## Measures of Compactness Report

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\text { Sunday, April 3, } 2022
$$

Number of cut edges: 3,950

|  | Reock | Schwartzberg | Alternate Schwartzberg | PolsbyPopper | Population Polygon | Area/Convex Hull | Population Circle | Ehrenburg | Perimeter | Length-Width |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sum | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 5,343.21 | N/A |
| Min | 0.21 | 1.72 | 1.87 | 0.09 | 0.39 | 0.53 | 0.24 | 0.18 | N/A | 6.44 |
| Max | 0.45 | 2.91 | 3.26 | 0.29 | 0.90 | 0.82 | 0.71 | 0.46 | N/A | 92.15 |
| Mean | 0.33 | 2.23 | 2.49 | 0.18 | 0.66 | 0.67 | 0.47 | 0.34 | N/A | 49.75 |
| Std. Dev. | 0.10 | 0.47 | 0.58 | 0.08 | 0.18 | 0.11 | 0.18 | 0.10 | N/A | 31.70 |
| District | Reock | Schwartzberg | Alternate Schwartzberg | Polsby- <br> Popper | Population Polygon | Area/Convex Hull | Population Circle | Ehrenburg | Perimeter | Length-Width |
| 1 | 0.24 | 2.91 | 3.26 | 0.09 | 0.68 | 0.53 | 0.48 | 0.18 | 1,087.36 | 92.15 |
| 2 | 0.21 | 2.84 | 3.25 | 0.09 | 0.65 | 0.53 | 0.35 | 0.24 | 1,081.87 | 58.64 |
| 3 | 0.38 | 1.72 | 1.87 | 0.29 | 0.90 | 0.82 | 0.71 | 0.43 | 550.94 | 60.41 |
| 4 | 0.37 | 2.02 | 2.19 | 0.21 | 0.39 | 0.70 | 0.24 | 0.39 | 777.63 | 22.54 |
| 5 | 0.25 | 1.81 | 1.91 | 0.27 | 0.88 | 0.76 | 0.71 | 0.34 | 383.03 | 80.38 |
| 6 | 0.45 | 2.22 | 2.58 | 0.15 | 0.56 | 0.69 | 0.42 | 0.34 | 618.02 | 6.44 |
| 7 | 0.42 | 2.12 | 2.38 | 0.18 | 0.54 | 0.69 | 0.38 | 0.46 | 844.36 | 27.70 |

Measures of Compactness Summary

| Reock | The measure is always between 0 and 1 , with 1 being the most compact. |
| :---: | :---: |
| Schwartzberg | The measure is usually greater than or equal to 1 , with 1 being the most compact. |
| Alternate Schwartzberg | This measure is always greater than or equal to 1 , with 1 being the most compact. |
| Polsby-Popper | The measure is always between 0 and 1 , with 1 being the most compact. |
| Population Polygon | The measure is always between 0 and 1 , with 1 being the most compact. |
| Area / Convex Hull | The measure is always between 0 and 1 , with 1 being the most compact. |
| Population Circle | The measure is always between 0 and 1 , with 1 being the most compact. |
| Ehrenburg | The measure is always between 0 and 1 , with 1 being the most compact. |
| Perimeter | The Perimeter test computes one number for the whole plan. If you are comparing several plans, the plan with the smallest total perimeter is the most compact. |
| Length-Width | A lower number indicates better length-width compactness. |
| Cut Edges | A smaller number implies a more compact plan. The measure should only be used to compare plans defined on the same base layer. |

