FoodSecurity

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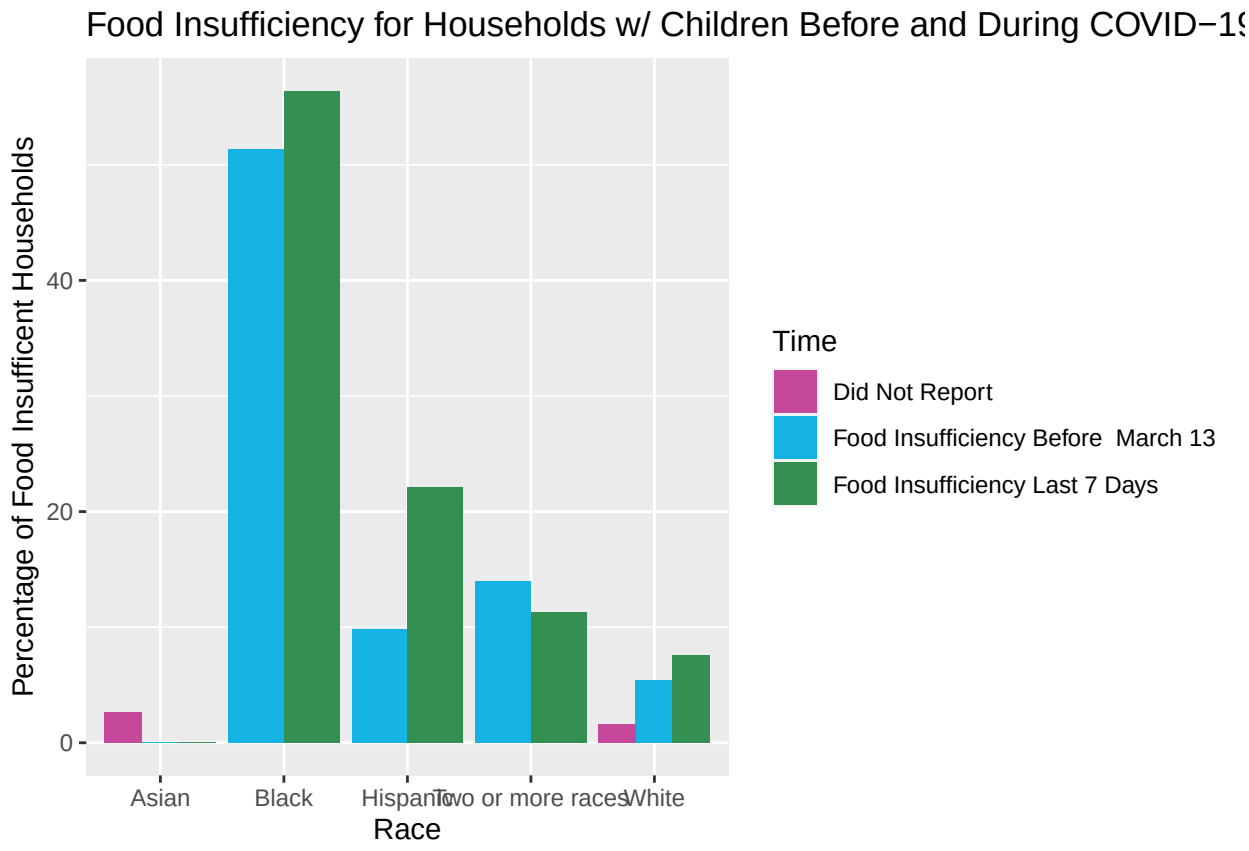
Data is taken from the U.S Census Bureau Household Pulse Survey. These graphs are focused on Oregon state.

