**What is Gerrymandering?** (intro)

A fundamental facet of American democracy since the 1800’s, gerrymandering refers to the process of drawing voting district lines in a way that offers a political advantage to a specific political party or group of people. This process is a hot-button issue in the current American political climate, as experts debate whether the construction of non-competitive districts in state and federal elections has contributed to the polarization of the political landscape, while legal arguments on the lawfulness of this practice have reached the Supreme Court. The drawing of district lines determines the political representation of a state’s population, with each district sending one representative to state or federal governing bodies, and can therefore have serious societal ramifications.

District lines throughout the country are mostly redrawn every ten years, after a new census determines the sociological makeup of a state’s residents. In most states, this line-drawing process is controlled by state legislatures. If one political party has universal control over the legislature and this process in a state, they could use this power to draw lines that offer them a political advantage, opening up the possibility to earn a disproportionately high number of representative seats, even if they don’t have the majority of votes in a state. Let’s look at an example of how manipulating district lines may lead to such a disproportionate advantage. Below we explore a couple line-drawing scenarios in an example state, with an equal number of votes between a Red and Blue political party. In each scenario, we can see how changing the district lines can result in a different number of representatives elected by each party, even though voting totals remain unchanged.

**How do we quantify Gerrymandering?** (introduce Supreme Court case, the need for quantification, and what it can accomplish)

Political gerrymandering’s opponents have argued that the process provides an unfair advantage for one party over another, contributing both to political polarization and the ability for a minority voice to control policy while silencing the will of voters. This argument has been brought before the Supreme Court in the past, most recently in the Vieth v. Jubelirer case in 2004. In this case, the Court ruled 5-4 that partisan gerrymandering was NOT unconstitutional. However, one of the consenting justices, Justice Kennedy, wrote that he was indeed troubled by extreme partisan gerrymandering, but didn’t quite know how to define it. He left the door open for this argument to come back to the court, with the clear directive that if a plaintiff could bring him a clear workable standard to define such extreme gerrymandering, he may vote that district lines that violate such a standard are unconstitutional. Is it in this directive from a pivotal swing vote in the Supreme Court that quantifying gerrymandering became a top priority for political scientists.

This issue has now found its way in front of the Supreme Court, this time in the case of Whiftford v. Gill, which is evaluating the constitutionality of Wisconsin’s state congressional map drawn by a Republican-controlled state legislature in 2011. Oral arguments for this case were held in October 2017, with a decision expected in the first half of 2018. In this case, the plaintiffs are presenting a three-part standard to classify what constitutes ‘extreme political gerrymandering:’

Whiftford v Gill – oral arguments in october, decision in first half of 2018 – getting rid of partisan bias, which means lawamkers drawing lines that benefit one party over another

* 2004, four members of supreme court were willing to consider partisan gerrymandering was unconstitutional if it was too extreme. Five did not agree, but the fifth was kennedy, who said he was troubled by “extreme partisan Gerrymandering,” but didn’t know how to define that  
  vieth v jubelirer
* If workable standards emerge, courts should be prepared to order relief – bring me a standard that is manageable

Plantiff’s in current Supreme Court case have argued the following standard for measuring ‘excessive partisan gerrymandering’:

Standard has three parts:

1. Was the map enacted with discriminatory intent – was the motive to benefit one party over another
2. Whether a map has actually produced a ‘large and durable’ discriminatory effect – are one party’s votes being wasted more than the others **(THIS SITE EXPLORES THIS CONCEPT HERE ONLY)**
3. Whether there is any legitimate justification for a plan’s discriminatory effect – explanation other than gerrymandering that explain one party is wasting their votes more than another.

**The efficiency Gap**

Way to measure partisan gerrymandering. This metric, used in arguments for a workable standard to quantify gerrymandering in front of the Supreme Court, rests on the notion that gerrymandering takes place by concepts called ‘cracking’ and ‘packing’. Cracking disperses opposing supporters across a high number of districts where their candidates lose by narrow margins. Packing concentrates opposing supporters into fewer districts where their candidates win by overwhelmingly high margins. Both of these strategies produce what political scientists call ‘wasted votes,’ which are votes that don’t directly contribute to the election of a candidate. So, all votes that are cast for a losing candidate or for the winning candidate above the 50% margin needed to win a district are considered ‘wasted’. The efficiency gap then subtracts one party’s wasted votes from another, taking this difference as a percent of overall votes cast in elections within that state, measuring the extent with which one party is more ‘cracked’ and ‘packed’ than the other party.

**Difference from Proportional Seat Count**

The right for proportional representation in legislature does not exist, but exploring the difference between the amount of votes won and districts won can give us a sense on how ‘fair’ election results were, and what kind of congressional impact these results have on our lawmaking governmental wing. If one party won disproportionately more seats than they would have ‘expected’ to win in pure proportional representation, it might be worthwhile to explore these results in more detail.

**Do metrics support evidence of Gerrymandernig in**

Plaintiffs argue map should only be illegal if the bias in the maps is deliberate, and not a factor of natural political geography. This analysis only explores whether there is bias in the maps that were in use during the 2012 Congressional elections, NOT whether district lines should be conclusively considered unlawful if the Supreme Court rules in favor of the plaintiffs in Whitford v. Gill. Further analysis would be necessary in states that display bias below to determine if these results were deliberately constructed by parties in control of state legislatures at the time of redistricting, or whether they have occurred naturally. Experts who have crafted the studies that explore this metric suggest a cut-off of an 8% efficiency gap, with anything above this line being considered unfairly biased. For reference, we’ve added this benchmark in the chart below to compare which states

Experts: nick stephanopoulos and eric mcghee