

Housing Demographics and Outcomes

Report created by OPEIR

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¹ This analysis was produced by OPEIR in response to a specific data request. Results are not necessarily generalizable and attempts to use results outside the scope of this project should be avoided.

 THE UNIVERSITY OF TENNESSEE
CHATTANOOGA

Background

Introduction and Demographics

The purpose of this analysis is to examine distribution of gender and ethnicity in the ten residence halls available at UTC and identify any relevant differences in academic performance and retention. This analysis used undergraduate enrollment at the end of each Fall term from 2016 through 2019. Differences in academic performance were measured by comparing fall term GPA and one-year retention to the next fall. A list of residence halls with opening year and occupancy size are provided in Appendix A.

Enrolled students living in residence halls make up between thirty to thirty-four percent of all enrolled undergraduates. Majority students in all residence halls are women and white. Annually, over sixty percent are female, and seventy percent of on-campus students are white. Freshman (47%) were most likely to live in residence halls, followed by sophomores (29%), juniors (14%), and seniors (9%). Less than one percent were non-degree undergraduates.

For students of color, campus residents are primarily Black or African American. A large proportion of African American and Hispanic who enroll also choose to live on campus. On average, half of all enrolled African American undergraduates ($\mu = 529$) and one-third of all Hispanic undergraduates ($\mu = 155$) live in a residence hall.

In comparing the population distribution of all residence halls, two of them deviate from the rest in gender ratio and ethnic diversity. Most residents in Boling apartments were men until Fall 2019 when the percentage of male residents dropped fourteen percent (Appendix B). In the same span of time, male residency in Johnson Obear apartments increased by twelve percent. Stophel apartments house most students of color, especially African Americans (Appendix C). For the past four years, approximately thirty percent of all African American residents, or fifteen percent of all African American undergraduates, lived in Stophel. The least diverse residence halls are Guerry and Stagmaier apartments, where the percentage of non-white residents ranges between fifteen and twenty percent.

Residency Demographics: Gender

Term	Female	Male	Total
Fall 2016	60.4%	39.6%	3,076
Fall 2017	62.5%	37.5%	3,148
Fall 2018	61.5%	38.5%	3,381
Fall 2019	62.0%	38.0%	3,535

Residency Demographics: Ethnicity

Ethnicity	Fall 2016	Fall 2017	Fall 2018	Fall 2019
American Indian/Alaska Native	0.1%	0.1%	0.1%	0.1%
Asian	1.9%	2.2%	2.0%	2.3%
Black/African American	16.9%	15.8%	15.7%	16.0%
Hispanic	4.2%	4.3%	4.8%	5.4%
Native Hawaiian/Pacific Islander	0.1%	0%	0%	0%
Multiracial	3.7%	2.5%	2.9%	2.3%
Unknown	0.7%	2.8%	3.3%	3.5%
White	72.5%	72.4%	71.3%	70.3%
Total	3,076	3,148	3,381	3,535

Academics

Term GPA

When viewing academic performance for all undergraduates living on or off campus, Stagmaier residents rise to the top. For the last three years, Stagmaier, UC Foundation, and Walker apartment students earned a higher Fall GPA than their counterparts; this is especially true for female residents. Women in general earned a higher Fall GPA than all undergraduates.

Both male students and students of color demonstrated lower GPA earnings than other undergraduate residents for the past four years, especially those living in Lockmillier and West Campus. Overall, male students in Lockmillier earned the lowest Fall GPA in all four terms. Both men and students of color in West Campus earned a significantly higher Fall GPA than Lockmillier but are still lower than their peers in all other residences (Appendix D).

Mean Fall Term GPA: Fall 2016–2019²

Residence	Female	Male	Students of Color	Residence Average
Boling Apartments	3.02	2.65	2.61	2.84
Decosimo Apartments	2.88	2.51	2.47	2.74
Guerry Apartments	2.93	2.52	2.53	2.79
Johnson Obear Apartments	3.08	2.74	2.67	2.95
Lockmillier Apartments	2.93	2.30	2.50	2.66
Stagmaier Apartments	3.24	2.96	2.81	3.13
Stophel Apartments	2.96	2.65	2.68	2.85
UC Foundation	3.10	2.73	2.66	2.97
Walker Apartments	3.04	2.81	2.79	2.96
West Campus Housing	2.84	2.47	2.45	2.69
Off Campus Residence	2.93	2.64	2.59	2.80

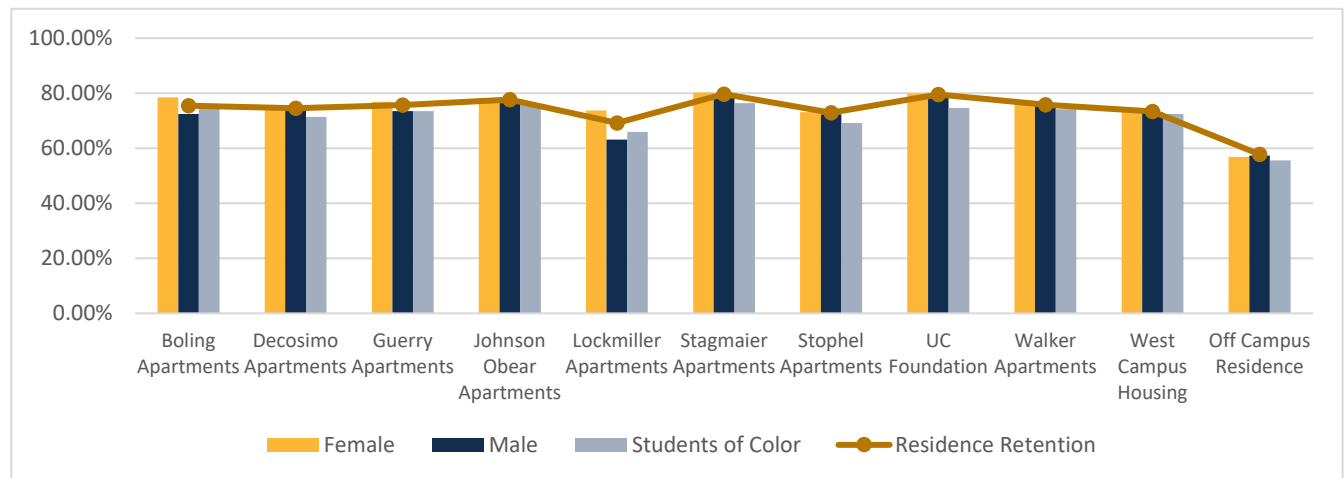
² West Campus Housing opened in Fall 2018. Data provided for West Campus only includes Fall 2018 and fall 2019 undergraduates.

Retention Rates

One-year retention rates follow a similar trend to academic performance. All residence halls hold a significantly higher retention than off-campus students. Stagmaier, Stophel, and UC Foundation retention gradually increased with Stagmaier holding an overall retention of more than eighty percent for the last three years. Bowling and Johnson-Obear saw a gradual decrease in retention over the same span of time. However, more students are also graduating as these are residence halls primarily for upperclassmen.

In reviewing the residence halls with lower retention, three are of note: Lockmilller, West Campus, and Stophel. Across all four years, Lockmilller holds one of the lowest retention rates, especially among male students. Fewer male residents in Lockmilller are retained to the subsequent fall across the last four years. West Campus housing showed a lower retention than other residence halls after its initial opening in Fall 2018, but it saw an increase in retention the following year. For Stophel, students of color had a very slight increase in retention over the years, and more than ten percent of residents have graduated each year (Appendix E).

