Assignment 7

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Question 1

Because the FIPS code in the CSV file was malformed (the leading zero was missing), I lightly processed the data in R before reading it into Mapshaper:

```r
read_csv("pop_18_poverty.csv", col_types = cols(Geo_FIPS = col_character(),
                                                 Geo_NAME = col_character(),
                                                 Geo_QName = col_character(),
                                                 pop_18_in_poverty = col_double())) %>%
  mutate(Geo_FIPS = case_when(str_length(Geo_FIPS) == 4 ~ paste0("0", Geo_FIPS),
                              TRUE ~ Geo_FIPS)) %>%
  write_csv("poverty_data.csv")
```

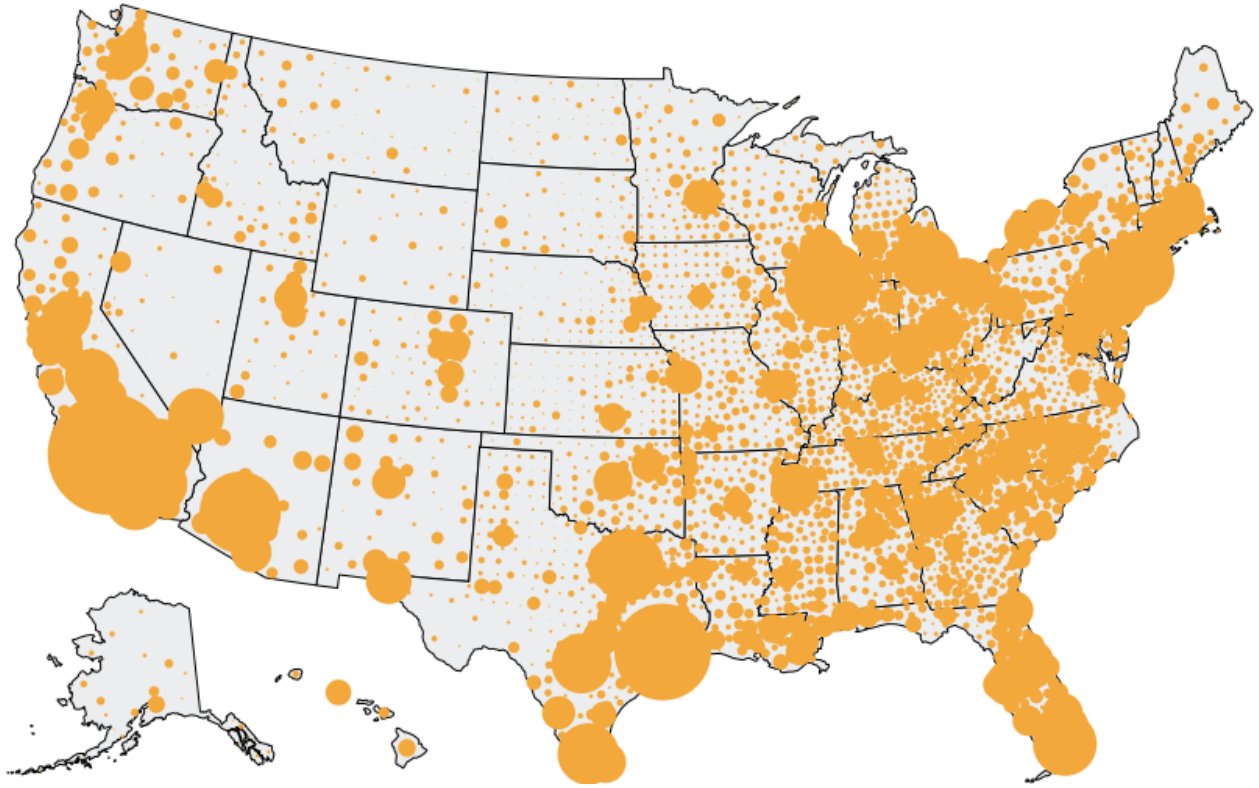When reading the files into Mapshaper, I used the `string-fields=Geo_FIPS` import option.

Once the data were in Mapshaper, I ran the following commands on the county layer:

```
proj albersusa
points
join poverty_data keys=GEOID,Geo_FIPS
style r=Math.sqrt(pop_18_in_poverty/300) fill=#f2a83b
```

I then ran the following commands on the state layer:

```
proj albersusa
style fill=#ecedee stroke=#000
```

The resulting SVG is displayed below and available at https://michaelcgorman.github.io/ppha-30560/assignment-7/mapshaper-output/image.svg

Question 2

The D3 version is available at https://michaelcgorman.github.io/ppha-30560/assignment-7/