Competitiveness in the Constitution

Article 4 Part 2 Section 1 (14)(F)

"To the extent practicable, competitive districts should be favored where to do so would create no significant detriment to the other goals."

Sample Definitions

National Conference of State Legislatures:

> "Districts having relatively even partisan balance, making competition between the two major parties more intense."

Professor Michael McDonald:

> "[Districts] in which each major party has an equal chance of winning and in which we don't know before the election who will win."

Challenges

- How to measure “competitiveness”?
- Which is preferable:
  - Creating a highly competitive district if it requires also creating two ultra-safe districts?
  - Two semi-competitive districts, or one highly competitive and one safe?
- “The Big Sort”
  - More and more, people tend to live in counties where people tend to vote like them.
  - In a similar vein, the Voting Rights Act or other criteria may require the concentration of voters of one party in a District.
    - In states where that party is the larger party, this can improve competitiveness in the other districts.
    - But where that party is the smaller party, this makes it more difficult to draw competitive districts elsewhere.

The Big Picture

- Competitiveness is a scale, not a yes/no answer.
- Upsets happen: some elections are competitive, even when the competitive measures say they are not.
- The incumbency advantage and/or extraordinary candidates can skew competitiveness data.

- The goal: if voter preferences change from election to election, the people elected should change too.

Recent Developments

Vieth v. Jubelirer (2004) - Pennsylvania

- Justice Kennedy's "call for papers" on ways to detect and measure partisan bias in plans

Gil v Watford (2018) – Wisconsin

- Focus on the "Efficiency Gap" measure

Rucho v Common Cause (2019) – North Carolina

- "Extreme outlier approach" looking back at the map's actual election returns

Partisan Gerrymandering Measurements

1. Seats-Votes Bias / Partisan Swing / Partisan Symmetry
2. Responsiveness
3. Proportionality
4. Mean-Median difference
5. Declination
6. Efficiency Gap
7. Extreme Outlier analysis
8. Reasonable Bias
9. and more . . . .

Looking Ahead vs Looking Back

"While it is a straightforward calculation to identify seats-votes gaps at the end of a decade, it is more problematic to project them with a high degree of certainty into the future."

- Bruce Cain and Wendy Cho, "A Reasonable Bias Approach to Gerrymandering," William & Mary Law Review, No. 5, 2018, p. 1525.

"It appears that the concept of political fairness, like compactness, is multidimensional and cannot be fully captured by a single number."

- Ibid, p. 1527.

Elements of Measurements

- Measure Republican vs Democratic lean
  - Independent of candidate factors, incumbency, etc.
- District-specific
  - Some measures evaluate plans for partisan gerrymandering, but Arizona's constitution calls for individual competitive districts.
- Forward-looking
  - It is relatively easy to identify partisan bias / lean looking backwards, but much harder to predict.

No Perfect Measure

Competitiveness measures can disagree:

"We find that choosing to optimize on any given measure as opposed to another does indeed lead to different conclusions about the best districts."

- Cain & Cho, p. 1546.

Usefulness of Measures

- Ease of Measurement
  - Can people drawing maps analyze the impact on competitiveness as they draw?
  - Or do plans need to be drawn and then sent off for evaluation?
  - *Given the Census delays, the time factor is a much bigger consideration than for past redistricting efforts*
- How does a measure handle an uncontested election?
- How does a measure handle a multi-winner election?
- Is the measure influenced by incumbency advantage?

