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CRISIS FOR THE UNIVERSITY STUDENT: CHANGING STUDENT HOUSING AND GROWING COST BURDEN Geography and Earth Sciences Department Connor Wood And J. Claire Schuch, Ph.D.

Abstract

College cost burden and student debt are among the most pressing discussions in contemporary US society. This conversation has largely been focused on changes in tuition and fees. While this is important, over 60% of the college cost at four-year public institutions is housing. This substantial burden has already forced 35% of four-year college students to be housing insecure and 7% to be homeless (Baker-Smith et al., 2020). In order to address this, it is essential we understand the factors driving housing costs and its impacts on students. This paper assists in that goal by investigating changes in on- and off-campus housing costs at the University of North Carolina at Charlotte in recent years. Using tuition, fees, and on- and off-campus housing data from UNC Charlotte, we demonstrate that student housing cost increased by 6% on-campus and 20% off-campus between 2017 and 2019. We also collected survey data from 99 students. According to those results, 59% of students currently feel cost burdened by their housing cost and 88% would feel burdened if their rent increased. Students believed



Connor Wood

Connor is a UNC Charlotte undergraduate student studying Geography. In his studies, he has became interested in the connections of economic policy on our spatial world. This interest was solidified during his work as a Summer Research Assistant where this project began. As a student who experienced housing insecurity, student housing affordability became one of his passions and made him a TEDxUNCCharlotte Speaker on the topic. Outside of Connor's academics, he has been involved across campus in various departments holding many executive positions. After graduation, he wants to pursue a Master's of Public Policy and work at the intersection of research and policy development.



FACULTY ADVISOR J. Claire Schuch, Ph.D.

Dr. Claire Schuch holds a Ph.D. in Geography and Urban Regional Analysis and worked as a National Science Foundation postdoctoral research fellow 2018-2020 in the Geography and Earth Sciences Department. She has conducted a range of interdisciplinary, mixed-methods, community-based studies, covering topics such as Latino civic engagement, minority and female entrepreneurship, immigrant inclusion, postpartum depression, unintended pregnancy, affordable housing, school-to-work transitions, and domestic violence.

being part of a growing university and city attributed to increasing off-campus rents. **Keywords:** housing, surveys, students, higher education, mixed-methods The annual cost of higher education at a four-year public institution has doubled in the last three decades from \$9,714 in 1990 to \$20,050 in 2017 (Figure 1). Still, university enrollment has increased by 27% since 2000 (Snyder et al., 2019). While more people are accessing higher education, students' ability to afford a college education has deteriorated, leaving the nation with a collective student debt of \$1.4 trillion and an estimated 70% of college graduates carry student loan debt averaging \$38,000 per person (Fay, n.d.). On a societal level, this has created a generation of young adults burdened by debt, which impacts their purchasing power and the entire economy. As a result, how to make college affordable and decrease student debt is a common state and federal political discussion. This paper contributes to our understanding of the factors driving housing costs and its impacts on students by investigating changes in on- and off-campus housing costs at the University of North Carolina at Charlotte in recent years.

Literature Review

The college affordability discussion has largely revolved around increasing tuition and fees; however, these are not the only factors. Student housing accounts for over 60% of the fouryear public college cost. Four-year public institution tuition and fees increased by 82% since 2000, from \$4,961 to \$9,037 in 2017. During that time, on-campus housing cost increased, on average by 66%, from \$3,761 to \$6,227 (Figure 1). However, student housing is still left out of the discussion and changes in off-campus student housing costs are largely unknown.

Four-Year Public Postsecondary Institution Costs in Constant 2017 US Dollars, 1990-2017



Source: Snyder et al. (2019)

While housing is largely left out of the popular discussion and the literature, some studies have examined student housing trends in the United States and other countries. For example, Van Der Werf (1990) wrote about the emerging privatization of student housing and potential loss of financial control. Others have written about shifting student preferences from traditional style to suites (Ghani & Suleiman, 2016; Khozaei et al., 2014; La Roche et al., 2010). Ong and colleagues (2013) discovered relationships between the number of students living on-campus and the off-campus market, driving factors in this connection were the cost of off-campus rent, complex security and campus housing stock including availability, style, and price. Still, the studies have failed to connect back to the student cost burden. Students are also largely left out of housing affordability discussions and policies. Therefore, this research sets out to understand what is happening with student housing costs and bring its potential changes and implications into the larger discussion around affordability for college and housing. In order to do this, this paper asks:

- 1. To what extent has on- and off-campus housing costs changed for college students?
- 2. What factors are driving these changes in the perspective of college students?
- 3. What are the implications of rising housing costs for students and college affordability?

