184 (15 credit hours)	\$4,440 (semester)	\$2,470 (semester - double)	\$1,970 (semester)
Texas A&M University - College Station	50,735	\$ 5,126 (semester)	\$5,423 (semester)	\$1,885 (semester - double)	\$3,538 (semester)
Florida International University	45,813	\$ 3,084 (15 credit hours)	\$4,350 (semester)	\$2,650 (semester - double)	\$1,700 (semester)
Ohio State University	45,831	\$ 5,363 (semester)	\$4,236 (semester, singles and doubles)	\$3,298 (semester - quad)	\$ 938 (semester)
Liberty University	47,050	\$11,900 (semester)	\$3,750 (semester - double)	\$2,300 (semester - triple)	\$1,450 (semester)
Arizona State University	42,477	\$ 5,411 (semester)	\$5,360 (semester)	\$3,075 (semester - double)	\$2,285 (semester)
University of Texas - Austin	40,168	\$ 5,461 (semester)	\$9,309 (semester)	\$5,625 (semester - double)	\$3,684 (semester)
Pennsylvania State University	41,359	\$ 8,708 (semester)	\$5,830 (semester)	\$2,550 (semester - quad)	\$3,280 (semester)
Michigan State University	39,090	\$ 7,261 (semester)	\$6,312 (semester)	\$2,121 (semester - double)	\$4,191 (semester)
University of Houston	37,215	\$ 5,246 (semester)	\$6,239 (semester)	\$2,612 (semester - double)	\$3,627 (semester)

Table 2. Characteristics at the 10 Nearest Private Institutions Next to the 10 Largest Institutions

Institution Name	Undergraduate Enrollment (Fall 2018)	In-State Tuition Cost – If Applicable (Without Housing)	Cost of Most Expensive Single Room	Cost of Cheapest Double/Triple/Quad Room	Price Difference
Rollins College	1,922	\$24,880 (semester)	\$6,000 (semester)	\$3,750 (semester - triple)	\$2,250 (semester)
Baylor University	14,316	\$20,597 (semester)	\$5,400 (semester)	\$3,225 (semester - triple)	\$2,175 (semester)
Barry University	2,176	\$14,850 (semester)	\$4,605 (semester)	\$3,085 (semester - double)	\$1,520 (semester)
Capital University	2,718	\$17,573 (semester)	\$4,651 (semester)	\$2,380 (semester - quad)	\$2,271 (semester)
University of Lynchburg	2,100	\$19,280 (semester)	\$4,100 (semester)	\$2,900 (semester - double)	\$1,200 (semester)
Grand Canyon University	20,500	\$ 8,250 (semester)	\$3,050 (semester)	\$1,775 (semester - triple)	\$1,275 (semester)
Huston Tillotson University	965	\$ 7,173 (semester)	\$1,821 (semester - double only)		\$ 0 (semester)
Dickinson College	2,399	\$27,318 (semester)	\$4,332 (semester)	\$3,407 (semester - triple)	\$ 925 (semester)
Albion College	1,505	\$22,535 (semester)	\$5,550 (semester)	\$3,040 (semester - double)	\$2,510 (semester)
University of St. Thomas	6,395	\$15,730 (semester)	\$4,020 (semester)	\$2,055 (semester)	\$1,965 (semester)

Table 3. Differences in Cost Illustrated by Largest, Smallest, Single, Double, and Quad

Cost Difference	Type of Institution	Overall Highest and Lowest Cost	Cost as Demonstrated over 8 Semesters
Largest Difference	Large Institution: Michigan State University	\$4,191 (semester)	X 8 semesters: \$33,528
	Private Institution: Albion College	\$2,510 (semester)	X 8 semesters: \$20,080
Smallest Difference	Large Institution: Ohio State University	\$ 938 (semester)	X 8 semesters: \$ 7,504
	Private Institution: Dickinson College	\$ 925 (semester)	X 8 semesters: \$ 7,400
Average Cost of Single	Large Institutions: \$5,525 (semester)	X 8 semesters: \$44,200	
	Private Institutions: \$4,188 (semester)	X 8 semesters: \$33,504	
Average Cost of Double/Triple/Quad	Large Institutions: \$2,859 (semester)	X 8 semesters: \$22,872	
	Private Institutions: \$2,744 (semester)	X 8 semesters: \$21,952	
Average Difference	Large Institutions: \$2,666 (semester)	X 8 semesters: \$21,328	
	Private Institutions: \$1,788 (semester)	X 8 semesters: \$14,304	

