

Perimeter		Compactness Measure:		District		Compactness Measure:		District		Compactness Measure:		District		Compactness Measure:		District		Compactness Measure:		District		Compactness Measure:		District																					
District	Value	As Percent	Value	As Percent	District	Value	As Percent	Value	As Percent	District	Value	As Percent	Value	As Percent	District	Value	As Percent	Value	As Percent	District	Value	As Percent	Value	As Percent																					
Compactness Reports for 5 Options																																													
2/2/2012																																													
DataDrivenDetroit.org Donated These Reports																																													
Circularity Ratio																																													
Option 1	1	25.55	0.28	28.2%	Option 2	25.26	1	0.30	30.4%	Option 3	20.87	1	0.48	48.2%	Option 4	38.11	1	0.18	17.7%	Option 5	20.99	1	0.41	41.0%																					
Option 1	2	23.52	0.29	29.3%	Option 2	26.39	2	0.36	36.0%	Option 3	23.59	2	0.33	33.4%	Option 4	33.94	2	0.21	21.4%	Option 5	21.32	2	0.49	48.9%																					
Option 1	3	41.78	0.15	14.8%	Option 2	41.98	3	0.14	14.0%	Option 3	46.31	3	0.13	12.7%	Option 4	38.02	3	0.18	18.0%	Option 5	29.41	3	0.26	26.4%																					
Option 1	4	32.20	0.22	22.0%	Option 2	38.00	4	0.20	19.6%	Option 3	20.64	4	0.45	45.0%	Option 4	26.13	4	0.35	35.1%	Option 5	22.47	4	0.52	52.1%																					
Option 1	5	32.65	0.23	22.9%	Option 2	32.65	5	0.23	22.9%	Option 3	32.21	5	0.26	25.5%	Option 4	19.72	5	0.46	45.9%	Option 5	28.58	5	0.31	30.9%																					
Option 1	6	22.47	0.34	33.9%	Option 2	20.84	6	0.39	39.0%	Option 3	27.06	6	0.28	27.6%	Option 4	23.43	6	0.32	31.9%	Option 5	17.48	6	0.72	72.2%																					
Option 1	7	29.22	0.25	24.8%	Option 2	27.20	7	0.28	27.7%	Option 3	28.04	7	0.28	27.6%	Option 4	28.97	7	0.23	22.6%	Option 5	21.70	7	0.45	45.0%																					
Circumference																																													
Option 1	1	25.55	0.59	59.3%	Option 2	25.26	1	0.54	54.3%	Option 3	20.87	1	0.74	73.5%	Option 4	38.11	1	0.45	45.2%	Option 5	20.99	1	0.71	70.9%																					
Option 1	2	23.52	0.62	62.4%	Option 2	26.39	2	0.60	59.9%	Option 3	23.59	2	0.62	62.1%	Option 4	33.94	2	0.48	47.6%	Option 5	21.32	2	0.76	76.1%																					
Option 1	3	41.78	0.42	42.3%	Option 2	41.98	3	0.41	40.5%	Option 3	46.31	3	0.38	38.0%	Option 4	38.02	3	0.45	44.7%	Option 5	29.41	3	0.55	54.9%																					
Option 1	4	32.20	0.51	50.9%	Option 2	38.00	4	0.47	47.2%	Option 3	20.64	4	0.71	71.5%	Option 4	26.13	4	0.62	61.8%	Option 5	22.47	4	0.75	74.7%																					
Option 1	5	32.65	0.50	50.4%	Option 2	32.65	5	0.50	50.4%	Option 3	32.21	5	0.52	52.1%	Option 4	19.72	5	0.72	71.9%	Option 5	28.58	5	0.56	55.8%																					
Option 1	6	22.47	0.65	65.5%	Option 2	20.84	6	0.68	67.8%	Option 3	27.06	6	0.59	58.9%	Option 4	23.43	6	0.63	62.8%	Option 5	17.48	6	0.88	88.4%																					
