

User:

Plan Name: IL Draft SB

Plan Type: IL Draft SB

Measures of Compactness Report

Saturday, April 2, 2022

11:52 AM

Number of cut edges: 6,944

| | 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 | 4,902.62 | N/A |
| Min | 0.28 | 1.31 | 1.38 | 0.15 | 0.39 | 0.55 | 0.20 | 0.19 | N/A | 0.51 |
| Max | 0.63 | 2.58 | 2.62 | 0.53 | 0.91 | 0.91 | 0.81 | 0.60 | N/A | 83.16 |
| Mean | 0.41 | 1.74 | 1.80 | 0.34 | 0.75 | 0.78 | 0.43 | 0.39 | N/A | 23.76 |
| Std. Dev. | 0.10 | 0.34 | 0.35 | 0.12 | 0.15 | 0.11 | 0.15 | 0.10 | N/A | 26.55 |

| District | Reock | Schwartzberg | Alternate Schwartzberg | Polsby-Popper | Population Polygon | Area/Convex Hull | Population Circle | Ehrenburg | Perimeter | Length-Width |
|----------|-------|--------------|------------------------|---------------|--------------------|------------------|-------------------|-----------|-----------|--------------|
| 1 | 0.49 | 1.79 | 1.82 | 0.30 | 0.71 | 0.74 | 0.31 | 0.38 | 105.28 | 3.94 |
| 2 | 0.33 | 1.77 | 1.86 | 0.29 | 0.89 | 0.79 | 0.46 | 0.41 | 38.55 | 4.48 |
| 3 | 0.28 | 2.58 | 2.62 | 0.15 | 0.55 | 0.55 | 0.33 | 0.19 | 75.54 | 2.14 |
| 4 | 0.45 | 1.50 | 1.53 | 0.43 | 0.85 | 0.90 | 0.51 | 0.42 | 86.39 | 9.80 |
| 5 | 0.34 | 2.22 | 2.25 | 0.20 | 0.62 | 0.63 | 0.37 | 0.35 | 74.90 | 1.55 |
| 6 | 0.53 | 1.42 | 1.50 | 0.45 | 0.39 | 0.89 | 0.23 | 0.60 | 144.29 | 11.79 |
| 7 | 0.35 | 2.14 | 2.18 | 0.21 | 0.60 | 0.65 | 0.33 | 0.34 | 109.71 | 7.54 |
| 8 | 0.39 | 1.31 | 1.38 | 0.53 | 0.78 | 0.91 | 0.20 | 0.31 | 183.57 | 38.31 |
| 9 | 0.43 | 1.52 | 1.54 | 0.42 | 0.80 | 0.84 | 0.38 | 0.53 | 92.34 | 1.98 |
| 10 | 0.51 | 1.40 | 1.41 | 0.50 | 0.76 | 0.82 | 0.44 | 0.43 | 121.85 | 0.51 |
| 11 | 0.30 | 1.62 | 1.65 | 0.37 | 0.90 | 0.88 | 0.63 | 0.35 | 361.75 | 83.16 |

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|-----------|-------|--------------|------------------------|---------------|--------------------|------------------|-------------------|-----------|-----------|--------------|
| Sum | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 4,902.62 | N/A |
| Min | 0.28 | 1.31 | 1.38 | 0.15 | 0.39 | 0.55 | 0.20 | 0.19 | N/A | 0.51 |
| Max | 0.63 | 2.58 | 2.62 | 0.53 | 0.91 | 0.91 | 0.81 | 0.60 | N/A | 83.16 |
| Mean | 0.41 | 1.74 | 1.80 | 0.34 | 0.75 | 0.78 | 0.43 | 0.39 | N/A | 23.76 |
| Std. Dev. | 0.10 | 0.34 | 0.35 | 0.12 | 0.15 | 0.11 | 0.15 | 0.10 | N/A | 26.55 |

| District | Reock | Schwartzberg | Alternate Schwartzberg | Polsby-Popper | Population Polygon | Area/Convex Hull | Population Circle | Ehrenburg | Perimeter | Length-Width |
|----------|-------|--------------|------------------------|---------------|--------------------|------------------|-------------------|-----------|-----------|--------------|
| 12 | 0.37 | 1.85 | 1.88 | 0.28 | 0.69 | 0.75 | 0.34 | 0.39 | 613.00 | 47.61 |
| 13 | 0.51 | 1.41 | 1.42 | 0.50 | 0.74 | 0.91 | 0.43 | 0.55 | 225.51 | 28.47 |
| 14 | 0.39 | 1.91 | 1.93 | 0.27 | 0.72 | 0.66 | 0.42 | 0.40 | 610.33 | 38.38 |
| 15 | 0.42 | 1.76 | 2.06 | 0.24 | 0.91 | 0.83 | 0.47 | 0.39 | 926.08 | 81.86 |
| 16 | 0.63 | 1.58 | 1.61 | 0.38 | 0.88 | 0.82 | 0.81 | 0.33 | 534.81 | 21.10 |
| 17 | 0.29 | 1.87 | 2.04 | 0.24 | 0.91 | 0.68 | 0.62 | 0.27 | 598.72 | 21.23 |

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. |