Methods

Case Study

We answer our research questions using the University of North Carolina at Charlotte (UNC Charlotte) as a case study. UNC Charlotte is a large public urban research institution and one of the 15 postsecondary institutions of the UNC System. It is the only system institution serving the City of Charlotte, the 16th largest city in the United States, and its surrounding metropolitan area. Both the City of Charlotte and UNC Charlotte have seen substantial growth in the past two decades (US Census). UNC Charlotte enrollment has grown from 17,241 in 2000 to 29,710 in 2018 (Figure 4). Approximately 6,000 students live on campus and over 10,000 live immediately around campus. With transfer students accounting for half of new students each year and the university enrolling and graduating more low-income students than any other UNC system institution, UNC Charlotte has a diverse student body that is often left out of student housing discussions (UNC Charlotte Admissions, 2020).

Data Collection

Primary and secondary data were collected between May and July 2019. All materials and study procedures were approved by the UNC Charlotte Institutional Review Board (IRB). Secondary data were largely derived from UNC Charlotte and UNC System sources. We obtained enrollment data from Fall 1988 to Spring 2019 from the Historical Factbook by the UNC Charlotte Office of Institutional Research (n.d). Tuition and fees data were pulled from the website of UNC Charlotte Niner Central and the Office of Bursar. This data was only available from 2009 onwards due to a record retention standard of 10 years and only publicly published from 2016 onwards. On-campus housing data was pulled from the UNC Charlotte Housing and Residence Life website (n.d.). Housing rates were only publicly available from 2015-2016 onward. This data was compiled into excel sheets and analyzed using descriptive statistics to find the average and percent change over time.

For off-campus housing, we used data from individual leasing complexes offering academic year leases that start in August and run until the following July. These complexes are designed and marketed directly to students and owned largely by national companies. Following a general model of large-scale multi-unit housing offering individual leases for a furnished single bedroom/ bathroom and a shared common space with a kitchen and an all-inclusive rent, these complexes have risen in popularity and frequency since 2000 (Ghani & Suleiman, 2016.) There are 12 of these privately-owned complexes operating around the university, largely built in the last decade, with the newest opening in Fall 2018 (Table 1). To find the rent price for each complex, we consulted with the respective leasing offices and websites. The apartments complexes only had on hand one or two years of rental rates. This specific housing is representative of current student housing market trends at UNC Charlotte and nationally, and most comparable to on-campus housing.

Table 1

Off-Campus Student Housing Leasing Offices

Name of Complex	Leasing Website
49 North	https://www.forty9north.com
	https://www.americancampus.com/student-apartments/nc/char-
The Edge	lotte/the-edge
	https://www.americancampus.com/student-apartments/nc/char-
University Walk	lotte/university-walk
University Village	https://www.universityvillagecharlotte.com
The Flats at Mallard Creek	https://theflatsatmallardcreek.com/#amenities
The Flats at Campus Pointe	https://theflatsatcampuspointe.com
Arcadia	https://www.arcadiauncc.com
Aspen	https://myaspenheights.com/our-locations/charlotte/
Millennium One	https://m1apartments.com
Blvd98	http://blvd98.com
	https://www.americancampus.com/student-apartments/nc/char-
University Crossings	lotte/university-crossings-charlotte#specials
Haven 49	https://haven49charlotte.com
Campus Walk	http://unccrentals.com/campus_walk.php
Colville Townhomes	http://unccrentals.com/colville townhouse.php
University Terrace	http://unccrentals.com/university_terrace.php
University Terrace North	http://unccrentals.com/university_terrace_north.php

Note: 2019-2020 Academic Year rental rates were found on the complexes' websites.

To take into account UNC Charlotte's surrounding area, known as University City, and Mecklenburg County as a whole, we used Quality of Life Data, an online public tool that includes numerous variables at the Neighborhood Profile Area (NPA) level (Charlotte-Mecklenburg Quality of Life Explorer, n.d.). To delineate between Mecklenburg County and specifically the University Area, we selected NPAs that contained at least one of our selected 12 individual leasing student complexes. Using the Explorer and ArcMap, we analyzed the spatial variation in the distribution of values for selected variables like rental costs (Figure 2).

