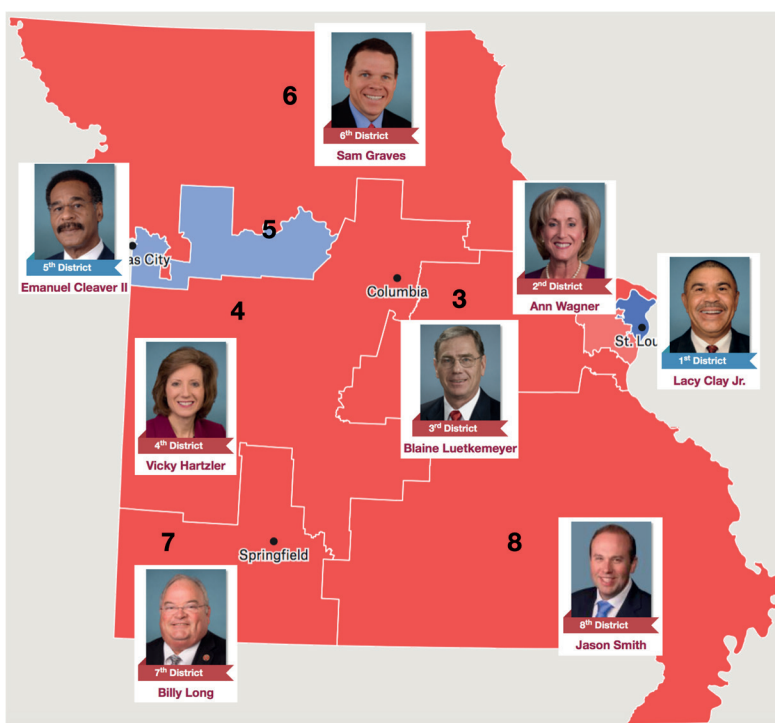


Considering the Fairness of Missouri's Voting District Boundaries

In Missouri, based on the 2016 and 2020 presidential elections, about 57% of Missourians vote Republican. As of January 2021, 6 of Missouri's 8 U.S. representatives are Republican. (Consider *contextual changes and/or updates*.)



Source: 2012 Congressional Map from Missouri Secretary of State, www.sos.mo.gov. Missouri Congress Members from www.congress.gov.

Is this OK? The politicians who draw the voting districts would probably never *admit* it if they had cheated, so how could we tell?

1. Today's challenge: Create a measure that quantifies the fairness of voting district boundaries. The application of your measure to a voting situation should result in a clear conclusion of either "cheating" or "not cheating."

2. Use the data in Table 1 below from Missouri’s 2020 election of U.S. representatives to try out your measure. (Consider *contextual changes and/or updates*)

Table 1

2020 Missouri U.S. Congressional Districts

2020 Missouri U.S. Congressional Districts		
District	Republican	Democrat
1	59,940	249,087
2	233,157	204,540
3	282,866	166,095
4	245,247	107,635
5	135,934	207,180
6	258,709	118,926
7	254,318	98,111
8	253,811	70,561

3. What questions or “wonderings” do you have after working on this task?

Optional workspace:



