Assignment #8: Census data and spatial data

1. Read A Guide to Working with US Census Data in R

- a. Site includes a census scraping tools and R packages that include data from the U.S. Census Bureau. Included with the packages are descriptions of what each package does. For instance, the "census" is a scraper package that not only allows for scraping data from multiple areas of the census, but it also does not require an API to use. Though, we will be getting a census API key regardless.
- 2. Get a Census API key from: http://api.census.gov/data/key_signup.html

3.

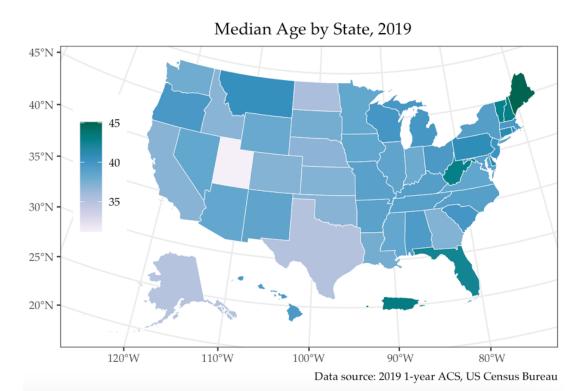


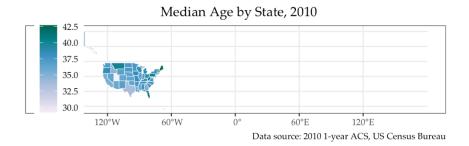
Table ID	₩	Line Number	~	Description	V
XK200101				POPULATION BY SEX	
XK200101				Universe: Total population	
XK200101			1	Total:	
XK200101			2		
XK200101			3	Female	
XK200102				POPULATION UNDER 18 YEARS BY AGE	
XK200102				Universe: Population under 18 years	
XK200102			1	Total:	
XK200102			2	In households:	
XK200102			3	Under 3 years	
XK200102			4	3 to 5 years	
XK200102			5	6 to 8 years	
XK200102			6	9 to 11 years	
XK200102			7	12 to 14 years	
XK200102			8	15 to 17 years	
XK200102			9	In group quarters	
XK200103				MEDIAN AGE BY SEX	
XK200103				Universe: Total population	
XK200103			0.5	Median age	
XK200103			1	Total:	
XK200103			2	Male	
XK200103			3	Female	

a. 2020 data was unable to be loaded. Tidycensus could not load the data due to low response rates, but 2020 data was accessed through: https://www.census.gov/programs-

surveys/acs/data/experimental-data/1-year.html

** this is the table downloaded from the census website.





Above is the visualized 2010 data from the Census Bureau.

4. Comparison: the 2009 and 2020 data are somewhat similar. The population of people aged 37.5 to 42.5 has seemed to have decreased in the northwestern part of the nation. Collection of older individuals along the east coast is relatively similar. Overall, the distribution is similar, with people 35 and under being most prevalent in Texas, North Dakota, and Utah.