

COMPACTNESS REPORTS

Explanation of Senate and House Maps Comparison

The charts below provide compactness scores on two conventional compactness measurements: the Reock metric and the Polsby-Popper metric. The Reock metric is a dispersion-based measure of compactness. The Reock score provides a way of evaluating the extent to which a district's shape is spread out from a central point. In other words, the Reock score measures the relationship between the area of a district and the area of the smallest circumscribing circle. For example, under this metric, a district that is a perfect circle would be very compact, while a district in the shape of a star would be less compact. Reock scores always fall between 0 and 1, with 1 being the most compact.

The Polsby-Popper metric is a perimeter-to-area based measurement of compactness. The Polsby-Popper score evaluates the degree of indentations in a district's boundaries. Districts with smooth perimeters are more compact under this metric; those with cragged borders are less compact. Like the Reock score, Polsby-Popper scores fall between 0 and 1, with 1 being the most compact.

These charts evaluate each district's score on both of these measurements, and also provide overall map scores. The "Lowest Score" category shows the scores for the least compact district in each map; the "Highest Score" category shows the scores for the most compact district in each map; the "Mean" category contains the average score for the entire map.

**Compactness of Legislature and Coalition
Senate Maps Summary**

	Coalition's Senate Map			Legislature's Senate Map	
	Reock	Polsby-Popper		Reock	Polsby-Popper
Lowest Score	0.18	0.08		0.05	0.05
Highest Score	0.58	0.54		0.60	0.56
Mean	0.40	0.27		0.35	0.28

**Compactness of Legislature and Coalition
Senate Maps District-By-District Analysis**

District	Coalition's Senate Map			Legislature's Senate Map	
	Reock	Polsby-Popper		Reock	Polsby-Popper
1	0.43	0.16		0.14	0.15
2	0.43	0.34		0.47	0.28
3	0.44	0.23		0.26	0.24
4	0.32	0.26		0.5	0.15
5	0.5	0.13		0.34	0.35
6	0.21	0.2		0.12	0.07
7	0.4	0.27		0.45	0.38
8	0.48	0.29		0.28	0.26
9	0.43	0.25		0.16	0.13
10	0.32	0.18		0.46	0.18
11	0.51	0.35		0.54	0.24
12	0.36	0.54		0.24	0.07
13	0.53	0.34		0.42	0.23
14	0.41	0.27		0.25	0.1
15	0.54	0.41		0.38	0.37
16	0.4	0.16		0.41	0.17
17	0.42	0.32		0.55	0.45
18	0.2	0.08		0.38	0.44
19	0.34	0.19		0.23	0.11
20	0.26	0.13		0.37	0.33
21	0.46	0.32		0.31	0.23
22	0.33	0.2		0.39	0.26
23	0.57	0.37		0.51	0.44
24	0.45	0.27		0.35	0.2
25	0.33	0.27		0.22	0.32

**Compactness of Legislature and Coalition
Senate Maps District-By-District Analysis**

District	Coalition's Senate Map			Legislature's Senate Map	
	Reock	Polsby-Popper		Reock	Polsby-Popper
26	0.49	0.34		0.51	0.45
27	0.25	0.25		0.23	0.28
28	0.41	0.38		0.4	0.56
29	0.43	0.29		0.16	0.15
30	0.47	0.21		0.19	0.17
31	0.18	0.23		0.5	0.41
32	0.36	0.36		0.59	0.54
33	0.35	0.24		0.6	0.54
34	0.58	0.46		0.05	0.05
35	0.41	0.34		0.28	0.32
36	0.54	0.31		0.3	0.21
37	0.33	0.21		0.29	0.3
38	0.32	0.32		0.6	0.44
39	0.18	0.18		0.41	0.5
40	0.51	0.33		0.23	0.14

Compactness of Legislature and Coalition House Maps Summary				
	Coalition's House Map		Legislature's House Map	
	Reock	Polsby-Popper	Reock	Polsby-Popper
Lowest Score	0.18	0.09	0.08	0.08
Highest Score	0.64	0.56	0.65	0.68
Mean	0.41	0.29	0.43	0.43

**Compactness of Legislature and Coalition
House Maps District-By-District Analysis**

District	Coalition's House Map		Legislature's House Map	
	Reock	Polsby-Popper	Reock	Polsby-Popper
1	0.32	0.19	0.37	0.24
2	0.27	0.14	0.31	0.31
3	0.35	0.22	0.53	0.37
4	0.51	0.41	0.6	0.61
5	0.53	0.33	0.49	0.55
6	0.27	0.14	0.46	0.57
7	0.46	0.36	0.37	0.3
8	0.5	0.22	0.38	0.22
9	0.48	0.39	0.57	0.32
10	0.44	0.28	0.5	0.35
11	0.58	0.55	0.38	0.19
12	0.55	0.46	0.54	0.36
13	0.44	0.29	0.56	0.44
14	0.45	0.3	0.44	0.28
15	0.45	0.17	0.45	0.42
16	0.34	0.09	0.49	0.54
17	0.29	0.24	0.52	0.46
18	0.2	0.13	0.47	0.56
19	0.5	0.36	0.36	0.34
20	0.35	0.1	0.38	0.24
21	0.47	0.15	0.41	0.31
22	0.53	0.41	0.46	0.4
23	0.43	0.33	0.62	0.46
24	0.54	0.44	0.46	0.34
25	0.42	0.2	0.32	0.21