Incumbency Impact

- For the sake of discussion, assume an incumbent has a 9% “incumbency advantage.”
  - A district where a challenger to that incumbent is “highly competitive” would need to lean against the incumbent’s party to offset that incumbency advantage.
  - But if the challenger wins, the new incumbent adds that 9% “incumbency advantage” to the built-in “lean against the old incumbent’s party” and the seat is now “safe” for the rest of the decade.
- *Open seats are almost always more competitive than incumbent-held seats.*

Simple Measures

- Voter Registration
  - Easy to understand, measure and calculate
  - Rise of independent voters undermines usefulness

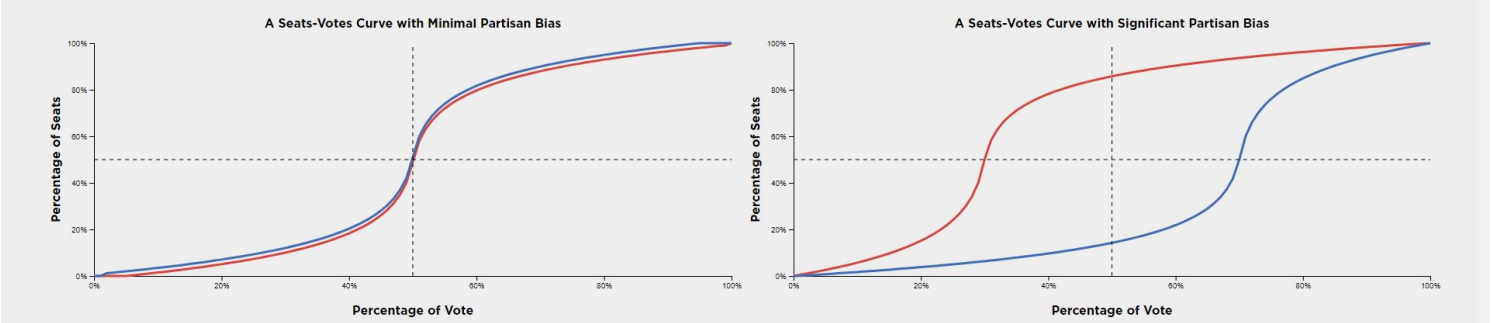
- Individual or Average of High-Profile Election Results
  - Easy to understand, measure and calculate
  - Force voters to an R vs D choice, removing independent voter registrations challenge
  - Candidate personalities and election-specific factors undermine value as a measure of the competitiveness of individual legislative and congressional districts

More Simple Measures

- Low-Profile Statewide Elections
  - Candidate-based factors are minimized due to relatively low profiles.
  - Voters are more likely to vote based on pure partisan lean.
  - But there are fewer “low-profile” elections in AZ recently.
    - The 2001 commission used “Arizona Quick & Dirty”: a four-year average of Arizona Corporation Commission elections.
- Ballot Proposition or average of Proposition votes
  - Free of candidate personalities.
  - But rare to find clear R vs D ballot measures that do not involve significant partisan cross-over

More Complicated Measures I

- Partisan Swing
  - Acknowledges no perfect 1:1 parallel between votes and seats
  - Measures whether one party gets more advantage from “one more vote” than the other party
  - For example, if both parties get 54% of the total vote, do they get an equal “winner’s bonus”?
  - A plan-wide, rather than a district-specific, measure



Images By Jeffrey Shen, Exploring the Seats-Votes Curve, https://jeffreyshen19.github.io/Seats-Votes-Curves/

More Complicated Measures II

- Efficiency Gap
  - Measures “wasted” votes
    - “Extra” votes for a party in a seat the party wins
    - All votes cast for a party in a seat the party loses
    - A plan-wide measure rather than a district-specific measure
    - Works better looking back than looking ahead
- Mean-Median
  - What is the difference between a party’s average or mean vote across the districts and the party’s median vote?
    - A match indicates supposedly “fair” districts, but that differs from *competitive* districts
    - A plan-wide measure rather than a district-specific measure
    - Works better looking back than looking ahead

More Complicated Measures III

- Declination
  - A party's vote share in each district is ranked from high to low
  - A significant shift at the win/loss point indicates partisan gerrymandering
    - A plan-wide measure rather than a district-specific measure
    - Works better looking back than looking ahead