Mean One Year Retention: Fall 2016 through Fall 2019

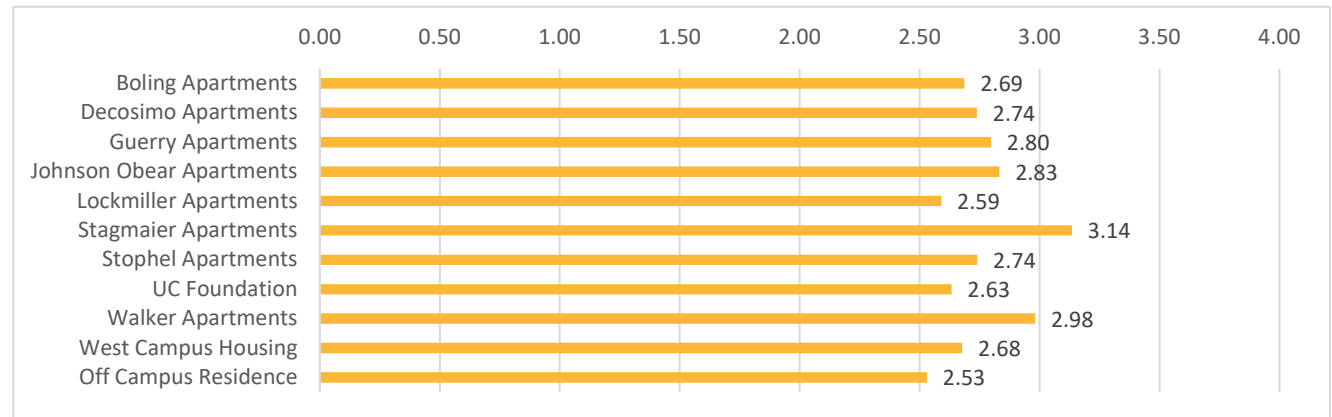


Freshman Cohort Performance

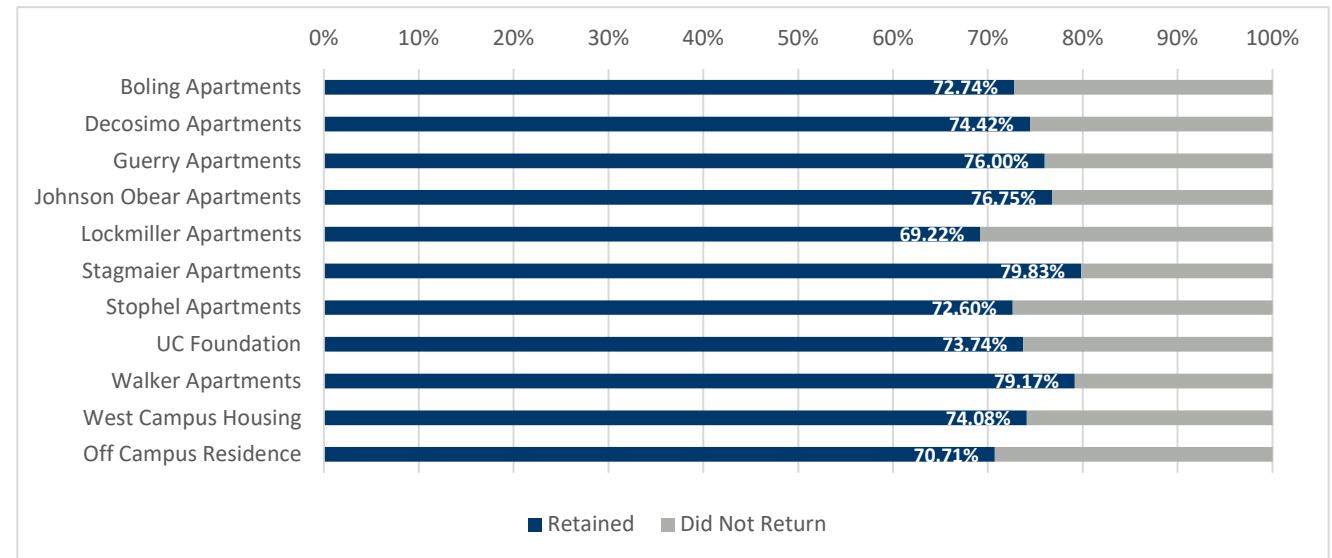
As Stagmaier, Lockmiller, and West Campus are primarily freshman housing residences, retention and Fall GPA metrics for first-time full-time freshman were also examined. Overall, the findings discussed above for all student residents apply to each freshman cohort. Stagmaier leads the residence halls in student retention and academic performance, while Lockmiller and West Campus display lower academic performance and fewer students retained. UC Foundation freshmen earned lower term GPAs than other residence halls, but their retention rate has been increasing over the last four years. Surprisingly, Walker apartments had one of the highest retention rates for Fall 2019. However, further investigation found that the number of freshmen staying in Walker was small (n = 25; Appendix F).

When comparing outcomes between on- and off-campus first time freshmen, all residence halls except Lockmiller display higher academic performance and retention. Off-campus freshmen share a similar retention to Lockmiller freshmen over the last four years. However, they received a lower Fall GPA by a mean difference of 0.06. In the last two years, both groups saw increases in GPA and retention, resulting in nearly equal performance between both groups (Appendix D).

Mean Fall Term GPA: Freshman Bachelor Cohorts 2016 through 2019



Mean One Year Retention: Freshman Bachelor Cohorts 2016 through 2019



Conclusion

Insights

The contrast in performance and retention between students who stay in Stagmaier versus Lockmiller or West Campus is interesting as all of these residencies are primarily for freshman students. Structurally, the primary difference between the residence halls is that Stagmaier's room type is a private suite, whereas the majority of Lockmiller and all of West Campus are shared rooms. The differences in academic performance and retention could be caused in part to difficulties adjusting to a shared living space. When comparing these three residencies with Guerry apartments, which has an equal amount of shared and private room type apartments for freshman, there appears to be a coinciding trend between GPA and retention and the ratio of available private rooms to shared rooms.

A second finding is the high concentration of African American students living in Stophel apartments compared to other residence halls. While Stophel has housed thirty percent of African American residents, all other residence halls held less than ten percent except UC Foundation (12.6%), West Campus (11.9%), Johnson Obear (10.7%), and Decosimo (10.1%). Considering the ratio of all African American undergraduates staying in Stophel, I believe it would be worthwhile to survey Stophel students to see why they choose to live there.

Residence Hall	Percentage of African American Residents
Boling Apartments	>10%
Decosimo Apartments	10.1%
Guerry Apartments	>10%
Johnson Obear Apartments	10.7%
Lockmiller Apartments	>10%
Stagmaier Apartments	>10%
Stophel Apartments	30%
UC Foundation	12.6%
Walker Apartments	>10%
West Campus Housing	11.9%

