

Income Quintile Report

FOR FALL 2017 UNDERGRADUATE STUDENTS



University of Colorado
Colorado Springs

Institutional Research

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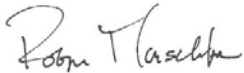
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Introduction

This report illustrates the socio-economic class or “income quintiles” of UCCS undergraduate students in an effort to contextualize decisions students make to pursue (and pay for) a baccalaureate degree. I presume that students and their families from the bottom 60% are facing difficult decisions regarding short-term risk and affordability versus the long-term payoff of upward social mobility that higher education provides. By providing this report, I hope to add useful information to inform institutional decisions regarding access, affordability, and student success.

Thank you,



Robyn Marschke, Ph.D.

Director of Institutional Research

University of Colorado Colorado Springs

719-255-3640 | rmarschk@uccs.edu | www.uccs.edu/ir

Executive Summary

Higher education is often considered the primary means of upward social mobility in the United States. The bundle of behaviors associated with socio-economic class are not tested for statistical significance in this report, but the data are intended to improve our understanding of socio-economic contexts that may underly students’ decisions to pursue the American Dream at UCCS and to inform institutional decisions regarding access, affordability, academic programming, and student success. Thus far, via the information in this report, we learn:

- At least 44% of undergraduate students are in the bottom three quintiles in which their estimated adjusted income is a substantial proportion of the annual full-time tuition and fees.
- The impact of accumulated advantages seems apparent in the admissions characteristics in which test scores and high school GPA increase as adjusted gross income increases.
- Among demographic variables, students who belong to an ethnic minority group or who are first-generation, affiliated with the military, or registered with the Disability Services Office are all overrepresented at the lower income quintiles.
- Non-residents and students in housing are overrepresented at the higher income levels.
- We discovered that age and income quintiles matter: the higher the income, the younger the student. Likewise, the average age in the lowest quintile is 25.2 years.
- Part-time students are more likely to be among the lower quintiles. Part-timers, who may be part-time to improve their GPAs, are also averaging a lower GPA than full-timers in every quintile.
- And, of course, academic progress, persistence, financial aid, and out-of-pocket expenses are intricately tied to adjusted income as well.
- We suspect affordability could be an issue for about 400 students who transfer to two-year institutions.
- And, finally, we discover the need to understand more about the students who do not submit the FAFSA, particularly those in the University Studies program.

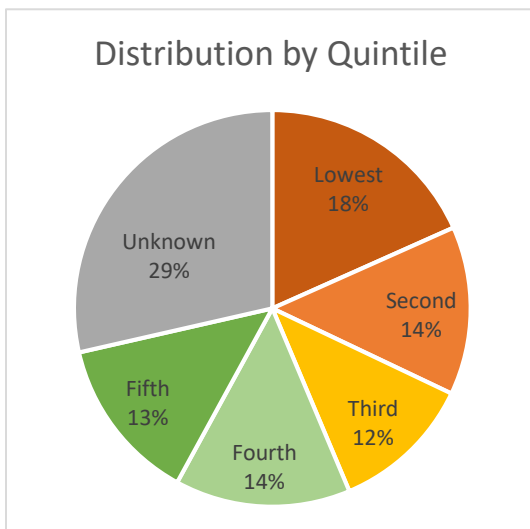
Methodology

The United States Census Bureau publishes income limits for each fifth or quintile of the population. The quintile tables are online at <https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-income-households.html>. The demographers working for the Census Bureau sort the population by income and determine the upper income limit for each quintile. The lowest quintile contains 20% of the population and the income of households in this category is less than \$24,638 (in 2017).

Year	Lowest Quintile Max	Second Quintile Max	Third Quintile Max	Fourth Quintile Max	Top 5 Percent Minimum
2017	\$24,638	\$47,110	\$77,552	\$126,855	\$237,034+
2016	\$24,002	\$45,600	\$74,869	\$121,018	\$225,251+
2015	\$22,800	\$43,511	\$72,001	\$117,002	\$214,462+
2014	\$21,432	\$41,186	\$68,212	\$112,262	\$206,568+

In order to place UCCS undergraduate students into these quintiles, we rely on the information students have submitted on the Free Application for Federal Student Aid (FAFSA) and which is returned to the institution via the Institutional Student Information Records (ISIRs). The ISIRs include students’ adjusted gross income which is based on their own income if they are independent or their household income if they are dependents. For the purposes of this report, we categorize students’ adjusted gross income from an aid year into the most recent household income quintiles. The quintile is unknown for students who did not submit the FAFSA.

Undergraduates’ Income Quintiles



About 44% of the UCCS undergraduate students in Fall 2017 were in the bottom three quintiles with incomes of less than \$77,552. About 18% of undergraduates were in the lowest quintile with incomes less than \$24,638 while 13% were in the fifth quintile. To put this into perspective, about 70% of Harvard students¹ and approximately 1/3rd of Boulder students² were in the fifth (the highest) quintile. Meanwhile, the poverty threshold for a four-person household in 2017 was \$24,600. About 14% are in the fourth quintile in which the affordability of tuition might not pose as much of a challenge as it does for the lowest three quintiles.

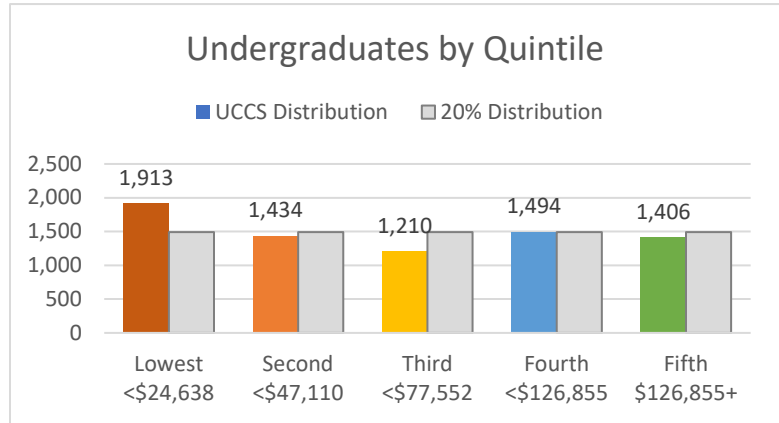
A rather substantial proportion of undergraduates (29%) did not submit a FAFSA; their quintile placement is unknown because we do not have an estimate of their income.

¹ Raj Chetty, John Friedman, Emmanuel Saez, Nicholas Turner, and Danny Yagan. 2017. “Mobility Report Cards: The Role of Colleges in Intergenerational Mobility.” NBER Working Paper No.23618, Revised Version, July 2017. http://www.equality-of-opportunity.org/assets/documents/coll_mrc_slides.pdf.

² Estimate based on adjusted income for undergraduates in financial aid year 2017 regardless of their fall 2016 enrollment status.

The bar chart on the right shows the comparison between UCCS undergraduates' placement into the U.S. quintiles versus an equal distribution of these students if 20% were in each quintile.