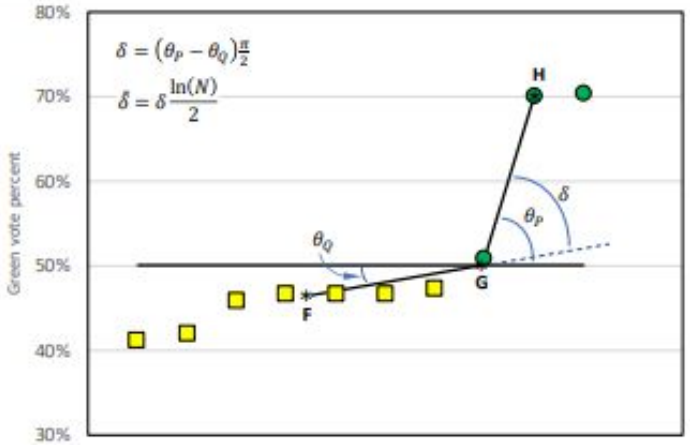


Chart from "An Introduction to Partisan Gerrymandering Metrics," by Craig F. Merrill, Ph.D. December 2017

Revisiting the Challenge

- Most advanced measures were developed to identify and *prevent* partisan gerrymandering, not to enhance competitiveness.
- Many measures focus on the bias of the entire map, not on the competitiveness of individual districts.

- In a partisan gerrymander, a competitive district can be a sign of gerrymandering.
  - Rather than allowing the out-of-power political party a safe seat, the gerrymandering party might manipulate the lines to make the seat competitive.