Rental Costs in Mecklenburg County vs University NPAs, 2017

Mecklenburg County vs University Area Rental Costs



Note: The star represents UNC Charlotte's Campus

Source: Charlotte-Mecklenburg Quality of Life Explorer, Rental Costs 2017. Map edited by authors.

Online Survey

To understand the student perspective on their cost burden, an online survey was conducted over Summer 2019 through a Google Form. Eligibility criteria included being a current or recent former UNC Charlotte student and living or have recently lived in one of the off-campus, individual leasing student housing complexes. In an attempt to obtain a representative sample, participants were recruited in a variety of ways, including through social media, email, student organization listservs, and word-of-mouth. Students were asked several questions about their college status (first-generation, transfer status, aid-receiving), their current and past living arrangements and monthly rent. Students were also asked for their thoughts on changes occurring in the University Area and what was driving these changes, as well as their feelings related to housing costs and student cost burden (for a full list of survey questions, see Appendix). The responses collected were stored in an excel sheet.

In total, 89 undergraduates and 10 graduate students responded to the online survey, 39 of whom were first-generation college students (representative of the whole student body). Nine were transfer students, which is an underrepresentation of the student body as a whole (Table 2). Seventy-seven out of the 99 received some form of financial aid (representative of the whole student body); 90% of first-generation students did and all transfer students did. We cannot speak to gender, age or race/ethnicity because we did not ask those demographics.

Table 2

Survey Sample Demographics Compared to Overall UNC Charlotte Student Demographics

Variable	Sample (N=99)	UNC Charlotte (N=29500)
First-generation	39%	37%*
Aid-receiving	78%	75%*
Transfer	10%	43%**

*Source: UNC System, UNC Charlotte page (2020)

**Source: UNC Charlotte Office for Institutional Research (2020)

Data Analysis

Current and former housing arrangements were analyzed in the subsequent method to calculate the monthly rent rate. First, all rent rates received were organized by year, then complex, then by number of bedrooms in the unit. Secondly, an average rent was calculated for each type of unit in the complex. These rents were compared to other complexes then an average rent rate for each style of unit in the off-campus market was calculated. Lastly, these rents were averaged to

give mean rent for the off-campus market.

To compare on- and off-campus costs, a few assumptions had to be made due to the differences between the two. The academic year runs from Mid-August to Mid-May, which totals nine months and is divided into two semesters. For students living on-campus, they pay a single rate at the beginning of each semester and are only allowed to reside on campus over the academic year. For students staying off-campus, their 12-month leases start in mid-August to the end of July with monthly rent due at the beginning of each month. Therefore, these residents pay ten months for the academic year and two summer months. On-campus students seeking summer housing must find another option and for off-campus students they must continue to pay or sublease their unit (Figure 3). We specifically looked at individual leasing complexes that included furnished apartments with utilities included in rent due to their prevalence around UNC Charlotte and increasing popularity across the country. Students who choose to live in traditional unfurnished apartments and in rental homes have different costs that are harder to compare directly to on-campus housing. **Figure 3**

Student Housing Lease Lengths in Comparison to Academic Year



Note: On-Campus refers to residence halls, off-campus refers to student housing complexes.

While there are differences in the two markets, comparing individual leasing complex-

es allows for more accuracy in our findings. To make the most accurate direct comparison, we accounted for differences in types of housing offered by the two. On-campus student housing offers a variety of styles including traditional double rooms, suites, and one- and four-bedroom apartments, while off-campus only offers apartments and townhomes. To make the most accurate comparison, we compared the cost of one- and four-bedroom apartments. To do so we converted the cost into a monthly rent, a semester rate, and yearly cost. Semester rates were divided by five to provide the on-campus monthly rent cost. Monthly rents were multiplied by five to provide their semester rate. To provide the total price for the 10-month academic year, we doubled the semester rate.

Results

This section shows our findings, organized by research question. First, we use the secondary quantitative data to demonstrate how on- and off-campus housing costs changed for college students. Second, we draw on primary survey data to explore what factors are driving these changes in the perspective of college students. In the final section, we build on these findings to discuss our third question, i.e. the implications of rising housing costs for students and college affordability.

