**Partisan Bias Analysis**

**2011 Maps with Original Data**

Partisan bias calculations for the 2011 South Carolina election maps using the 2010 Governor’s race as a proxy for voter preferences. Uses 2010 precincts.

|  |  |  |  |
| --- | --- | --- | --- |
| **Map** | **Congressional** | **SC Senate** | **SC House** |
| **Median-Mean** |  |  |  |
| **Geometric Bias\*** |  |  |  |
| **Efficiency Gap\*\*** |  |  |  |

*\*Geometric bias represents overall bias and is not signed at the moment. I am working on a way to indicate the sign of the bias measure.*

*\*\*Average efficiency gap from the districts. EG > 0 indicates that Democrats wasted more votes on average (i.e. a Republican advantage).*

**2011 Maps with Updated Voting Data**

Partisan bias calculations for the 2011 South Carolina election maps using the 2020 Presidential Election and the 2020 U.S. Senate Election. Demonstrates bias measures if we were to keep the same maps as last year. Uses 2020 precincts.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Map** | **Congressional** | | **SC Senate** | | **SC House** | |
| **Proxy** | Presidential | U.S. Senate | Presidential | U.S. Senate | Presidential | U.S. Senate |
| **Median-Mean** |  |  |  |  |  |  |
| **Geometric Bias** |  |  |  |  |  |  |
| **Efficiency Gap** |  |  |  |  |  |  |

**Proposed LWVUS Maps for 2021**

Partisan bias calculations for the proposed LWVUS 2021 South Carolina election maps using the 2020 Presidential Election and the 2020 U.S. Senate Election. Uses 2020 precincts.

Cells in red are measures that are worse (more biased) using the same proxy in comparison to the original 2011 maps applied to 2020 precincts.

Cells in green are measures that are better (less biased) using the same proxy in comparison to the original 2011 maps applied to 2020 precincts.

**Draft 1**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Map** | **Congressional** | | **SC Senate** | | **SC House** | |
| **Proxy** | Presidential | U.S. Senate | Presidential | U.S. Senate | Presidential | U.S. Senate |
| **Median-Mean** |  |  |  |  |  |  |
| **Geometric Bias** |  |  |  |  |  |  |
| **Efficiency Gap** |  |  |  |  |  |  |

**Draft 1a**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Map** | **Congressional** | | **SC Senate** | | **SC House** | |
| **Proxy** | Presidential | U.S. Senate | Presidential | U.S. Senate | Presidential | U.S. Senate |
| **Median-Mean** |  |  |  |  | N/A | N/A |
| **Geometric Bias** |  |  |  |  | N/A | N/A |
| **Efficiency Gap** |  |  |  |  | N/A | N/A |