

# Assignment: Introduction to mapping in R

EDH7916

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Using data from the `geo` directory in the data folder, please answer the following question. Use comments to respond as necessary.

## Questions

1. Re-project and re-plot your lower 48 states map `df_148` using a CRS code of 3338 (good for Alaska) and 32136 (good for Tennessee). What happens to the map each time?
2. Choose a different cut point for BA attainment and different years. Plot another small multiples plots showing changes over time.
3. Rerun this bit of code,

```
df_sch_zip %>%  
  st_drop_geometry() %>%  
  group_by(zip) %>%  
  summarise(num_schools = n()) %>%  
  arrange(desc(num_schools))
```

but store the results in a tibble this time. Join the tibble back to the `df_zip` sf object and make a plot that color codes each zip code by the number of schools it contains.

4. Using the Alchua County geo data, flip the order of `df_zon` and `df_zip` in `st_intersection()` in order to see how many school zones are in each zip code. Choose a zip code that covers more than one elementary zone and plot it, color coding the unique elementary school zones.

## Submission details

- Save your script (`<lastname>_assignment_mapping.R`) in your `scripts` directory.
- Push changes to your repo (the new script and new folder) to GitHub prior to the next class session.