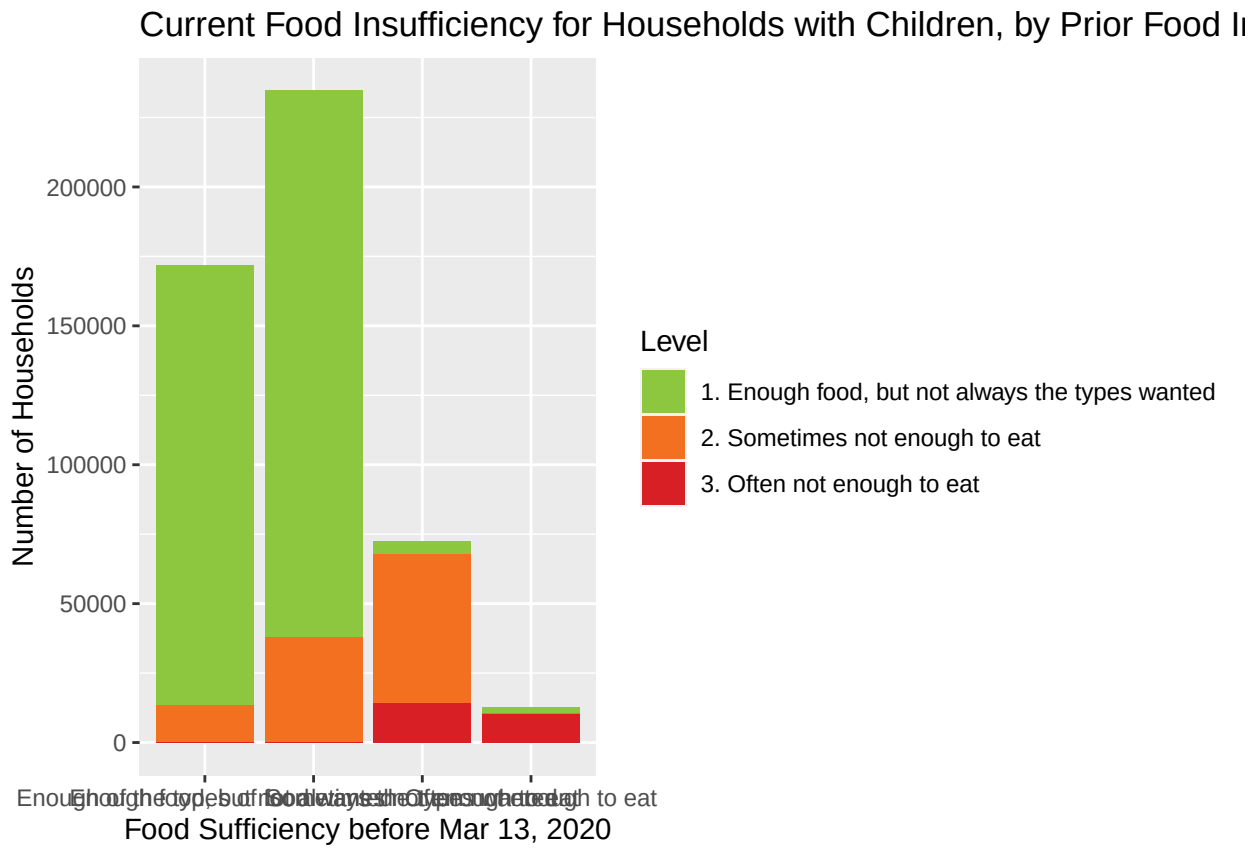
(https://www.census.gov/programs-surveys/household-pulse-survey/data.html)

```
ggplot(Food, aes(x = Race, fill = Time, y = Percentage)) +
  geom_bar(position = "dodge", stat = "identity") +
  ylab("Percentage of Food Insufficent Households") +
  ggtitle("Food Insufficiency for Households w/ Children Before and During COVID-19 by Race") +
  scale_fill_manual(values = c("#c6489a", "#14b3e4", "#339052"))
```



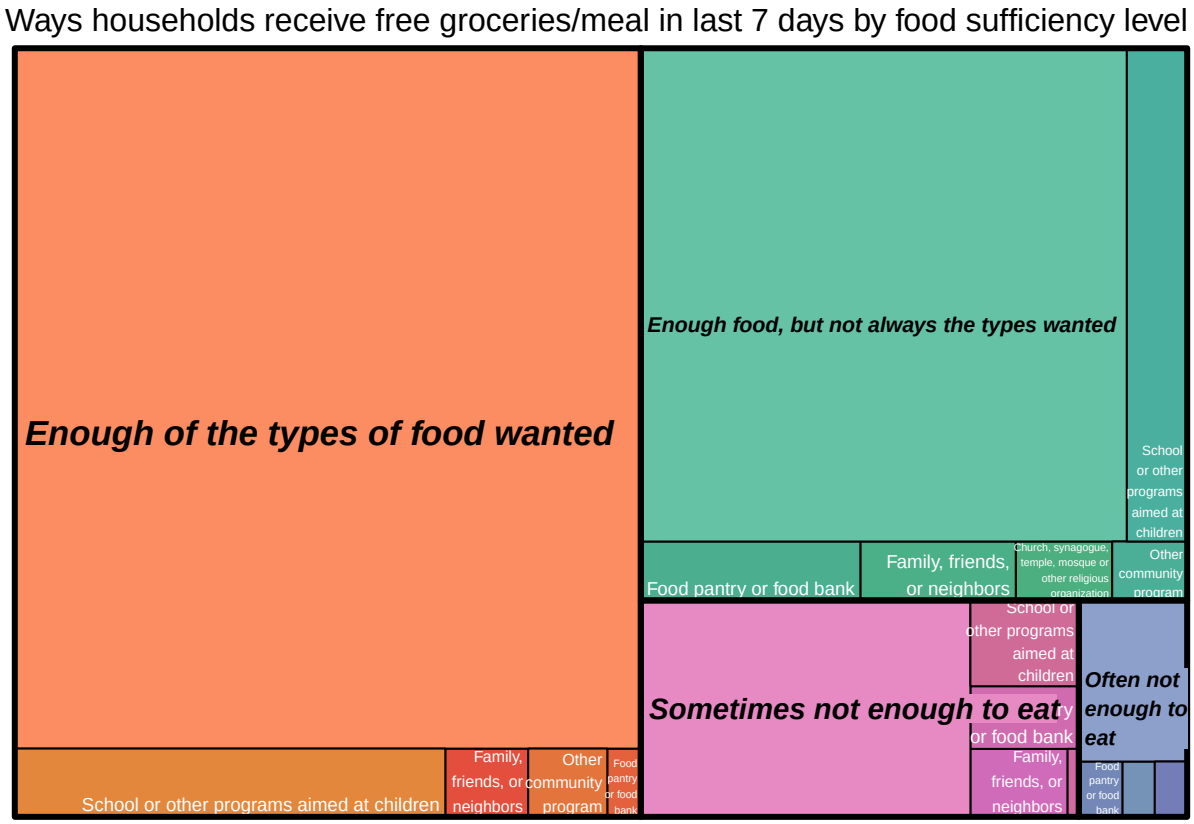

```
Food1$`Food Sufficiency before Mar 13, 2020` <- factor(Food1$`Food Sufficiency before Mar 13, 2020`,
  levels = c("Enough of the types of food wanted",
```

```
            "Enough food, but not always the types wanted",
            "Sometimes not enough to eat", "Often not enough to eat")
