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With Maps 13151 and 13209, the largest issue we notice is the splitting of more counties than is necessary. For example, look at the border between Districts 1 and 2 on Map 13151: This border alone splits five counties: Washington, Monroe, Noble, Morgan, and Perry Counties. As a general matter, any border between two districts needs to only split one county at most, unless there is another higher-tiered criterion that requires sacrificing additional specific counties. So, for example, it might be possible to assign all of Washington County to District 1 and assign all of Monroe, Noble, and Perry Counties to District 2; finally, Morgan County would be split between Districts 1 and 2 in such a way as to equalize their populations perfectly. This approach would minimize split counties while equalizing population.

A similar issue arises at the borders of Districts 11/12 in Map 13151, Districts 4/9 in Map 13209, Districts 4/13 in Map 13209, and Districts 3/4 in Map 13209.

In general, any shared border between two districts only needs to split, at most, one county, one municipality, and (for congressional plans) one precinct. So if a shared border between two districts splits more than one county, then it's possible to reduce this to one split, absent a higher-tiered criterion (eg, the Voting Rights Act) that predominates and necessitates additional splits.

Some general comments about the way these three maps handle the Cleveland area (Cuyahoga County): Note that Cleveland is small enough in population to be fully contained within a single district, and Map 13106 does a good job at this. Additionally, note that Cuyahoga County (population of 1.25 million) is small enough to fully fit within only two districts. Maps 13106, 13151, and 13209 all split Cuyahoga into 3-4 districts. To address this issue, one might start by first assigning all of Cleveland into a single district, as Map 13106 did. Second, expand this Cleveland-based district in such a way as to satisfy the VRA. Third, assign the balance of Cuyahoga County into a second district, which will not yet be fully populated (because Cuyahoga does not have enough population to fill two districts fully). Finally, complete this second district by adding a portion of one of the surrounding counties, such as Summit County.

There is a similar issue in the Columbus area (Franklin County). Columbus is too large to fit within a single district, but all of Franklin County can fit fully within two districts. Thus, to minimize county splits in the districting plan, one might begin here by drawing one district fully within Franklin County (such a district would contain part, but not all, of Columbus). Then draw a second district that contains the balance of Franklin County, combined with areas outside of Franklin.

Maps 13106 and 13209 both do a good job of minimizing splits in the Cincinnati area.