Dickinson College had the smallest difference in cost between a single-occupancy housing experience and double/triple/quad-occupancy housing at \$925 per semester, resulting in a savings of \$7,400 over the most expensive single-occupancy room. The average cost of a single at nine of the institutions was \$4,188 per semester, or \$33,504 for four academic years, compared to \$2,744 per semester (\$21,952 for four academic years) for a double/triple/quad-occupancy room. The average difference in cost between the large institution and the private institution with which it was paired for a single is \$1,337 per semester, or \$10,696 over four academic years. Note that Huston Tillotson University only offers double rooms on their campuses.

Data from the Bureau of Economic Analysis in 2017 was used to identify and compare RPP for goods (see Table 4) and for housing (see Table 5) in the MSA in which each of these pairs of institutions are located. RPP: Rent comparisons identified the MSA in which Florida International University and Barry University are located as the most expensive in which to live in the sample, with an RPP index value of 130, almost 28% above the national baseline. The MSA in which Liberty University and University of Lynchburg are located is the least expensive with an RPP index value of 71.4, almost 30% below the national baseline. The University of Houston—University of St. Thomas, and Arizona State University—Grand Canyon University pairings are in MSAs that most closely reflect the national baseline RPP value (2.46% above and 2.85% below, respectively). Regional Price Parities (RPP): Food comparisons identified the MSA in which Florida International University and Barry University are located as the most expensive in the sample, with an RPP index value of 101.6, almost 3% above the national baseline. The MSA for the University of Houston—University of St. Thomas pairing is located is the least expensive area, with an RPP index value of 95.3, almost 4% below the national baseline. The MSA for the Pennsylvania State University—Dickerson College pairing most closely reflects the national baseline RPP value (.91% below).

Finally, Numbeo comparisons of the basic and selected cost of living indicators by location are reflected in Table 6 and Table 7. In 2018, the highest and lowest rents for in-town single bedroom apartments were \$1,868.13 (Florida International University – Barry University) and \$625.00 (Liberty University – University of Lynchburg) per month, respectively. The highest and lowest rents for outside of town rents were \$1,378.74 and \$615.00 per month, respectively, for the same institutional pairings. On average, in-town accommodations cost \$266.94 more than outside of town accommodations. The average costs across the ten institutional pairings were \$154.42 per month for basic utilities, \$2.37 for gas, \$7.05 for a McDonald’s meal, \$3.90 for a cappuccino, \$40.24 for a pair of Levi’s or similar jeans, and \$3.57 for a pint of domestic beer. The institutional pairings that reflected the highest and lowest costs of living indicators varied by category. The highest basic utility costs (\$226.21 per month) were found in the MSA for the Michigan State University—Albion College pairing, while the lowest (\$118.33 per month) were found in the metro area for the Pennsylvania State University—Dickinson College pairing. The highest gas prices (\$2.56) were found in the MSA for the Pennsylvania State University—Dickinson College pairing, while the lowest (\$2.14 per gallon) were found in the MSA hosting Texas A&M University, College Station—Baylor University. No clear lowest cost existed for a McDonald’s meal, a cappuccino, a pair of jeans, or a pint of local beer—several MSAs reported the same low cost value—but the highest costs were found in the MSAs for the University of Central Florida—Rollins College (\$7.75, McDonald’s meal), University of Texas Austin—Huston Tillotson University (\$4.41, cappuccino), Ohio State University—Capital University (\$44.92, jeans), and Florida International University—Barry University (\$5.00, pint of domestic beer) pairings.