)

ggplot(Food1, aes(
  x = `Food Sufficiency before Mar 13, 2020`,
  y = Number, fill = Level
)) +
  geom_bar(position = "stack", stat = "identity") +
  ylab("Number of Households") +
  ggtitle("Current Food Insufficiency for Households with Children, by Prior Food Insufficiency") +
  scale_fill_manual(values = c("#8dc63f", "#f37021", "#d81f26"))
```

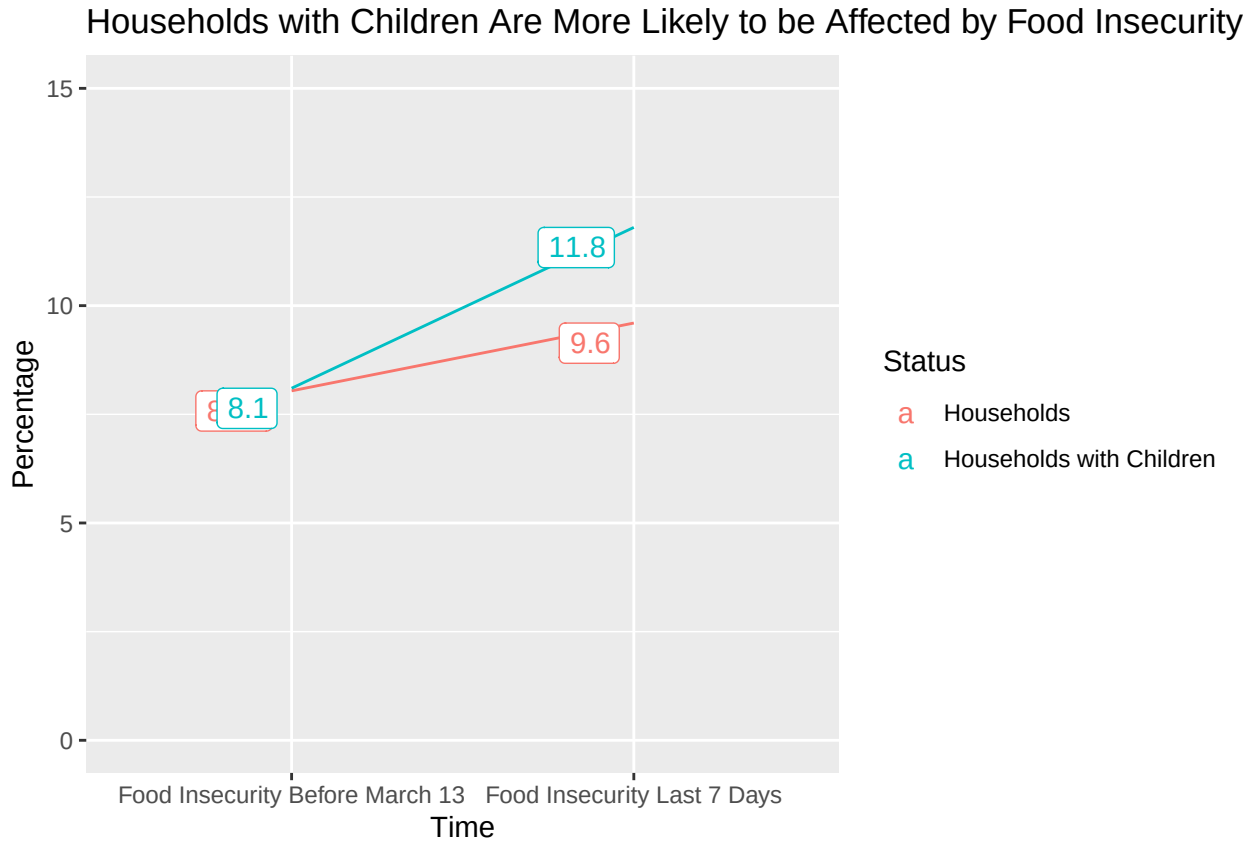



```
# Build Dataset
group <- c(rep("group-1", 4), rep("group-2", 2), rep("group-3", 3))
subgroup <- paste("subgroup", c(1, 2, 3, 4, 1, 2, 1, 2, 3), sep = "-")
value <- c(13, 5, 22, 12, 11, 7, 3, 1, 23)
data <- data.frame(group, subgroup, value)

# treemap
treemap(Food2,
  index = c("Sufficiency", "Provider of Free Groceries/Meal"),
  vSize = "Number of Households",