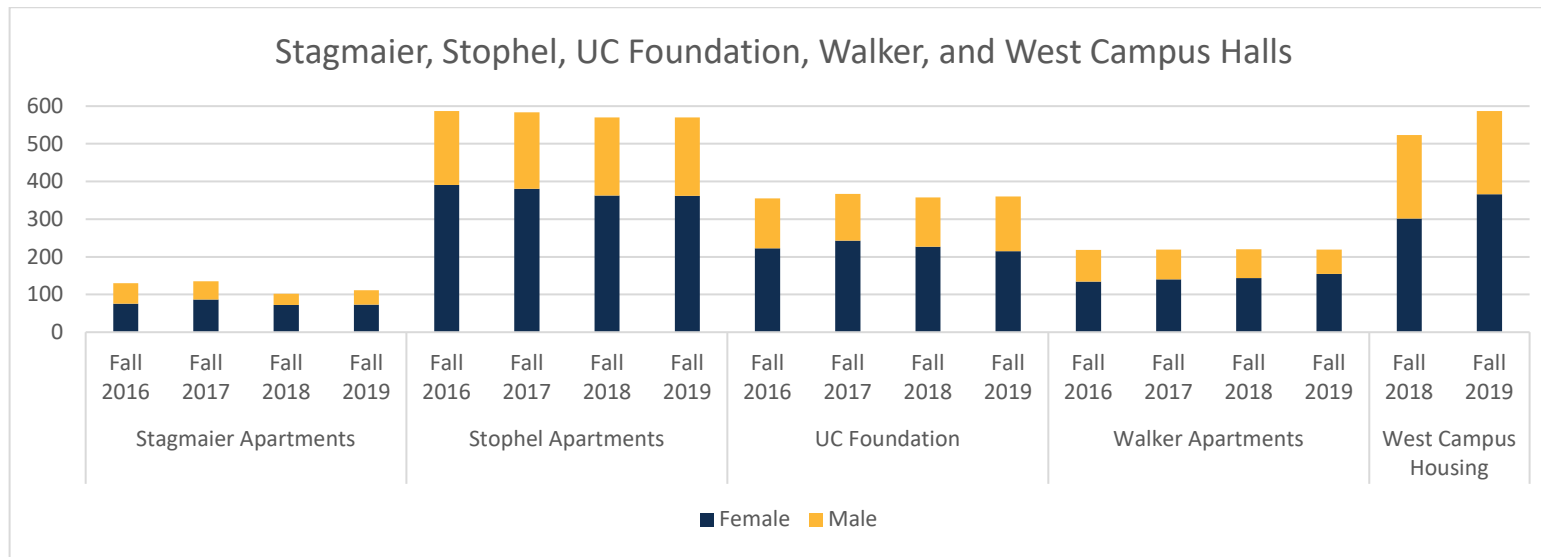
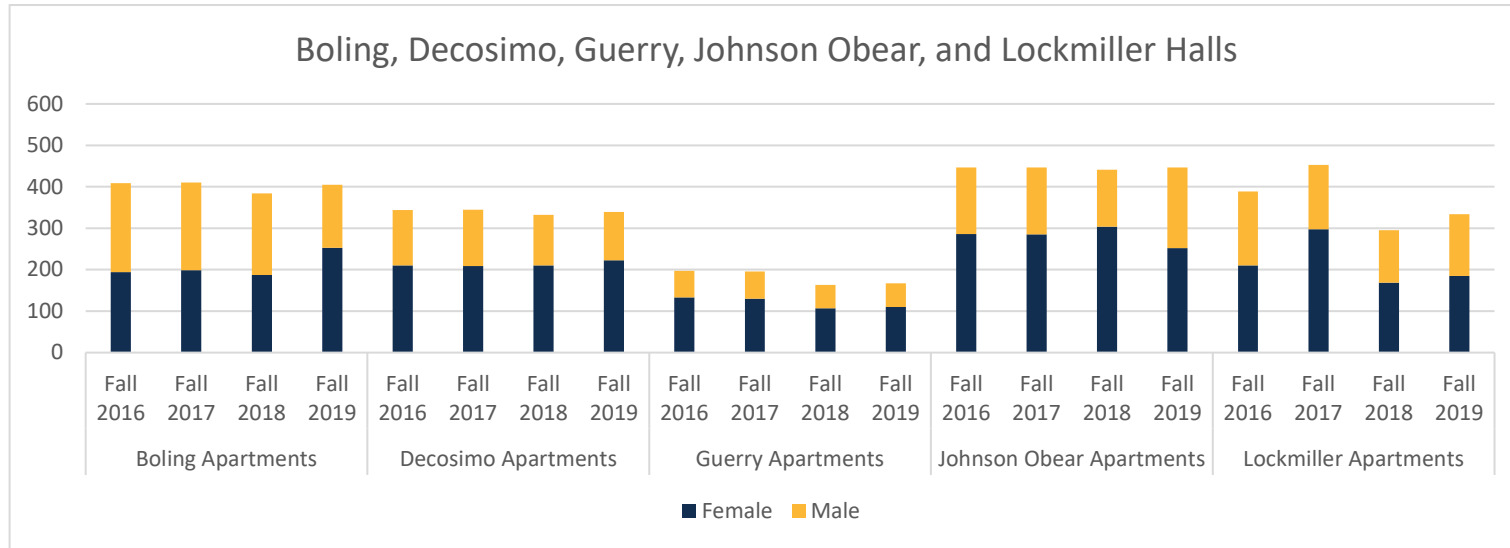
Appendices

Appendix A. List of Residence Halls³

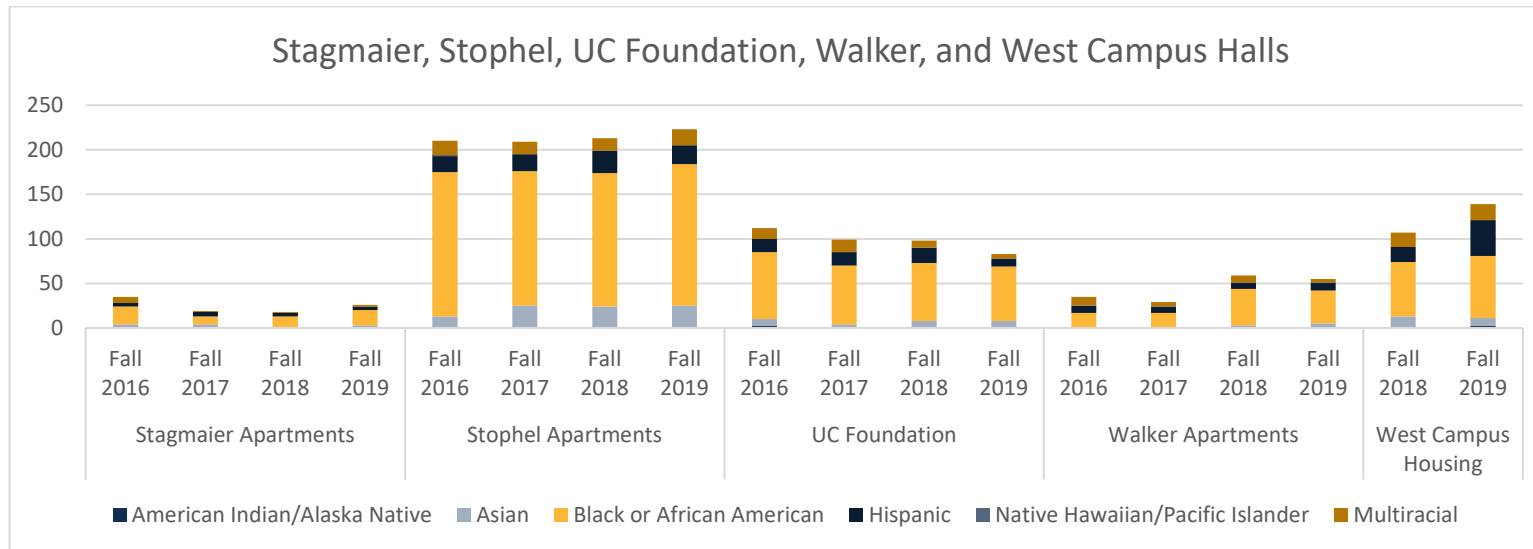
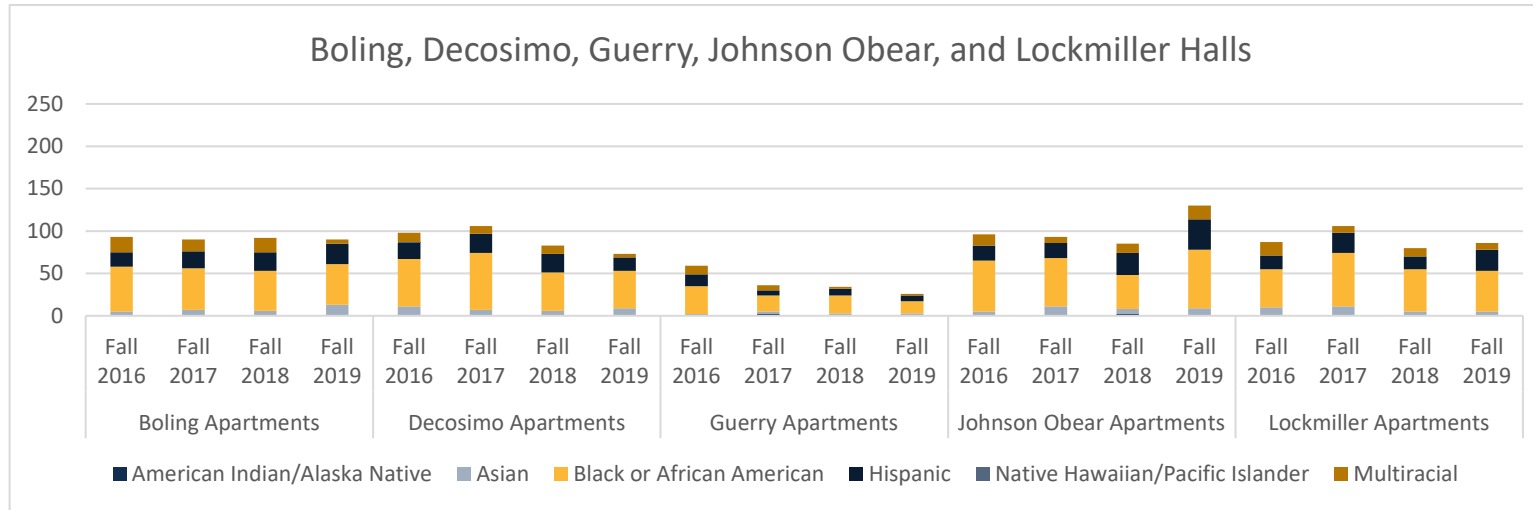
Residence Hall	Date Opened	Student Housing Type	Capacity
Boling Apartments	1975	Freshmen/Upperclassmen	411
Decosimo Apartments	2001	Upperclassmen	341
Guerry Apartments	2001	Freshmen	173
Johnson Obear Apartments	1993, 1997	Upperclassmen	449
Lockmiller Apartments	1982, 1986	Freshmen	354
Stagmaier Apartments	1967	Freshmen	117
Stophel Apartments	2002	Upperclassmen	582
UC Foundation	2004	Upperclassmen	364
Walker Apartments	2004	Upperclassmen	220
West Campus Housing	2018	Freshmen	599

