**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 interest in exploring some sort of data involving food and/or restaurants at some capacity. I figured it may be more interesting to present data that doesn’t have to do with driving business, but rather driving social improvement and welfare.

**Data Question**

What areas in the US have the highest food insecurity among children? Is there a correlation between hungry children and lack of community outreach? Where are the most serious areas of food insecurity? (Are there other factors that may be related to this insecurity?)

**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

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.causeiq.com/directory/food-banks-list/>
* More food bank data that’s easier to scrape: <https://www.foodbanks.net/>
* More potential data here: <https://datacenter.kidscount.org/topics>

**Known Issues and Challenges**

For now, I’m anticipating scraping to be hard. If for some reason it doesn’t work, copying and pasting 4,000+ foodbanks and their data could be too time consuming. I will do this in small bits consistently if the scraping doesn’t work (if I can’t find another resource for similar data.)

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.

If I have to jump ship, I’m hoping to obtain some back-up data for a different analysis.