

# Game of Homes: Mapping and Analysing Off-campus Student Housing in Goleta and Santa Barbara

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## 1. Abstract

The focus of this research project is on finding and mapping off-campus student housing in Goleta and Santa Barbara based on attributes that undergraduates are interested in. Sourced from students, the criteria for what makes for a good housing experience ranges from purely monetary concerns to more qualitative concerns. Research is sourced from pre-existing government and private data as well as through manual data mining.

## 2. Challenges

While information was available, one of the hardest parts of this project was assembling the data from various sources. Manually parsing through rent and transportation data was time-consuming but proved more accurate than using APIs. Creating and distributing the attribute survey was another challenge as the human factor produced mixed results. Government data like zoning and noise was not in a useful format and had to be played with and converted to prove useful. Data that was useable often had gaps in certain areas, such as the mixed use zones near downtown.

## 3. Methods

Polygonized neighbourhoods based on city boundaries

Rent sourced from Craigslist, Trulia, and Zillow

Proximity to beach using centroid and near tool

All bus routes passing through UCSB

Noise Element trimmed to fit within city limits

POIs mapped using geocoding tools

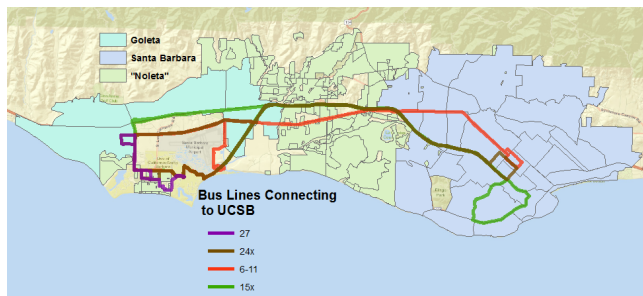


Figure 1: Residential polygons and bus lines connecting to UCSB.

## 4. Results

In general, the most affordable housing within a typical student's budget can be found in the periphery areas surrounding downtown Santa Barbara and the far eastern and western corners of Goleta. With some notable exceptions, the farther away from the city center and the closer to the mountains you go, the more affordable the housing becomes.

Proximity to points of interest also seem to play a role in rental price. For example, Old Town Goleta and Downtown have a plethora of restaurants, bars, and shops within walking or bus distance; this coincides with moderately high rent prices in those areas. Closeness to the ocean also ranked of importance in some of our student surveys, so we calculated the distance from each neighborhood centroid to the beach. Surprisingly, many neighborhoods adjacent and close to the ocean were fairly priced, making an ocean view or short commute to the water possible for many students.

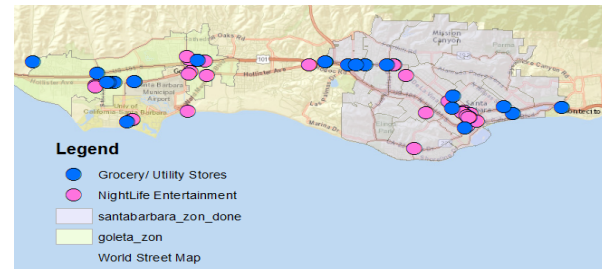


Figure 2: Entertainment and Shopping points of interest

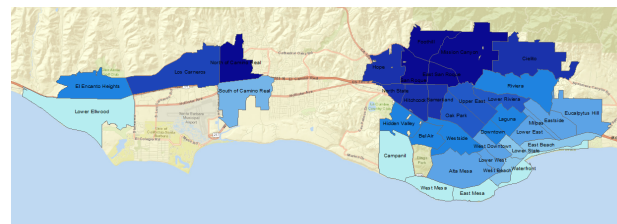


Figure 3: Proximity to ocean by neighborhood

The noise element showed areas near the major freeways and the airport had the highest decibel levels and the farthest noise reach. One would think that this would negatively affect neighborhood rent prices, or that students may not want to live in noisy areas. However, our analysis found that this is not the case. A majority of Students did not rank noise levels as a high priority on their surveys and in many instances rental prices do not seem to suffer (see South Camino Real, Samarkand, San Roque).

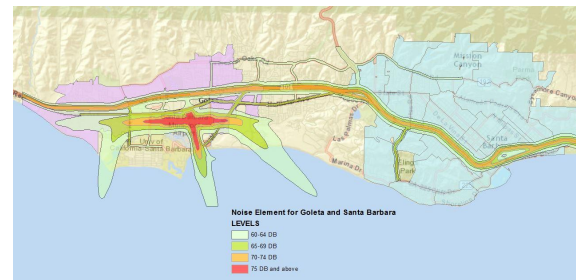


Figure 4: Noise Levels in Goleta and Santa Barbara.

## 5. Discussion

Rental results match expectations. The heart of downtown Santa Barbara is more expensive than surrounding neighbourhoods. Extremely expensive zones are more for luxury rental seekers and are typically family homes, like those near Montecito and the country club. Incredible city and ocean views and relative remoteness provided by the geography of the rivera and mesa inflate rent prices as well.

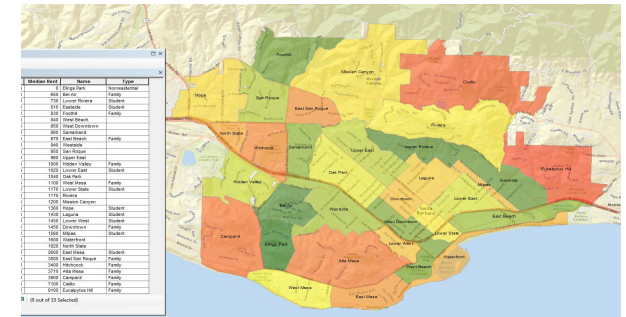


Figure 5: Polygonized Neighborhoods showing rent prices in downtown area

Santa Barbara County Planning recently conducted a survey\* regarding median rent price. Their April 2015 data revealed that the median rent for a 1 bedroom unit was \$1650 per month. This is well beyond the median price surveyed students said they could afford in rent (\$700).

### 2015 RENT SURVEY - AFFORDABILITY

Apartment Size	Median Rent	Hourly Income Needed*	Annual Income Needed*	2015 Median Income	2015 Min Wage Income (\$8/hr) 2080 hrs	% of Min Wage Income Needed
Studio	\$1,288	\$24.77	\$51,520	\$22,780 (1 person)	\$16,640	310%
1-Bedroom	\$1,650	\$31.73	\$66,000	\$60,320 (2 persons)	\$33,280	198%
2-Bedroom	\$2,500	\$48.08	\$100,000	\$67,800 (3 persons)	\$49,920	200%
3-Bedroom	\$3,950	\$75.96	\$158,000	\$75,400 (4 persons)	\$66,560	237%

(\* Income required if household pays 30% of income for rent)

Figure 6: Excerpt from the County's 2015 survey highlighting the estimated income needed to afford housing in Santa Barbara

\*2015 Rent Survey - Affordability; Santa Barbara Planning Commission, 2015. Web.