

User:

Plan Name: Iowa\_GG

Plan Type: Congress

# Measures of Compactness Report

Thursday, October 14, 2021

8:43 PM

Number of cut edges: 1,170

	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	2,390.73	N/A
Min	0.45	1.27	1.32	0.38	0.55	0.78	0.31	0.29	N/A	5.32
Max	0.68	1.58	1.62	0.57	0.97	0.86	0.93	0.55	N/A	81.60
Mean	0.53	1.41	1.48	0.47	0.77	0.84	0.61	0.45	N/A	38.64
Std. Dev.	0.10	0.13	0.14	0.08	0.22	0.04	0.29	0.11	N/A	34.75

District	Reock	Schwartzberg	Alternate Schwartzberg	Polsby-Popper	Population Polygon	Area/Convex Hull	Population Circle	Ehrenburg	Perimeter	Length-Width
1	0.53	1.40	1.55	0.42	0.55	0.86	0.43	0.50	885.18	16.19
2	0.45	1.40	1.41	0.50	0.96	0.85	0.78	0.45	364.34	51.44
3	0.47	1.58	1.62	0.38	0.61	0.78	0.31	0.29	802.10	81.60
4	0.68	1.27	1.32	0.57	0.97	0.86	0.93	0.55	339.11	5.32

## Measures of Compactness Summary

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<b>Reock</b>	The measure is always between 0 and 1, with 1 being the most compact.
<b>Schwartzberg</b>	The measure is usually greater than or equal to 1, with 1 being the most compact.
<b>Alternate Schwartzberg</b>	This measure is always greater than or equal to 1, with 1 being the most compact.
<b>Polsby-Popper</b>	The measure is always between 0 and 1, with 1 being the most compact.
<b>Population Polygon</b>	The measure is always between 0 and 1, with 1 being the most compact.
<b>Area / Convex Hull</b>	The measure is always between 0 and 1, with 1 being the most compact.
<b>Population Circle</b>	The measure is always between 0 and 1, with 1 being the most compact.
<b>Ehrenburg</b>	The measure is always between 0 and 1, with 1 being the most compact.
<b>Perimeter</b>	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.
<b>Length-Width</b>	A lower number indicates better length-width compactness.
<b>Cut Edges</b>	A smaller number implies a more compact plan. The measure should only be used to compare plans defined on the same base layer.