Food Security

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```
library(tidyverse)
```

```
## Warning: package 'tidyverse' was built under R version 4.2.3
```

```
## Warning: package 'ggplot2' was built under R version 4.2.3
```

```
## Warning: package 'tibble' was built under R version 4.2.3
```

```
## Warning: package 'tidyr' was built under R version 4.2.3
```

```
## Warning: package 'readr' was built under R version 4.2.3
```

```
## Warning: package 'purrr' was built under R version 4.2.3
```

```
## Warning: package 'dplyr' was built under R version 4.2.3
```

```
## Warning: package 'forcats' was built under R version 4.2.3
```

```
## Warning: package 'lubridate' was built under R version 4.2.3
```

```
## -- Attaching core tidyverse packages ------------------------ tidyverse 2.0.0 --
## v dplyr     1.1.3     v readr     2.1.4
## v forcats   1.0.0     v stringr   1.5.0
## v ggplot2   3.4.4     v tibble    3.2.1
## v lubridate 1.9.3     v tidyr     1.3.0
## v purrr     1.0.2
## -- Conflicts ------------------------------------------ tidyverse_conflicts() --
## x dplyr::filter() masks stats::filter()
## x dplyr::lag()    masks stats::lag()
## i Use the conflicted package (<http://conflicted.r-lib.org/>) to force all conflicts to become errors
```

```
library(ggplot2)
library(readxl)
```

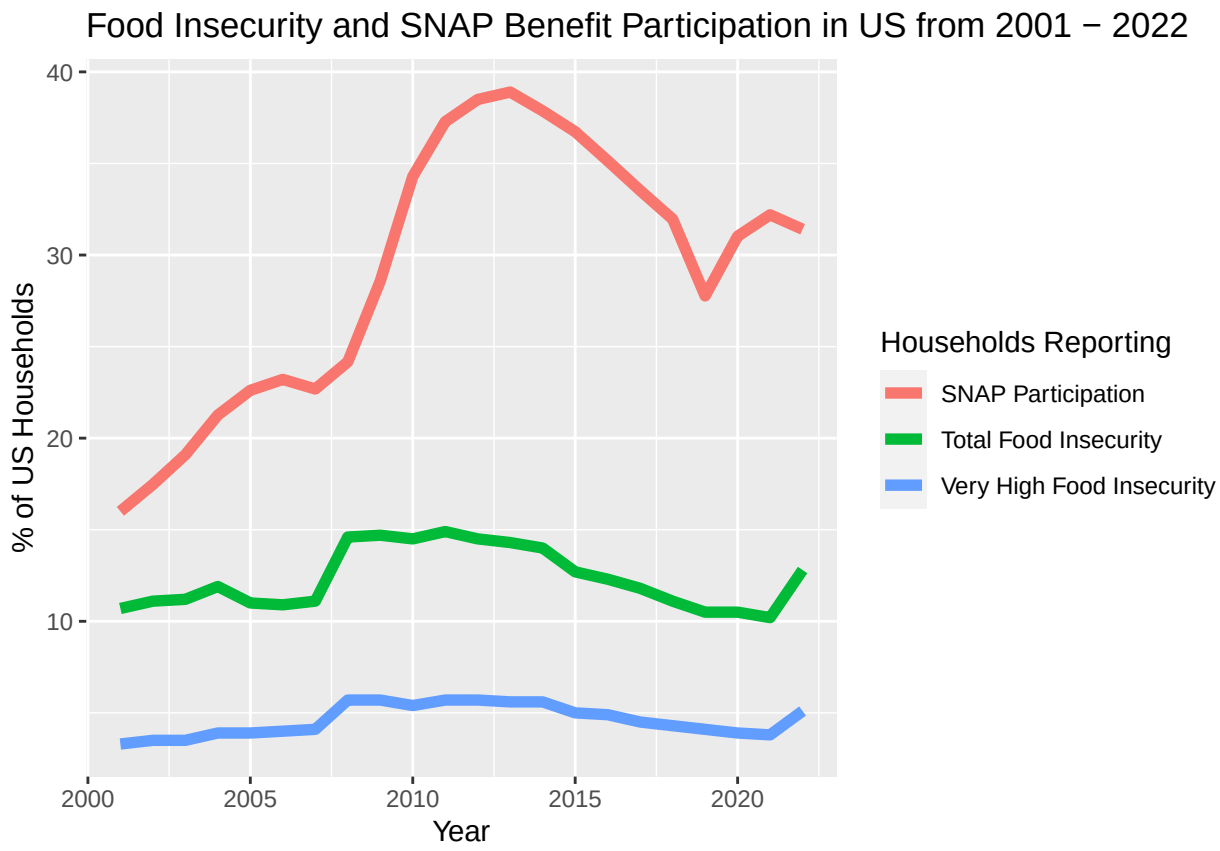
```
## Warning: package 'readxl' was built under R version 4.2.3
```

Annual Trends in Food Security and SNAP / Food Stamp Benefits in the US Sources: * **ANNUAL FOOD INSECURITY AS PERCENT OF U.S. HOUSEHOLDS** - USDA, Economic Research Service, using data from U.S. Department of Commerce, Bureau of the Census, Current Population Survey Food Security Supplements * **ANNUAL SNAP BENEFITS AS PERCENT OF U.S. HOUSEHOLDS** - USDA - Food and Nutrition Service, using the SNAP Data Tables * **U.S. HOUSEHOLD COUNTS** came from the St. Louis Fed - Provided