Table 4. Regional Price Parities (RPP) for Goods by Metropolitan Statistical Area (MSA)

GeoFips ID Number	Region Name	Large Institution Name	Institution Name (Private)	RPP Value 2017	Percent Above or Below US Baseline
31340	Lynchburg, VA	Liberty University	University of Lynchburg	71.4	-29.86%
29620	Lansing-East Lansing, MI	Michigan State University	Albion College	83.7	-17.78%
18140	Columbus, OH	Ohio State University	Capital University	84.5	-16.99%
17780	College Station-Bryan, TX	Texas A&M University - College Station	Baylor University	87.2	-14.34%
38060	Phoenix-Mesa-Chandler, AZ	Arizona State University	Grand Canyon University	98.9	-2.85%
00000	United States – Baseline Data			101.8	0%
26420	Houston-The Woodlands-Sugar Land, TX	University of Houston	University of St. Thomas	104.3	2.46%
36740	Orlando-Kissimmee-Sanford, FL	University of Central Florida	Rollins College	105.8	3.93%
44300	State College, PA	Pennsylvania State University	Dickinson College	113.2	11.20%
12420	Austin-Round Rock-Georgetown, TX	University of Texas - Austin	Huston-Tillotson University	119.4	17.29%
33100	Miami-Fort Lauderdale-Pompano Beach, FL	Florida International University	Barry University	130.0	27.70%

Source. Adapted from Bureau of Economic Analysis, 2017

Table 5. Regional Price Parities (RPP) for Housing by Metropolitan Statistical Area (MSA)

GeoFips ID Number	Region Name	Large Institution Name	Institution Name (Private)	RPP Value 2017	Percent Above or Below US Baseline
26420	Houston-The Woodlands-Sugar Land, TX	University of Houston	University of St. Thomas	95.3	-3.74%
18140	Columbus, OH	Ohio State University	Capital University	96.0	-3.03%
29620	Lansing-East Lansing, MI	Michigan State University	Albion College	96.2	-2.83%
38060	Phoenix-Mesa-Chandler, AZ	Arizona State University	Grand Canyon University	96.2	-2.83%
17780	College Station-Bryan, TX	Texas A&M University - College Station	Baylor University	97.5	-1.52%
31340	Lynchburg, VA	Liberty University	University of Lynchburg	97.9	-1.11%
12420	Austin-Round Rock-Georgetown, TX	University of Texas - Austin	Huston-Tillotson University	98.1	-0.91%
36740	Orlando-Kissimmee-Sanford, FL	University of Central Florida	Rollins College	98.1	-0.91%
44300	State College, PA	Pennsylvania State University	Dickinson College	98.1	-0.91%
00000	United States			99.0	0%
33100	Miami-Fort Lauderdale-Pompano Beach, FL	Florida International University	Barry University	101.6	2.63%

Source. Adapted from Bureau of Economic Analysis, 2017

Table 6. Basic Cost of Living Indicators (Rent, Utility, and Gasoline) in the Cities Near Each Institution

Large Institution Name	Closest Private Institution Name	Nearest Major Metro Area	Rent for One-Bedroom Apartment in City	Rent for One-Bedroom Apartment Outside of City	Basic Utility Costs	Gasoline
University of Central Florida	Rollins College	Orlando, FL	\$1,257.04 (month)	\$ 939.42 (month)	\$159.42 (month)	\$2.43 (gallon)
Texas A&M University - College Station	Baylor University	College Station, TX	\$ 750.00 (month)	\$ 665.00 (month)	\$148.74 (month)	\$2.14 (gallon)
Liberty University	University of Lynchburg	Lynchburg, VA	\$ 625.00 (month)	\$ 615.00 (month)	\$147.50 (month)	\$2.17 (gallon)
Ohio State University	Capital University	Columbus, OH	\$1,111.11 (month)	\$ 753.57 (month)	\$172.25 (month)	\$2.42 (gallon)
Florida International University	Barry University	Miami, FL	\$1,868.13 (month)	\$1,378.74 (month)	\$126.33 (month)	\$2.55 (gallon)
Arizona State University	Grand Canyon University	Phoenix, AZ	\$ 873.50 (month)	\$ 738.00 (month)	\$150.00 (month)	\$2.28 (gallon)
Pennsylvania State University	Dickinson College	University Park, PA	\$ 853.33 (month)	\$ 725.00 (month)	\$118.33 (month)	\$2.56 (gallon)
University of Texas - Austin	Huston Tillotson University	Austin, TX	\$1,646.09 (month)	\$1,069.17 (month)	\$143.83 (month)	\$2.22 (gallon)
Michigan State University	Albion College	Lansing, MI	\$ 750.00 (month)	\$ 620.00 (month)	\$226.21 (month)	\$2.50 (gallon)
University of Houston	University of St. Thomas	Houston, TX	\$1,332.65 (month)	\$ 893.53 (month)	\$151.54 (month)	\$2.41 (gallon)