³ Palmetto Place is not included in this analysis as it is used as an overflow residence.

Appendix B. Residence Hall Populations: Gender



Appendix C. Residence Hall Populations: Ethnicity



Appendix D. Fall Term GPA: 2016 through 2019

Fall 2016					
Residence	Female	Male	Students of Color	First-Time Freshmen	Residence Average
Boling Apartments	3.00	2.66	2.59	2.81	2.82
Decosimo Apartments	2.77	2.45	2.51	2.65	2.65
Guerry Apartments	2.72	2.59	2.19	2.66	2.67
Johnson Obear Apartments	3.02	2.59	2.49	2.85	2.86
Lockmiller Apartments	3.22	2.38	2.44	2.62	2.83
Stagmaier Apartments	2.99	2.57	2.58	2.83	2.82
Stophel Apartments	2.78	2.49	2.55	2.46	2.68
UC Foundation	3.02	2.54	2.42	2.47	2.84
Walker Apartments	2.94	2.56	2.75	2.80	2.79
Off Campus Residence	2.91	2.60	2.61	2.50	2.77

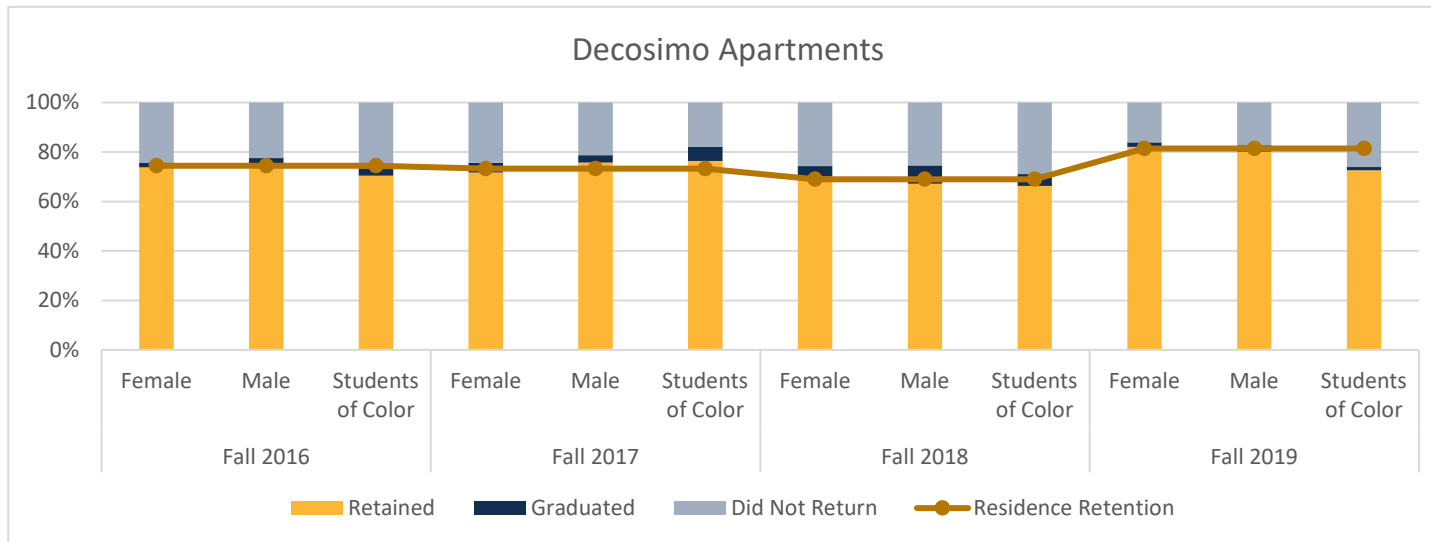
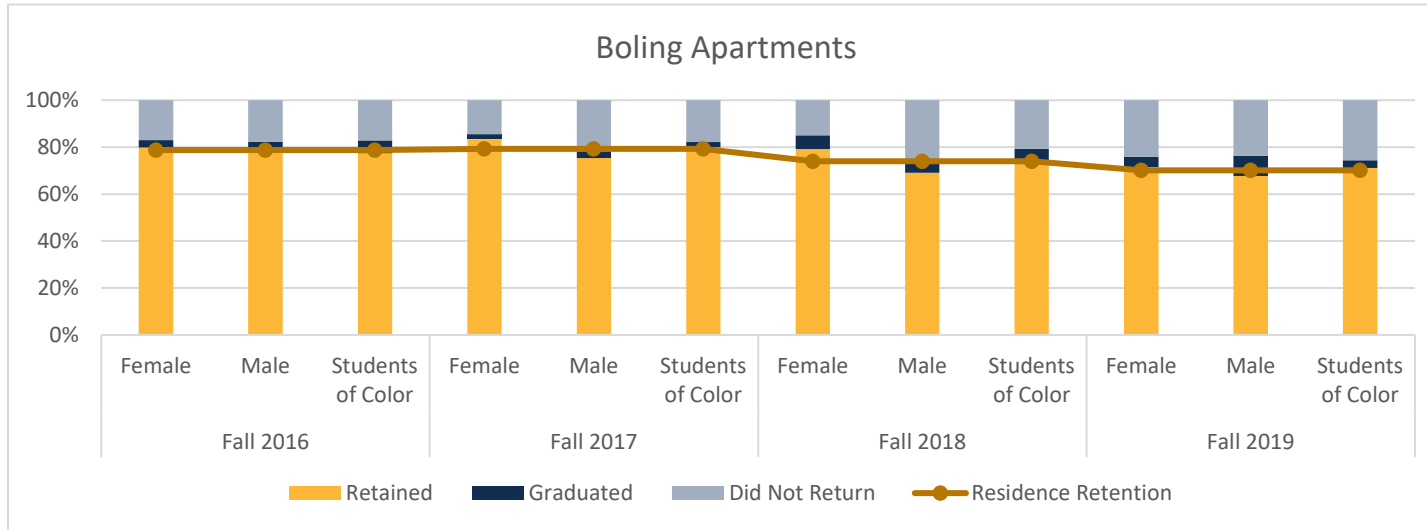
Fall 2017					
Residence	Female	Male	Students of Color	First-Time Freshmen	Residence Average
Boling Apartments	3.07	2.71	2.59	2.60	2.89
Decosimo Apartments	2.89	2.44	2.47	2.60	2.71
Guerry Apartments	2.95	2.47	2.59	2.80	2.79
Johnson Obear Apartments	3.12	2.81	2.67	2.80	3.01
Lockmiller Apartments	3.12	2.36	2.64	2.65	2.66
Stagmaier Apartments	3.20	2.89	2.69	3.08	3.09
Stophel Apartments	2.98	2.64	2.71	2.76	2.86
UC Foundation	3.14	2.73	2.72	2.68	3.01
Walker Apartments	2.99	2.71	2.85	2.87	2.89
Off Campus Residence	2.96	2.64	2.67	2.57	2.81

