

Compactness Analysis Report

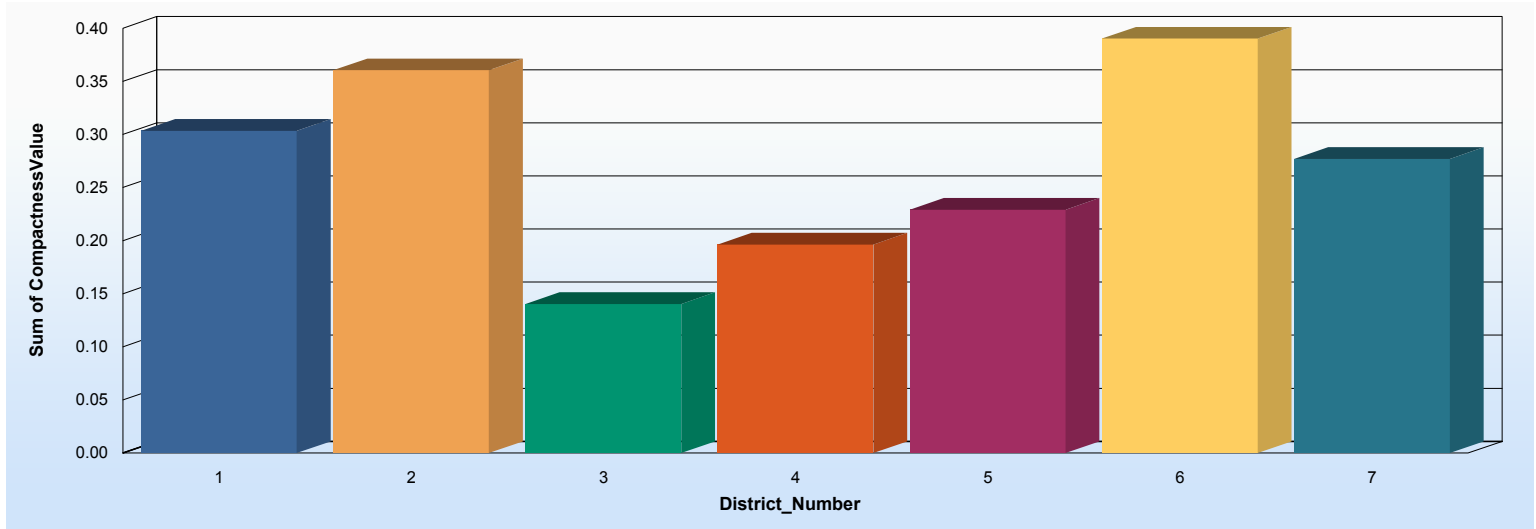
Plan Name: Workspace: AB Plans>>Discussion Plan 2
 Plan Last Edited on: 1/20/2012 11:51:58 PM

1/22/2012

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Compactness Measure:

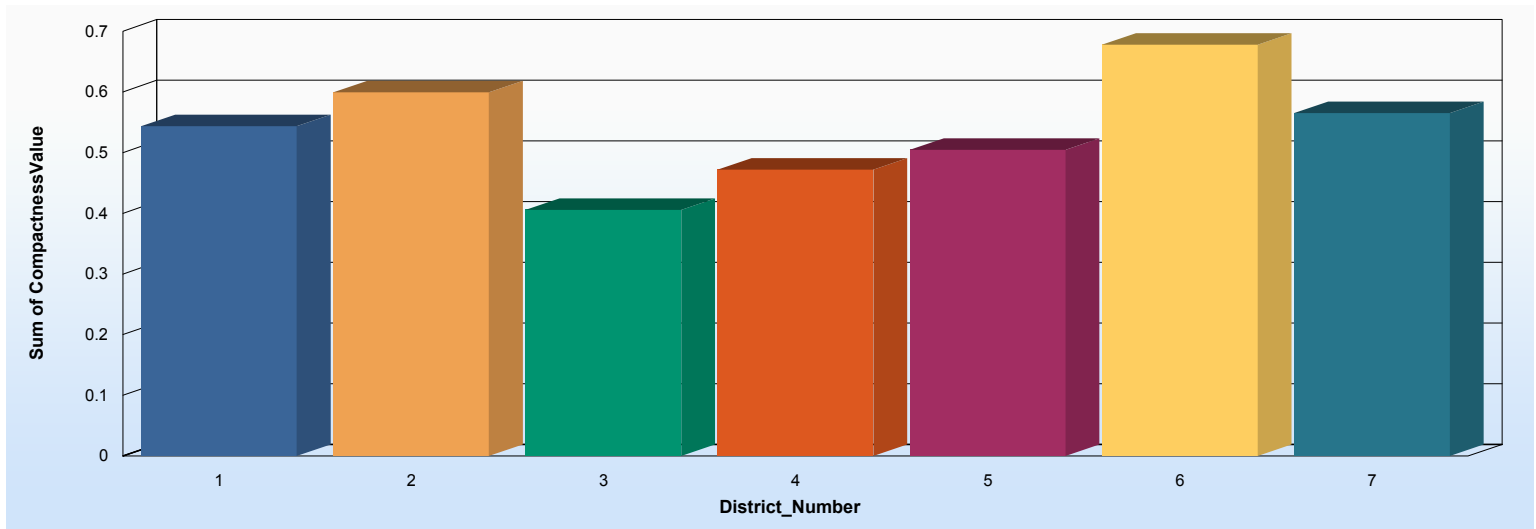
Circularity Ratio - Ratio of the area of the District to the area of a circle (the most compact shape) having the same perimeter. That ratio is expressed as $M = 4\pi(\text{area}) / (\text{perimeter})^2$. For a circle, the ratio is one. This

