Assessing California’s Redistricting Commission
Effects on Partisan Fairness and Competitiveness

March 2018

Eric McGhee
Outline

- Background and context
- Commission plans: fairness
- Commission plans: competitiveness
- Conclusions and recommendations
Citizen Redistricting Commission (CRC) was a big change

- Elected state legislature $\rightarrow$ independent appointed commission
- Some constraints $\rightarrow$ specific criteria
- A few public hearings $\rightarrow$ dozens of public hearings, internet streaming, explanatory report
- Any partisan coalition $\rightarrow$ partisan membership and coalition dictated by law
Fair and competitive plans hoped for but not required

- Fairness: neither party gets too many seats given its vote
- Competitiveness: many seats change hands as vote changes
- But law only required:
  - No party favorites
  - No incumbent favorites
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How do gerrymanders work?

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50 VOTERS
20 BLUE
30 RED
How do gerrymanders work?

5 DISTRICTS
3 BLUE
2 RED
The packed districts

9 RED - 1 BLUE
The packed districts

“LOST” VOTES

9 RED - 1 BLUE
The packed districts

“LOST” VOTES
+
“SURPLUS” VOTES

9 RED - 1 BLUE
The cracked districts

4 RED – 6 BLUE
The cracked districts

4 RED – 6 BLUE

“LOST” VOTES
The cracked districts

4 RED – 6 BLUE
“LOST” VOTES
+ “SURPLUS” VOTES
The efficiency gap compares wasted votes

\[
\text{SURPLUS VOTES} + \text{LOST VOTES} - \text{SURPLUS VOTES} \rightarrow \text{LOST VOTES} \times 100
\]
The efficiency gap compares wasted votes

\[ \frac{8 + \text{SURPLUS VOTES} + \text{LOST VOTES}}{\text{TOTAL VOTES}} \times 100 \]
The efficiency gap compares wasted votes

\[
\text{Efficiency Gap} = \frac{(8 + 12)}{\text{Total Votes}} \times 100
\]
The efficiency gap compares wasted votes

\[
\text{TOTAL VOTES} = \frac{(20 - 3) + \text{LOST VOTES}}{\text{TOTAL VOTES}} \times 100
\]
The efficiency gap compares wasted votes

\[
\frac{20 - 3 + 2}{\text{TOTAL VOTES}} \times 100
\]
The efficiency gap compares wasted votes

\[
\frac{20}{5} \times 100 = 50
\]
The efficiency gap compares wasted votes

\[ \frac{15}{50} \times 100 \]
The efficiency gap compares wasted votes

\[
\frac{15}{50} \times 100 = +30\%
\]
The efficiency gap can be either seats or seat share

- **Seat share** = seat advantage relative to potential advantage
  - 30%

- **Seats** = total seat advantage
  - 30% of 5 = 1.5
State legislatures $\rightarrow$ seat share
- Power = seat advantage relative to potential advantage

Congress $\rightarrow$ sometimes seat share, sometimes seats
- One seat always means the same thing for congressional majority
  BUT
- Large states can have bigger seat gaps by accident
How does the CRC’s efficiency gap look?

- CRC vs. state legislature
- California vs. other states
Assembly CRC plan is fair, with little change
Senate CRC plan is fair, with slightly more change

![Diagram showing Senate/upper chamber distribution with 2001 and 2011 CA plans highlighted.](chart.png)
Congressional CRC plan has big raw seats change...
...but seat share change is small
Efficiency gap trends vary over time

Assembly/lower chamber

Lower chamber efficiency gaps

California
US

Redistricting

Efficiency gap trends vary over time

 Senate/upper chamber

California

US

Upper chamber efficiency gaps


Redistricting
Efficiency gap trends vary over time

This slide was corrected after the event.
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What does “competitive” mean?

- Districts with vote share outcomes between 45% and 55%
- CRC vs. state legislature
- California vs. other states
Assembly CRC plan is much more competitive, but still on low end nationally
Senate CRC plan is somewhat more competitive, but still on low end
Congressional CRC plan is much more competitive, and on high end
CRC plans are consistently more competitive
CRC plans are consistently more competitive

Senate/upper chamber

Upper chamber competitive (%)

- California
- US

Redistricting

CRC plans are consistently more competitive
Outline

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Conclusions

- CRC plans are as fair as previous plans
  - But with greater tilt toward Democrats

- CRC plans are more competitive than previous plans
  - But still tend to be uncompetitive
Recommendations

- Use all information
- Pick goals in advance
- Use computer-simulated maps
Notes on the use of these slides

These slides were created to accompany a presentation. They do not include full documentation of sources, data samples, methods, and interpretations. To avoid misinterpretations, please contact:

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Thank you for your interest in this work.