Appendix D. Fall Term GPA: 2016 through 2019 continued

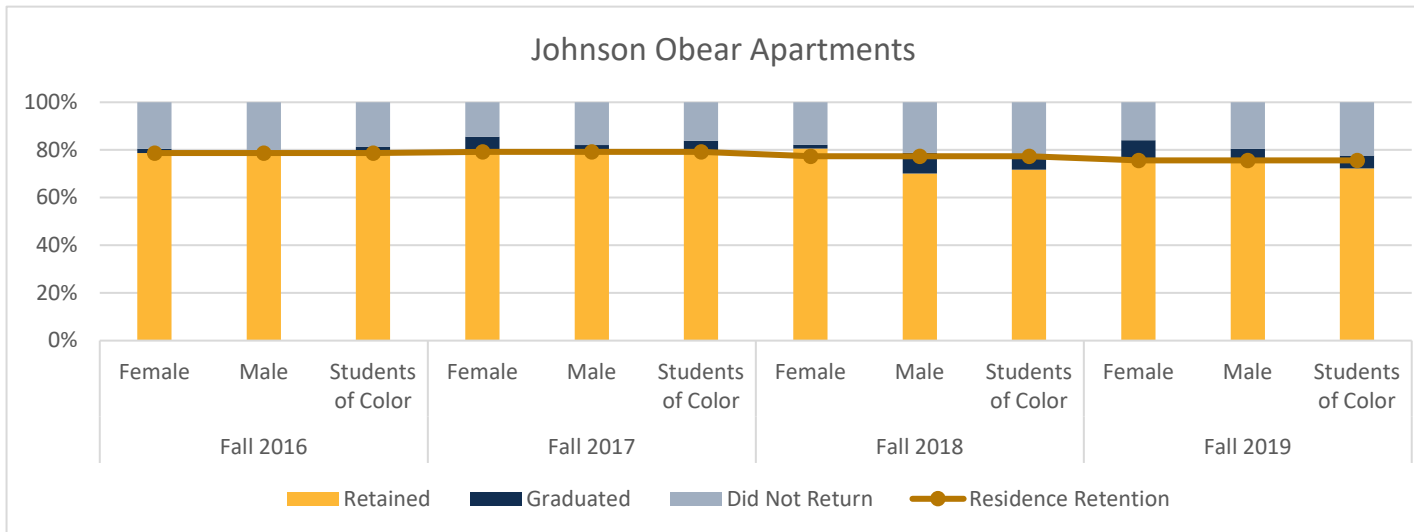
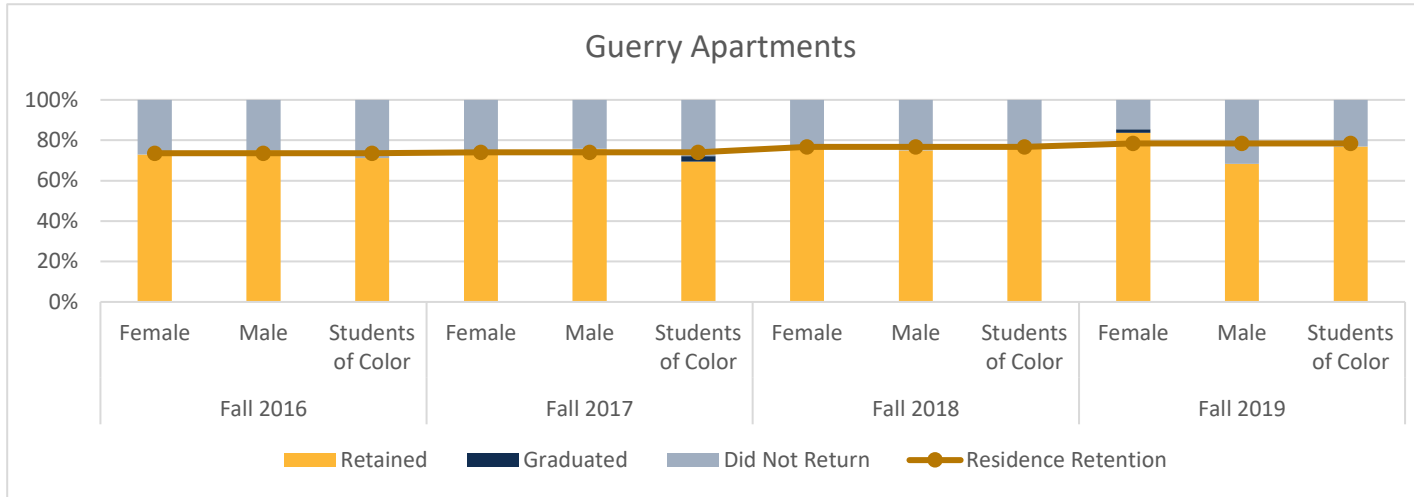
Fall 2018					
Residence	Female	Male	Students of Color	First-Time Freshmen	Residence Average
Boling Apartments	3.00	2.65	2.54	2.53	2.82
Decosimo Apartments	2.85	2.52	2.51	2.75	2.73
Guerry Apartments	2.84	2.45	2.49	2.71	2.71
Johnson Obear Apartments	3.07	2.78	2.78	2.91	2.98
Lockmiller Apartments	2.80	2.09	2.37	2.47	2.49
Stagmaier Apartments	3.31	3.39	3.03	3.34	3.33
Stophel Apartments	3.00	2.67	2.68	2.83	2.88
UC Foundation	3.04	2.86	2.67	2.63	2.98
Walker Apartments	3.00	2.87	2.63	2.91	2.95
West Campus Housing	2.76	2.41	2.40	2.59	2.61
Off Campus Residence	2.90	2.64	2.49	2.41	2.78

Fall 2019					
Residence	Female	Male	Students of Color	First-Time Freshmen	Residence Average
Boling Apartments	2.99	2.59	2.74	2.81	2.84
Decosimo Apartments	3.02	2.61	2.38	2.95	2.88
Guerry Apartments	3.21	2.57	2.84	3.01	2.99
Johnson Obear Apartments	3.11	2.77	2.74	2.77	2.96
Lockmiller Apartments	2.90	2.36	2.55	2.63	2.66
Stagmaier Apartments	3.44	2.99	2.95	3.30	3.28
Stophel Apartments	3.10	2.79	2.79	2.92	2.99
UC Foundation	3.20	2.79	2.84	2.75	3.04
Walker Apartments	3.22	3.10	2.94	3.35	3.19
West Campus Housing	2.92	2.53	2.51	2.77	2.77
Off Campus Residence	2.96	2.69	2.59	2.64	2.84

