

# UC Davis Graduate Student Rent Analysis

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In this document we compile the results of two rent surveys taken to analyze the rent burden and distribution among UC Davis physics graduate students. The two surveys were taken in the 2019-2020 and 2021-2022 school years, two rent cycles apart. Each had over 60 respondents. We will compare the various metrics surveyed and their impact on graduate student life. The main takeaway is that rent increases have outpaced wage increases.

## 1 Rent Distribution

The mean graduate student rent is \$906 per month in rent. This is up 8.4% from two years ago when the average rent was \$836. The median increased from \$750 to \$800. In the same time period graduate student pay increased by 6.1%. The distribution in both years is somewhat bimodal which can likely be explained by there being two groups of renters; those who attempt to find the cheapest option available, and those who can afford or prioritize slightly more expensive or solitary lodging. Figure 1 shows the distribution in both years with a histogram with bin width of \$50. The least anyone is paying has increased from \$310 to \$550. The maximum has increased from \$1500 to \$1990<sup>1</sup>. Hopefully, figure 1 can give graduate students an idea of the spectrum of rent options available so that they can make an informed decision for the next rent year. One interesting note is that the distributions are clearly right skewed as there is a minimum possible rent available, but really no maximum.

A useful re-visualization of this data can be done by scaling the x-axes to the percentage of graduate student income that year rather than absolute dollars. In this way we can show how rent is inflating compared to real wages. Figure 2 shows this scaling. In 2019-2020, with year round teaching assignments, graduate students earned \$2,434 a month. In 2021-2022, after two compounded 3% increases, graduate students with year round TA assignments earn \$2,583. After two years, the mean rent burden has actually increase from 38% of graduate student income to 39%.

## 2 Number of residents

The number of residents per domicile is a useful metric to compare how different physics graduate students live. This distribution is shown in figure 3. The most common arrangement is two people living in a two bedroom, although there are a sizable number in any configuration from 1 to 6 residents. There is no great change in the distributions between the 2019-2020 and 2021-2022 rent cycles which indicates that while the rent burden is increasing, it has not greatly changed the available or chosen living arrangements.

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<sup>1</sup>One respondent said that their monthly rent was \$16,700 for a 1 bedroom. This would be the maximum. As this is preposterously large we simply removed a 0 to give \$1,670. It is possible this was in error and they actually reported their yearly rent which would make the monthly rent \$1,392. In any case this does not throw off our distribution much.

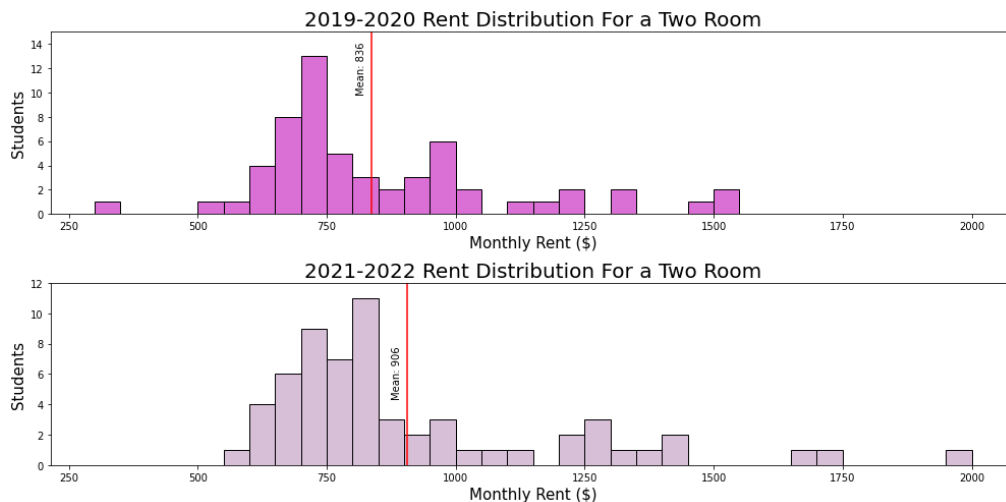


Figure 1: Physics graduate student rent distribution histogram in the 2019-2020 and 2021-2022 rent cycles. The mean rent is marked with a vertical red line. The bin width is \$50.