**Compactness of Legislature and Coalition
House Maps District-By-District Analysis**

District	Coalition's House Map		Legislature's House Map	
	Reock	Polsby-Popper	Reock	Polsby-Popper
26	0.34	0.17	0.41	0.28
27	0.46	0.24	0.35	0.26
28	0.32	0.21	0.51	0.44
29	0.56	0.32	0.48	0.45
30	0.39	0.41	0.34	0.4
31	0.32	0.3	0.4	0.36
32	0.38	0.42	0.49	0.49
33	0.29	0.23	0.35	0.25
34	0.4	0.37	0.65	0.49
35	0.31	0.25	0.29	0.32
36	0.32	0.25	0.38	0.54
37	0.39	0.22	0.59	0.59
38	0.46	0.32	0.61	0.61
39	0.53	0.31	0.41	0.33
40	0.27	0.16	0.53	0.65
41	0.4	0.12	0.51	0.42
42	0.45	0.29	0.62	0.61
43	0.21	0.23	0.35	0.29
44	0.33	0.27	0.54	0.63
45	0.64	0.43	0.46	0.54
46	0.47	0.39	0.54	0.53
47	0.44	0.26	0.47	0.52
48	0.47	0.22	0.33	0.33
49	0.5	0.14	0.54	0.53
50	0.43	0.23	0.41	0.39

**Compactness of Legislature and Coalition
House Maps District-By-District Analysis**

District	Coalition's House Map		Legislature's House Map	
	Reock	Polsby-Popper	Reock	Polsby-Popper
51	0.32	0.21	0.51	0.46
52	0.24	0.13	0.5	0.53
53	0.32	0.16	0.51	0.68
54	0.2	0.1	0.54	0.59
55	0.54	0.29	0.54	0.6
56	0.41	0.23	0.49	0.6
57	0.46	0.2	0.49	0.55
58	0.56	0.18	0.56	0.54
59	0.51	0.22	0.46	0.33
60	0.38	0.19	0.35	0.27
61	0.51	0.37	0.35	0.25
62	0.49	0.43	0.54	0.56
63	0.48	0.4	0.38	0.44
64	0.36	0.25	0.39	0.44
65	0.37	0.25	0.55	0.58
66	0.47	0.36	0.43	0.48
67	0.6	0.41	0.45	0.36
68	0.24	0.12	0.53	0.5
69	0.5	0.46	0.43	0.32
70	0.34	0.33	0.25	0.09
71	0.52	0.36	0.45	0.43
72	0.48	0.21	0.45	0.45
73	0.38	0.35	0.58	0.65
74	0.37	0.3	0.54	0.55
75	0.48	0.29	0.36	0.56

**Compactness of Legislature and Coalition
House Maps District-By-District Analysis**

District	Coalition's House Map		Legislature's House Map	
	Reock	Polsby-Popper	Reock	Polsby-Popper
76	0.46	0.56	0.27	0.37
77	0.31	0.31	0.56	0.46
78	0.41	0.2	0.39	0.4
79	0.3	0.26	0.39	0.34
80	0.38	0.27	0.41	0.4
81	0.33	0.24	0.51	0.63
82	0.34	0.35	0.31	0.43
83	0.34	0.29	0.3	0.38
84	0.51	0.46	0.49	0.44
85	0.3	0.19	0.39	0.39
86	0.37	0.18	0.38	0.35
87	0.46	0.36	0.57	0.31
88	0.3	0.18	0.08	0.08
89	0.3	0.3	0.19	0.27
90	0.55	0.25	0.5	0.38
91	0.36	0.43	0.3	0.42
92	0.38	0.35	0.34	0.42
93	0.54	0.53	0.41	0.64
94	0.46	0.44	0.46	0.4
95	0.38	0.29	0.54	0.54
96	0.44	0.48	0.4	0.49
97	0.4	0.27	0.38	0.54
98	0.43	0.41	0.55	0.45
99	0.46	0.38	0.32	0.39
100	0.34	0.36	0.41	0.57

**Compactness of Legislature and Coalition
House Maps District-By-District Analysis**

District	Coalition's House Map		Legislature's House Map	
	Reock	Polsby-Popper	Reock	Polsby-Popper
101	0.3	0.2	0.51	0.6
102	0.31	0.2	0.48	0.44
103	0.3	0.26	0.35	0.44
104	0.5	0.55	0.36	0.51
105	0.45	0.3	0.27	0.26
106	0.23	0.15	0.26	0.32
107	0.52	0.33	0.56	0.59
108	0.44	0.47	0.44	0.43
109	0.49	0.26	0.28	0.28
110	0.46	0.28	0.29	0.48
111	0.34	0.38	0.42	0.45
112	0.32	0.34	0.56	0.67
113	0.38	0.26	0.45	0.48
114	0.34	0.32	0.32	0.35
115	0.18	0.19	0.21	0.28
116	0.29	0.25	0.27	0.39
117	0.37	0.3	0.2	0.16
118	0.44	0.25	0.27	0.38
119	0.53	0.41	0.49	0.64
120	0.54	0.31	0.16	0.18