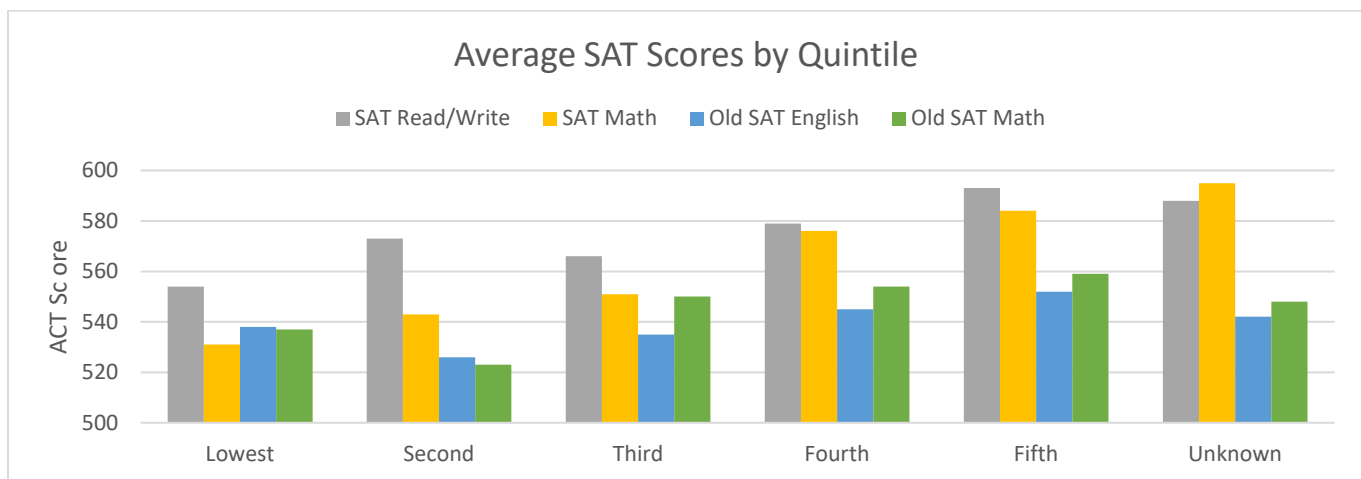
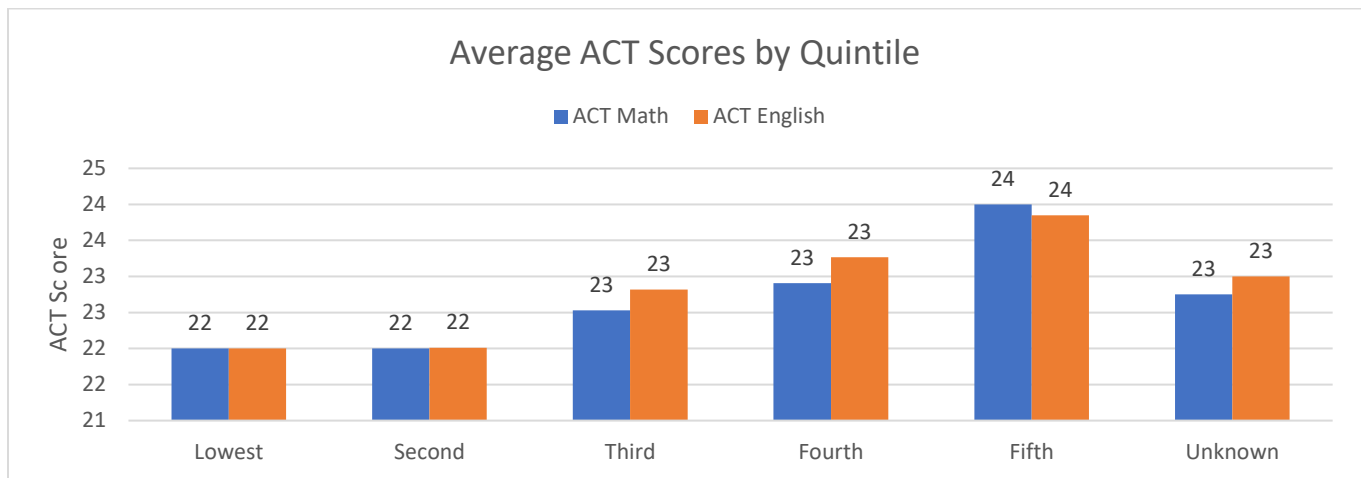
The UCCS undergraduates are overrepresented in the lowest quintile and underrepresented in other quintiles, especially the middle class.



Admissions Characteristics

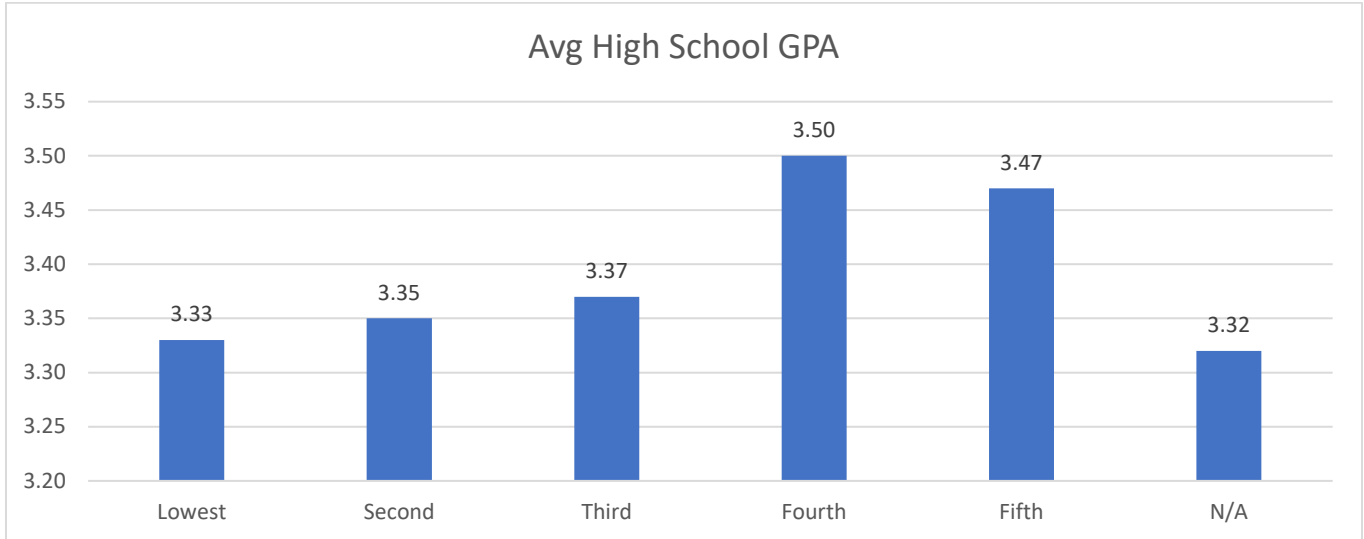
Test Scores

We see higher test scores among the higher quintiles and the lowest test scores in the lowest quintile.



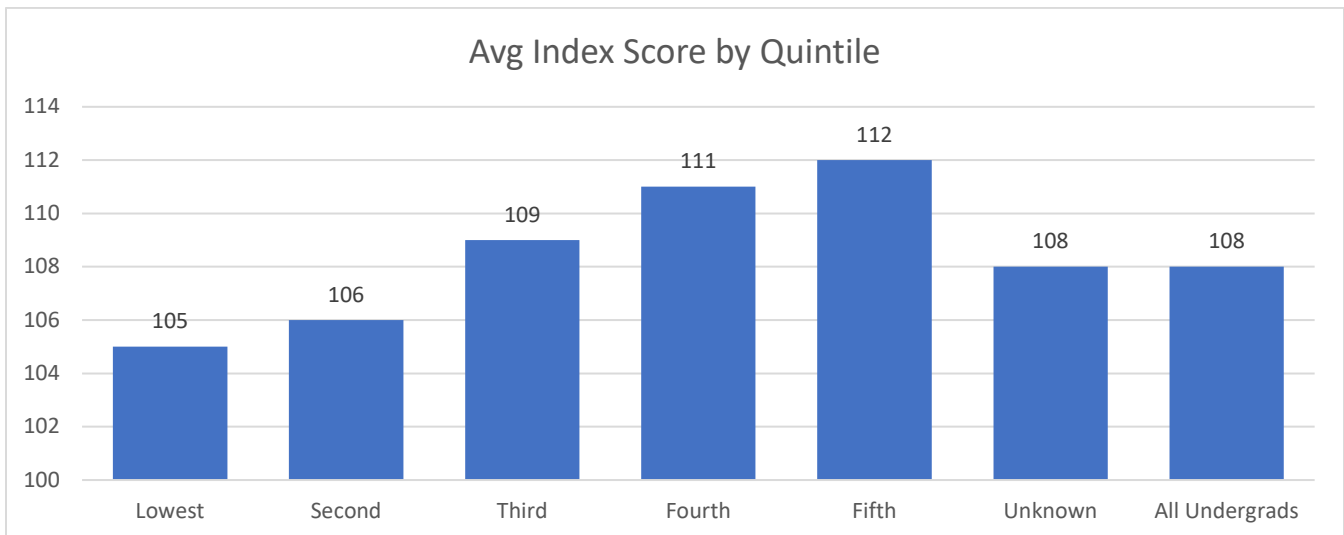
High School GPA

There is a similar pattern with students' high school GPA. Students in higher income quintiles have higher average high school GPAs.



