

Compactness Analysis Report

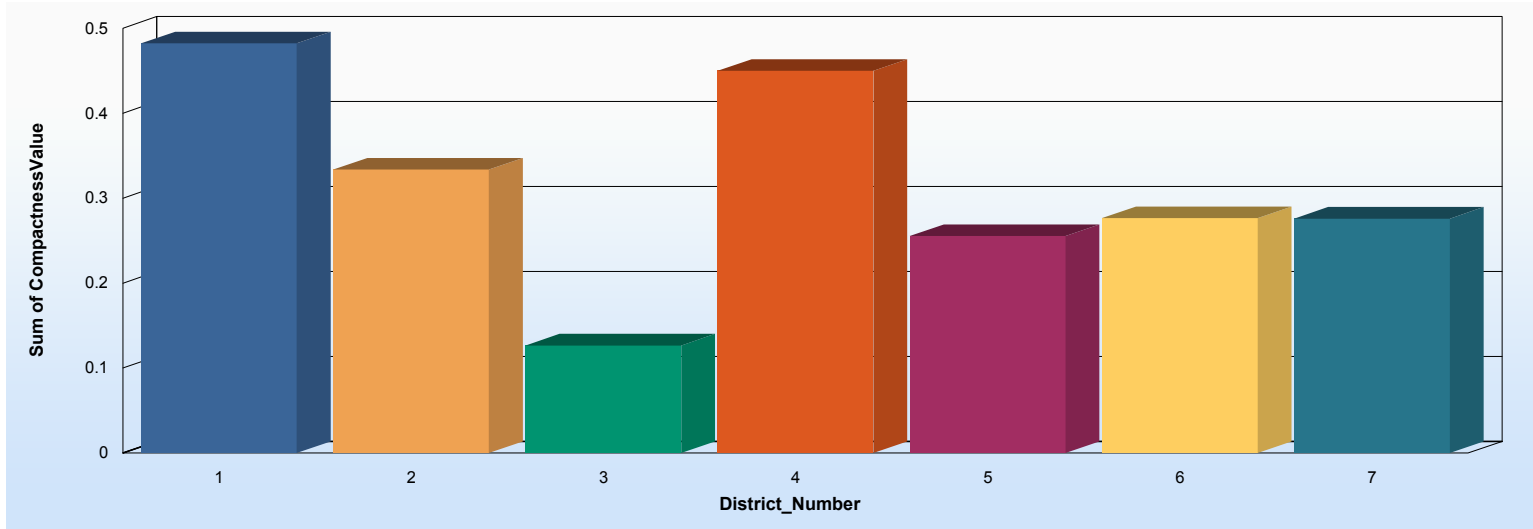
Plan Name: Workspace: AB Plans>>Discussion Plan 3
 Plan Last Edited on: 1/21/2012 12:13:46 AM

1/22/2012

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Compactness Measure:

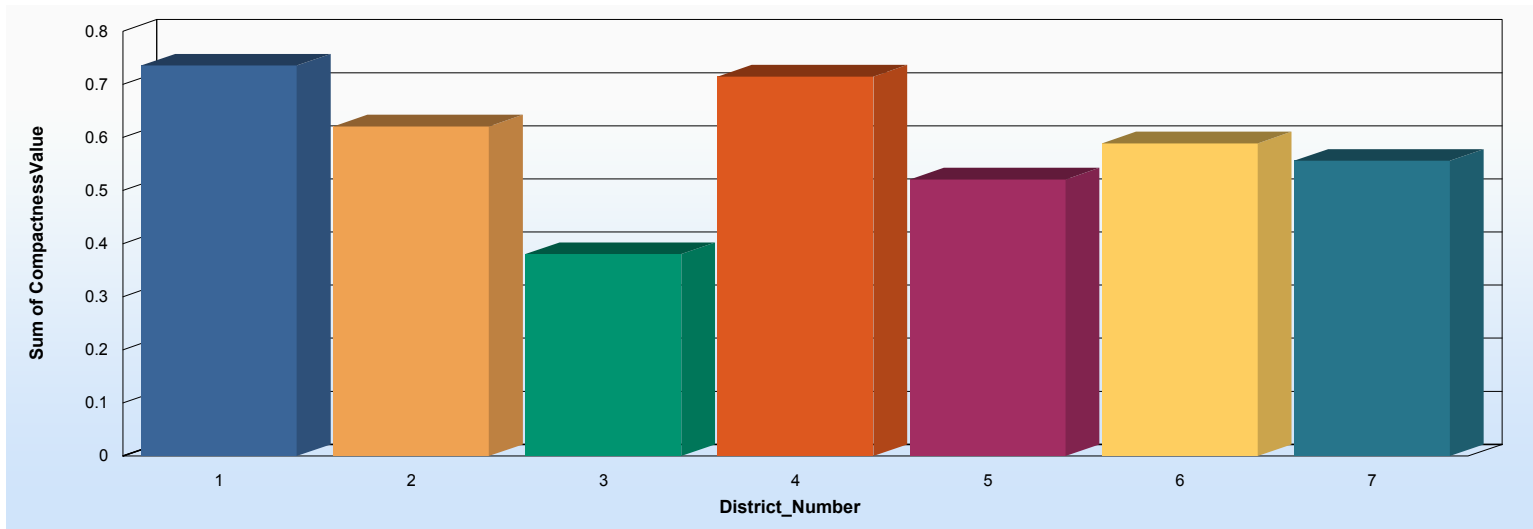
Circularity Ratio - Ratio of the area of the District to the area of a circle (the most compact shape) having the same perimeter. That ratio is expressed as $M = 4\pi(\text{area}) / (\text{perimeter})^2$. For a circle, the ratio is one. This