  type = "index",
  fontcolor.labels = c("black", "white"),
```

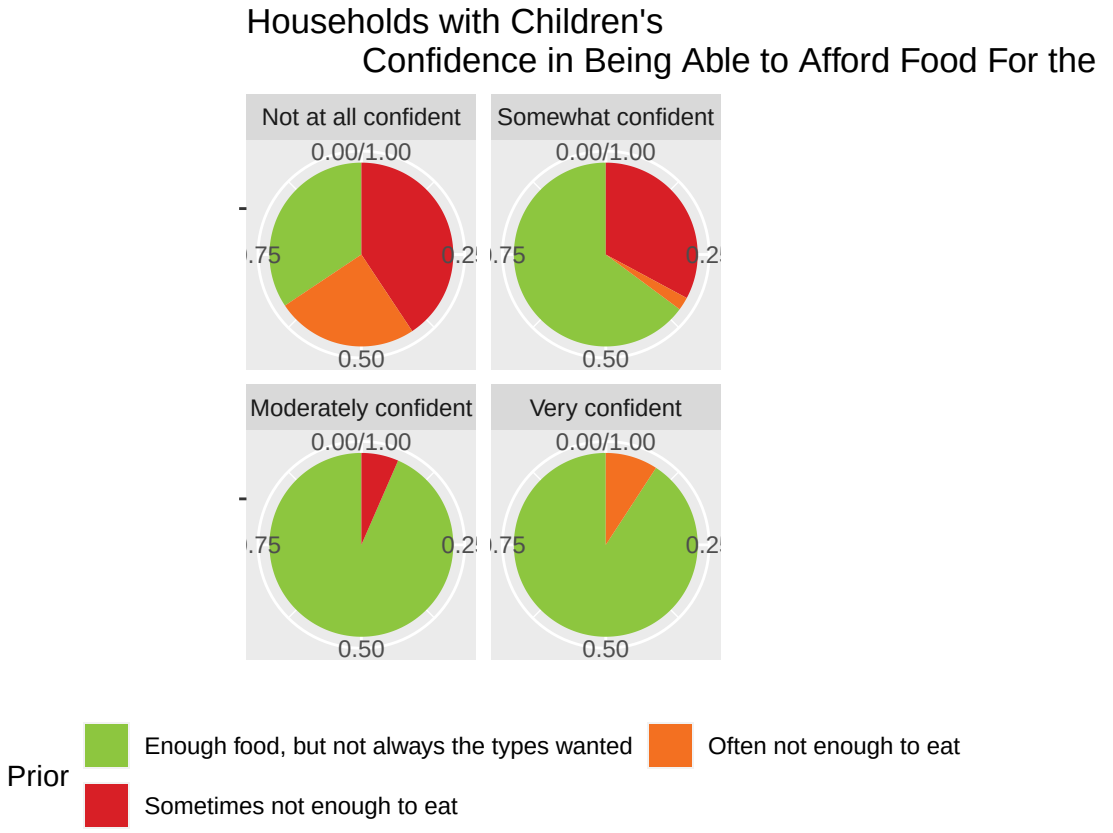
```
  fontface.labels = c(4, 1),
  overlap.labels = 1,
  align.labels = list(
    c("left", "center"),
    c("right", "bottom")
  ),
  bg.labels = 255,
  fontsize.labels = c(13, 7),
  palette = "Set2",
  title = "Ways households receive free groceries/meal in last 7 days by food sufficiency level ",
  fontsize.title = 12,
)
```



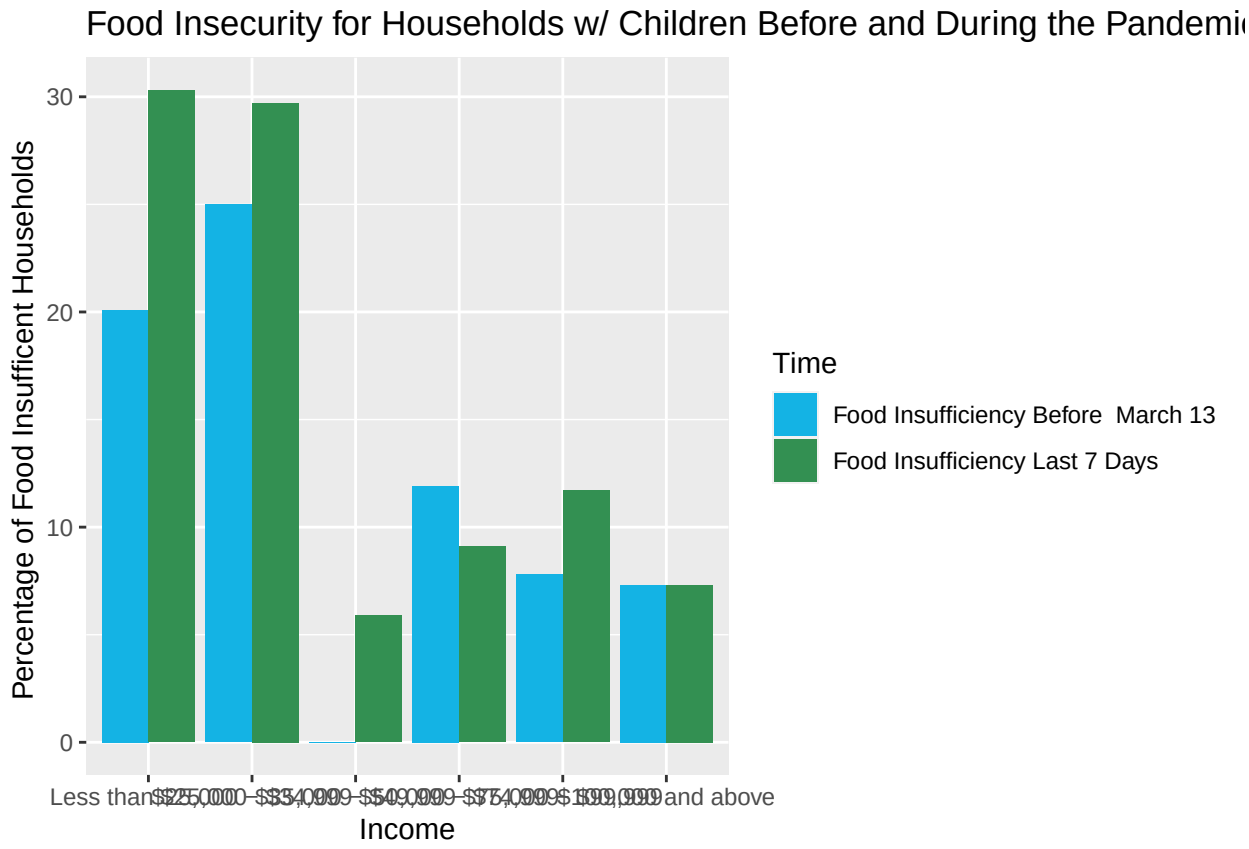

```
ggplot(Food3, aes(x = Time, group = Status, y = Percentage, color = Status)) +
  geom_line() +
  ylim(0, 15) +
  ggtitle("Households with Children Are More Likely to be Affected by Food Insecurity During Covid-19 C
  geom_label(label = Food3$Percentage, hjust = 1.3, vjust = 1, nudge_x = .01)
```