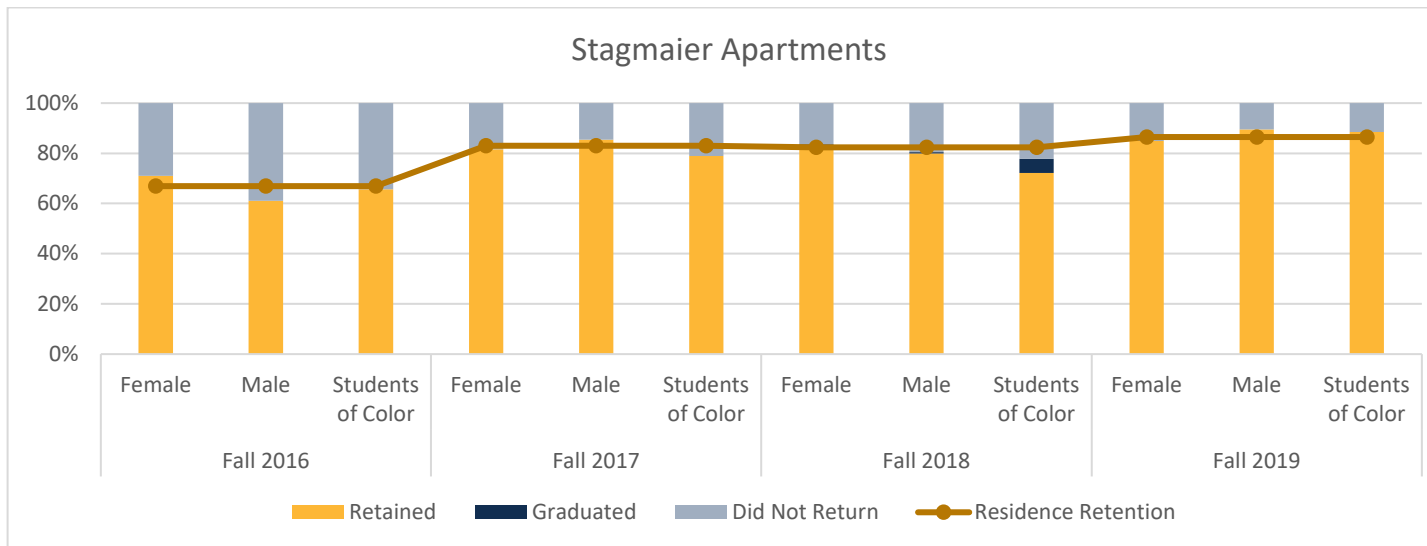
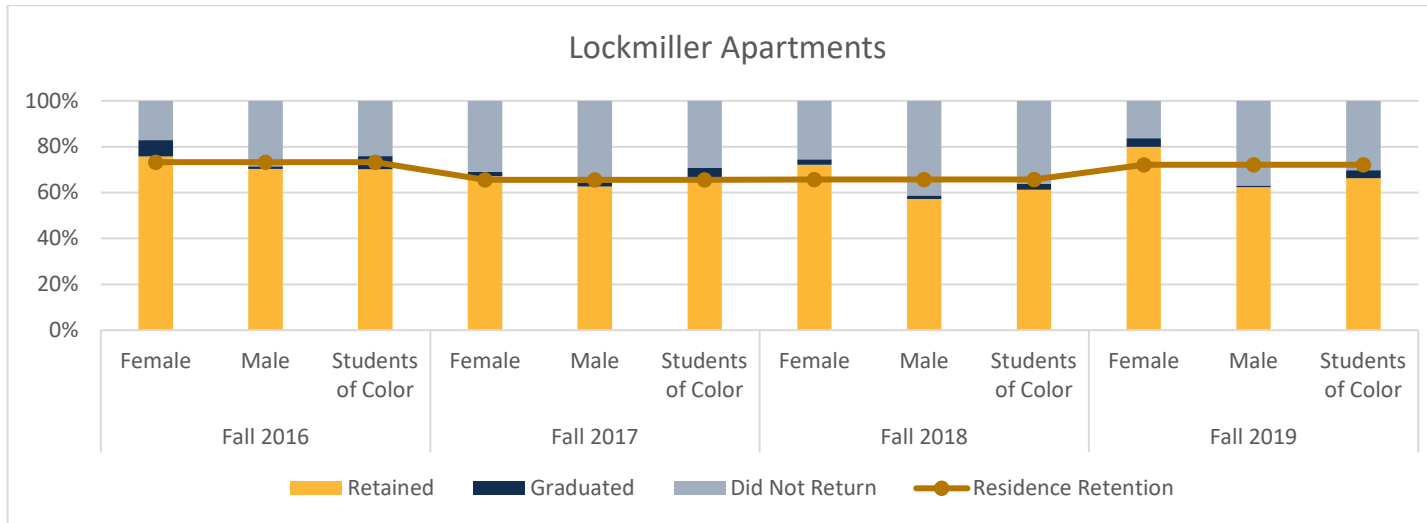
Appendix E. One Year Retention: 2016 through 2019