Campus and Local Changes

UNC Charlotte enrollment has increased by 72% in the past two decades, from 17,241 in 2000 to 29,701 in 2018. For undergraduates specifically, enrollment was 19,755 in 2010 and 24,381 in 2018 (Figure 4). Meanwhile, in-state undergraduate tuition and fees per semester increased from \$2,404 in 2010 to \$3,548 in 2019 (Table 3). In other words, in-state tuition and fees increased by 47% while total enrollment only increased by 6%.

UNC Charlotte Fall Enrollment 2000-2018



Source: UNC Charlotte Office of Institution Research, Factbook (2018)

Table 3

Undergraduate Tuition and Fees Rates at UNC Charlotte, 2010-2020

	Per Sen	nester
Academic Year	In-State	Out-Of-State
2010-2011	\$2,404	\$7,709
2015-2016	\$3,266	\$9,852
2016-2017	\$3,382	\$9,967
2017-2018	\$3,497	\$10,214
2018-2019	\$3,522 \$10,239	
2019-2020	\$3,548	\$10,265

Source: UNC Charlotte Niner Central, Tuition and Fees (2019)

We found tremendous changes in the University Area as well as significant differences

between this area and Mecklenburg County as a whole. The selected University NPAs saw a 92% population increase, compared to a 58% increase for the County overall (Table 4). Low average resident age, household income, and single-family units and ownership speak to a traditional postsecondary student population. While the University Area differs greatly from the rest of the County due to the high number of students, 2017 rental costs only differed by 17% difference, averaging \$1,097 in the County and \$915 in the University Area (Table 4, Figure 2).

Table 4

Select Population and Housing Variables for Mecklenburg County and the University Area

	All Meckler	iburg County NPAs	Univ	ersity NPAs
Variables	Average	Percent Change	Average	Percent Change
Population Density 2000	3.4	From 2000-2018:	5.5	From 2000-2018:
Population Density 2018	5.1	44%	10.8	95.5%
Population 2000	1505	From 2000-2018:	2471	From 2000-2018:
Population 2018	2373	57.7%	4752	92.3%
Resident Age 2016	37		22	
Household Income 2016	\$66,629		\$29,393	
Housing Density 2011	2.0	From 2011-2018:	1.2	From 2011-2018:
Housing Density 2018	2.1	8.7%	2.5	25.3%
Single Family Housing 2011	64.5%	From 2011-2018:	9.3%	From 2011-2018:
Single Family Housing 2018	62.9%	-2.3%	10.3%	10.8%
Home Ownerships 2016	57%		15.3%	
Rental Costs 2016	\$1,097		\$915	

Select Population and Housing Variables for Mecklenburg County and the University Area

Source: Charlotte Mecklenburg Quality of Life Explorer

Housing Cost Changes

We find that both on- and off-campus housing costs have risen in recent years. For on-campus housing specifically, semester rates have increased on average by nearly 16%, from \$3,947 in 2015-2016 to \$4,565 in 2019-2020. Double traditional rooms saw the largest price increase at nearly 20%. Three-bedroom suites saw the smallest price increase at 9% and no

on-campus option saw a price decrease (Table 5). Calculating a monthly rent for comparison we can see that rent for a one bedroom is \$1,071 and \$960 for four Bedrooms with two shared bath-rooms. Overall, the average on-campus housing yearly cost increased from \$7,894 in 2015-2016 to \$9,130 in 2019-2020 (Table 6).

Table 5

UNC Charlotte On-campus Housing Rates per Semester and Percent Changes, 2015-2019

	Single	Double	1B Suite	2B Suite	3B Suite	4B Suite	1B apt	4B Apt	Average
'15-'16	\$3,837	\$2,955	\$4,135	\$4,075	\$4,090	\$3,930	\$4,690	\$4,138	\$3,947
'16-'17	\$4,008	\$3,087	\$4,378	\$4,300	\$4,248	\$4,077	\$4,830	\$4,389	\$4,135
'17-'18	\$4,170	\$3,212	\$4,553	\$4,472	\$4,416	\$4,220	\$5,025	\$4,504	\$4,293
'18-'19	\$4,316	\$3,369	\$4,713	\$4,628	\$4,570	\$4,436	\$5,200	\$4,661	\$4,451
'19-'20	\$4,462	\$3,532	\$4,855	\$4,766	\$4,458	\$4,568	\$5,355	\$4,801	\$4,565
% increase	16.3%	19.5%	17.4%	17.0%	9.0%	16.2%	14.2%	16.0%	15.7%