Source. Adapted from Numbeo, 2018

Table 7. Selected Cost of Living Indicators (Meal, Drink, and Cloth) in the Cities Near Each Institution

Large Institution Name	Closest Private Institution Name	Nearest Major Metro Area	McDonalds Meal	Cappuccino	Pair of Jeans - Levi's or Similar	Domestic Pint of Beer
University of Central Florida	Rollins College	Orlando, FL	\$7.75	\$3.80	\$40.94	\$3.50
Texas A&M University - College Station	Baylor University	College Station, TX	\$7.00	\$3.75	\$37.50	\$3.50
Florida International University	Barry University	Miami, FL	\$7.00	\$4.03	\$41.28	\$5.00
Ohio State University	Capital University	Columbus, OH	\$7.00	\$3.41	\$44.92	\$4.00
Liberty University (Private)	University of Lynchburg	Lynchburg, VA	\$7.00	\$3.62	\$38.93	\$3.50
Arizona State University	Grand Canyon University	Phoenix, AZ	\$7.25	\$4.27	\$41.48	\$3.25
University of Texas - Austin	Huston Tillotson University	Austin, TX	\$7.00	\$4.41	\$43.41	\$4.00
Pennsylvania State University	Dickinson College	University Park, PA	\$7.00	\$3.35	\$42.50	\$3.50
Michigan State University	Albion College	Lansing, MI	\$6.00	\$4.03	\$32.60	\$3.00
University of Houston	University of St. Thomas	Houston, TX	\$7.50	\$4.34	\$38.86	\$2.41

Source. Adapted from Numbeo, 2018

Table 8. Cost of Single-Unit Housing On-Campus vs. Off-Campus

Institution	Nearest Major Metro Area	Equivalent Cost for Campus Housing (9.5 Months)	Equivalent Cost for Off-Campus in City (9.5 Months)	Off-Campus Apartment and Utilities (9.5 Months)	Yearly Cost for Off-Campus Apartment in City and Utilities (12 Months)	Difference in Cost for Off-Campus in City (w/utilities) and Campus Housing (9.5 Months)
University of Central Florida	Orlando, FL	\$ 8,800	\$11,941.88	\$13,456.37	\$16,997.52	\$ 4,656.37
Texas A&M University - College Station	Waco, TX	\$10,846	\$ 7,125.00	\$ 8,538.03	\$10,784.88	-\$ 2,307.97
Liberty University	Lynchburg, VA	\$ 7,500	\$ 5,937.50	\$ 7,338.75	\$ 9,150.00	-\$ 161.25
Ohio State University	Columbus, OH	\$ 8,472	\$10,555.55	\$12,191.93	\$15,400.32	\$ 3,719.93
Florida International University	Miami, FL	\$ 8,700	\$17,747.24	\$18,947.38	\$23,933.52	\$10,247.38
Arizona State University	Tempe, AZ	\$10,720	\$ 8,298.25	\$ 9,723.25	\$12,282.00	-\$ 996.75
Pennsylvania State University	State College, PA	\$11,660	\$ 8,106.64	\$ 9,230.58	\$11,659.92	-\$ 2,429.42
University of Texas - Austin	Austin, TX	\$18,618	\$15,637.86	\$17,004.25	\$21,479.04	-\$ 1,613.75
University of Houston	Houston, TX	\$12,478	\$12,660.18	\$14,099.81	\$17,810.28	\$ 1,621.81
Michigan State University	Lansing, MI	\$12,624	\$ 7,125.00	\$ 9,274.00	\$11,714.52	-\$ 3,350.00