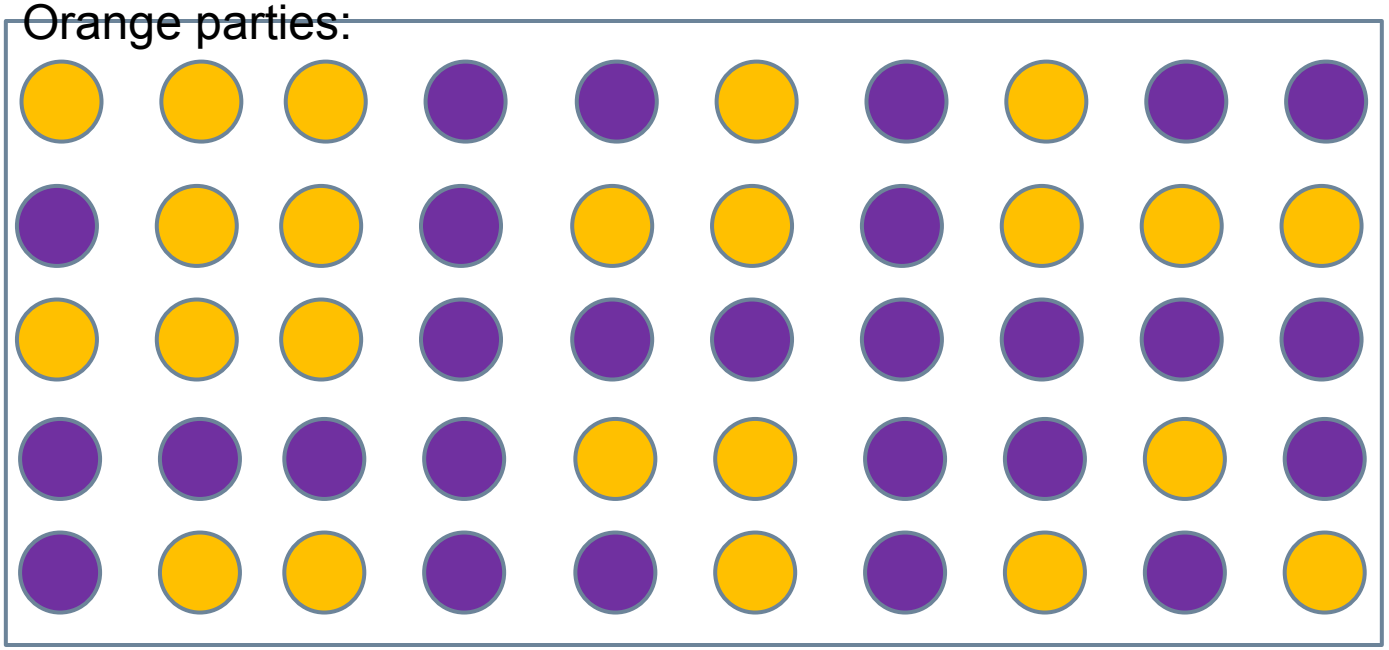
Options

- Possibly use some average of past election results.
  - Easy to calculate on the fly
  - Easy to understand
  - Challenge is choosing (and weighting?) past elections to use
- Possibly “score” maps with points for highly competitive and competitive districts, and negative points for “blowout” districts.
- Possibly review key maps with more advanced analysis.
- Public and academics may have additional ideas.

Practical Look at Decisions

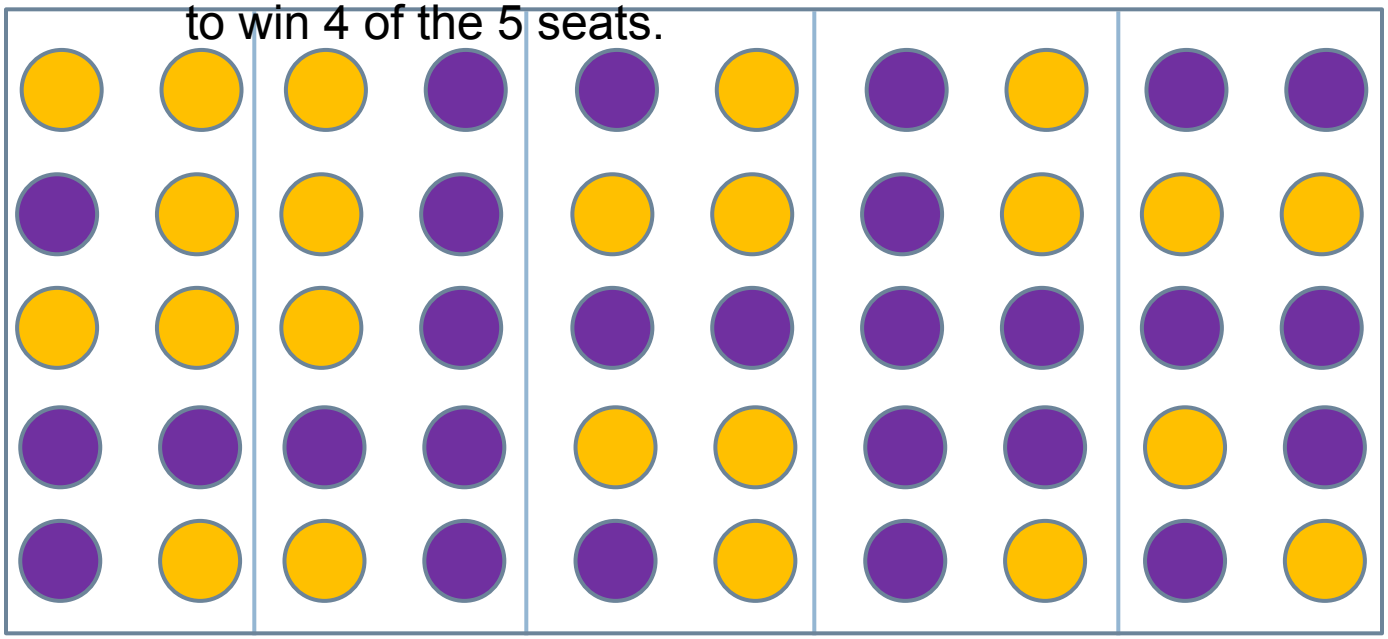
Regardless of which measure is used, competitiveness decisions can be difficult.