Index Score

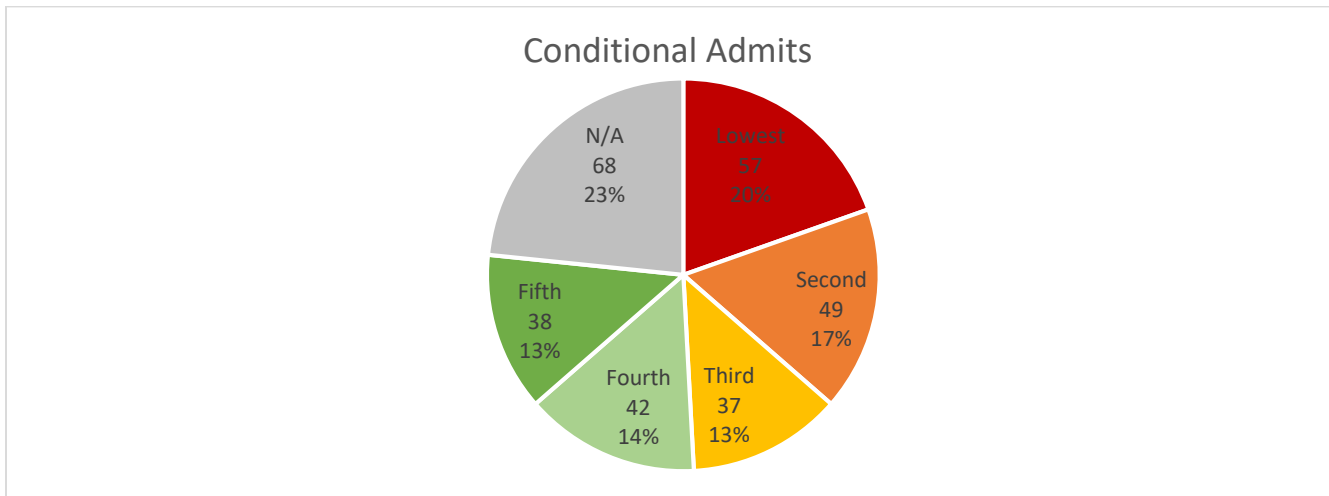
The average admissions index score³ for the Fall 2017 undergraduate students was 108, several points above the minimum of 93 formerly needed for admission into the university. The average index by quintile ranges from 105 among undergraduates in the lowest quintile to 112 among students in the fifth quintile. As anticipated, the average index score is higher among the higher quintiles.



³ The recorded index score could be unreliable due to missing data, index scores of zero, and the inclusion or exclusion of new SAT scores, among other issues. Please use with discretion; since the index score will no longer be used for admissions next year (Fall 2019), we will not recalculate or independently verify the admission index scores for all students.

Conditional Admits

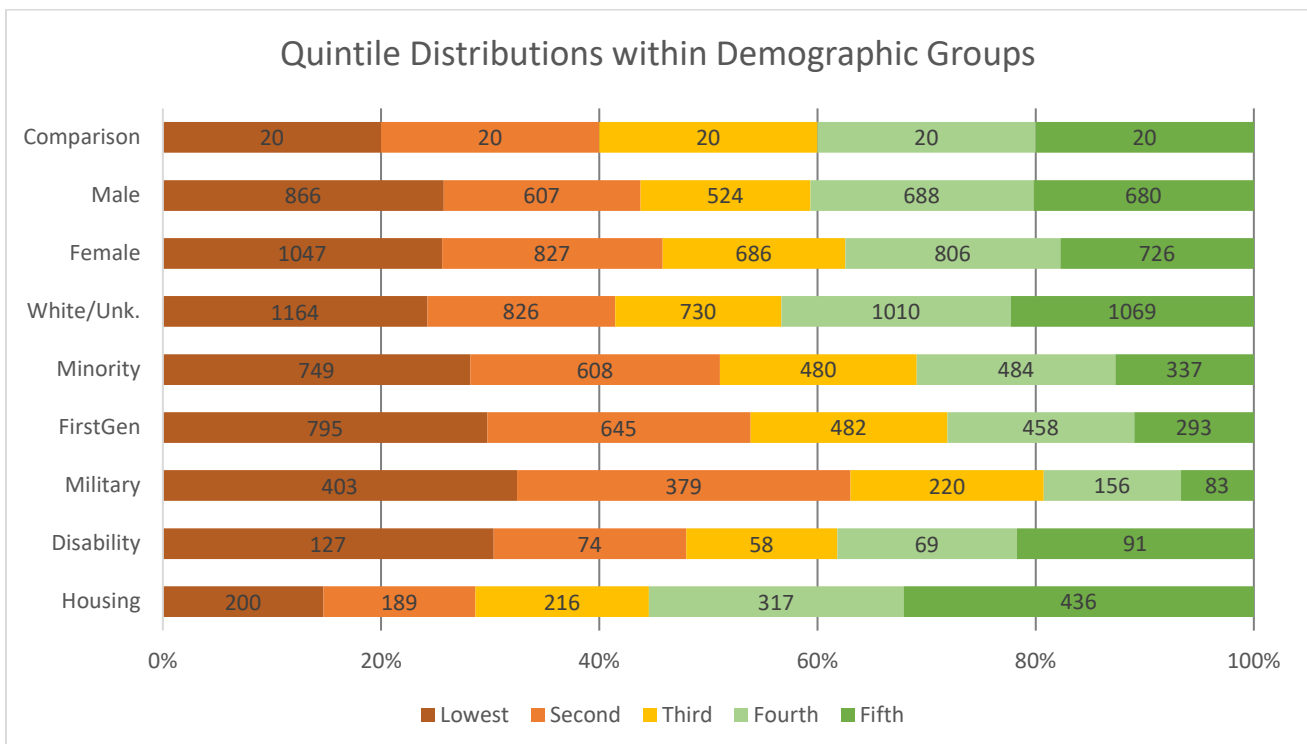
There were 291 students in the “conditional admit” program at the end of Fall 2017 and they comprised 2.8% of the undergraduate population. The conditional admits are slightly more concentrated in the lowest quintile (20%) compared to the undergraduate population as a whole (18%).



Demographic Characteristics

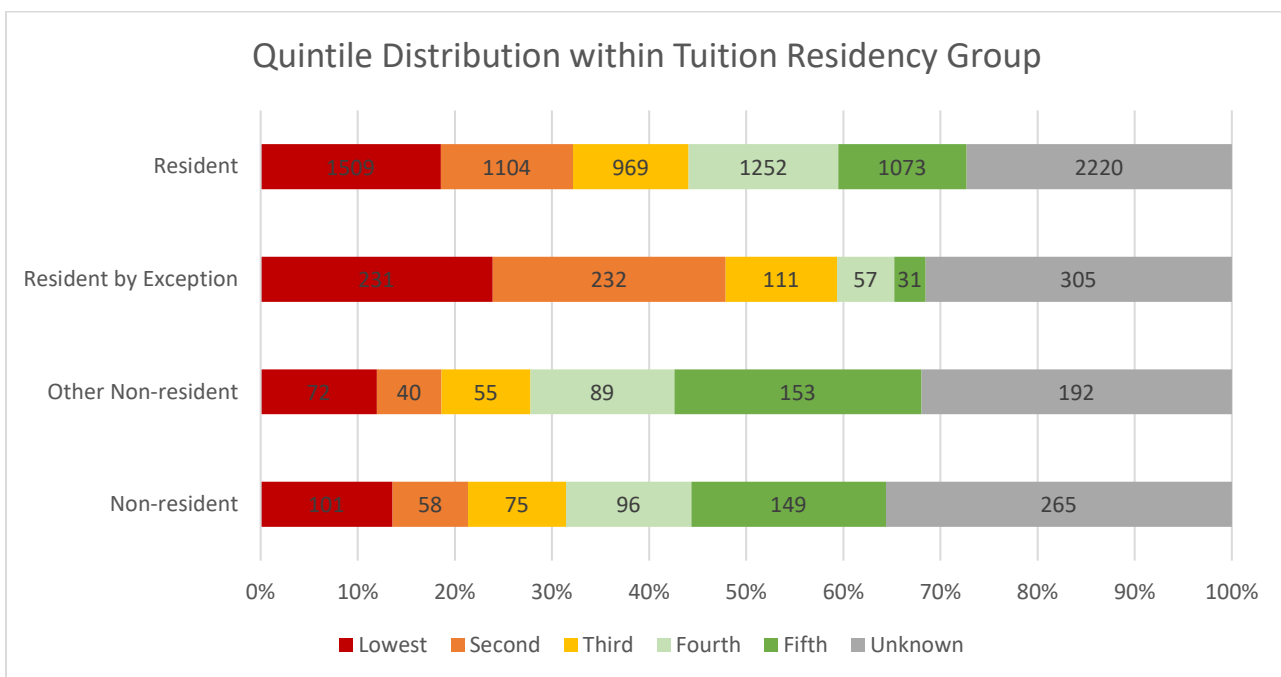
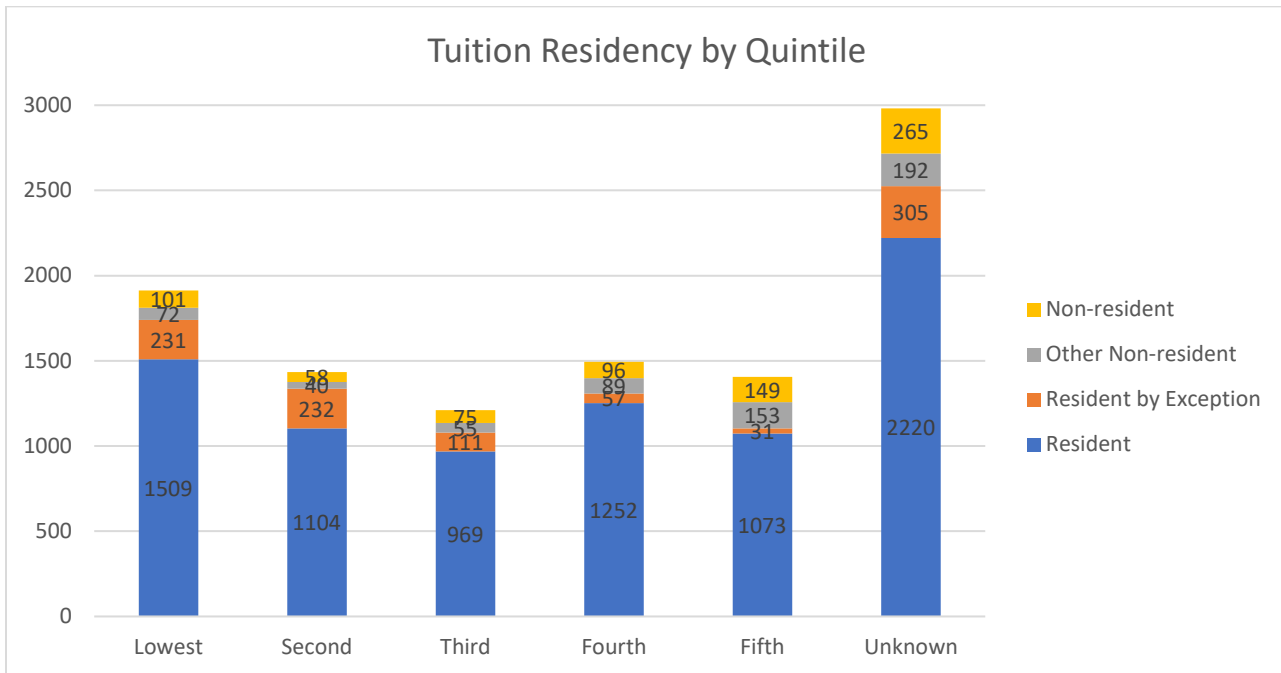
Gender, Ethnicity, First Generation, Military, Disability, and Housing

