User:

Plan Name: Kansas\_GG
Plan Type: Congress

## **Measures of Compactness Report**

Wednesday, October 13, 2021

Number of cut edges: 1,394

	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	2,626.43	N/A
Min	0.36	1.36	1.38	0.33	0.54	0.80	0.47	0.31	N/A	3.00
Max	0.64	1.59	1.73	0.53	0.93	0.95	0.75	0.58	N/A	107.40
Mean	0.51	1.46	1.51	0.45	0.79	0.88	0.62	0.48	N/A	53.67
Std. Dev.	0.11	0.10	0.16	0.09	0.18	0.07	0.12	0.12	N/A	50.70
District	Reock	Schwartzberg	Alternate Schwartzberg	Polsby- Popper	Population Polygon	Area/Convex Hull	Population Circle	Ehrenburg	Perimeter	Length-Width
1	0.52	1.36	1.38	0.53	0.54	0.95	0.47	0.58	1,180.60	107.40
2	0.52	1.43	1.43	0.49	0.93	0.85	0.75	0.54	518.36	3.00
3	0.64	1.59	1.73	0.33	0.77	0.80	0.59	0.50	509.98	18.58
4	0.36	1.45	1.48	0.46	0.93	0.93	0.66	0.31	417.49	85.71

## 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-PopperThe measure is always between 0 and 1, with 1 being the most compact.Population PolygonThe measure is always between 0 and 1, with 1 being the most compact.Area / Convex HullThe measure is always between 0 and 1, with 1 being the most compact.Population CircleThe measure is always between 0 and 1, with 1 being the most compact.EhrenburgThe 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.