Consider these 50 voters, split 27-23 between Purple and Orange parties:



Scenario I

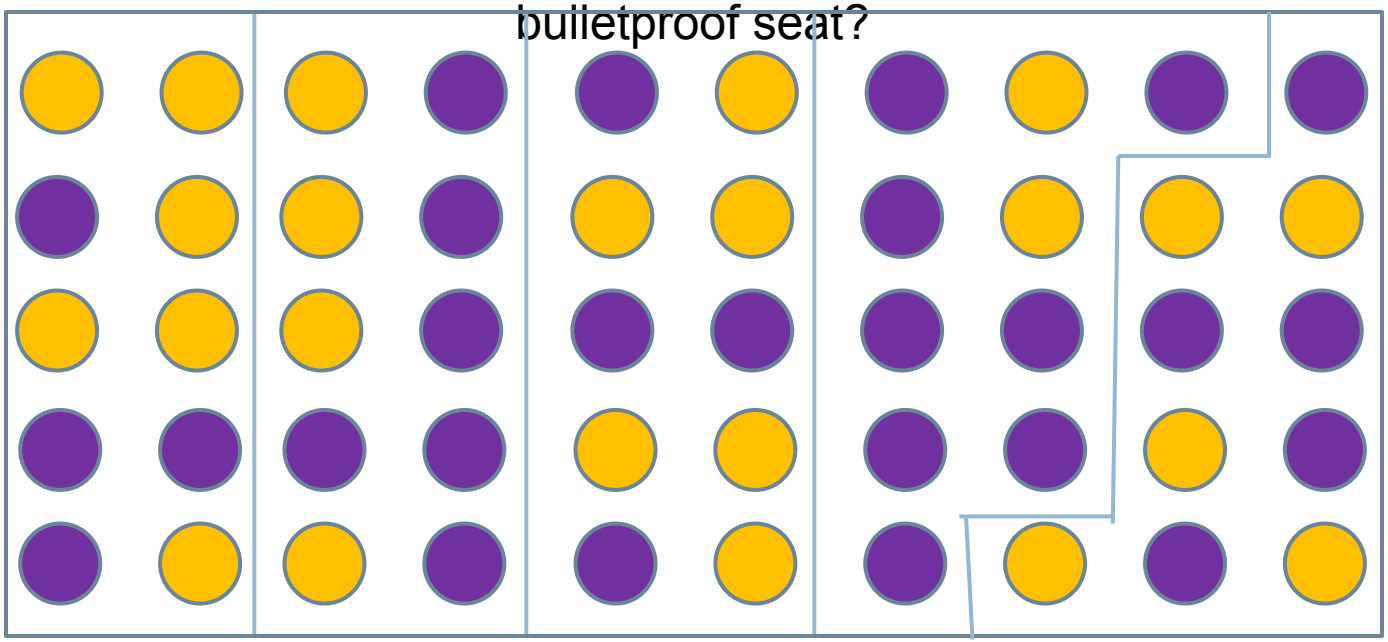
A compact map results in 4 somewhat competitive districts and one safe district, with a 3 to 2 Purple lean, but a chance for Orange to win 4 of the 5 seats.