## 2.1 Number of Bedrooms

It turns out that in almost all cases, number of bedrooms and number of residents is almost always a 1:1 ratio. the few exceptions can be accounted for by significant others sharing a room. The two notable outliers to this are one respondent who has one more room than residents and one respondent who reported 7 people living in 3 bedrooms. The takeaway here is that graduate students, if they so choose, can afford to have their own bedroom and will virtually always choose to do so.

## 2.2 Rent by number of rooms

Rent can obviously vary greatly depending on how many rooms are in your residence. In figure 4 we compare the different rent ranges for each number of rooms. We chose to present the data this way as histograms would easily become cluttered and misleading due to varying number of occurrences in each category. All residences with 5 or more rooms are lumped into the 5 category as there are so few living with 5 or more residents. The mean for each is denoted by a circle and the line stretches from the minimum to maximum rent value. Again, we can scale these numbers to percentage of year round TA income rather than raw dollars. This is shown in figure 5.

## 2.3 Location

Most graduate students live in the City of Davis, with a minority living on the UC Davis campus or outside Davis. One graduate student reports that they live in a van which doesn't really fit any of the other categories. In figure 6 we show a pie chart of the different locations where graduate students live. In figures 7 and 8 we show the monthly

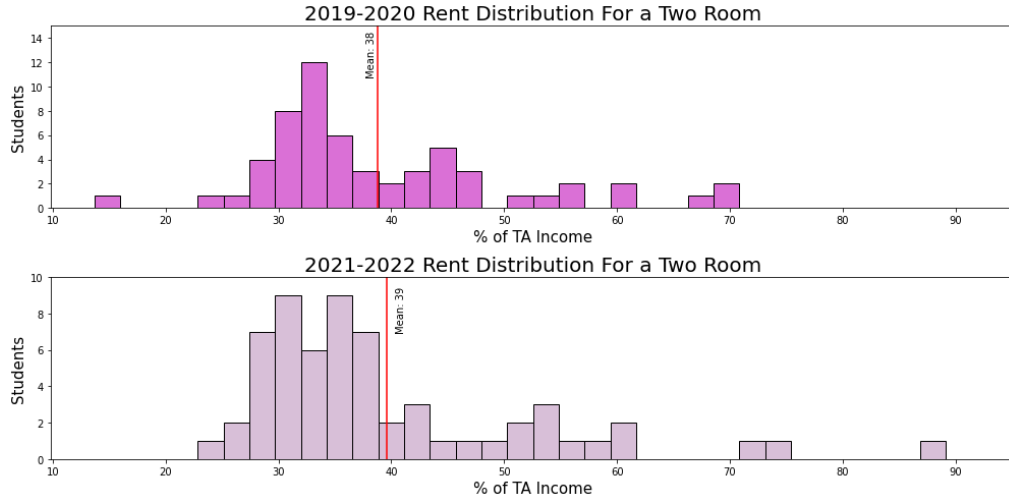


Figure 2: Physics graduate student rent burden distribution histogram in the 2019-2020 and 2021-2022 rent cycles. Here the x-axes are scaled to percentage of year round graduate student TA income. The mean rent burden is marked with a vertical red line.

rent range on the x-axis for each location where graduate students live and the same scaled to percentage of year round TA income. As we did not sample this data in the 2019-2020 cycle, the 2021-2022 rent cycle is shown. To preserve anonymity, we moved the one student who lives in a van into the “Outside Davis” category.

