

User:

Plan Name: Least Change MN 1

Plan Type: Congress

Measures of Compactness Report

Monday, October 18, 2021

12:14 AM

Number of cut edges: 3,029

| | Reock | Schwartzberg | Alternate Schwartzberg | Polsby-Popper | 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 | 4,359.18 | N/A |
| Min | 0.22 | 1.38 | 1.41 | 0.20 | 0.27 | 0.59 | 0.14 | 0.20 | N/A | 3.72 |
| Max | 0.57 | 2.11 | 2.25 | 0.50 | 0.93 | 0.88 | 0.59 | 0.56 | N/A | 217.05 |
| Mean | 0.40 | 1.70 | 1.83 | 0.32 | 0.71 | 0.78 | 0.32 | 0.37 | N/A | 63.79 |
| Std. Dev. | 0.13 | 0.22 | 0.28 | 0.09 | 0.22 | 0.09 | 0.19 | 0.13 | N/A | 87.78 |

| District | Reock | Schwartzberg | Alternate Schwartzberg | Polsby-Popper | Population Polygon | Area/Convex Hull | Population Circle | Ehrenburg | Perimeter | Length-Width |
|----------|-------|--------------|------------------------|---------------|--------------------|------------------|-------------------|-----------|-----------|--------------|
| 1 | 0.22 | 1.79 | 1.81 | 0.31 | 0.93 | 0.83 | 0.16 | 0.30 | 702.63 | 188.69 |
| 2 | 0.27 | 1.65 | 1.78 | 0.31 | 0.77 | 0.74 | 0.24 | 0.31 | 302.73 | 50.53 |
| 3 | 0.57 | 1.61 | 1.76 | 0.32 | 0.53 | 0.79 | 0.40 | 0.45 | 148.63 | 4.46 |
| 4 | 0.54 | 1.38 | 1.41 | 0.50 | 0.91 | 0.88 | 0.59 | 0.56 | 93.74 | 5.80 |
| 5 | 0.50 | 1.59 | 1.62 | 0.38 | 0.88 | 0.86 | 0.59 | 0.51 | 67.23 | 6.73 |
| 6 | 0.35 | 2.11 | 2.25 | 0.20 | 0.27 | 0.59 | 0.20 | 0.20 | 397.61 | 3.72 |
| 7 | 0.30 | 1.84 | 2.21 | 0.21 | 0.63 | 0.74 | 0.14 | 0.25 | 1,481.31 | 217.05 |
| 8 | 0.44 | 1.64 | 1.81 | 0.31 | 0.72 | 0.77 | 0.20 | 0.39 | 1,165.30 | 33.32 |

Measures of Compactness Summary

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|-------------------------------|--|
| 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. |