6 – 4 Orange	6 – 4 Purple	6 – 4 Orange	7 – 3 Purple	6 – 4 Purple

Scenario II

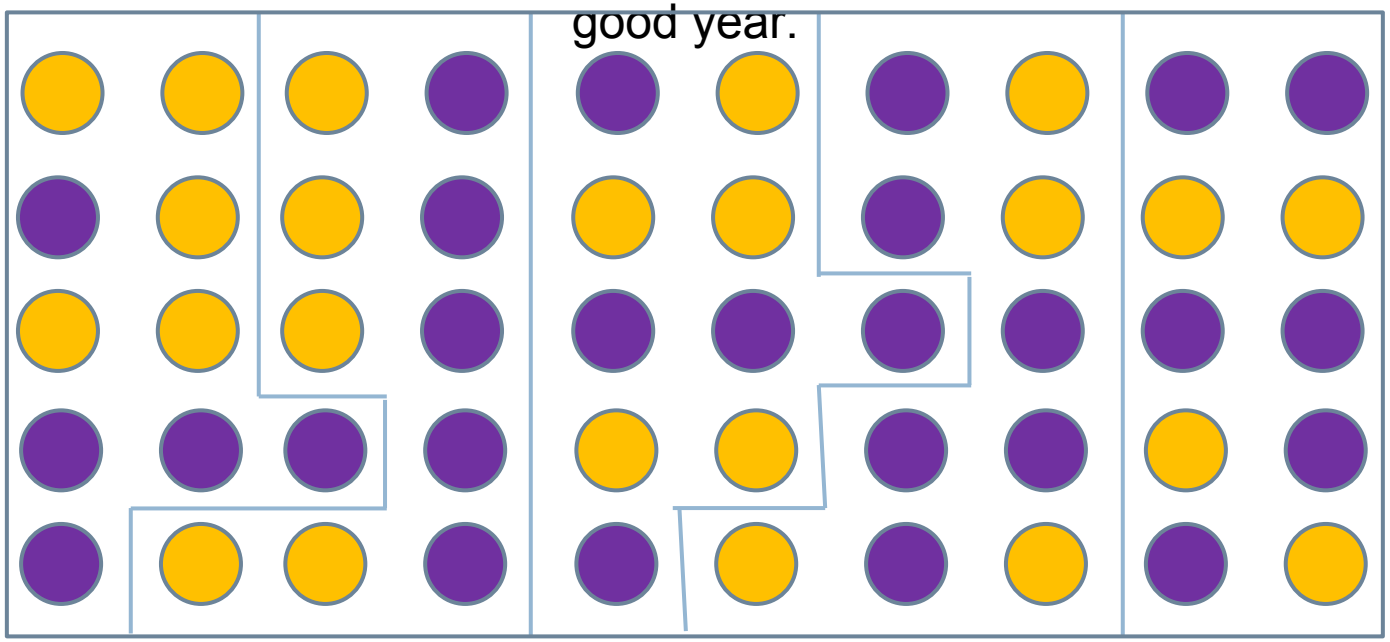
The Commission may need to weigh whether making District 5 into a 5 – 5 highly competitive district justifies making District 4 an 8 – 2 Purple bulletproof seat?