Source: UNC Charlotte Housing & Residence Life website

Table 6

UNC Charlotte On-Campus Rate per Month, Semester, and Yearly Cost, 2015-2019

	Monthly Rent		Semester Rate			Academic Year Cost			
	1B Apt	4B Apt	Average	1B Apt	4B Apt	Average	1B Apt	4B Apt	Average
'15-'16	\$938	\$828	\$789	\$4,690	\$4,138	\$3,947	\$9,380	\$8,276	\$7,894
'16-'17	\$966	\$878	\$827	\$4,830	\$4,389	\$4,135	\$9,660	\$8,778	\$8,270
'17-'18	\$1,005	\$901	\$859	\$5,025	\$4,504	\$4,293	\$10,050	\$9,008	\$8,586
'18-'1 9	\$1,040	\$932	\$890	\$5,200	\$4,661	\$4,451	\$10,400	\$9,322	\$8,902
'19-'2 0	\$1,071	\$960	\$913	\$5,355	\$4,801	\$4,565	\$10,710	\$9,602	\$9,130

Note: 1B = 1 Bedroom, Apt = Apartment, 4B = 4 Bedroom

For off-campus rents, we used the data collected by the student survey and leasing offices. We received responses for each of the 16 complexes listed in the survey; 12 were individual leasing complexes, and four offered individual and traditional leasing. We also received 12 entries for unlisted complexes. We received a total of one response for 2015-2016, four for 2016-2017, 19 for 2017-2018, and 99 responses for 2018-2019. Due to limited responses for 2015-2016 and 2016-2017, we chose not to compare these values due to the inability to evaluate their validity. For 2017-2018, we did not receive one- or two-bedroom rents. For each year, the most reported bedroom students lived in was a four-bedroom unit. We find that for each year prices increased for each style of unit, except for three bedrooms. Four-bedroom apartments varied the most in price, with an average of \$350 difference between the minimum and maximum rents (Table 7).

Table 7

Year	# of Bedrooms	Average	# of Complexes	Minimum	Maximum
	1	-	-	-	-
	2	-	-	-	-
2017-2018	3	\$462	2	\$375	\$549
	4	\$561	10	\$335	\$700
	5	\$813	2	\$665	\$960
	1	\$896	3	\$776	\$999
2018-2019	2	\$741	4	\$700	\$781
	3	\$623	6	\$450	\$701
	4	\$584	12	\$365	\$699
	5	\$529	1	\$529	\$529
	1	\$1,071	6	\$928	\$1,180
	2	\$743	7	\$669	\$809
2019-2020	3	\$599	7	\$435	\$732
	4	\$603	13	\$375	\$709
	5	\$642	2	\$609	\$674

University Area Off-Campus Monthly Rents, 2017-2020

Note: Average was found by each individual unit type for that respective year.

To compare directly to on-campus, we pulled one- and four-bedroom rents from Table 6 and then averaged all rents reported for an individual year. The average off-campus rent paid by students increased from \$612 in 2017-2018 to \$732 in 2019-2020, an average increase of 20%. In the same time frame, four-bedroom apartments increased by 7.5% from \$561 to \$603 (Table 8).

Table 8

UNC Charlotte Off-campus Month, Semester, and Yearly Cost, 2017-2019

	Monthly Rent		Monthly Rent Semester Rate		Yearly Cost				
Year	1B Apt	4B Apt	Average	1B Apt	4B Apt	Average	1B Apt	4B Apt	Average
'17-'18	-	\$561	\$612	-	\$2,805	\$3,060	-	\$5,610	\$6,120
'18-'19	\$896	\$584	\$675	\$4,480	\$2,920	\$3,375	\$8,960	\$5,840	\$6,750
'19-'2 0	\$1,071	\$603	\$732	\$5,355	\$3,015	\$3,660	\$10,710	\$6,030	\$7,320

Note: 1B = 1 Bedroom, Apt = Apartment, 4B = 4 Bedroom

Due to the larger availability of four-bedroom apartments than one-bedrooms in the onand off-campus housing stock, we directly compare them to the on-campus equivalent in Table 9. While both prices have increased since 2017-2018, there is on average a \$1,500 saving to live off-campus for a semester. Strikingly, we find that in 2019-2020 a student saved on average \$3,572 living off-campus for the academic year when comparing tuition, fees, and housing (Table 9). Student survey respondents also felt that college cost and the cost burden have both grown.