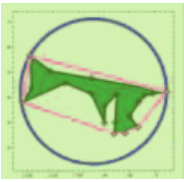


District:	1	Compactness Value:	0.30	As Percent:	30.4%
District:	2	Compactness Value:	0.36	As Percent:	36.0%
District:	3	Compactness Value:	0.14	As Percent:	14.0%
District:	4	Compactness Value:	0.20	As Percent:	19.6%
District:	5	Compactness Value:	0.23	As Percent:	22.9%
District:	6	Compactness Value:	0.39	As Percent:	39.0%
District:	7	Compactness Value:	0.28	As Percent:	27.7%

Compactness Measure:

Circumference of an equal area circle divided by the perimeter of the district





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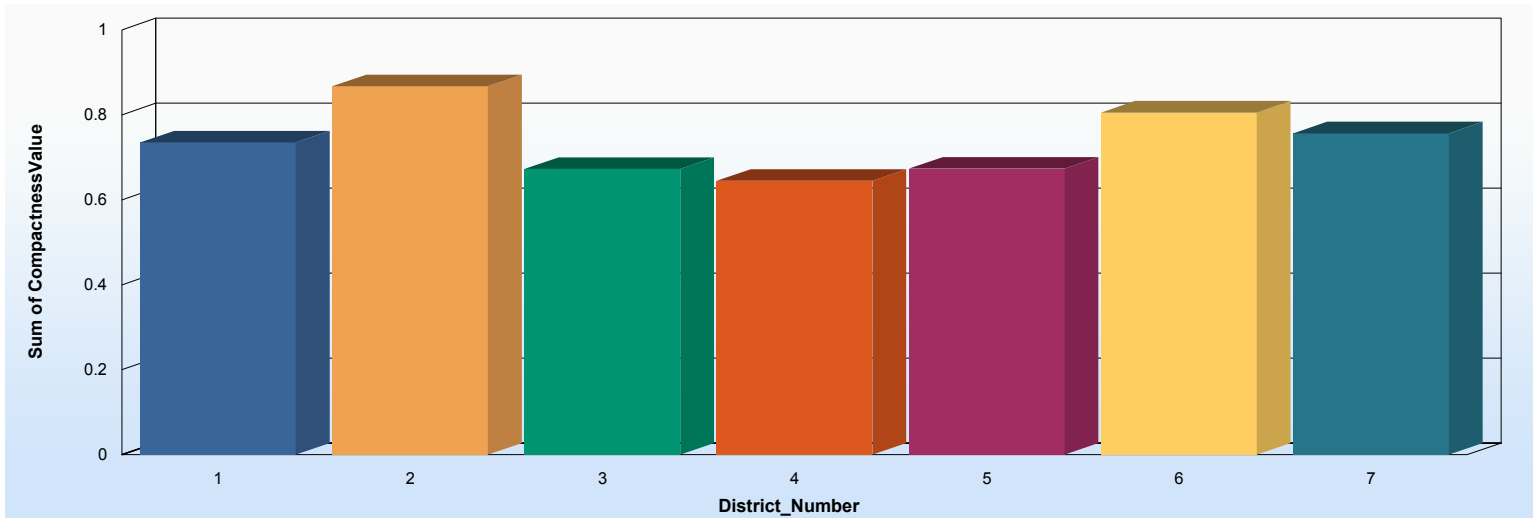
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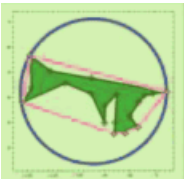
District:	1	Compactness Value:	0.54	As Percent:	54.3%
District:	2	Compactness Value:	0.60	As Percent:	59.9%
District:	3	Compactness Value:	0.41	As Percent:	40.5%
District:	4	Compactness Value:	0.47	As Percent:	47.2%
District:	5	Compactness Value:	0.50	As Percent:	50.4%
District:	6	Compactness Value:	0.68	As Percent:	67.8%
District:	7	Compactness Value:	0.57	As Percent:	56.5%