The following bar chart depicts the quintile distribution for several demographic groups. Several minoritized groups (women, ethnic minority, first-generation) have more representation in the lower quintiles. Students in housing reflect a different pattern that we have seen thus far in which the majority (55%) of the students in housing with an AGI are from the top fourth and fifth quintiles.



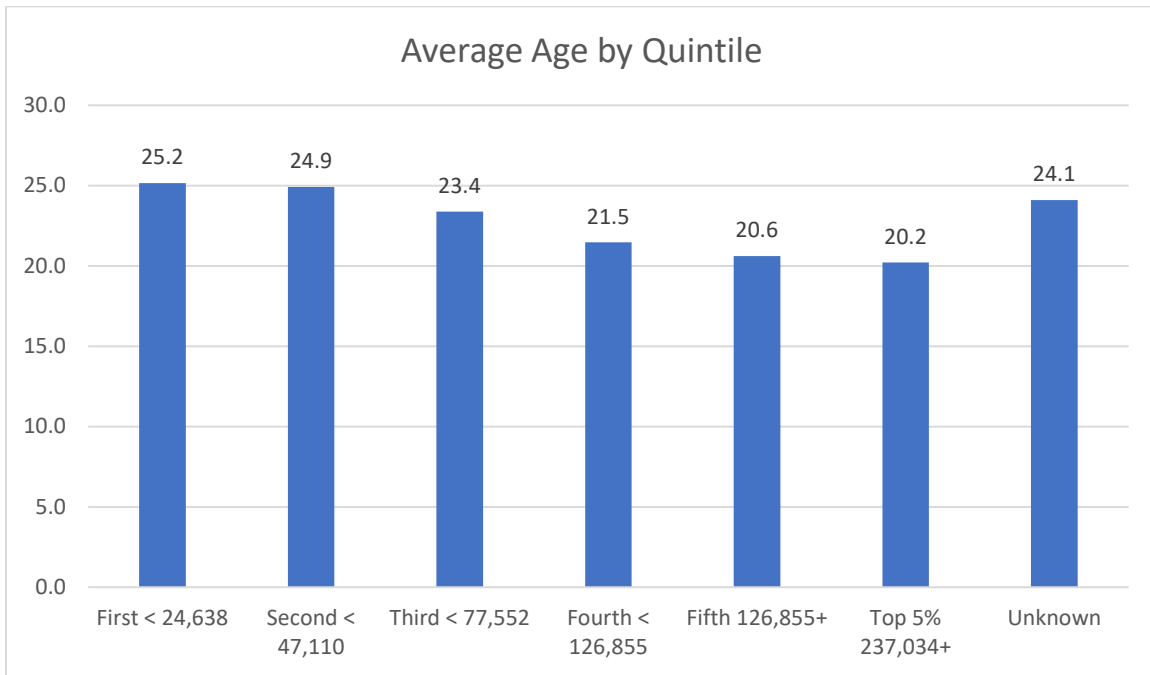
Residency

The tuition residency of students is re-categorized as resident, non-resident, residents-by-exception (non-residents with an exception that allows them to pay the resident rate), and other non-residents. The other category includes students in an exchange agreement or in the presidential scholar or Western Undergraduate Exchange programs in which they pay a rate less than the non-resident rate but more than the resident rate. Non-residents are more concentrated in the fifth quintile whereas residents-by-exception are more concentrated in the lowest and second quintiles.

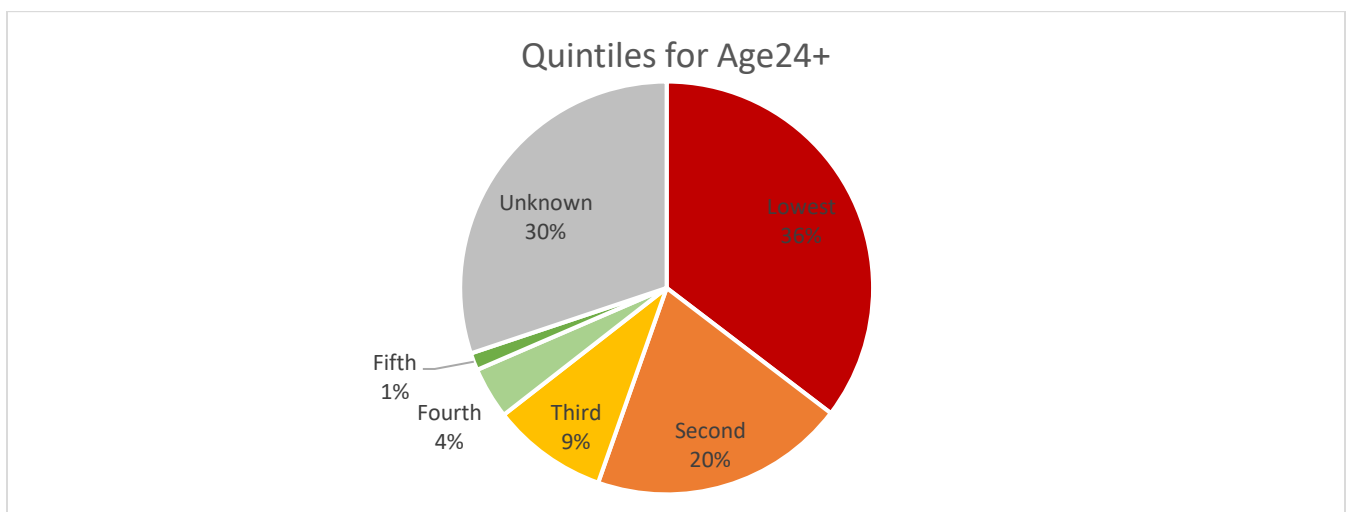


Age

Among the students' demographic characteristics, their average age poses a striking pattern by quintile. Students in the lower quintiles are older than students in the higher quintiles. This suggests an important distinction in our student body: non-traditional students are most likely to be in the lowest quintile.