6 – 4 Orange	6 – 4 Purple	6 – 4 Orange	8 – 2 Purple	5 – 5 tie

Scenario III

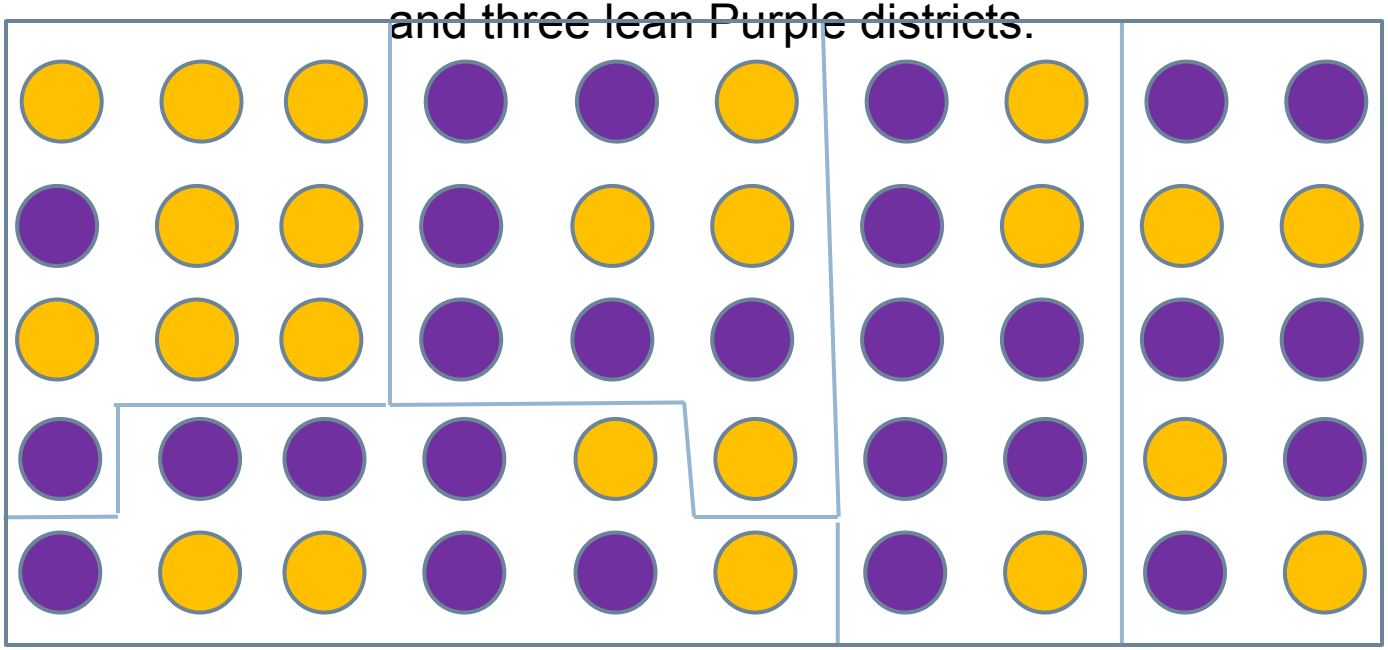
A reconfigured map results in 3 perfectly balanced districts and two somewhat competitive districts. Both lean Purple, but Orange could win all five seats in a good year.



5 – 5 tie | 5 – 5 tie | 5 – 5 tie | 6 – 4 Purple | 6 – 4 Purple

Scenario IV

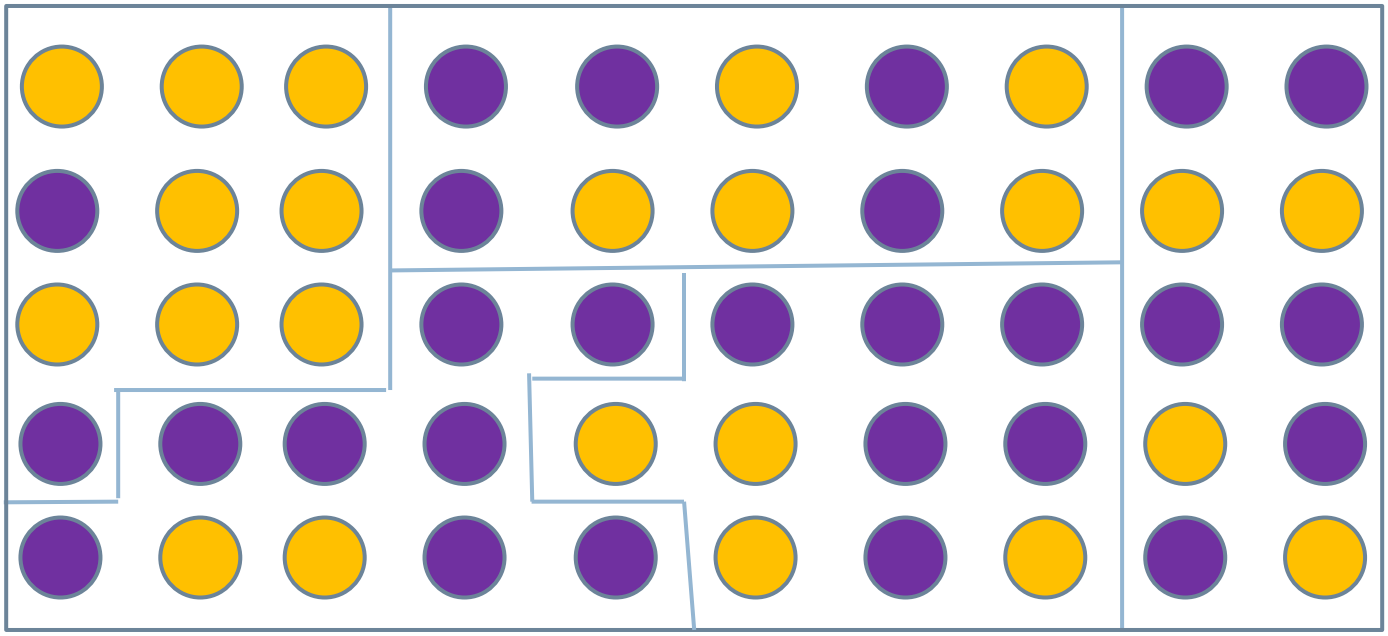
If some other criterion requires concentrating a group of Orange Voters into an 8 – 2 Orange district, that leaves a 25 to 15 Purple advantage in the rest of the map. A possible result is one safe Purple and three lean Purple districts.



