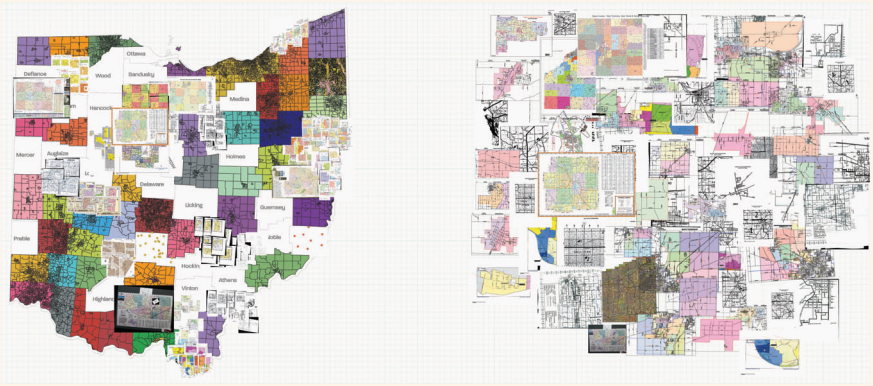
THE DATA

Throughout all of the debates about how best to study gerrymandering, there's a fundamental need for a certain kind of data that is very hard to get. Americans vote in *precincts*, which are geographical units for election administration that usually have a population of a few hundred to a few thousand. For instance, the math department at Tufts is in a small building that has two entrances, each in different precincts. The main entrance is in a precinct with Census population 3902, and the back entrance is in a different precinct with population 3567. What's more, those precincts are in different cities and different Congressional districts! The front door is represented by Katherine Clark and the back door is represented by Ayanna Pressley. Typically, each precinct has a single polling place, but it's sometimes several-to-one in either direction.

Election results are typically reported in cast vote totals per precinct. Front door precinct cast 1270 votes for Clinton in 2016 against 120 votes for Trump, while back door precinct went 1013-167.

Believe it or not, in most states in the country, *nobody knows where the precincts are at any given moment*. That's because local election officials—usually county officials, but in some states like MA and WI it's actually town officials—have the authority to administer elections and to change precinct boundaries, and in many states they have no reporting requirements, so even the secretary of state is not kept abreast of changes.



At the Voting Rights Data Institute in 2018, we put dozens of students to work on figuring out the precinct boundaries of Ohio. We called all 88 counties to ask the simple question: can you send us a map of your precincts? 46 counties sent shapefiles. 27 counties had PDF maps. 8 counties sent paper maps (including highway maps with marker and tape). 7 had nothing. Our team spent hundreds of person-hours digitizing and georeferencing the maps to build a statewide shapefile, which you can see at districtr.org. And that was for one year's elections! So whenever you see highly granular color-coded maps of election results, think twice about the accuracy of the dataset.

Excerpted from *Political Geometry*, forthcoming.