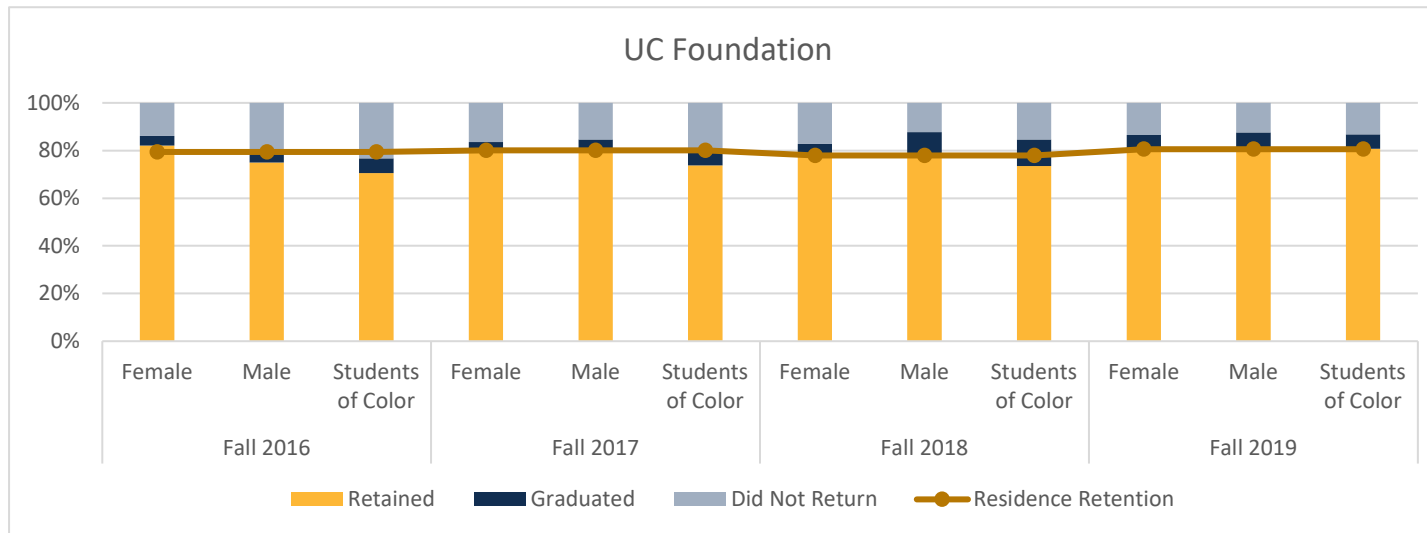
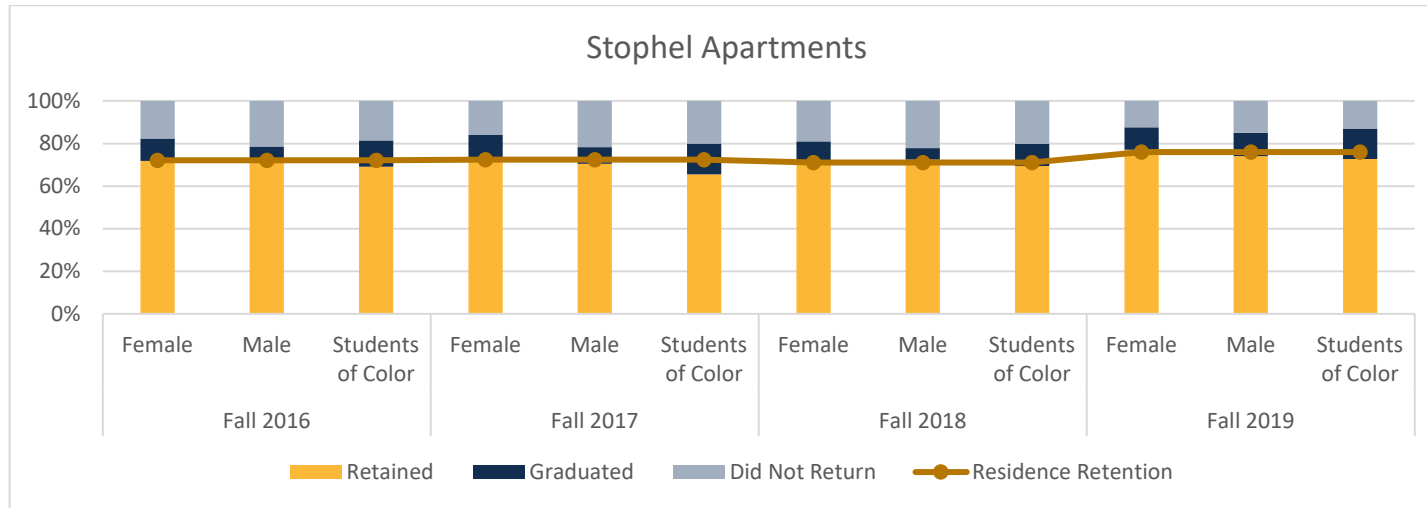
Appendix E. One Year Retention: 2016 through 2019 continued



