

CS448B – Albert Feng
Assignment #1

In my visualization of the given data, I wanted to emphasize the drastic difference in the change of yield of bushels/acre of barley in Morris versus in the other 5 locations. To do so, I wanted to display an average of all the different varieties yielded for each year at each location and show the change through 6 line graphs representing each location. Furthermore, to help the viewer understand the uniqueness of Morris's yield growth, I color coded increased yield between 1931 and 1932 as green and decreased yield between 1931 and 1932 as red. I also sorted the cities from largest increase of yield to largest decrease of yield between 1931 to 1932. This is to help the viewer easily see in how each location compared to one another in terms of change of yield of bushels/acre between 1931 and 1932.

I also included a map for each of the locations because there may be a geographical reason that causes one location to be more successful at increasing barley production than others. From the data strictly alone, it appears that locations closer to the horizontal center line of Minnesota had better yield changes but that interpretation could become much more salient with something like Rainfall data, Temperature data or Soil Quality data. Thus, I decided not to mark each map with a line since there is no causation present.

Through my analysis of the data, the general trend that every crop in Morris increased its yield from 1931 to 1932 as well as the trend that every crop **not** in Morris decreased its yield from 1931 to 1932 both stayed true. There were a couple of outliers that are not being presented in the visualization such as how No. 475 in University Farm and Velvet in Grand Rapids increased in yield which could be useful information.

Tools: I used Tableau to help visualize and compute sums on the data given. I used Sketch to help mark the 6 locations on the Minnesota State Map.

Change in Yield of Bushels/Acre of Barley from 1931 to 1932 at 6 Locations in Minnesota