Compactness Measure:

District area divided by the area of the district's Convex Hull. This method is also known as the Schwartzberg test.



District:	1	Compactness Value:	0.73	As Percent:	73.5%
District:	2	Compactness Value:	0.87	As Percent:	86.7%
District:	3	Compactness Value:	0.67	As Percent:	67.2%
District:	4	Compactness Value:	0.64	As Percent:	64.5%
District:	5	Compactness Value:	0.67	As Percent:	67.3%
District:	6	Compactness Value:	0.81	As Percent:	80.5%
District:	7	Compactness Value:	0.76	As Percent:	75.6%



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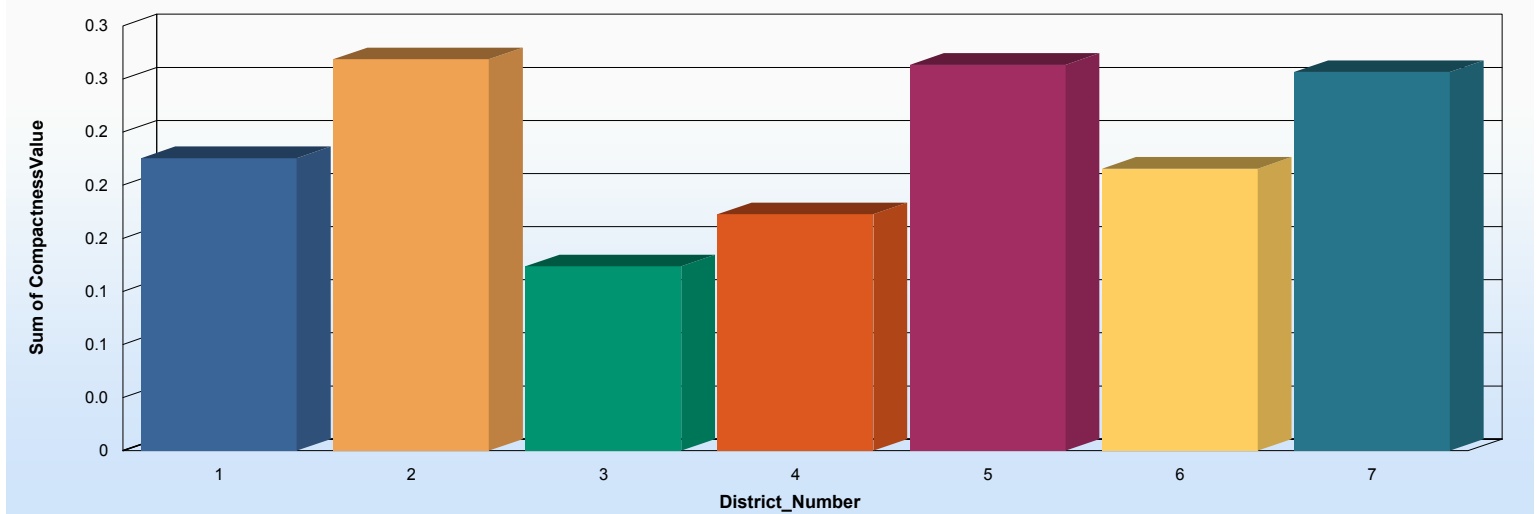
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Compactness Measure:

District area divided by the area of the minimum circle bounding the district. This method is also known as the Roeck or Ehrenberg test.



District:	1	Compactness Value:	0.22	As Percent:	22.0%
District:	2	Compactness Value:	0.29	As Percent:	29.5%
District:	3	Compactness Value:	0.14	As Percent:	13.9%
District:	4	Compactness Value:	0.18	As Percent:	17.8%
District:	5	Compactness Value:	0.29	As Percent:	29.1%
District:	6	Compactness Value:	0.21	As Percent:	21.2%
District:	7	Compactness Value:	0.29	As Percent:	28.5%

Total Perimeter for all Districts

849.34 Miles