Among the 3093 undergraduates who were 24 years or older in Fall 2017, 36% are in the lowest quintile and only 1% are in the highest quintile. The pie chart illustrates the distribution of this age group among quintiles.

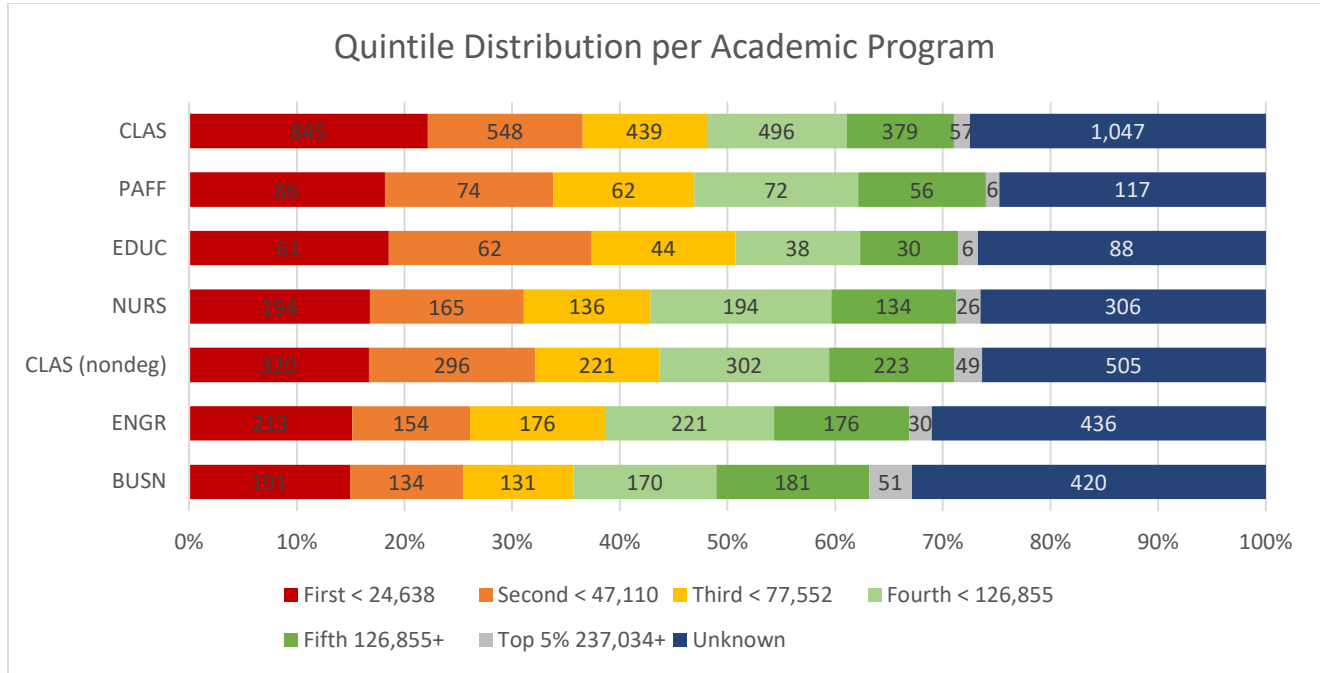


Academic Characteristics

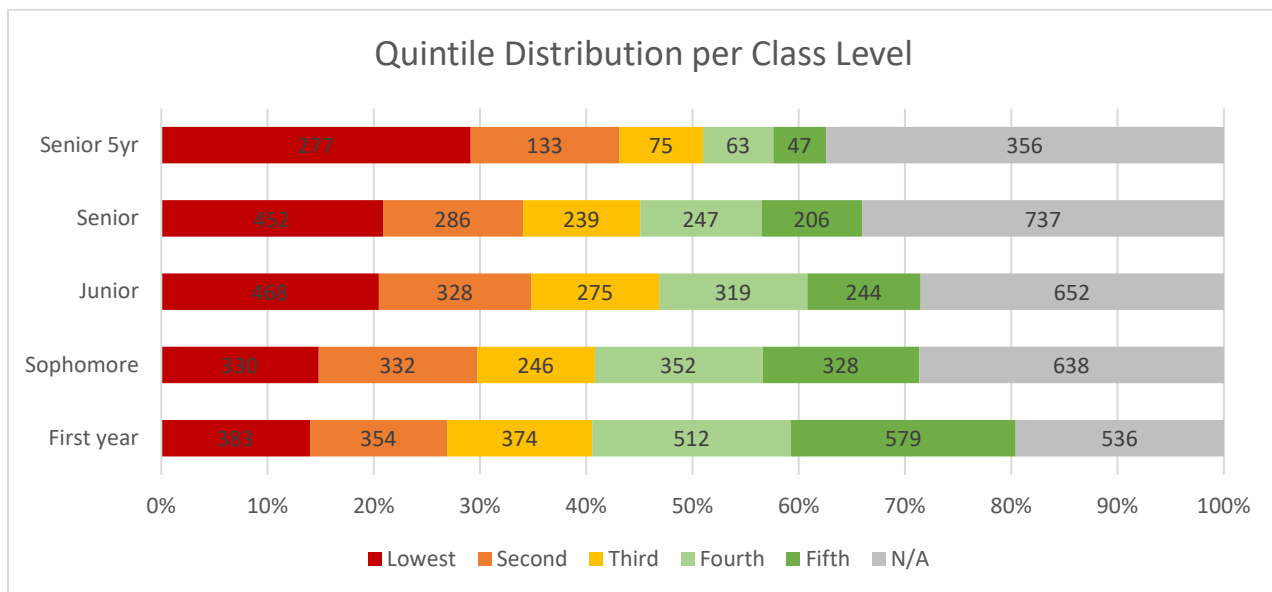
College & Class Level

The quintile distribution per academic program is intended to illustrate potential sorting among students or whether students of certain quintiles would concentrate or sort themselves into certain programs. The College of Letters, Arts, and Sciences is divided into two areas to distinguish the students who are in degree-granting

programs within CLAS from students who are in undecided, pre/prep, and non-degree-granting programs that are housed within CLAS. The proportion of students in the bottom 60% is highest in Education (51%) followed by CLAS (48%) and Public Affairs (47%). The proportion in the top 40% is highest in Business (31%) and Nursing (31%).

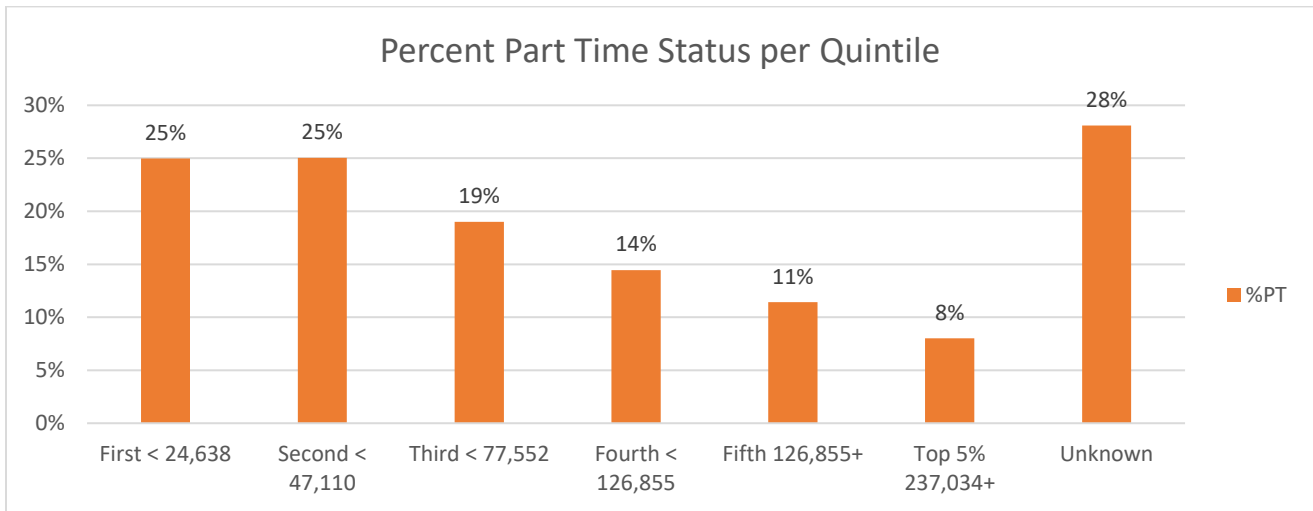


Class level is shown here as it relates to the cost of attendance (tuition is higher at the junior and senior levels) and financial aid dependency (the likelihood of independence is more likely as students age and progress to the senior level). Students whose level is considered “unclassified” are excluded from this chart because 89% of them are in the unknown group. By looking at the number of students in the fifth quintile, many (579) are in their first year. The proportion of students in the lowest quintile is greater at each progressive class level.

