**Final Project – Food Environment Dataset**

Food environment factors—such as store/restaurant proximity, food prices, food and nutrition assistance programs, and community characteristics—interact to influence food choices and diet quality. Research has been documenting the complexity of these interactions, but more research is needed to identify causal relationships and effective policy interventions.

The objectives of the Atlas are:

* to assemble statistics on food environment indicators to stimulate research on the determinants of food choices and diet quality, and
* to provide a spatial overview of a community's ability to access healthy food and its success in doing so.

You can access the atlas here:

<http://www.ers.usda.gov/data-products/food-environment-atlas/go-to-the-atlas.aspx>

Whereas the site gives a lot of information, it has a hard time pulling it all together.

Create visualizations that help us answer the two big questions:

1. What factor or factors are contributing to diabetes in America?
2. What factor or factors are contributing to obesity in America?
3. What factor or factors contained in the dataset DO NOT seem to contributing to one or both of these health issues?

**Final Report**

Food Choice and Diet Quality Impacts Obesity

1. Create the WDA, this is the analysis work we hope will help you to feel confident that you understand the referent domain, the world in which your visualization must exist. Remember, we're looking to create visualizations that put data into context and highlight key frames of reference, this is your chance to capture that information.

* You get to scope this project however you wish! It's up to you to decide who is going to be getting this "report." From there your job is to understand their domain, their organization and their interests and expectations.
* here are some examples of an **Abstraction Hierarchy, a Part-Whole Decomposition, Listing Variables and Constraints, and an Abstraction Network**
* They have been redacted so as not to give you too much of a head start, but they should help you with shaping your own
* for the **Part-Whole Decomposition,** aim for one level larger and one level smaller minimum
  + you may find that as you move "up" physical forms drop off, that's okay. conversely, as you move down goals may no longer make sense, also okay

2. Pick out the **frames of reference** to focus on (examples: Population, Access to grocery stores, Restaurant availability, Food assistance programs, Food insecurity, Local foods, socioeconomic characteristics)

* These should be revealed by your **WDA.** Think about how your network relays the relationships between goals, balances, processes, and physical components. You'll want to identify the frames of reference that you feel are particularly interesting and jump in!

1. Create visuals based on frames of reference and utilizing class concepts, especially the four techniques

* Hopefully you feel confident at this point in your ability to create visualizations. Please reach out if you want to talk over techniques for representing information in your visualizations.

Ex: Histogram, Bar chart and Scatter plot are the different techniques to create visualization.

4. The end report should include the above, with discussions on each section (Why did you choose each frame? What is interesting about the visualizations? Any other important information for stakeholders?)

* Here is your chance to explain what's interesting to you, what did you find in the data? Why do you believe the frames of reference you focused on are critical? What do you feel is not well explained and warrants further attention from your audience?

Powerpoint format is preferred, but you can submit your report in any media you would like. For more info on the project please look at the project description below:

Details: Food Environment project description.docx

For all of the project files you will need, please find the appropriate files below:

Food Environment Atlas Data:

FoodEnvironmentAtlas2014.xls