

# Project Proposal

due October 11, 2021 by 11:59 PM

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## Load Packages

```
library(tidyverse)
library(readxl)
library(tinytex)
```

## Load Data

```
STAT_198_Food_Security_Dataset <-
  read_excel("~/R/Team-E-T/data/STAT 198 Food Security Dataset.xlsx", sheet = "County Projections")
```

## Introduction and Data, including Research Questions

(The introduction should introduce your general research question and your data (where it came from, how it was collected, what are the cases, what are the variables, etc.). Your research questions should be clearly specified. The motivation for your research question should be clear, with citations to relevant literature as appropriate.)

## Glimpse

(Please use `glimpse` for your data, uploaded into the data folder, here.)

```
glimpse(STAT_198_Food_Security_Dataset)
```

```
## Rows: 100
## Columns: 15
## $ County                <chr> "Alamance", "Alexa~
## $ `2019 FI Percent`     <dbl> 0.137, 0.143, 0.18~
## $ `2019 Child FI Percent` <dbl> 0.192, 0.195, 0.26~
## $ `2021 FI Percentage`  <dbl> 0.153, 0.160, 0.19~
## $ `2019-2021 FI Percent Change` <dbl> 11, 12, 5, 14, 7, ~
```

```
## $ `2019-2021 Unemployment Change`      <dbl> 2.1, 2.3, 0.7, 2.9~
## $ `2021 Child FI Percent`               <dbl> 0.217, 0.222, 0.28~
## $ `2019-2021 Child FI Percent Change`   <dbl> 13, 14, 4, 13, 8, ~
## $ `2019 Cost per Meal`                  <dbl> 3.15, 2.92, 2.83, ~
## $ `2013 Rural-urban Continuum Code`      <dbl> 3, 2, 9, 6, 7, 8, ~
## $ `2013 Urban Influence Code`           <dbl> 2, 2, 10, 4, 10, 7~
## $ `Less than HS Diploma, 2015-9, Percent` <dbl> 13.694117, 17.6091~
## $ `Only HS Diploma, 2015-9, Percent`    <dbl> 27.65582, 38.65881~
## $ `Some College Education Completed, 2015-9, Percent` <dbl> 33.81207, 29.52250~
## $ `College Degree Obtained, 2015-9, Percent` <dbl> 24.83799, 14.20957~
```

```
view(STAT_198_Food_Security_Dataset)
```

## Data Analysis Plan

(Specify the outcome (response, Y) and predictor (explanatory, X) variables you will use to answer your question, as well as the comparison groups you will use, if applicable. You may include very preliminary exploratory data analysis, including some summary statistics and visualizations, along with some explanation on how they help you learn more about your data. Note the statistical method(s) that you believe will be useful in answering your question(s). What results from these specific statistical methods are needed to support your hypothesized answer?)