Source. Adapted from Numbeo, 2018

Discussion

Conclusions

When examining housing costs, campus-affiliated housing allows a 9.5-month commitment (two semesters), while off-campus housing often requires a twelve-month commitment. However, many off-campus private apartment complexes in close proximity to universities rely on student tenants and provide shorter-term options to accommodate the academic cycle. These options usually incur higher monthly rent rates. To conduct a fair comparison, both are provided as cost-of-living indicators in Table 8. Further, the cost of utilities must be included in any estimate, as this is covered as part of the on-campus housing agreement.

Combining data from all ten institutions, the cost of living on campus is nearly the same as the cost of living off campus when the most expensive on campus option is chosen. The average cost for the most expensive on-campus housing option at the ten largest institutions is \$11,042.00 per academic year, and the average cost of off-campus housing (including the cost of basic utilities) is \$11,980.00 per academic year (9.5 months)—a difference of \$938.00 per year. This could indicate that on average, it is more cost-efficient to live in on-campus housing, take advantage of the resources, and have the safety and security offered through the college campus community than off-campus living.

Three additional considerations are accounted for in the analysis. First, most apartments will not allow individuals to enter into 9.5-month leases, therefore, this data is partially skewed in favor of on-campus housing, as summer costs of living are not factored into the total. Second, Miami offers a tremendous outlier—it is more than double the cost to live off-campus than it is to live in a single unit at Florida International University. Eliminating Miami, Florida from the analysis in an average cost for on-campus housing at \$11,302.00 and the average cost for off-campus housing becomes \$11,206.00 (a difference of \$96 per year). Finally, there are additional costs associated with off-campus housing, including having reliable transportation (assuming that the majority of individuals living off-campus would have their own personal automobile). Many large universities occupy spaces much greater than their official campus boundaries. Transportation (including public options and university shuttles) in the areas surrounding the university is often very easy and accessible, and at low or no cost. This could greatly favor on-campus single housing in terms of cost, but the freedom associated with a personal automobile is then lost.

Theoretical Implications

The data presented through the MARPP and campus tuition costs directly from each institution indicate that the costs associated with living on-campus are beginning to approach and in some locations, exceed, the cost of living off-campus. More research needs to be done to see how decisions are made to determine on campus housing costs relative to the overall cost of living and how decisions are made to price on-campus housing.

Institutions are reacting to student and parent demand for single rooms by building more in their new construction; additionally, some institutions are including other features such as gyms, pools, and *lazy rivers* in their residence halls. One consideration for residence life professionals is affordability for students of lower socioeconomic backgrounds. The trend for more expensive, luxury housing can be problematic for students of lower socioeconomic backgrounds who want the *traditional* college experience on campus but cannot afford on-campus life. Additionally, many

institutions also have a first year live-on requirement for students beyond a certain geographic radius, and this may affect a student's ability to attend certain institutions if they are unable to afford the housing.

Practical Implications

This study described the incommensurable contradistinctions inherent in wicked problems. Based on the data provided in Table 1 and Table 2, the cost of the most expensive room across all 20 selected institutions over the course of 4 years (considering a traditional four-year college experience) was on average \$17,104.00 more than the cost of the cheapest double/triple/quad for on-campus housing. Students and their families can spend a lot of money on expensive student housing, leading to unwanted higher levels of debt. In 2017, the median home price in the United States was \$199,200.00 (Martin, 2017). Using our data, the \$17,104.00 spent for the convenience of single-unit living would be enough for an 8.6% down payment on a home a student could purchase post-graduation. Additionally, as of February 2020, the average student loan debt was \$32,731.00 (Campos, 2020). The \$15,160.40 cost of a single unit would be 52.3% of that total debt. However, it appears that most institutions are not concerned with addressing these cost considerations with their students; almost all advertised newer housing at these campuses featured single options—indicating a growing trend of higher education institutions to create boutique housing options to recruit students. Given the instability in the marketplace, this could lead to a student housing bubble.