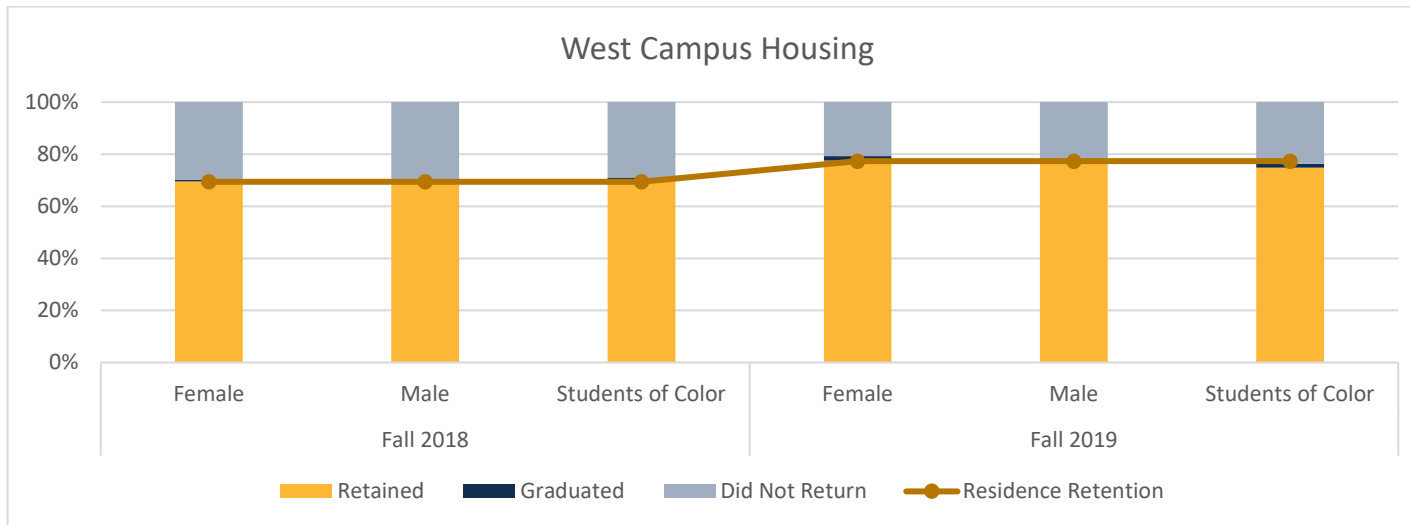
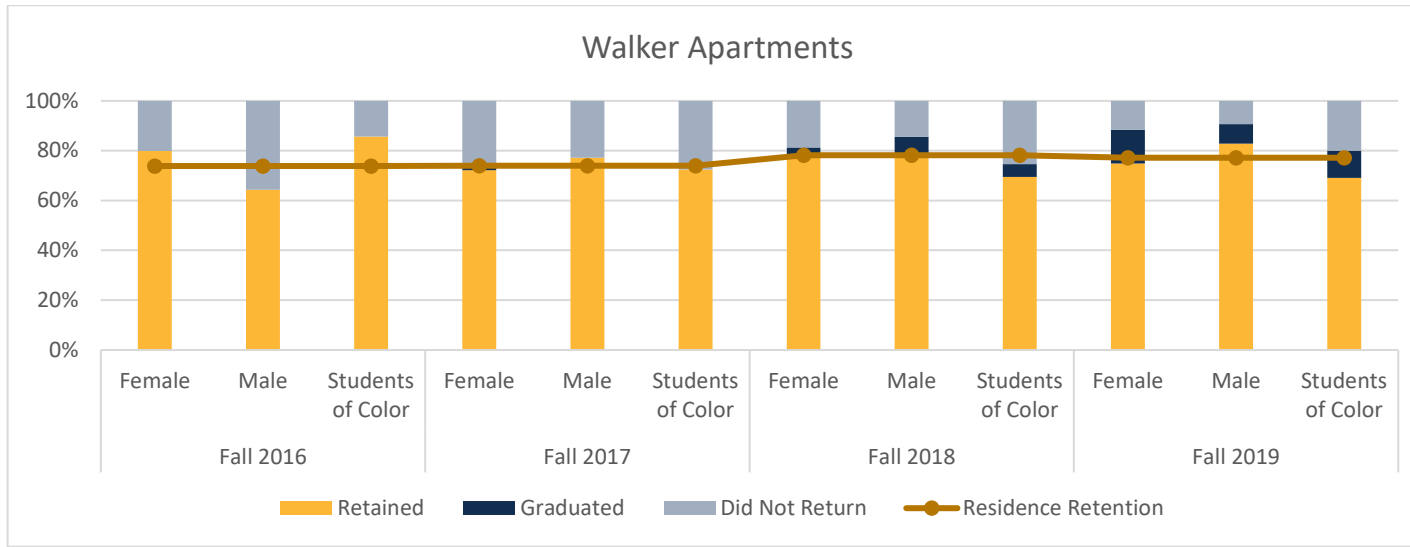
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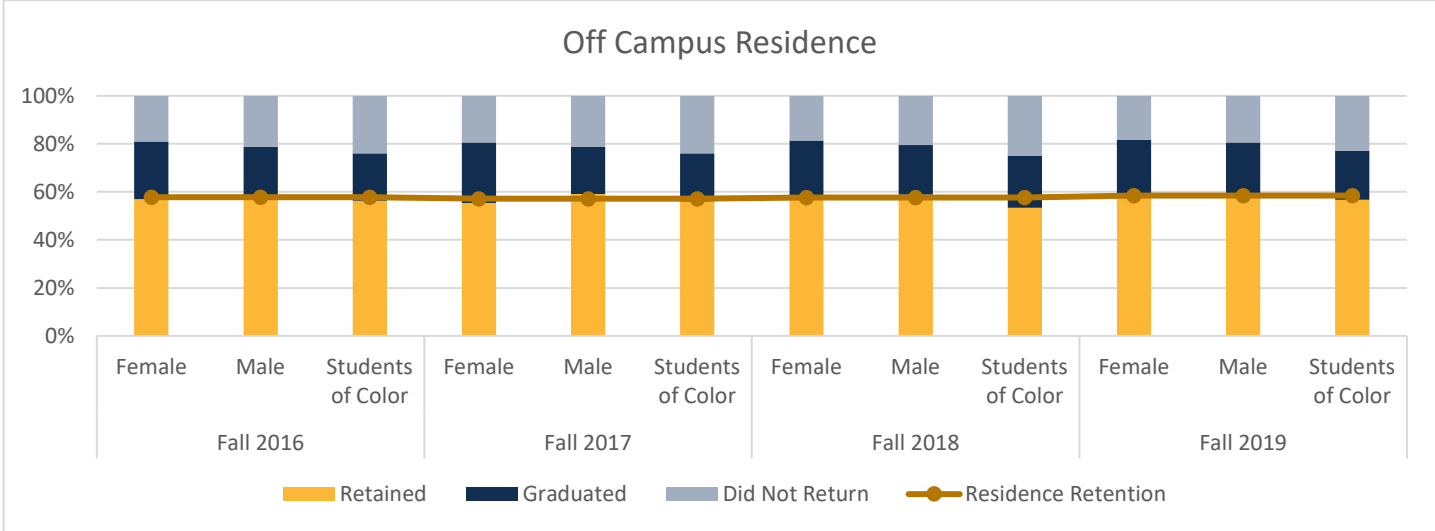
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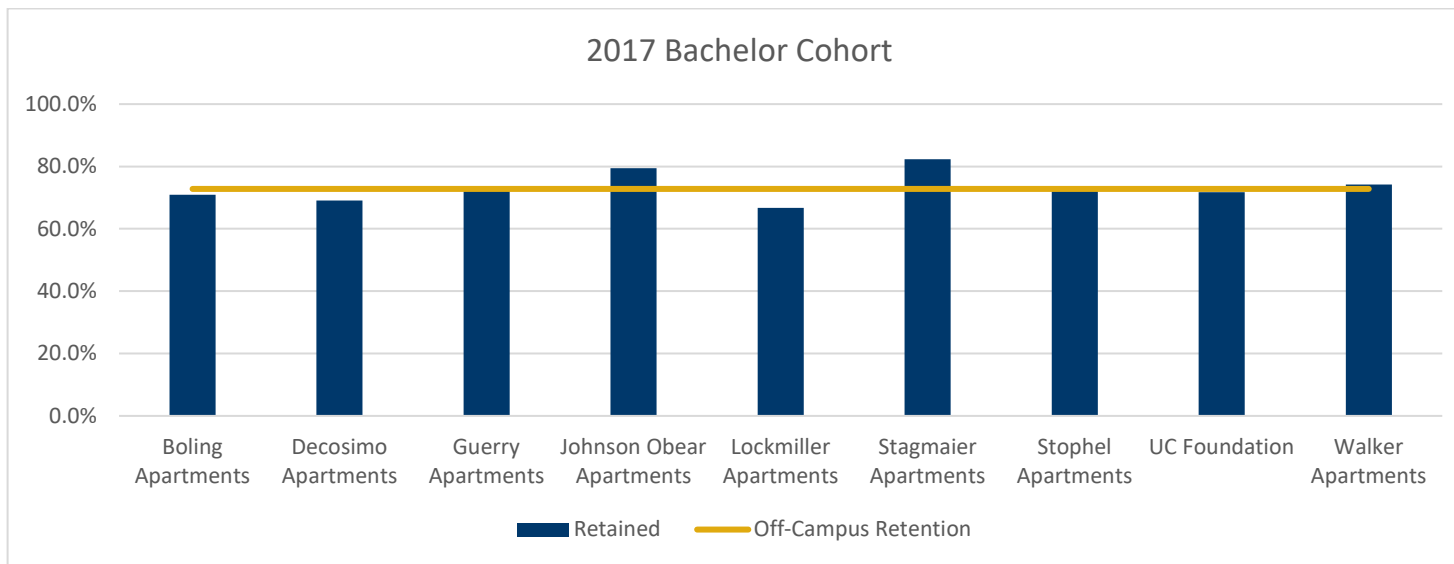
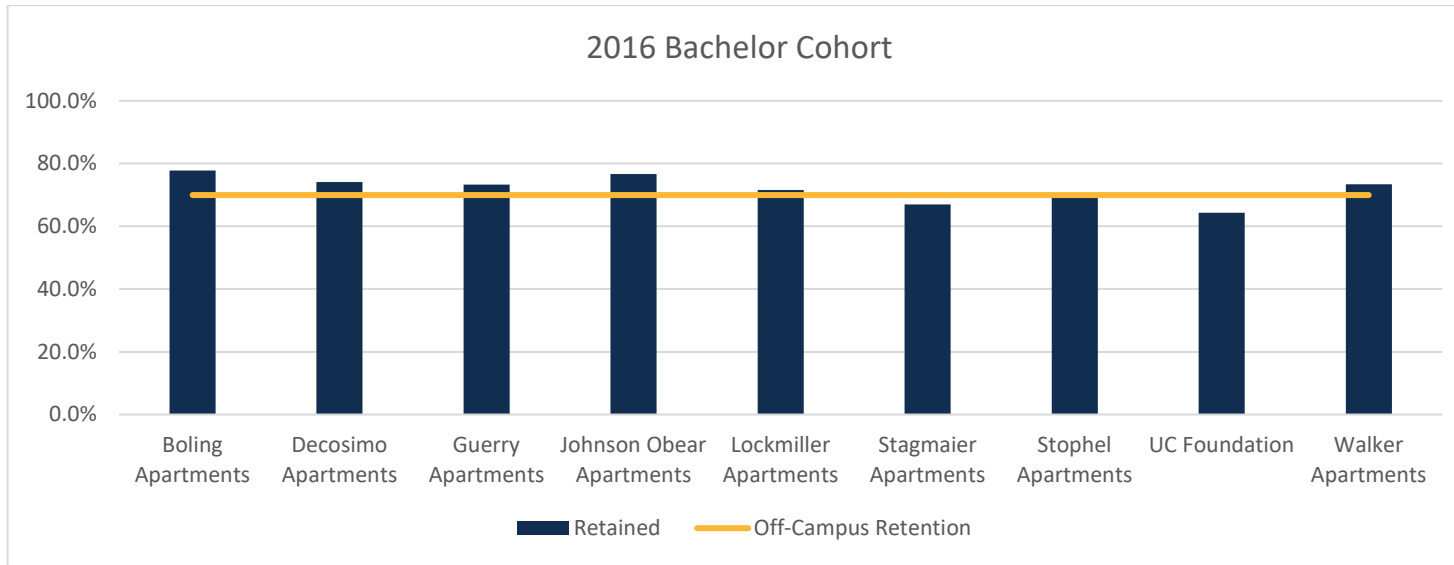
Appendix E. One Year Retention: 2016 through 2019 continued



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Appendix F. First-time Freshman Retention by Cohort



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