Option 1	7	29.22	0.53	53.4%	Option 2	27.20	7	0.57	56.5%	Option 3	28.04	7	0.56	55.6%	Option 4	28.97	7	0.53	52.5%	Option 5	21.70	7	0.70	69.6%																					
Convex Hull - Schwartzberg test.																																													
Option 1	1	25.55	0.77	76.8%	Option 2	25.26	1	0.73	73.5%	Option 3	20.87	1	0.88	88.1%	Option 4	38.11	1	0.76	76.0%	Option 5	20.99	1	0.86	86.0%																					
Option 1	2	23.52	0.95	95.4%	Option 2	26.39	2	0.87	86.7%	Option 3	23.59	2	0.84	83.9%	Option 4	33.94	2	0.70	70.2%	Option 5	21.32	2	0.85	84.8%																					
Option 1	3	41.78	0.70	69.9%	Option 2	41.98	3	0.67	67.2%	Option 3	46.31	3	0.73	72.5%	Option 4	38.02	3	0.66	66.5%	Option 5	29.41	3	0.75	75.1%																					
Option 1	4	32.20	0.71	71.3%	Option 2	38.00	4	0.64	64.5%	Option 3	20.64	4	0.81	80.7%	Option 4	26.13	4	0.81	80.9%	Option 5	22.47	4	0.87	86.7%																					
Option 1	5	32.65	0.67	67.3%	Option 2	32.65	5	0.67	67.3%	Option 3	32.21	5	0.71	71.3%	Option 4	19.72	5	0.88	88.3%	Option 5	28.58	5	0.69	68.7%																					
Option 1	6	22.47	0.86	86.0%	Option 2	20.84	6	0.81	80.5%	Option 3	27.06	6	0.77	77.2%	Option 4	23.43	6	0.80	79.9%	Option 5	17.48	6	0.96	96.4%																					
Option 1	7	29.22	0.69	69.4%	Option 2	27.20	7	0.76	75.6%	Option 3	28.04	7	0.75	75.2%	Option 4	28.97	7	0.75	74.5%	Option 5	21.70	7	0.76	76.3%																					
Minimum Circle - Roecq or Ehrenberg test.																																													
Option 1	1	25.55	0.14	13.7%	Option 2	25.26	1	0.22	22.0%	Option 3	20.87	1	0.30	30.2%	Option 4	38.11	1	0.21	21.3%	Option 5	20.99	1	0.21	21.0%																					
Option 1	2	23.52	0.11	11.5%	Option 2	26.39	2	0.29	29.5%	Option 3	23.59	2	0.28	27.6%	Option 4	33.94	2	0.25	24.8%	Option 5	21.32	2	0.22	22.1%																					
Option 1	3	41.78	0.14	14.3%	Option 2	41.98	3	0.14	13.9%	Option 3	46.31	3	0.17	16.8%	Option 4	38.02	3	0.20	20.1%	Option 5	29.41	3	0.28	28.2%																					
Option 1	4	32.20	0.13	13.4%	Option 2	38.00	4	0.18	17.8%	Option 3	20.64	4	0.34	34.2%	Option 4	26.13	4	0.27	26.9%	Option 5	22.47	4	0.24	24.2%																					
Option 1	5	32.65	0.29	29.1%	Option 2	32.65	5	0.29	29.1%	Option 3	32.21	5	0.26	25.5%	Option 4	19.72	5	0.27	27.1%	Option 5	28.58	5	0.24	23.9%																					
Option 1	6	22.47	0.14	13.8%	Option 2	20.84	6	0.21	21.2%	Option 3	27.06	6	0.16	16.2%	Option 4	23.43	6	0.18	17.7%	Option 5	17.48	6	0.37	37.1%																					
Option 1	7	29.22	0.14	14.4%	Option 2	27.20	7	0.29	28.5%	Option 3	28.04	7	0.19	19.5%	Option 4	28.97	7	0.17	16.6%	Option 5	21.70	7	0.27	26.6%																					
Total Perimeter for all Districts																						829.55 Miles				849.34 Miles				794.92 Miles				833.27 Miles				Total Perimeter for all Districts				647.85 Miles			
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