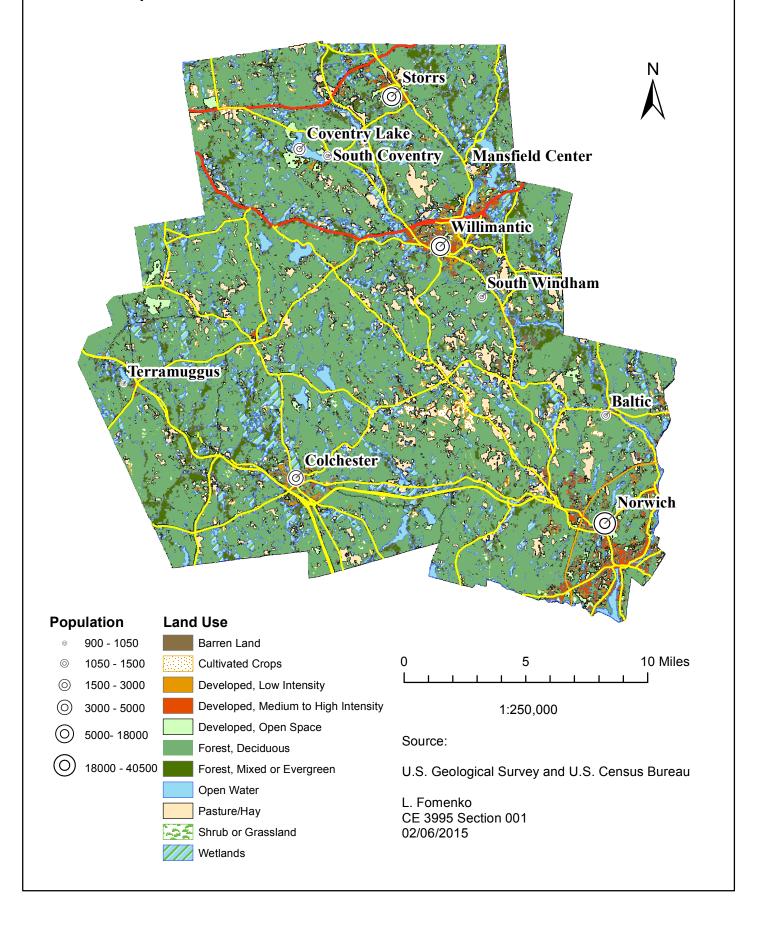
## Population and Land Use in East Central CT



## Question 1:

The three components of color are hue, value, and saturation. Hue describes how the color is defined along the spectrum. Value describes the intensity, or how bright or dark the color is. Saturation describes the vividness of the color. In situations when there are nominal variables, it would be best to hold value constant and vary hue. For example, both roads and rivers may be represented by a line, but they would need to have different hues in order to determine which is which on a map. When there is a situation with ordinal or interval/ratio quantities, it is best to hold hue constant and vary value to differentiate categories. For example, when talking about population density, it is best to vary value to show the difference between high and low density areas. I tried to use colors that best represented the type of land use being presented. For example, to show forests and open areas, I used various greens, and to differentiate between low and medium to high intensity development, I used different values of orange since they are different levels of the same type of land use. I chose to vary hue especially between categories such as barren land and cultivated crops because they are very different types of land use.

## Question 2:

I used the Natural Breaks classification method with six classes to display the population data. I selected this method because it seemed to group the data better than the other options. Since a lot of the towns had samller populations, it was difficult to find a good classification method to separate the categories comparing them to much larger populations. The classification method is important because it represents the data differently on the map. For example, using equal interval would separate the classes regardless of the number of observations in each while quantile would ensure that each class had the same number of observations regardless of the interval.

## Question 3:

The purpose or message of this map is to relate land use to the size of the population. The audience can see that in areas with lower populations, there tends to be more forest area and open space, whereas in towns with larger population, there is more developed land. They can learn from my map that a lot of the land use in the majority of the region is dedicated to forests, and scattered areas of water, and compare this to the medium to high intensity development seen in the bigger cities like Willimantic and Norwich.