**Executive Summary**

My idea is to explore data that shows food insecurity among children in the US, by state, (maybe over a time period.) I will also look at concentration of food banks as well, and see if there is any correlation between lack of pantries and higher numbers of insecurity in order to pinpoint regions (or cities, or counties) that need more resources to help hungry children.

If I have time, I also want to study other possible insecurities that relate to children’s well-being, and see if there is a correlation between these different types of insecurities. If so, I will again pinpoint these areas where children are lacking security, see if there are sufficient social welfare services in those area, and if not, make suggestions of where and which ones could be added to improve upon care and well-being of children. (More realistically, I think I should pick a few insecurities that I hypothesize are related to child hunger, and once I find one with the strongest correlation, I take a closer look at that one)

For instance, if through exploring, I find that the Southeast seems to have generally more food insecurity among children, and I also see that there is a higher divorce rate, and/or 1-income households, and/or (another factor), then I can conclude there are multiple basics that children may be lacking. I can then look at density of help in those areas. Are there enough food banks, WIC locations, etc. there?

**Motivation**

My motivation for this project comes from my initial interest in exploring food and/or restaurants at some capacity. I thought it would be more interesting to explore data and present findings that doesn’t have to do with driving business, but rather finding areas for improvements in social welfare and community advocacy.

**Data Question**

What areas in the US have the highest food insecurity among children (and what has this looked like from 2013 to 2018)? Is there a correlation between hungry children and lack of foodbanks? Are there other economic of well-being indicators that follow a similar pattern to child food insecurity (poverty/household income/food waste)?

**Minimum Viable Product (MVP)**

I would like to have a geographic representation of all 50 states showing food insecurity levels among children. Also, I’d like to pin all non-profit food banks in America. I’ll show some scatterplots showing food insecurity compared to food bank density (and maybe other insecurities if time and data allow.) I’ll show a deeper dive into the most serious areas, either by county or city as well. If it’s relevant, I’ll add a line chart representing changes in hunger in these locations over time. My audience would be anyone looking to become more involved in donating time and/or money, potential non-profit investors, and possibly organizations/groups that supply grants.

**Schedule (through <date of demo day>)**

1. Get the Data (5.22)
2. Clean & Explore the Data (6.14)
3. Create Presentation of your Analysis (6.22)

* Should be a presentation, but could include a Jupyter Notebook or dashboard in Excel, Tableau, or PowerBI
* Clean up Github (6.24)

1. Internal demos 6.26
2. Demo Day!! 6.29

**Data Sources**

* Main data from Map The Meal Gap files emailed from: <https://www.feedingamerica.org/research/map-the-meal-gap/how-we-got-the-map-data?s_src=WXXX1MTMG&_ga=2.67349524.44214178.1620268572-880066652.1619024952>
* Food bank data (hopefully) scraped from: <https://www.foodbanks.net/>
* More potential data here: <https://datacenter.kidscount.org/topics>
* Food waste data: https://insights.refed.com/
* https://aspe.hhs.gov/prior-hhs-poverty-guidelines-and-federal-register-references

**Known Issues and Challenges**

The scraping made me nervous, but I gave myself a handful of extra time to work through it and successfully created a data frame of food banks in Python, and exported to SQL. However, I have the pages of the website hard-coded, so I hope the page numbers don’t change…

I’m also anticipating similarities between my results and the ones the data was initially collected for, so I want to make sure I am presenting something new and unique. I plan on exploring the data from different angles than Feeding America in order to find something new and unique.

No jumping ship at this point, so sticking it through.