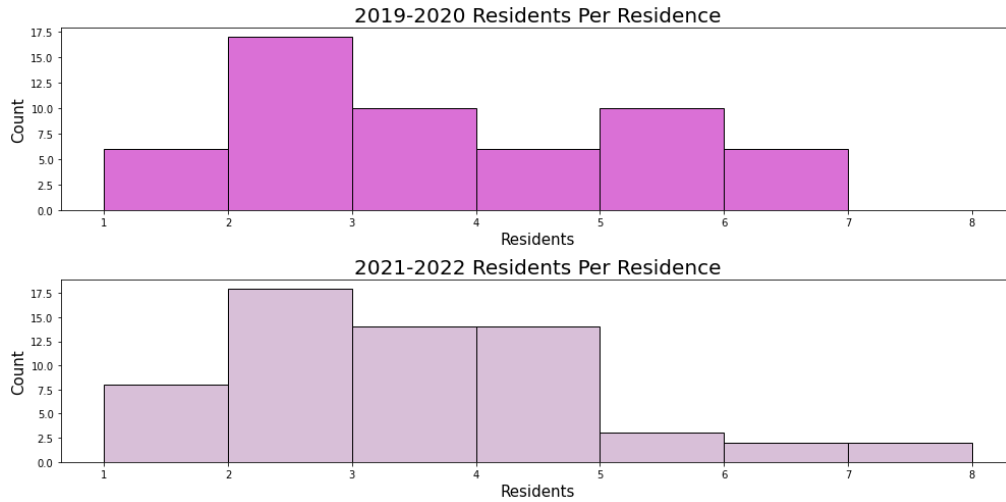


Figure 3: Histogram of the number of residents per domicile in the 2019-2020 and 2021-2022 rent cycles. No great change occurs between the two rent cycles.

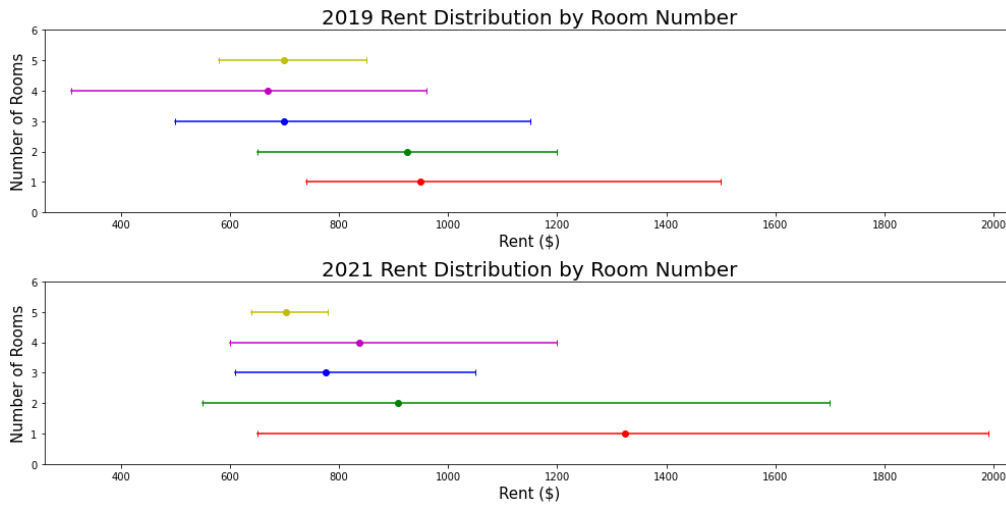


Figure 4: Breakdown of monthly rent range on the x-axis by number of rooms on the y-axis. All residences with 5 or more rooms are lumped into the 5 category. The mean for each is denoted by a circle and the line stretches from the minimum to maximum rent value.

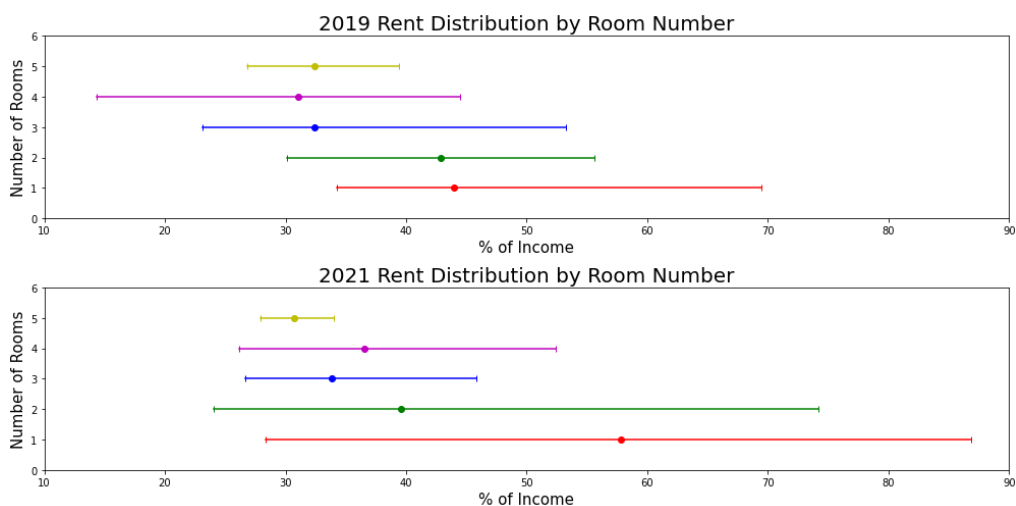


Figure 5: Breakdown of the rent burden range on the x-axis by number of rooms on the y-axis. Here the x-axis is scaled to percentage of year round TA income rather than dollars. All residences with 5 or more rooms are lumped into the 5 category. The mean for each is denoted by a circle and the line stretches from the minimum to maximum rent value.

