How to Find a Reasonable Rental in Seattle

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Summary:

Seattle is one of the top ten most expensive cities in the US to live; this creates a problem for one near graduation University of Washington senior. You see, while I am enrolled in school my parents (who happen to live 1700 miles away in much less costly Oshkosh, WI) have agreed to pay for all of my tuition and living expenses; however, the day I graduate I am on my own. With this in mind, I do not see myself able to continue living solo in my studio apartment for $575 a month.

So I set out to find a cheaper living arrangement in the Emerald City. I first divided Seattle into 23 different districts, ranging in distance from Lake City to West Seattle. Then I paged through the Stranger and searched the NW Classifieds, Seattle Rentals and Apartments.com for two bedroom apartments throughout the Seattle area. I collected 314 data points (roughly 13-14 rental rates per district); I also gathered data on factors I thought would affect the rental price of an apartment. These factors include: distance from downtown, average age of the neighborhood residents, average income (data found at seattlepi.nwsource.com/webtowns), percentage of rental units and percentage of white residents.

After running a least squares regression on the data, it was determined that one can find a reasonable rental in Seattle by incorporating these factors. The factors that had the largest affect on the data are: distance from downtown (-$52.20/mile), age (+$21.64/year), and the percentage of rental units in the neighborhood (+$6.87/percent).

Determining the Factors:

Since I was determined to find the cheapest possible two bedroom apartment I needed to predict some factors that would influence the rental price. The first and most

obvious one I thought of was distance from downtown. Downtown Seattle is the place to see and be seen; major department stores and novelty shops are located downtown and along the waterfront, many bars and clubs are found Downtown, Belltown, and Pioneer Square, large concert venues and sports arenas can be found here, and not to mention a popular Seattle tourist attraction, The Pike Place Market. So it seems obvious that the further away one gets from the hustle and bustle of downtown, the less they will pay for a place to live. I marked downtown Seattle at 6th Avenue and Cherry Street and used Yahoo! Maps to determine the distance of other districts from downtown (the furthest neighborhood being Lake City at 9.9 miles). And after running the least squares regression, it is in fact the case that for each mile away from downtown, one will save around $52.20 on their monthly rent.

I also thought the income of the renter would have a large influence over rental price, but this turned out not to be true. I predicted the neighborhood with the highest average income to be either Downtown or Belltown; when in actuality the average income for those districts is $24,678 and $35,140 respectively. The area with the highest average income is the Madison Park/Madrona area, earning an average of $75,034 per year and average monthly rent being $1005. The least squares regression confirmed that the renter's income has little to no effect on their monthly rent.

One surprising factor turned out to be average age of the renter. When I gathered data on average age of residents there didn't seem to be much variance between neighborhoods. Further more surprising was the youngest (University District at 24 years of age) and the oldest (Madison Park/Madrona at 45 years) have fairly close rent prices at $1048/month and $1005/month respectively; their distances from downtown varied by

only 1.3 miles, the U-District is 4.6 miles away while Madison Park/Madrona is 3.3. For each year of age the renter can add $21.64 to their monthly rent. This can logically be explained. On average a person in their 40s is well into his/her career, making a sufficient amount of money and able to afford a nicer place to live (or own their own house); whereas a 24 year old recent college grad is just starting their occupation, may change it a few more times before they find a job that they enjoy and are hardly making enough money to support themselves. However, it is difficult to control for age because it is inevitable that each year that passes we become a year older; even though many people, especially women, seem to remain 29 years old for as long as we can remember.

The last major variable in determining rent price is the percentage of rental units in the area. Neighborhoods with a high percentage of renters include: Downtown (84%), U-District (82%), Capitol Hill (76%) and Wallingford (76%). According to the least squares regression, for each renter percentage point one should add $6.87 to the price of rent. The positive relation between percentage and price can be understood through basic economic supply and demand. The supply curve for rental units is nearly vertical (limited supply) due to the fact that rental units cannot be created in only a few days, so when more households demand units for rent the demand curve shifts to the right causing the price to increase.

How to reduce your rent:

According to the model there are several ways to reduce the price you pay for a space to live. First, get out of downtown! I know there are people out there who have an extreme fear of leaving the comfort of downtown Seattle. Yes, it is true downtown seems to have everything…so why would you want to leave? The answer is simple, to save you

money! Moving just 3 miles away to somewhere like Queen Anne or Eastlake will save you $156.60 a month, that's $1879.20 a year. The extra $1879 comes in pretty handy for a starving 20 something learning to budget his/her expenses for the first time.

Also, you might try to find a neighborhood with a small percentage of renters. Magnolia, Greenlake and Greenwood are neighborhoods that have less than 50% of units for rent. These areas are also more than 3 miles out of downtown, saving you between $3319.90 and $4760.61 each year.

Testing the Results:

This model works well when trying to find a reasonable rental in Seattle. I tested the data in several different cases. First, I found the price for a two bedroom apartment in my current complex. I did not include this price ($915/month) in my observations. Using the regression I calculated a rent price of $1060.71. This seems a little high but I am not able to control the age variable (I am 20 years old) or income (currently I am a starving student with $0 income). Second, last year I lived in Lake City with a roommate and paid $620; this observation was also not included in the observations. The price calculated from the regression is $592/month. The error from the first test is -15.9% and the error from the second test is 4.52%.

Conclusion:

Although there is a small error term, it is possible to find a reasonably priced unit in Seattle. Adding more variables may make this model more accurate, but the key is to determine which ones. Initially I included two dummy variables: whether or not there is a hospital in the neighborhood and whether or not there is a university in the neighborhood. These dummy variables seemed to skew the data. I ran practice tests with

the initial regression data and received an accurate price for a unit in the University District (a neighborhood with both a hospital and university), but a very inaccurate price for a unit in Lake City (a neighborhood without either a hospital or university). After omitting these two variables the regression provides a means to find a reasonable rental in Seattle. The most important factors to keep in mind are choosing a home outside of downtown and finding a neighborhood with a small percentage of renters.

Dependent Variable: PRICE
Method: Least Squares
Date: 12/08/03 Time: 12:08
Sample: 1 23
Included observations: 23

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	176.3001	627.0116	0.281175	0.7820
AGE	21.63682	11.87893	1.821445	0.0862
DIST	-52.19964	20.52976	-2.542633	0.0210
INCOME	-0.004708	0.004989	-0.943535	0.3586
PER_RENT	6.871180	4.961659	1.384856	0.1840
PER_WHITE	1.734590	3.081109	0.562976	0.5808

R-squared	0.676091	Mean dependent var	1034.377
Adjusted R-squared	0.580824	S.D. dependent var	276.8154
S.E. of regression	179.2208	Akaike info criterion	13.43457
Sum squared resid	546041.5	Schwarz criterion	13.73079
Log likelihood	-148.4976	F-statistic	7.096788
Durbin-Watson stat	2.144179	Prob(F-statistic)	0.000945