```
food_sec <- read_excel("C:\\Users\\akhay\\OneDrive\\Documents\\DATA_SCIENCE\\DATA_608\\Major Assignments
food_sec <- food_sec %>%
  mutate(`Percent SNAP Participation` = `Percent SNAP Participation` * 100) %>%
  rename("SNAP Participation" = `Percent SNAP Participation`, "Very High Food Insecurity" = `Very low fo
```

```
food_sec %>%
  select(c(1:3, 6)) %>%
  pivot_longer(!1, values_to = "perc_households", names_to = "measure") %>%
  ggplot(aes(x = Year, y = perc_households, fill = measure, color = measure)) +
  geom_line(size = 2) +
  labs(y = "% of US Households", title = "Food Insecurity and SNAP Benefit Participation in US from 200
```

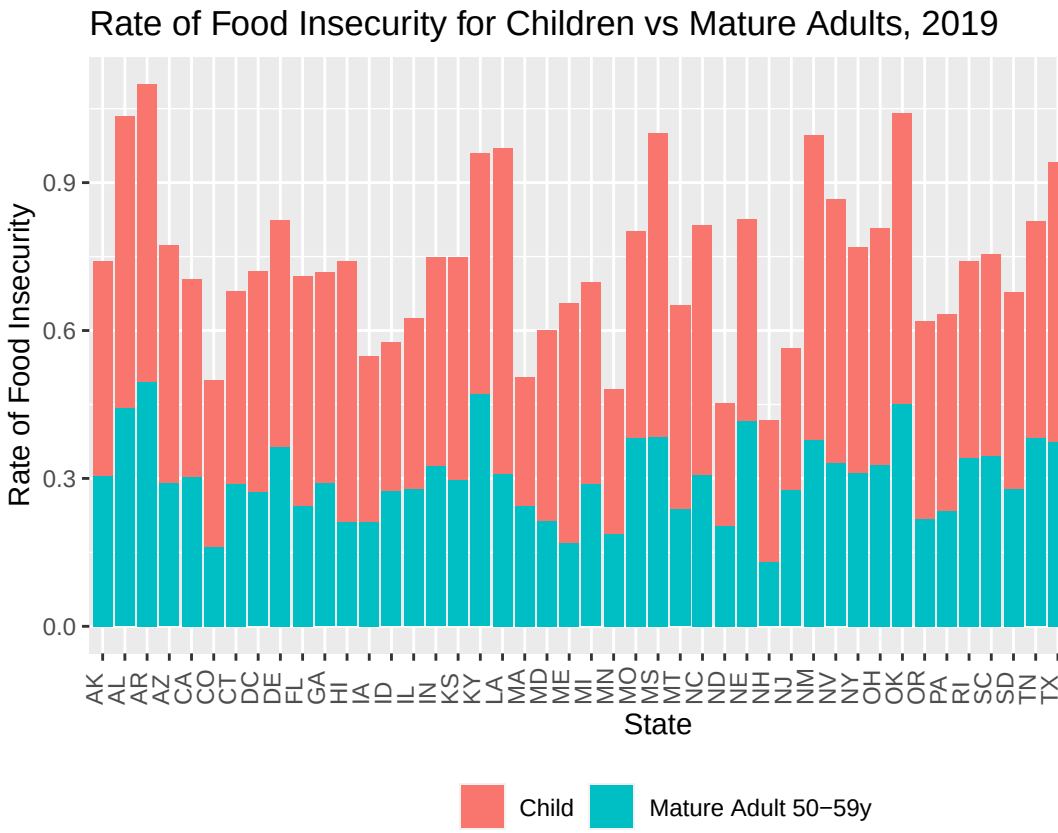
```
## Warning: Using 'size' aesthetic for lines was deprecated in ggplot2 3.4.0.
## i Please use 'linewidth' instead.
## This warning is displayed once every 8 hours.
## Call 'lifecycle::last_lifecycle_warnings()' to see where this warning was
## generated.
```



```
MMG <- read_excel("C:\\Users\\akhay\\OneDrive\\Documents\\DATA_SCIENCE\\DATA_608\\Major Assignments\\As
```

```
MMG %>%
  select(c(3, 22, 26)) %>%
  pivot_longer(!1, values_to = "Rate", names_to = "Measure") %>%
  mutate(Measure = ifelse(Measure=="Child Food Insecurity Rate", "Child", "Mature Adult 50-59y")) %>%
  ggplot(aes(x = State, y = Rate, fill = Measure)) +
  geom_col() +
  labs(y = "Rate of Food Insecurity", title = "Rate of Food Insecurity for Children vs Mature Adults, 2
  theme(legend.position = "bottom", legend.title = element_blank(), axis.text.x = element_text(angle = 
```

At the state and/or regional level, is there a difference in the breakdown in food security with



poverty & (anything else?)

Children –> adults? what do we expect?