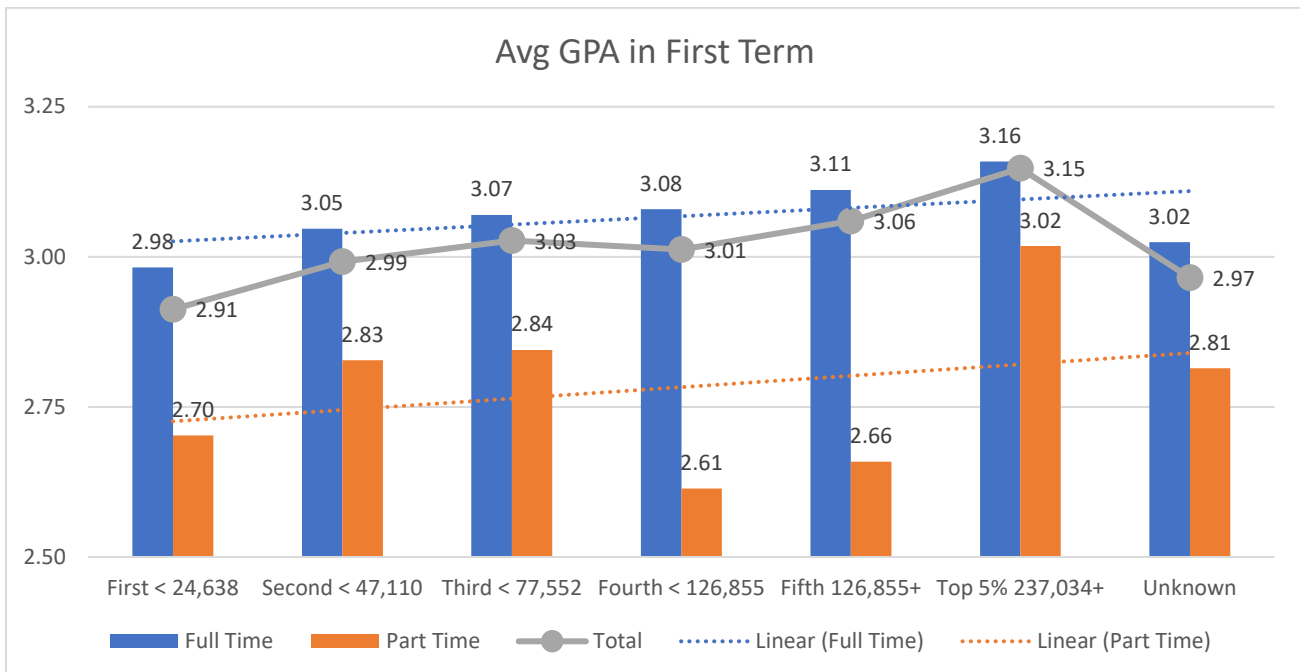


Part Time Status & First Term GPA

As we move up the quintiles, the proportion of part-timers in each quintile decreases from 26% (lowest) to 11% (fifth quintile). This pattern suggests that students' with more adjusted gross income may be more able to afford full-time enrollment.



Undergraduates' first term GPA increases per quintile for (the gray line markers range from 2.91 to 3.15 among the quintiles). Parsing the data by full-time status reveals a difference within each quintile where the part-time students earn average GPAs that are about 0.28 points less than their full-time counterparts.⁴

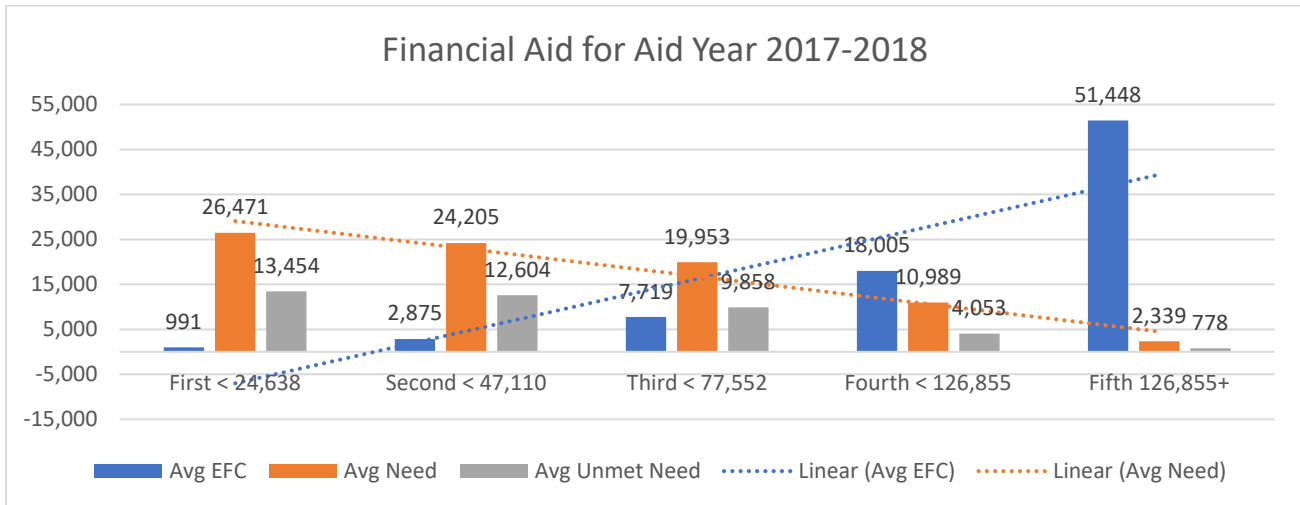


⁴ In a separate study, the Academic Load Survey of 2018, we asked part-time students why they were attending part-time (less than 15 hours) and while their work schedule was their number one reason, their second reason for being part-time was a belief that their academic performance would decline with a heavier load.

Financial Aid & Billing

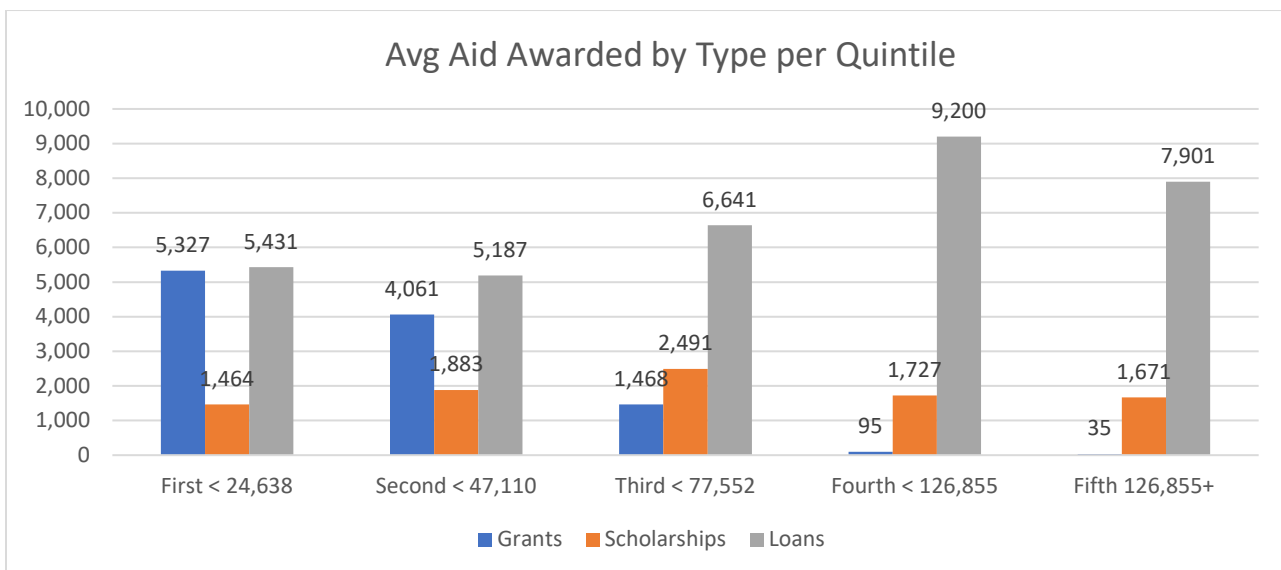
Expected Family Contribution, Need, & Unmet Need

Within the realm of financial aid, an expected family contribution (EFC) is determined for each student who submits a FAFSA. The pattern of increasing EFC per quintile is expected as many students in the lowest quintile have zero EFC and students in the highest income quintile are more likely to have disposable income. The average need (one's budget or cost of attendance minus the EFC) and unmet need (budget minus EFC minus total aid) also vary per quintile.