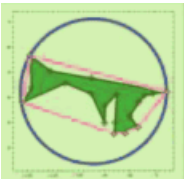


District:	1	Compactness Value:	0.48	As Percent:	48.2%
District:	2	Compactness Value:	0.33	As Percent:	33.4%
District:	3	Compactness Value:	0.13	As Percent:	12.7%
District:	4	Compactness Value:	0.45	As Percent:	45.0%
District:	5	Compactness Value:	0.26	As Percent:	25.5%
District:	6	Compactness Value:	0.28	As Percent:	27.6%
District:	7	Compactness Value:	0.28	As Percent:	27.6%

Compactness Measure:

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





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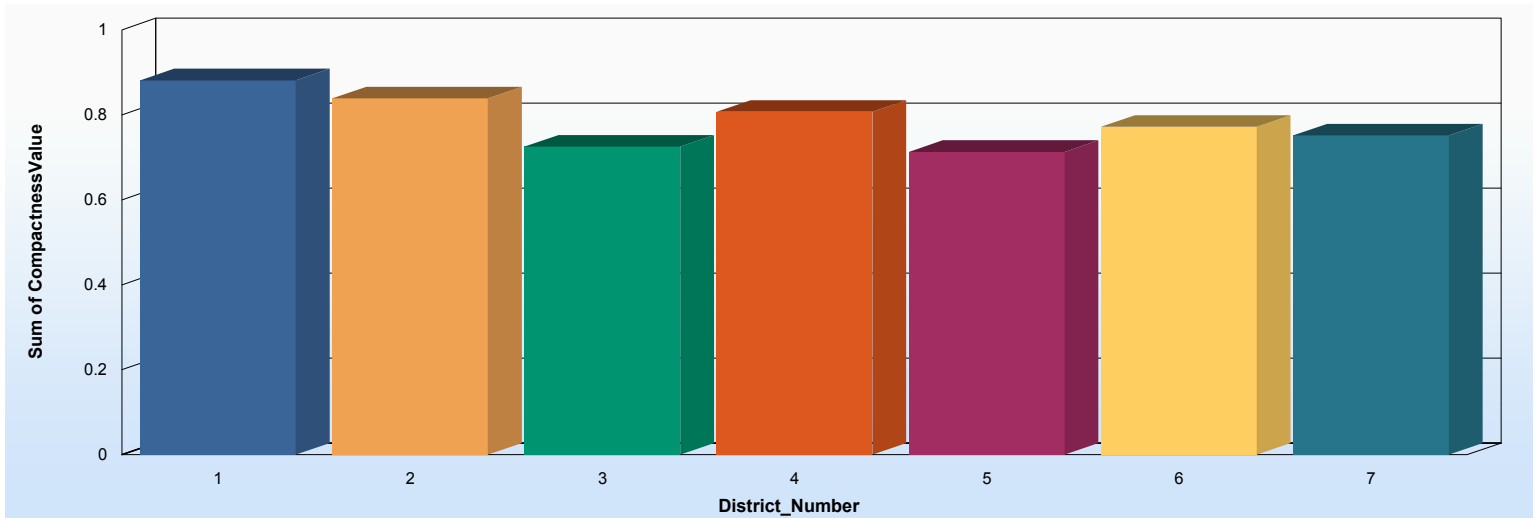
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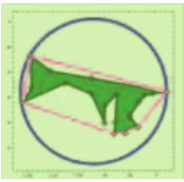
District:	1	Compactness Value:	0.74	As Percent:	73.5%
District:	2	Compactness Value:	0.62	As Percent:	62.1%
District:	3	Compactness Value:	0.38	As Percent:	38.0%
District:	4	Compactness Value:	0.71	As Percent:	71.5%
District:	5	Compactness Value:	0.52	As Percent:	52.1%
District:	6	Compactness Value:	0.59	As Percent:	58.9%
District:	7	Compactness Value:	0.56	As Percent:	55.6%

