User: **jacobo rothner** Plan Name: **MI Least Changed 1** Plan Type: **MI least changed** 

## **Measures of Compactness Report**

Tuesday, October 12, 2021 5:08 PM

Number of cut edges: 5,461

	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	4,692.06	N/A
Min	0.23	1.16	1.22	0.13	0.51	0.51	0.20	0.18	N/A	1.03
Max	0.69	2.74	2.76	0.67	0.96	0.95	0.61	0.64	N/A	95.52
Mean	0.45	1.72	1.76	0.38	0.69	0.78	0.42	0.41	N/A	25.23
Std. Dev.	0.15	0.45	0.44	0.17	0.13	0.14	0.13	0.16	N/A	28.14
District	Reock	Schwartzberg	Alternate Schwartzberg	Polsby- Popper	Population Polygon	Area/Convex Hull	Population Circle	Ehrenburg	Perimeter	Length-Width
1	0.39	1.50	1.62	0.38	0.96	0.85	0.42	0.30	1,354.53	95.52
2	0.62	1.38	1.39	0.52	0.64	0.90	0.55	0.59	421.45	6.14
3	0.57	1.66	1.68	0.35	0.66	0.81	0.48	0.43	342.29	5.02
4	0.24	2.04	2.05	0.24	0.63	0.59	0.25	0.42	477.25	27.54
5	0.69	1.27	1.28	0.61	0.70	0.92	0.51	0.61	478.87	11.63
6	0.57	1.16	1.22	0.67	0.94	0.95	0.47	0.64	347.04	34.14
7	0.43	1.47	1.49	0.45	0.59	0.90	0.24	0.42	358.45	60.85
8	0.29	1.65	1.67	0.36	0.63	0.82	0.20	0.34	227.41	49.12
9	0.23	2.74	2.76	0.13	0.51	0.51	0.28	0.18	144.00	16.50
10	0.57	1.39	1.41	0.51	0.76	0.88	0.61	0.59	144.23	6.14
11	0.50	1.86	1.89	0.28	0.64	0.71	0.49	0.41	124.79	1.03

Number of cut edges: 5,461

	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	4,692.06	N/A
Min	0.23	1.16	1.22	0.13	0.51	0.51	0.20	0.18	N/A	1.03
Max	0.69	2.74	2.76	0.67	0.96	0.95	0.61	0.64	N/A	95.52
Mean	0.45	1.72	1.76	0.38	0.69	0.78	0.42	0.41	N/A	25.23
Std. Dev.	0.15	0.45	0.44	0.17	0.13	0.14	0.13	0.16	N/A	28.14
District	Reock	Schwartzberg	Alternate Schwartzberg	Polsby- Popper	Population Polygon	Area/Convex Hull	Population Circle	Ehrenburg	Perimeter	Length-Width
12	0.35	2.10	2.17	0.21	0.67	0.67	0.47	0.20	159.71	8.51
13	0.35	2.18	2.20	0.21	0.66	0.66	0.48	0.23	112.04	5.84

## 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.