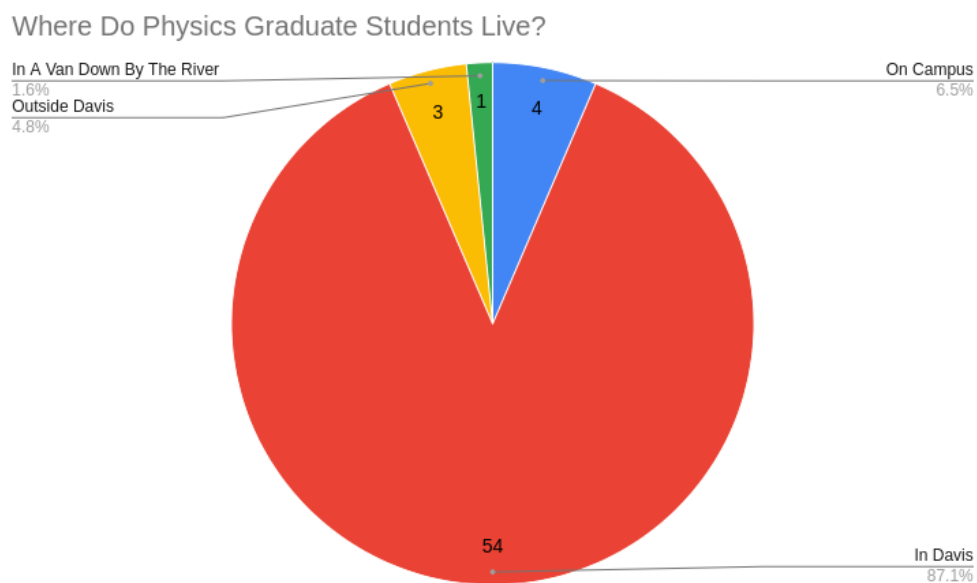


Figure 6: Pie chart showing the breakdown of where physics graduate students live.

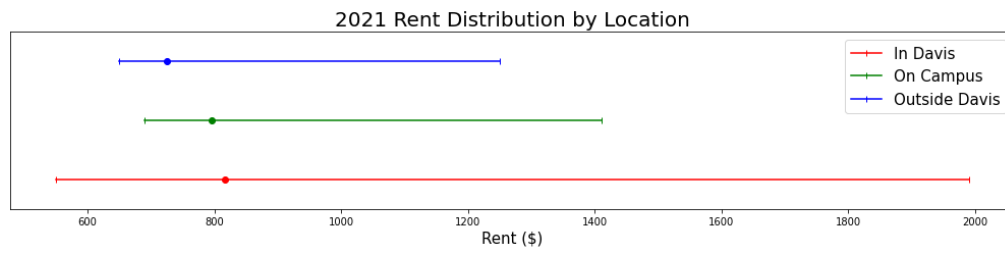


Figure 7: The monthly rent range on the x-axis for each location where graduate students live.

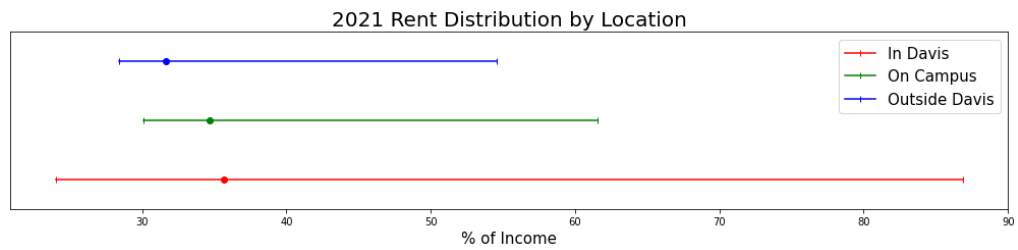


Figure 8: The rent burden range on the x-axis scaled to percentage of year round TA income for each location where graduate students live