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:	0.88	As Percent:	88.1%
District:	2	Compactness Value:	0.84	As Percent:	83.9%
District:	3	Compactness Value:	0.73	As Percent:	72.5%
District:	4	Compactness Value:	0.81	As Percent:	80.7%
District:	5	Compactness Value:	0.71	As Percent:	71.3%
District:	6	Compactness Value:	0.77	As Percent:	77.2%
District:	7	Compactness Value:	0.75	As Percent:	75.2%



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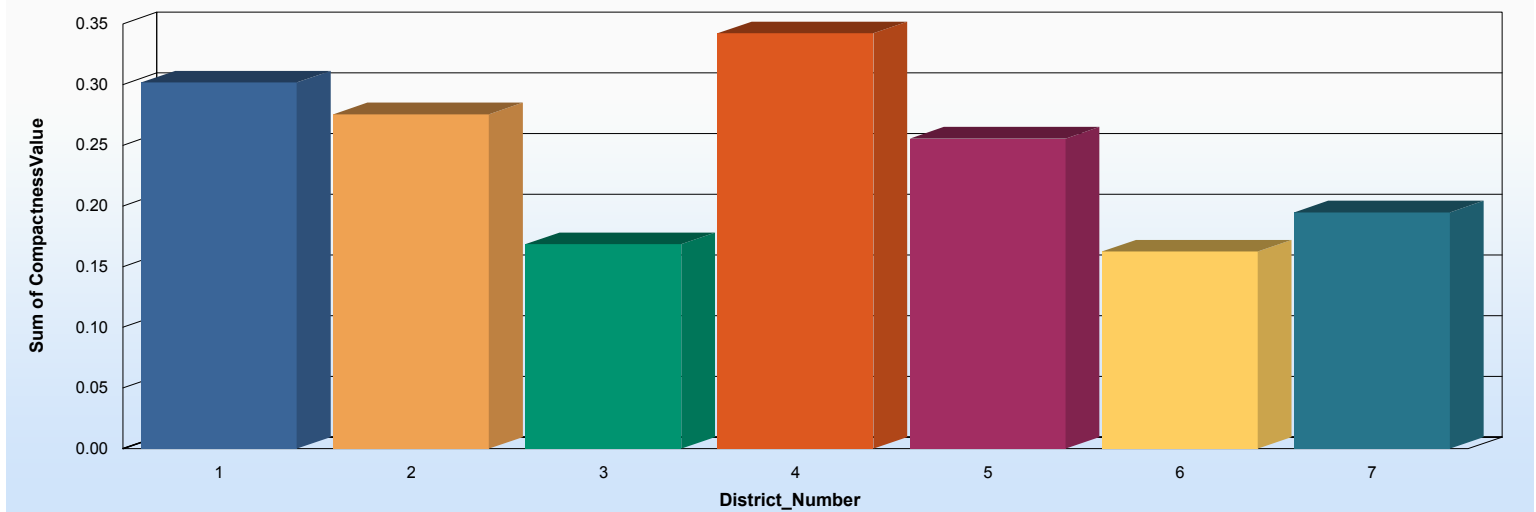
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Compactness Measure:

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:	0.30	As Percent:	30.2%
District:	2	Compactness Value:	0.28	As Percent:	27.6%
District:	3	Compactness Value:	0.17	As Percent:	16.8%
District:	4	Compactness Value:	0.34	As Percent:	34.2%
District:	5	Compactness Value:	0.26	As Percent:	25.5%
District:	6	Compactness Value:	0.16	As Percent:	16.2%
District:	7	Compactness Value:	0.19	As Percent:	19.5%

Total Perimeter for all Districts 794.92 Miles