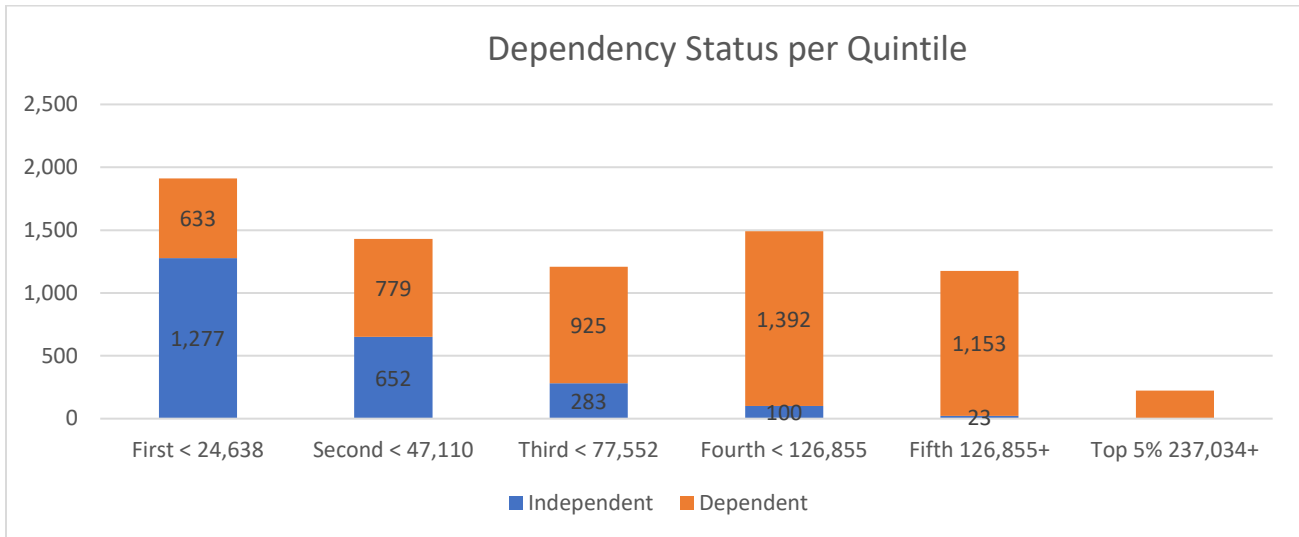
Grant, Scholarship, and Loan Aid

The average grant, scholarship, and loan amounts per quintile are shown in the bar chart below; note that the denominator is the total number of students in each quintile so the average award includes the zero values for students who did not receive the award. The average grant is highest among the lowest and second quintiles because the typical grant is the Pell Grant which is only available to those students who are considered low-income. The average scholarship aid is relatively consistent among the quintiles while the average loan increases by quintile.



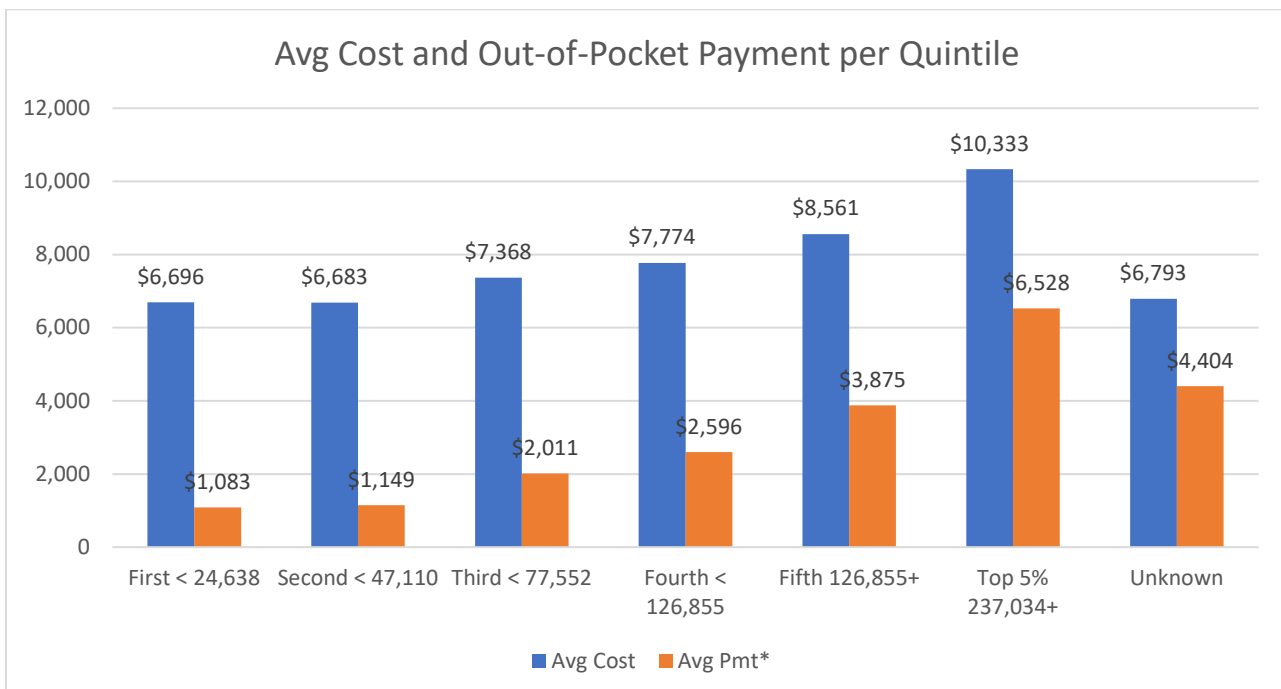
Dependency

When students are independent, their adjusted income is usually only their own income whereas dependent students' adjusted income is more likely to reflect the students' and his/her parents' income. Students aged 23 or more do not need to report their parental income.