Ultimately, the cost of living on campus is increasing alongside the rising cost of living in the United States as a whole. Consequently, students are taking on more debt related to cost of living than in previous decades to avoid exclusion from the on-campus living experience. However, despite rising costs, students and their parents continue to advocate for more singles and luxury housing. Despite the negative connotations that come with accumulating debt, some students perceive single occupancy rooms as essential, demonstrating an inelastic demand related to price.

When assessing the cost of single spaces in residence halls compared to tuition, five of the ten largest institutions examined demonstrated the cost of housing is higher than the cost of tuition. However, when students opt for the least expensive room type on campus, housing is more expensive than tuition at only 1 of the institutions examined (University of Texas Austin).

While the cost of tuition is non-negotiable, selecting less expensive housing is the most impactful way to reduce the amount of money students borrow to live and study on campus. This information must be conveyed effectively to students. Until that message is presented in an impactful manner to students, the costs associated with boutique housing, for some, becomes an expected component of the college experience. It remains an unresolvable wicked problem.

Limitations and Future Studies

The scope of this study was limited to the ten largest institutions in the United States, as reported in US News and World Report 2018 enrollment data, and the private colleges or universities that were their closest geographical neighbors. Data was provided by each institution's website and not directly confirmed from each institution, which may affect accuracy based on additional costs (mandatory meal plans, different fees associated with certain rooms) or any discounting that may be offered by an institution. Additionally, out-of-state tuition was not included, as the cost would

greatly vary between institutions and give an inconsistent analysis. Distance between paired institutions was also a limitation of this study. With specific reference to the Texas A&M University—Baylor University, and Pennsylvania State University—Dickinson College pairings, a distance of 91 miles and 74 miles, respectively, separated the institutions. Cost associated with major limited the study as well. Some institutions (e.g., Arizona State University and University of Texas Austin) assessed different costs of tuition depending on the major. Liberal arts were chosen as the default major as a method of delimitation and because the majority of students on college campuses tend to choose a liberal art major. Finally, we did not consider the classification of institutions (Historically Black College or University, Minority Serving Institution, Hispanic Serving Institution) in calculating costs, which may have made a difference.

The most current data available from the Bureau of Economic Analysis was from 2017. This was, however, an accurate and reliable source that provided an assessment of the relative cost of living. Recognizing that Numbeo is a crowd-sourced open-access database, which limits its reliability, it was coupled with a more reliable source (specifically, the Bureau of Economic Analysis) to provide a more holistic picture of the realistic experiences college students face in living on or off-campus in these locations.

There are several different directions for future research involving the increased costs of student housing. Comparing public and private institutions in terms of average room size, room cost, and room features is a natural transition from this work. Additionally, interviewing college students who have chosen single room options to better understand the reasons for their preferences is also a possibility. Another direction would be to address costs of comparable apartments off-campus, and to assess whether a correlation exists between retention and living off-campus. From an economic perspective, some professionals believe that having a roommate and sharing a communal bathroom are educational experiences in themselves. As such, a future study could look at the contradiction between student affairs professionals' beliefs about student housing, and the potential privatization of student housing. An exploration of institutional administration decision-making as a demand-side, supply-side, revenue generation, and student recruitment debate may offer additional discussion points regarding total cost and return on investment that can benefit higher education institutions in a time of financial uncertainty.

Additionally, research suggests that higher education institutions across the United States are creating more courses tied with first-year experiences and creating Living Learning Communities across their institutions. The purpose of these initiatives is tied to college success and college retention. Assessing which higher education institutions are instituting these programs and where those institutions are located (rural, urban, suburban) may have an impact on costs associated with housing and residence life.

With the recent challenge of COVID-19, many institutions are eliminating the double, triple, and quad options to limit the spread of the disease. For the time being, institutions are using the CARES Act to prevent housing costs from rising. However, if institutions choose not to reintroduce the less expensive double, triple, and quad options once the pandemic is over, this may make it more difficult for students of lower socioeconomic backgrounds to afford living on campus. Exploring housing costs post-COVID-19 will offer additional dialogue related to boutique housing and options for students.

