

# LACRA & RESPONSIVENESS



## Summary

The Pennsylvania General Assembly has refused to transfer its redistricting power to an independent commission. Therefore, a legislative contingency plan containing line-drawing criteria and increasing public input and transparency has been introduced as the Legislative and Congressional Redistricting Act (“LACRA”). This bill (HB22/SB222), would ensure that whatever maps the Legislative Reapportionment Commission and congressional redistricting committees produce in 2021 will be responsive to changes in voters’ preferences.

## What is responsiveness? What does it seek to measure?

As defined in LACRA, the responsiveness criterion seeks to ensure that a particular group of voters can “translate their popular support into representation” and “that such representation is . . . reflective of shifts in the electorate’s preferences.” Concretely, responsiveness is the rate at which a change in a party’s vote-share increases or decreases in proportion to that party’s seat-share.

Essentially, a responsiveness criterion measures whether election outcomes will respond to changes in the will of the people or whether they will be durable against shifts in popular opinion. In general, low responsiveness will protect incumbents from any party due to cemented margins of victory. Such insulation eliminates a voter’s ability to vote out their representative. High responsiveness, on the other hand, will benefit whichever party wins a majority of votes in a given legislative or congressional election and can allow districts to switch parties from election to election if the voters so choose. Importantly, responsiveness does not favor any particular party.

## How is responsiveness typically measured? And how reliable is it?

Since responsiveness is a relationship between a party’s vote-share and its seat-share, the [seats-to-votes curve](#) “is the most appropriate vehicle to assess” a particular district plan. Once the seats-to-votes curve is plotted, experts create a “line of best fit” to estimate the relationship between vote-share and seat-share, and responsiveness is measured by the slope of this line. Generally, a steeper slope for the [part of the curve](#) that falls closest to the state’s average vote-share will correspond with a responsive map. For example, the slope for the seats-to-votes curve of [Pennsylvania’s unresponsive 2012-2016 congressional map](#) is nearly flat within the range of actual vote-share between 2006-2016. The curve for the [remedial 2018 map](#), on the other hand, is smooth, constant, and steep within that critical range, showing that it is likely more responsive.

Using the seats-to-votes curve analysis, responsiveness is generally a reliable criterion for gauging a voting bloc’s ability to translate its popular support into representation. It becomes all the more reliable when combined with the criterion that prohibits the undue favoring of a party on a statewide basis. All that said, as with other metrics, responsiveness may be affected by things like incumbency and political geography.

## How does it work in the map-drawing process? Do you first draw a map that meets your other goals, and then test whether it results in districts that are likely to be responsive?

Yes, a map-drawer would first draw a map that complies with all of LACRA’s other criteria (e.g., compactness, communities of interest, county-splitting rules, etc.), and then the map-drawer would run the responsiveness analysis. If the analysis shows that a map is sufficiently responsive based upon the seats-to-votes curve measure described above, then the map has met this criterion. If not, the map-drawer would return to the drawing board.

## Why is responsiveness desirable as a goal? And what are its advantages as a redistricting criterion?

Responsiveness is a desirable goal because it seeks to prevent the worst ill of gerrymandering: durable lack of representation. As defined by [Bernard Grofman and Ronald Gaddie](#), “If a map is responsive, then when voters change their allegiances, their representation also changes.” Further, responsiveness is advantageous as a redistricting criterion because rather than focusing purely on partisan outcomes or ensuring that every district is as close to 50% as possible, it makes sure that the preferences of the voters can adequately translate into representation in Congress and in the Pennsylvania General Assembly.



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