8 – 2 Orange	6 – 4 Purple	6 – 4 Purple	7 – 3 Purple	6 – 4 Purple

Scenario V

Does one intentionally draw an 8 – 2 Purple district to offset that impact?



8 – 2 Orange	8 – 2 Purple	5 – 5 tie	6 – 4 Purple	6 – 4 Purple

Scenario VI

Just to show what is possible on the negative side, here is an Orange-gerrymandered map with a likely 3 – 2 Orange advantage in districts:

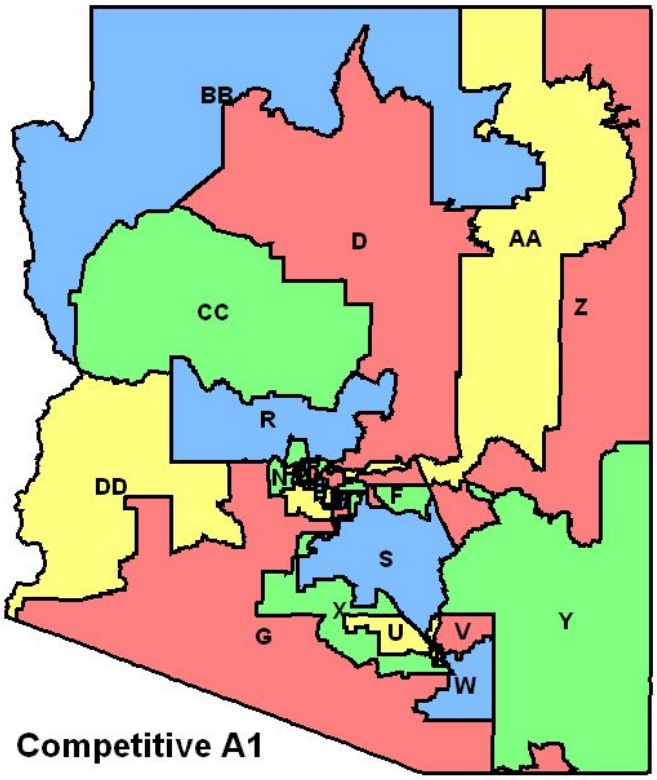
7 – 3	8 – 2	7 – 3	9 – 1	6 – 4
Orange	Purple	Orange	Purple	Orange

Additional Questions

- How to define a “more competitive” map?
  - Hypothetical question:
    Is a map split between ¼ “highly competitive” and ¾ “bulletproof” districts better than a map where 40% of districts are “somewhat competitive” and only 60% “bulletproof”?
  - Another hypothetical:
    If more “somewhat competitive” districts all lean toward one party, is that “fair”?

Keeping Perspective

- Competitiveness is primarily mathematical.
- Anything mathematical can overwhelm other considerations.
- An example:
  - The initial Court ordered "IRC 1.0" to restart with drawing "the most competitive map possib ignoring the other criteria. The result was a map with 24 competitive districts, 3 of which combined Navajo lands with Scottsdale:



Competitive A1

Complicated Decisions

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