Finally, novelty features are becoming more enticing for some prospective college students. As novelty features can correlate with increased living costs, this research can help facilities' directors assess what features may be included in future constructions to balance both marketing and housing affordability to maximize occupancy.

References

- Archibald, R. B., & Feldman, D. H. (2008). Explaining increases in higher education costs. *The Journal of Higher Education*, 79(3), 268-295.
- Auld, G., Bernstein, S., Cashore, B., & Levin, K. (2021). Managing COVID-19 as a super wicked problem: Lessons from, and for, the climate crisis. *Policy Science*, 54, 707-728.
- Barshay, J. (2015, April 8). *Think tuition is rising fast? Try room and board*. The Hechinger Report. <https://hechingerreport.org/think-tuition-is-rising-fast-try-room-and-board/>
- Beale, E. M., & Cude, B. J. (2017). College students' attitudes toward debt. *International Journal of Undergraduate Research and Creative Activities*, 9(1), 1-10.
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40.
- Burns, R. (2019, August 27). *Luxury private student housing further divides rich and poor on campuses*. The Hechinger Report. <https://hechingerreport.org/luxury-private-student-housing-further-divides-rich-and-poor-on-campuses/>
- Bureau of Economic Analysis. (2017). *Regional data: GDP and personal income* [Data set]. <https://apps.bea.gov/iTable/iTable.cfm?reqid=70&step=1&acrdn=8>
- Campos, S. (2020, April 27). Federal student loan payments are on pause through September. Here's what you should do. *NBC10 Philadelphia*. <https://www.nbcphiladelphia.com/news/business/federal-student-loan-payments-are-on-pause-until-september-heres-what-you-should-do/2376997/>
- Chingos, M., Lee, V., & Blagg, K. (2017). *Five facts about the sharp rise in college living costs*. Urban Institute. <https://www.luminafoundation.org/wp-content/uploads/2017/08/five-facts-about-living-costs.pdf>
- Daniel, W. (2022, April 19). Your new college landlord could be on Wall Street. *Fortune*. <https://fortune.com/2022/04/19/blackstone-campus-housing-college-landlord-wall-street/>
- Davies, E., & Lea, S. E. (1995). Student attitudes to student debt. *Journal of Economic Psychology*, 16(4), 663-679.
- Dellande, S., Gilly, M. C., & Graham, J. L. (2016). Managing consumer debt: Culture, compliance, and completion. *Journal of Business Research*, 69(7), 2594-2602.
- DeVaney, S. A. (2015). Understanding the millennial generation. *Journal of Financial Service Professionals*, 69(6), 11-14.
- Dougherty, K. J., & Reddy, V. T. (2011). *The impacts of state performance funding systems on higher education institutions: Research literature review and policy recommendations*. Community College Research Center <https://academiccommons.columbia.edu/doi/10.7916/D8XW4SZZ>.
- Doyle, J., Wheelis, M., Thompson, L., & Strietzel, J. (2019). The impact of living-Learning program scholarships on scholarship recipients. *Journal of Student Affairs Research and Practice*, 56(2), 221-234.
- Garg, M., Gupta, K., & Jha, R. (2014). An empirical study on market research of organized students' housing industry in India. *International Journal of ICT and Management*, 2(2), 143-154.
- Giovanetti, E. (2022, September 17). 35% of millennials say student loan debt is preventing them from buying a home: Survey. *Fox Business*. <https://www.foxbusiness.com/personal-finance/millennials-student-loan-debt-buying-a-home>.
- CARES Act, 116 U.S.C. § 3548 (2020). <https://www.govinfo.gov/content/pkg/BILLS-116s3548is/pdf/BILLS-116s3548is.pdf>
- Hess, A. (2019, December 19). The cost of college increased by more than 25% in the last 10 years – Here's why. *CNBC*. <https://www.cnbc.com/2019/12/13/cost-of-college-increased-by-more-than-25percent-in-the-last-10-years.html>
- Hicks, T., & Heastie, S. (2008). High school to college transition: A profile of the stressors, physical and psychological health issues that affect the first-year on-campus college student. *Journal of Cultural Diversity*, 15(3), 143-147.

