

User:

Plan Name: MI Congress Fair Final Data

Plan Type: Congress LC

# Measures of Compactness Report

Friday, October 8, 2021

9:29 PM

Number of cut edges: 4,384

	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	4,527.61	N/A
Min	0.26	1.34	1.38	0.30	0.38	0.65	0.23	0.23	N/A	4.18
Max	0.57	1.81	1.83	0.52	0.93	0.90	0.73	0.66	N/A	103.79
Mean	0.43	1.53	1.57	0.42	0.76	0.81	0.46	0.43	N/A	34.94
Std. Dev.	0.11	0.15	0.15	0.07	0.15	0.08	0.15	0.15	N/A	31.63

District	Reock	Schwartzberg	Alternate Schwartzberg	Polsby-Popper	Population Polygon	Area/Convex Hull	Population Circle	Ehrenburg	Perimeter	Length-Width
1	0.37	1.48	1.60	0.39	0.93	0.87	0.29	0.30	1,353.46	83.63
2	0.57	1.44	1.47	0.46	0.68	0.87	0.35	0.51	572.78	39.07
3	0.29	1.67	1.68	0.35	0.85	0.87	0.57	0.23	269.25	60.69
4	0.51	1.43	1.46	0.47	0.91	0.90	0.54	0.59	296.97	34.65
5	0.41	1.53	1.54	0.42	0.91	0.76	0.73	0.37	269.41	31.84
6	0.44	1.34	1.41	0.50	0.83	0.86	0.41	0.45	382.77	33.78
7	0.26	1.69	1.72	0.34	0.60	0.80	0.23	0.39	428.84	103.79
8	0.53	1.59	1.61	0.39	0.80	0.81	0.52	0.46	101.43	5.49
9	0.56	1.41	1.44	0.48	0.81	0.85	0.59	0.62	93.24	4.23
10	0.50	1.37	1.38	0.52	0.38	0.88	0.23	0.66	406.53	36.73
11	0.49	1.44	1.45	0.48	0.75	0.81	0.54	0.52	156.39	7.45

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	<b>Reock</b>	<b>Schwartzberg</b>	<b>Alternate Schwartzberg</b>	<b>Polsby- Popper</b>	<b>Population Polygon</b>	<b>Area/Convex Hull</b>	<b>Population Circle</b>	<b>Ehrenburg</b>	<b>Perimeter</b>	<b>Length-Width</b>
Sum	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4,527.61	N/A
Min	0.26	1.34	1.38	0.30	0.38	0.65	0.23	0.23	N/A	4.18
Max	0.57	1.81	1.83	0.52	0.93	0.90	0.73	0.66	N/A	103.79
Mean	0.43	1.53	1.57	0.42	0.76	0.81	0.46	0.43	N/A	34.94
Std. Dev.	0.11	0.15	0.15	0.07	0.15	0.08	0.15	0.15	N/A	31.63
<b>District</b>	<b>Reock</b>	<b>Schwartzberg</b>	<b>Alternate Schwartzberg</b>	<b>Polsby- Popper</b>	<b>Population Polygon</b>	<b>Area/Convex Hull</b>	<b>Population Circle</b>	<b>Ehrenburg</b>	<b>Perimeter</b>	<b>Length-Width</b>
12	0.38	1.81	1.83	0.30	0.70	0.65	0.46	0.24	95.90	4.18
13	0.30	1.72	1.80	0.31	0.77	0.65	0.53	0.27	100.64	8.74

## 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.