Tittle: Poverty in Polk County Iowa

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*Elevator speech:*

My final project will consist of an interactive colorful featured webpage showing the poverty status of families. It will specifically look at the families who are considered to be in poverty in Polk County Iowa from 2013-2017.

*Expanded abstract:*

For my final project I want to create an interactive page that will show how poverty in families have changed throughout the years. It is interesting to explore this data because I live in Polk County and growing up, I was always told that Des Moines has the highest employment rate. But as I drive down some of the streets close to downtown Des Moines area, I see many homeless people asking for spare change. It leads me to wonder why they are in this situation and how many others are in similar situations? Do Iowns in Polk County struggle to find enough food to eat or a place to sleep at night? So, this study could help me answer at least one of those questions. The purpose of this study is to understand how poverty in families has changed over the years.

On my webpage I want to show poverty changes from 2013- 2017. This will give the viewer a better idea of how Polk County has changed over the years in terms of poverty and what this means for employment rates. Employment rates will not be the main focus of my project, but it will be briefly touched on as it correlates with poverty. I also want to provide a brief history of the county so that viewers who are not familiar with the area have a better understanding of it. While also providing a spatial analysis of the data collected from the Census Bureau to present the findings. I have also considered taking the special analysis a step further and comparing family poverty from 2013- 2017 and compare it with food stamps. This would include which race is prominently using food stamps (but I haven’t decided if I want to add this onto my project yet). Overall the webpage will include maps and charts of data findings, with interactive maps to show cool places in Polk County and other stuff. I will also include pictures to other fun interactive elements onto the page after doing more research about different commands we haven’t learned about.

*Technology interests:*

* Google Data Studio
* Leaflet
* QGIS
* Turf.js
* HighMaps/HighCharts
* GeoJson

*Data sources:*

Almost all of my data will come from the United States Census Bureau and more specifically American Fact Finder. These formats are CSV files which can be edited on excel. Other information I may use are in shapefile formats which I can work with in ArcMap or QGIS. Pictures and other fun aspects to make an interactive map will be uploaded to GitHub and used from there into code. I may also use GeoJson formats to convert the data and bring it into code.

*Expected challenge:*

There may be some challenges along the way when preparing my final webpage. I am still not the best with having a customized background design but would like to. Since I am new to coding in general it will take me longer than most to create a code that will make the page look cool. Another challenge I may come across is loading GeoJson data using the AJAX loader plug in method. I have struggled with this the most and it may take me a while to master. I am also a bit nervous about using Turf.js especially since it is fairly new on our lecture page. I am hopeful that it will work great with the data I will be working with and that not much help form professor Seeger is needed.