- Junior Achievement USA. (2019). *Millennials and College Planning*. https://www.juniorachievement.org/web/ja-usa/press-releases/-/asset_publisher/q4WH4nMou1cw/content/nearly-one-in-four-millennials-believe-their-college-loans-will-be-forgiven-according-to-research-from-ja-and-pwc/pop_up;jsessionid=AB9B0D2C91ECA935361DB5DB065DDBEE?_101_INSTANCE_q4WH4nMou1cw_viewMode=print
- Kiersz, A. (2016, July 19). *Here are the most and least expensive places to live in America*. Insider. <https://www.businessinsider.com/regional-price-parity-map-2016-7>
- Kolko, J. (2012). *Wicked problems: Problems worth solving*. Austin Center for Design. https://www.andrehabermacher.ch/wp-content/uploads/2015/12/WickedProblemsJonKolko_lowres_spreads.pdf
- Letkiewicz, J. C., Lim, H., Heckman, S. J., & Montalto, C. P. (2019). Parental financial socialization: Is too much help leading to debt ignorance among college students? *Family and Consumer Sciences Research Journal*, 48(2), 149-164.
- Martin, E. (2017, June 29). The median home price in the U.S. is \$200,000 – here’s what that will get you across the country. *CNBC*. <https://www.cnn.com/2017/06/29/what-the-median-home-price-of-200000-will-get-you-across-the-us.html>
- McClure, M. W. (2018). Reframing education finance: Super wickedness, silver bullets, and educational inheritance. *Voices of Reform: Educational Research to Inform and Reform*, 1(1), 89-98.
- Minsky, C. (2016, January 28). *The soaring cost of student living*. Times Higher Education. <https://www.timeshighereducation.com/student/news/soaring-cost-student-living#survey-answer>
- Muslim, M. H., Karim, H. A., & Abdullah, I. C. (2012). Challenges of off-campus living environment for non-resident students’ well-being in uitm shah alam. *Procedia-Social and Behavioral Sciences*, 50, 875-883.
- Nova, A. (2021, September 17). Student debt can make buying a home feel impossible. Here are your options. *CNBC*. <https://www.cnn.com/2021/09/17/student-debt-is-a-main-obstacle-for-millennials-wanting-to-buy-a-house.html>
- Numbeo. (2018). *Cost of living* [Data set]. <https://www.numbeo.com/cost-of-living/>
- O’Keeffe, P. (2013). A sense of belonging: Improving student retention. *College Student Journal*, 47(4), 605-613.
- Ohio State University. (2022). *Office of student life: Housing and residence education*. <https://housing.osu.edu/living-on-campus/fees-contracts-policies/housing-regulations-terms-conditions/>
- Ong, S. E., Petrova, M., & Spieler, A. (2013). Demand for university student housing: An empirical analysis. *Journal of Housing Research*, 22(2), 141-164.
- Rittel, H. W., & Webber, M. M. (1973). Dilemmas in a general theory of planning. *Policy Sciences*, 4(2), 155-169.
- Schudde, L. T. (2011). The causal effect of campus residency on college student retention. *The Review of Higher Education*, 34(4), 581-610.
- Steinberg, S. & Brodie, A. (2011, September 22). Dorms go to extreme to lure students. *CNN*. <https://www.cnn.com/2011/09/22/living/dorm-rooms/index.html>
- Theelin, J. R. (2013). *The rising costs of higher education: A reference handbook*. ABC-CLIO.
- United States Census Bureau. (2022). *Families and households*. <https://www.census.gov/topics/families/families-and-households.html>
- Weissman, S. (2021). *Too much for some, not enough for others*. Inside Higher Ed. <https://www.insidehighered.com/news/2021/08/13/campuses-anticipate-housing-shortages-and-surpluses-fall>
- Wheeler, D. (2014, February 13). The end of the college roommate? *The Atlantic*. <https://www.theatlantic.com/education/archive/2014/02/the-end-of-the-college-roommate/283621/>
- Wood, S. (2021, October 26). 10 colleges with the most undergraduate students. *U.S. News*. <https://www.usnews.com/education/best-colleges/the-short-list-college/articles/colleges-with-the-most-undergraduates>