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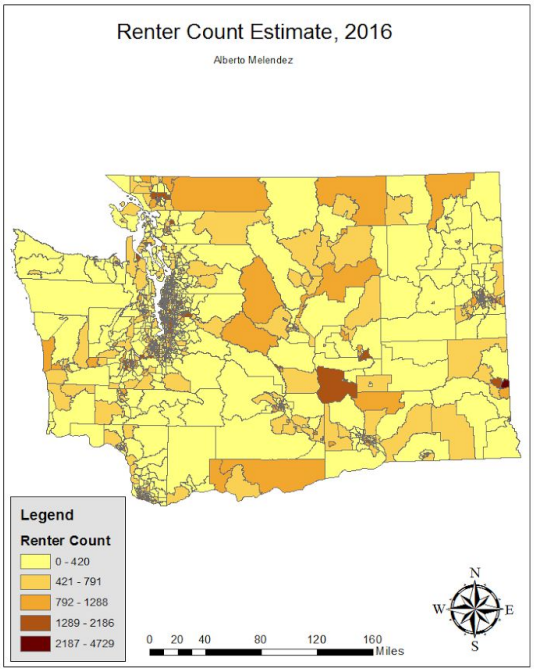
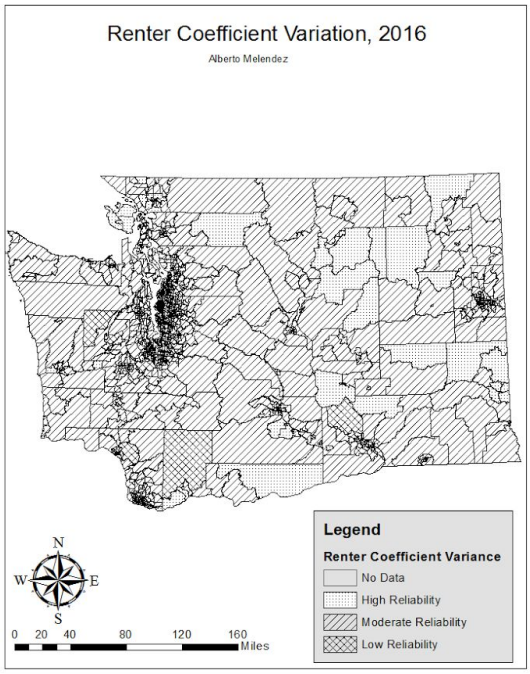
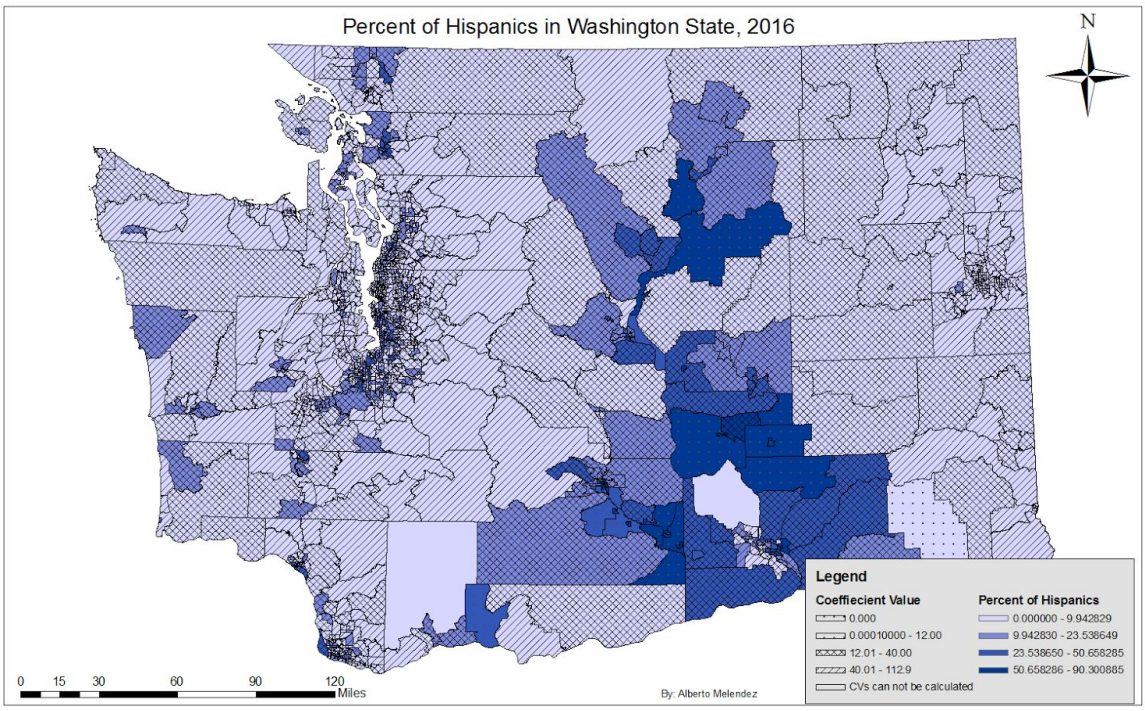
January 29, 2018
Assignment 2: Census Data and GIS
GEOG 461