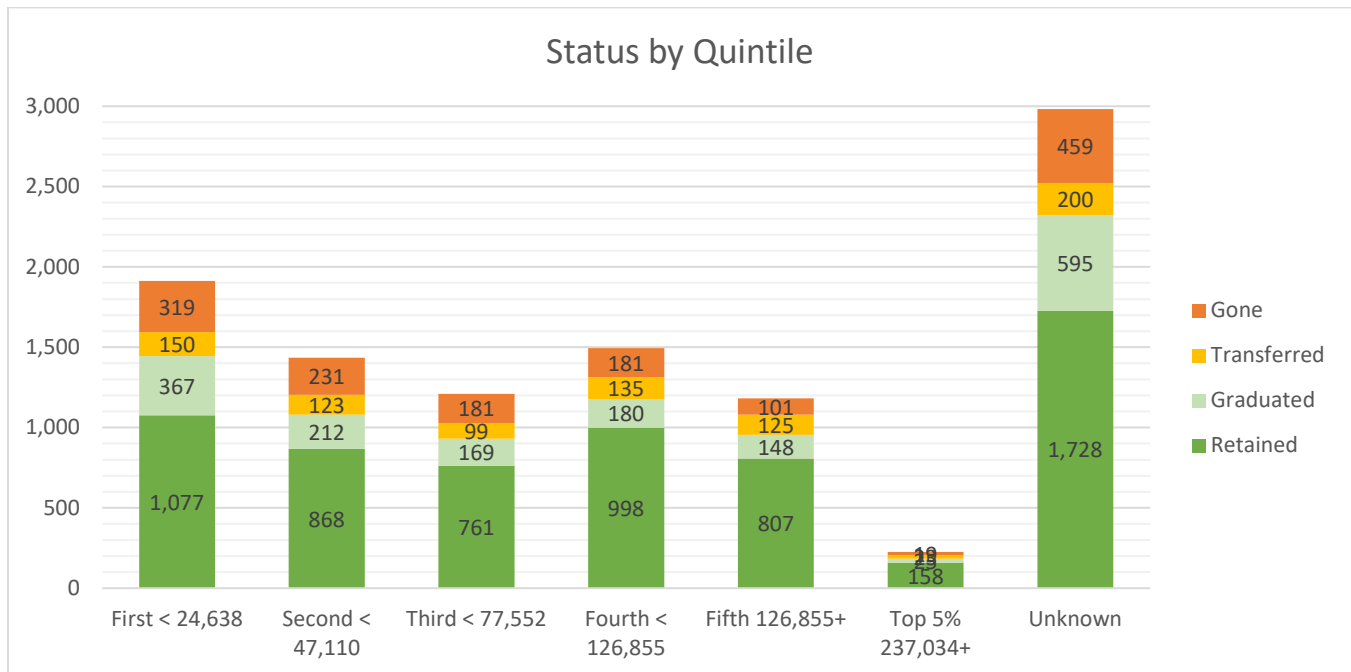
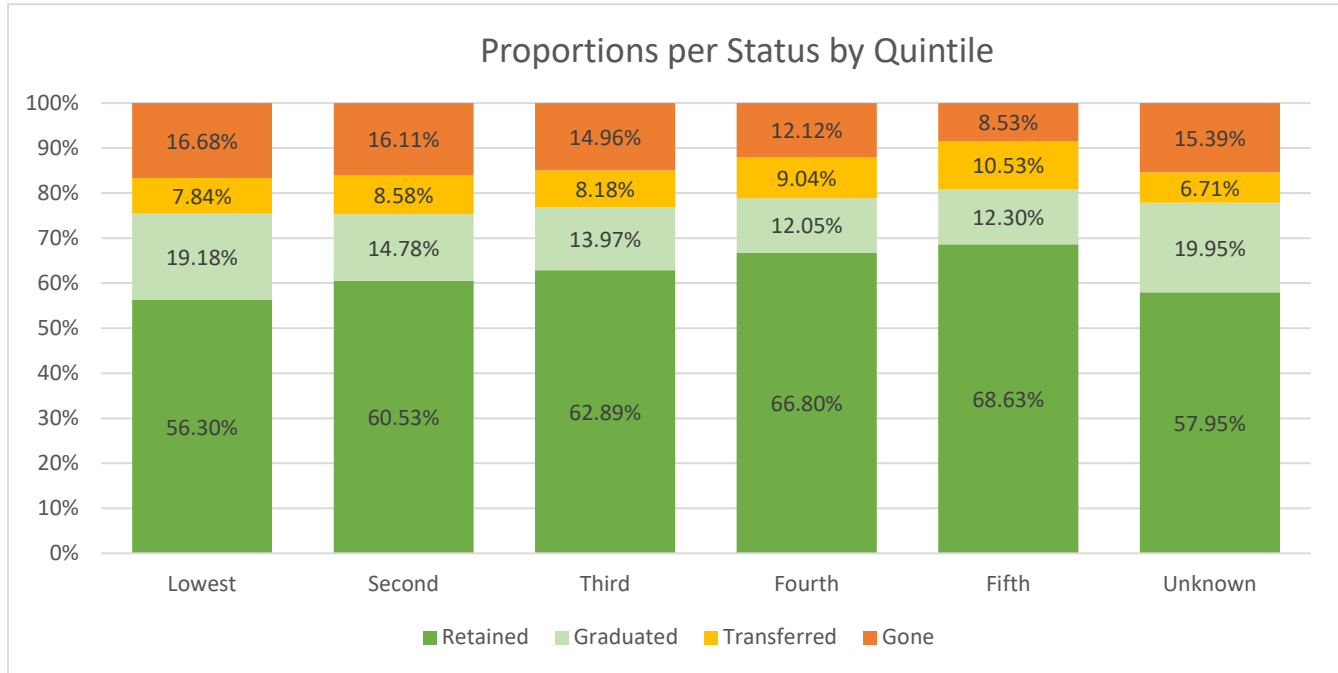
Billing

By aggregating financial transactions, we are able to determine the dollar amount students were billed and the source of their payments. Their cost is the sum of tuition, mandatory fees, course or program fees, housing, and miscellaneous service fees (like parking or printing). Their payment is the sum of "out of pocket" payments which excludes financial aid, COF, waivers, and third-party payments (all of which fill the gap between the cost and the payment shown in the chart).

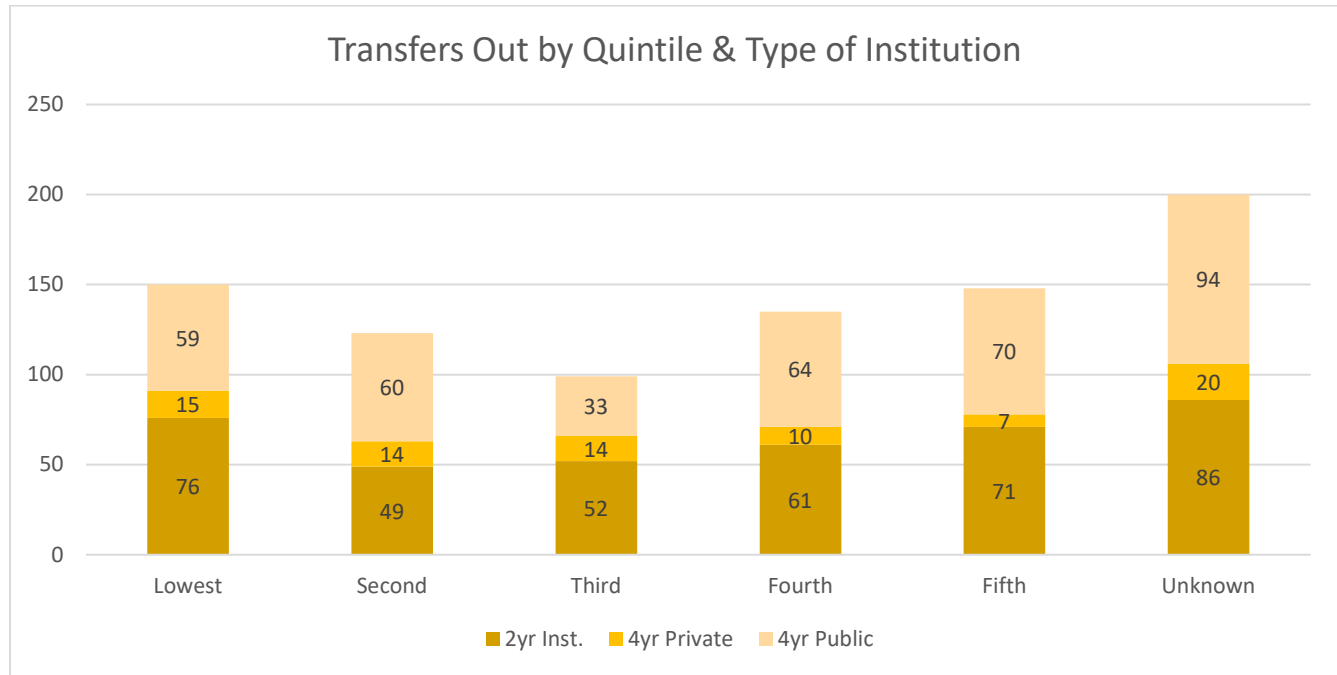


Persistence by Quintile

For the Fall 2017 undergraduate students, we document their status at UCCS one year later at the beginning of the Fall 2018 semester. The proportion of students who persist increases from 56% in the lowest quintile to 69% in the fifth quintile, a substantial difference. Note that the proportion graduating declines as we move up the quintiles, most likely due to the concentration of independent seniors (who are most likely to graduate) in the lowest quintile.



Although the proportion of students who transfer out *within one year* is relatively small, other analyses indicate that about 45% of students in an incoming cohort transfer out of UCCS over the course of six years or the “normal time” to completion. Thus, we look at the transfers out and determine the type of institution where they have continued their education as it is a clue to both their fit and affordability at UCCS. Of the 855 who transferred out, 46% transferred to a two-year institution.



Quintile Unknown

Nearly 3,000 undergraduate students did not fill out the FAFSA, which is the source for adjusted income. When their income is unknown, their quintile is unknown. It is possible that some of these students have other resources but we are concerned about those who may not and whether they are leaving money on the table. While we cannot place these students into a quintile or determine exactly why they have not completed a FAFSA, we can identify knowns among the unknown:

- 764 or 26% received private or institutional aid that does not require a FAFSA
- Another 78 or 3% held a temporary visa and were ineligible for financial aid
- Another 431 or 14% received some form of military-affiliated tuition assistance
- Another 106 or 4% are affiliated with the military but did not receive tuition assistance
- Another 168 or 6% were employed at UCCS or received an employee tuition waiver

We also know that 448 students or 15% of those whose quintile is unknown are in the University Studies program, suggesting that structured outreach to this group, possibly via in-class coursework or required advising appointments, could ensure these students are fully aware of their options to make college more affordable for themselves and their families. Further analyses are needed to help determine underlying reasons for opting out of the FAFSA, but ensuring these students are informed and aware of advising and financial aid services could reduce their out-of-pocket costs.