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

- 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

- “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.”


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

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

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. 

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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.

<table>
<thead>
<tr>
<th>6 – 4 Orange</th>
<th>6 – 4 Purple</th>
<th>6 – 4 Orange</th>
<th>7 – 3 Purple</th>
<th>6 – 4 Purple</th>
</tr>
</thead>
</table>

Orange: Yellow dots
Purple: Purple dots
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?
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.
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.
Scenario V

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

- How to define a “more competitive” map?
  - Hypothetical question:
    Is a map split between $\frac{1}{4}$ “highly competitive” and $\frac{3}{4}$ “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 possible” ignoring the other criteria. The result was a map with 24 competitive districts, 3 of which combined Navajo lands with Scottsdale:
“To the extent practicable, competitive districts should be favored where to do so would create no significant detriment to the other goals.”