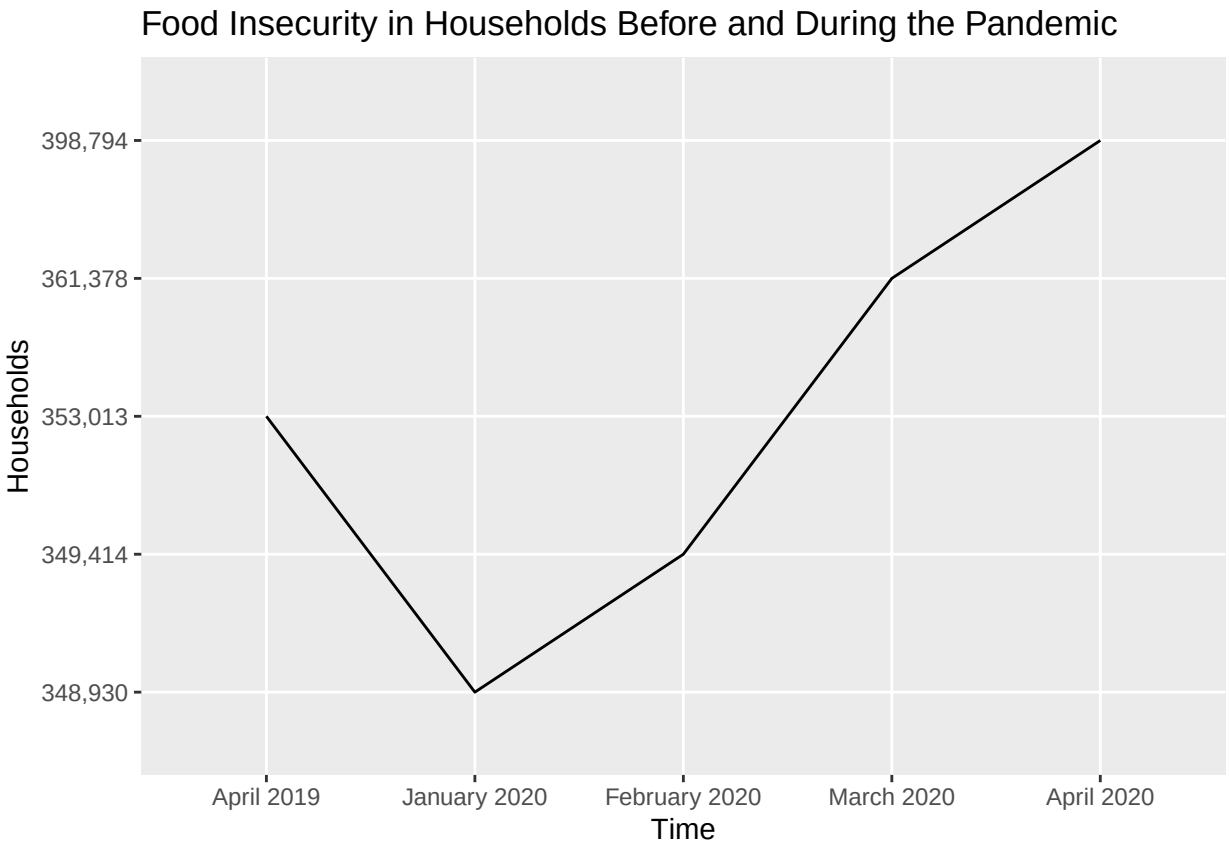

```
Food4$Confidence <- factor(Food4$Confidence, levels = c("Not at all confident",
                                                         "Somewhat confident",
                                                         "Moderately confident",
                                                         "Very confident"))

ggplot(data = Food4, aes(x = "", y = Number, fill = Prior)) +
  geom_bar(stat = "identity", position = position_fill()) +
  # geom_text(aes(label = Number), position = position_fill(vjust = 0.5)) +
  coord_polar(theta = "y") +
  facet_wrap(~Confidence) +
  theme(
    axis.title.x = element_blank(),
    axis.title.y = element_blank()
  ) +
  theme(legend.position = "bottom") +
  guides(fill = guide_legend(nrow = 2, byrow = TRUE)) +
