User:

Plan Name: Utah Least Change

Plan Type: Congress

## **Measures of Compactness Report**

Tuesday, October 12, 2021 4:43 PM

Number of cut edges: 1,277

	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	3,495.39	N/A
Min	0.27	1.61	1.72	0.23	0.29	0.66	0.25	0.25	N/A	12.70
Max	0.40	1.87	2.08	0.34	0.84	0.80	0.49	0.40	N/A	86.85
Mean	0.32	1.76	1.90	0.28	0.49	0.70	0.37	0.32	N/A	50.07
Std. Dev.	0.06	0.11	0.16	0.05	0.25	0.07	0.12	0.07	N/A	31.73
District	Reock	Schwartzberg	Alternate Schwartzberg	Polsby- Popper	Population Polygon	Area/Convex Hull	Population Circle	Ehrenburg	Perimeter	Length-Width
1	0.27	1.73	1.82	0.30	0.29	0.68	0.27	0.25	933.12	86.85
2	0.40	1.61	1.72	0.34	0.33	0.80	0.25	0.40	1,324.43	12.70
3	0.28	1.87	2.08	0.23	0.84	0.67	0.49	0.35	874.69	62.01
4	0.34	1.82	1.98	0.26	0.51	0.66	0.45	0.28	363.15	38.70

## 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.