Table 9

·19-'20

			Per semester		Total Cost for th	e Academic Year
	Year	On-Campus	Off-Campus	Tuition & Fees	On-Campus	Off-Campus
_	'17-'18	\$4,138	\$2,805	\$3,497	\$15,270	\$12,604
	'18 - '19	\$4,504	\$2,920	\$3,522	\$16,052	\$12,884

\$3,015

Cost to Attend and Live in a Four-Bedroom Apartment at UNC Charlotte, 2017-2019

Note: Yearly cost only includes Fall and Springs semesters, not the optional summer term

\$3,548

\$16,698

\$13,126

Factors Driving Housing Cost Changes

\$4,801

Of the students surveyed, 96% believed that higher education's cost burden had increased. Of those respondents, 76% believed that university growth was the cause while 58% believed that inflation and lack of government funding/aid was the cause (Figure 5). In reference to off-campus rents, 92% of students believed that rents had increased in the University Area. Over 60% of students believed that enrollment growth, construction of new complexes, and rising rents in Charlotte were increasing the off-campus rents (Figure 6).

Figure 5



Factors Increasing Higher Education's Cost Burden

Note: Students were asked to "select all that apply" for relevant factors.



Factors Driving Changes in Off-Campus Housing Rents



Nearly 70% of students either agreed or strongly agreed that off-campus student housing was contributing to the cost burden of students. Only 12% of students disagreed or strongly disagreed that off-campus housing was impacting the cost burden (Figure 7). At the time of the survey, 59% of students felt current cost burden by their off-campus rents. When asked if they would feel a cost burden if their rents increased, 88% of students said yes.



Off-Campus Cost are Increasing Cost Burden of Students

Note: Students were asked to choose only one response.

A majority of students who chose to live off-campus choose to due to the cost-burden of on-campus living. Of the respondents, 45% and 40% respectively chose to live off-campus for convenience to the university and amenities of the complex (Figure 8).



Factors Determining Student Selection of Complex

Note: Individual Leasing refers to each bedroom in a unit receiving its own lease.

Half of students responded that they were moving after July 2019 when their lease ended. While students oftentimes select off-campus housing to save money, the most common reasons for moving once they are living off-campus is their lease ending and relocating to another off-campus housing complex. Others (27%) listed increased rent as a reason for moving and 31% of respondents were moving to a rental home or non-student apartments (Figure 9). Students' written responses confirmed that, while off-campus housing is costly to them, it is still cheaper and more accessible than living on-campus. Some students were concerned about off-campus safety and security, which is in line with other studies (La Roche et al., 2010; Ong et al., 2013). Students were also concerned with the generalization that all college students receive financial support from parents, arguing that that is not always the case.

Figure 9



Factors Leading to Students Moving

Note: Non-student apartments were not compared due to time constraints and different factors that make them less directly comparable to on-campus residence halls.

Discussion and Conclusions

In summary, we find that on-campus and off-campus housing costs have changed drastically in recent years. On average, on-campus rates increased by 16% since 2015. Since 2017 alone, on-campus living increased by 6% and off-campus rents increased by 20%. Even with this recent increase in the off-campus market, it is still cheaper to live off-campus for the academic year. We also find that UNC Charlotte's on-campus housing prices per academic year were 25% higher than the national average reported by the Digest of Education in 2017-2018, off-campus prices was 7% lower (Synder et al., 2019). While students typically save money by living off-campus, 59% of students say they are currently cost burdened by their rent. This cost burden and the changes in off-campus rents impact where and how long students stay in their residence. Ninety percent of our survey sample expressed that a future rent increase would make them feel cost burdened. As such, results support the point that student housing needs to be included in college affordability discussions.

Students attribute the increasing cost of higher education largely to university growth, as well as lack of government funding, inflation and housing privatization. Top factors believed to drive changes in off-campus rents, according to students, were general rising rents around Charlotte, UNC Charlotte enrollment growth, the construction of new student housing and Charlotte population growth. In other words, being part of a city where housing costs are increasing, impacts the University Area, and both university growth and city growth were believed to be attributing to increased rents.