  ggtitle("Households with Children's
            Confidence in Being Able to Afford Food For the Next Four Weeks by Prior Food Insufficiency
  scale_fill_manual(values = c("#8dc63f", "#f37021", "#d81f26"))
```




```
Food5$Income <- factor(Food5$Income, levels = c("Less than $25,000",
                                                "$25,000 - $34,999", "$35,000 - $49,999",
                                                "$50,000 - $74,999", "$75,000 - $99,999",
                                                "$100,000 and above"))

ggplot(Food5, aes(x = Income, fill = Time, y = Percentage)) +
  geom_bar(position = "dodge", stat = "identity") +
  ylab("Percentage of Food Insufficent Households ") +
  ggtitle("Food Insecurity for Households w/ Children Before and During the Pandemic by Income") +
  scale_fill_manual(values = c("#14b3e4", "#339052"))
```




```
Food6 <- data.frame(
  "Time" = c(
    "April 2019", "January 2020",
    "February 2020", "March 2020", "April 2020"
  ),
  "Households" = c("353,013", "348,930", "349,414", "361,378", "398,794")
)
Food6$Time <- factor(Food6$Time, levels = c(
  "April 2019",
  "August 2019",
  "January 2020", "February 2020", "March 2020", "April 2020"
))

ggplot(Food6, aes(x = Time, y = Households, group = NA)) +
  geom_path() +
  ggtitle("Food Insecurity in Households Before and During the Pandemic")
```


Food Insecurity in Households Before and During the Pandemic
Households
398,794
361,378
353,013
349,414
348,930
April 2019
January 2020
February 2020
March 2020
April 2020
Time