Capstone

2023-01-29

```
library(dplyr)
```

```
##
## Attaching package: 'dplyr'
```

```
## The following objects are masked from 'package:stats':
##
##     filter, lag
```

```
## The following objects are masked from 'package:base':
##
##     intersect, setdiff, setequal, union
```

```
library(ggthemes)
library(devtools)
```

```
## Loading required package: usethis
```

```
library(tidyverse)
```

```
## ── Attaching packages ─────────────────────────────────────── tidyverse 1.3.2
## ──
```

```
## ✔ ggplot2 3.4.0     ✔ purrr   1.0.1
## ✔ tibble  3.1.8     ✔ stringr 1.5.0
## ✔ tidyr   1.3.0     ✔ forcats 0.5.2
## ✔ readr   2.1.3
## ── Conflicts ────────────────────────────────────────── tidyverse_conflicts() ──
## ✖ dplyr::filter() masks stats::filter()
## ✖ dplyr::lag()    masks stats::lag()
```

```
library(urbnthemes)
```

```
## Setting Mac/Linux options...
##
## Attaching package: 'urbnthemes'
##
## The following objects are masked from 'package:ggplot2':
##
##     geom_bar, geom_col, scale_color_discrete, scale_color_gradientn,
##     scale_color_ordinal, scale_colour_discrete, scale_colour_gradientn,
##     scale_colour_ordinal, scale_fill_discrete, scale_fill_gradientn,
##     scale_fill_ordinal
```

```
devtools::install_github("UrbanInstitute/urbnthemes")
```

```
## Skipping install of 'urbnthemes' from a github remote, the SHA1 (f6a368d6) has not changed since last install.
##   Use `force = TRUE` to force installation
```

```
devtools::install_github("UrbanInstitute/urbnmapr")
```

```
## Skipping install of 'urbnmapr' from a github remote, the SHA1 (ef9f4488) has not changed since last install.
##   Use `force = TRUE` to force installation
```

```
setwd("/Users/tomcooklin/Desktop/Capstone")
```

```
husa = read.csv("psam_husa.csv")
husb = read.csv("psam_husb.csv")
pusa = read.csv("psam_pusa.csv")
pusb = read.csv("psam_pusb.csv")

hus = rbind(husa, husb)
pus = rbind(pusa, pusb)

data = full_join(hus, pus)

keep <- c("SERIALNO","REGION", "ST", "HINCP", "ADJINC", "WGTP", "PWGTP", "AGEP", "RAC1P", "RAC2P", "RACBLK", "RAC
WHT", "RELSHIPP", "SEX")
subset = data[keep]

write.csv(subset, file = "subset.csv")
```

```
d = read.csv("subset.csv")

gini = read.csv("gini_index.csv")
```

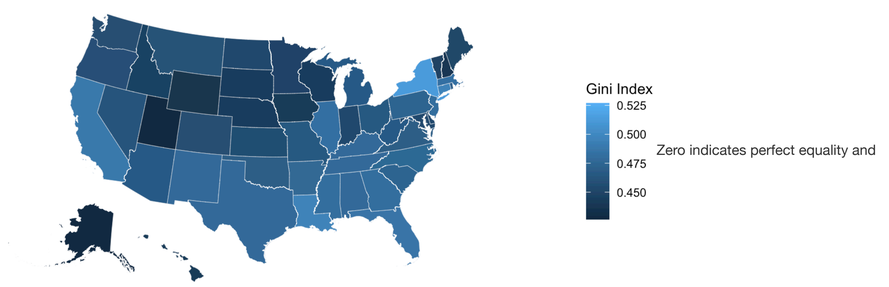
```
states = urbnmapr::states

states = rename(states, "State" = "state_name")

gini_states = left_join(states, gini, by = "State")

gini_states %>%
  ggplot(aes(long, lat, group = group, fill = Gini.Index)) +
  geom_polygon(color = "#ffffff", size = 0.1) +
  coord_map(projection = "albers", lat0 = 39, lat1 = 45) +
  labs(fill = "Gini Index") +
  theme_void()
```

```
## Warning: Using `size` aesthetic for lines was deprecated in ggplot2 3.4.0.
## ℹ Please use `linewidth` instead.
```



Zero indicates perfect equality and one indicates perfect inequality.