While it does seem to be more cost effective for students to live off-campus, it is not as straight-forward as it seems. On-campus housing is for the 10-month academic year, while off-campus housing is a 12-month lease running from August to July. This differing timespan causes an opportunity cost related to summer housing. Another challenge of comparing on- and off-campus housing is that there are certain amenities such as internet and cable factored into the rent. Meanwhile, off-campus housing may have other amenities, such as a pool or a gym. While this difference is hard to compare, students' total cost for the 12-month lease on average is less than the cost to live on-campus for an entire academic-year, which influences their perceptions of housing costs and how they make decisions on where to live.

A limitation of this paper is that we only looked at one university. That said, we anticipate findings to be reflective of those of similar institutions. Furthermore, in an effort to overcome this

limitation and provide more knowledge on the subject, this project is currently being expanded to look at all 15 postsecondary institutions in the UNC System. Other limitations include potential margin of error in the housing data collected, and the convenience sample of the survey data. Though our student sample was relatively small, it was largely representative of the larger student body and the student responses largely agreed with one another, suggesting a reliability of the results. While on-campus housing was readily available, off-campus rents are not tracked anywhere to our knowledge and leasing offices only had largely only one year available. Therefore, we use the student survey responses to calculate off-campus rents in previous years. Additional recommendations include a comprehensive analysis of all price points available in the student housing market including on-campus rates, student apartments, and privately-owned rental homes. Due to the ever-changing conditions that students experience in their educational trajectories, a longitudinal study is also needed to understand changes in cost burden over time, including post-graduation.

In conclusion, we find that the on- and off-campus housing costs at UNC Charlotte have increased in recent years. A majority of our student sample expressed that they currently feel cost burdened by their housing costs, and 90% shared they would feel cost burdened if their rent were to further increase. While the UNC System (2019) unveiled its college affordability "NC Promise" plan, reducing tuition to \$500/semester at three institutions, it only focuses on tuition. While tuition and fees are a factor in college costs, they are not the only one and for many two- and four-year public institutions, housing is the largest cost factor. Therefore, it is essential that we continue to explore and discuss what is happening in student housing, not just at an institutional level (e.g. within UNC Charlotte) but also as part of the broader national discussion about college affordability. Further examination should also be given to solutions on reducing or curbing housing cost for college students. Students should be involved in that conversation since they are directly affected. Our ongoing research explores who else should be involved in those discussions given that a variety of public and private stakeholders are involved with setting the prices for both on- and off-campus housing.

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Appendix

Degree Pursuit	Would you feel cost burdened if you rent price increased?		
O Undergraduate	⊖ Yes		
O Graduate	O No		
Are you a first generation college student?	Why did you choose to live in off-campus student housing? (Check all that		
○ Yes	apply)		
O No	On-Campus Housing unaccessible (expensive, full, not an option)		
	Convience to the University		
Are you a transfer student?	Ability to have Individualual Leasing		
O Yes	Roommate Matching Amenities of the complex		
0	Amenities of the complex Other.		
O No			
Do you recieve financial aid?	Are you planning on moving this year?		
	Yes		
⊖ Yes			
O No			
Have off-campus student housing rents in the University area increased?	If yes, why? (Check all that apply)		
⊖ Yes	Cost Burden grown		
O No	Graduating		
	Switching Student Complexes		
If yes, what do you think is contributing to this increase? (Check all that apply)	Moving into a house or non-student apartment complex		
UNC Charlotte Growth in Enrollment	Other:		
City of Charlotte Population Growth			
Light Rail Construction	Do you think the cost burden of higher education has increased?		
Rising Rents around Charlotte			
Construction of new student housing complexes with "better" amenities	O Yes		
Privatization of Student Housing	O No		
Other:			
	If yes, why? (Check all that apply)		
Are off-campus student housing cost attributing to the cost burden of students?	University Growth		
	Increase in Support Staff and Services		
1 2 3 4 5	Lack of Government Funding (Endowments, Aid, etc.)		
Strongly Disagree O O O O Strongly Agree			
	Privatization of Higher Education		
Do you feel cost burdened by your current rent price?	Other:		
⊖ Yes			
O No			

Note: Survey questions used in this study.

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The Office of Undergraduate Research Atkins 237 (Area 49) 9201 University City Blvd. |Charlotte, NC 28223 undergradresearch@uncc.edu | (704) 687-5316

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