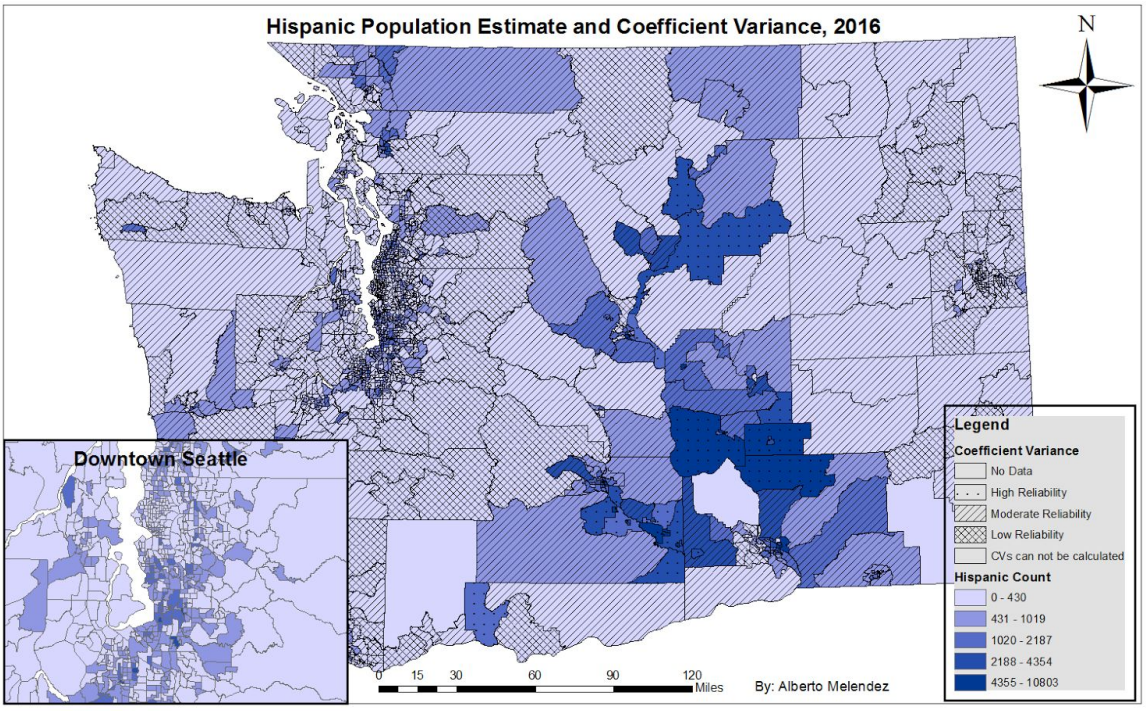
1) This map tells the estimated count of renters in Washington State in the left side. The coefficient variation adapts to each area's population and Margins of Error and based on this map we see that most of the state has low to moderate reliability with most areas having counts being very low to moderate numbers.

2) A few counties that I found to be the least reliable being: Mason, Benton, and Skamania County. They all at coefficient variant values of roughly 52, 75, 72 in that same order.



1) Here we have the percent of Hispanics in each area, each with a range of coefficient values except with those with 0. Those with a 0 have no data, any less than 12 is deemed highly reliable, between 12.01 to 40 is moderate, and higher than 40 is low reliability. Based on this map it seems that the higher population areas have moderate reliability whereas the low percentage ones have moderate to low reliability interestingly enough.

2) In this map I found same counties as the other map with Hispanic Populations with the same levels of coefficient variance.



1) This map provides the Hispanic population estimate holds resemblance to the percentage map of Hispanics showing the high count/percentage areas and displaying the coefficient variance in the same places. This indicates that with low population counts or even percentages in certain areas may have moderate to low reliability.

2) A few of the least reliable areas are: Pierce, King, and Okanogan county. They have coefficient variances of 44, 53, 76 roughly in that order.

The challenges of mapping ACS data included properly formatting the data for ArcGIS. When we had to do calculations we found that the Hispanic data were formatted as strings and so we had to create new fields for them and have them be long integers. It's a simple fix, however it was tedious. Another was multiplying the percent values for Hispanics by 100 after using the MOE Calculator, again simple fix, but it took time. Lastly, the MOE Calculator for providing an output name, no special characters can be used, even underscores which was both odd and is bad coding on the developers part.