

centroid

<http://support.esri.com/en/knowledgebase/GISDictionary/term/centroid>

The centroid of a non-self-intersecting closed polygon defined by n vertices $(x_0, y_0), (x_1, y_1), \dots, (x_{n-1}, y_{n-1})$ is the point (C_x, C_y) , where ^[3]

$$C_x = \frac{1}{6A} \sum_{i=0}^{n-1} (x_i + x_{i+1})(x_i y_{i+1} - x_{i+1} y_i)$$

$$C_y = \frac{1}{6A} \sum_{i=0}^{n-1} (y_i + y_{i+1})(x_i y_{i+1} - x_{i+1} y_i)$$

and where A is the polygon's signed area,

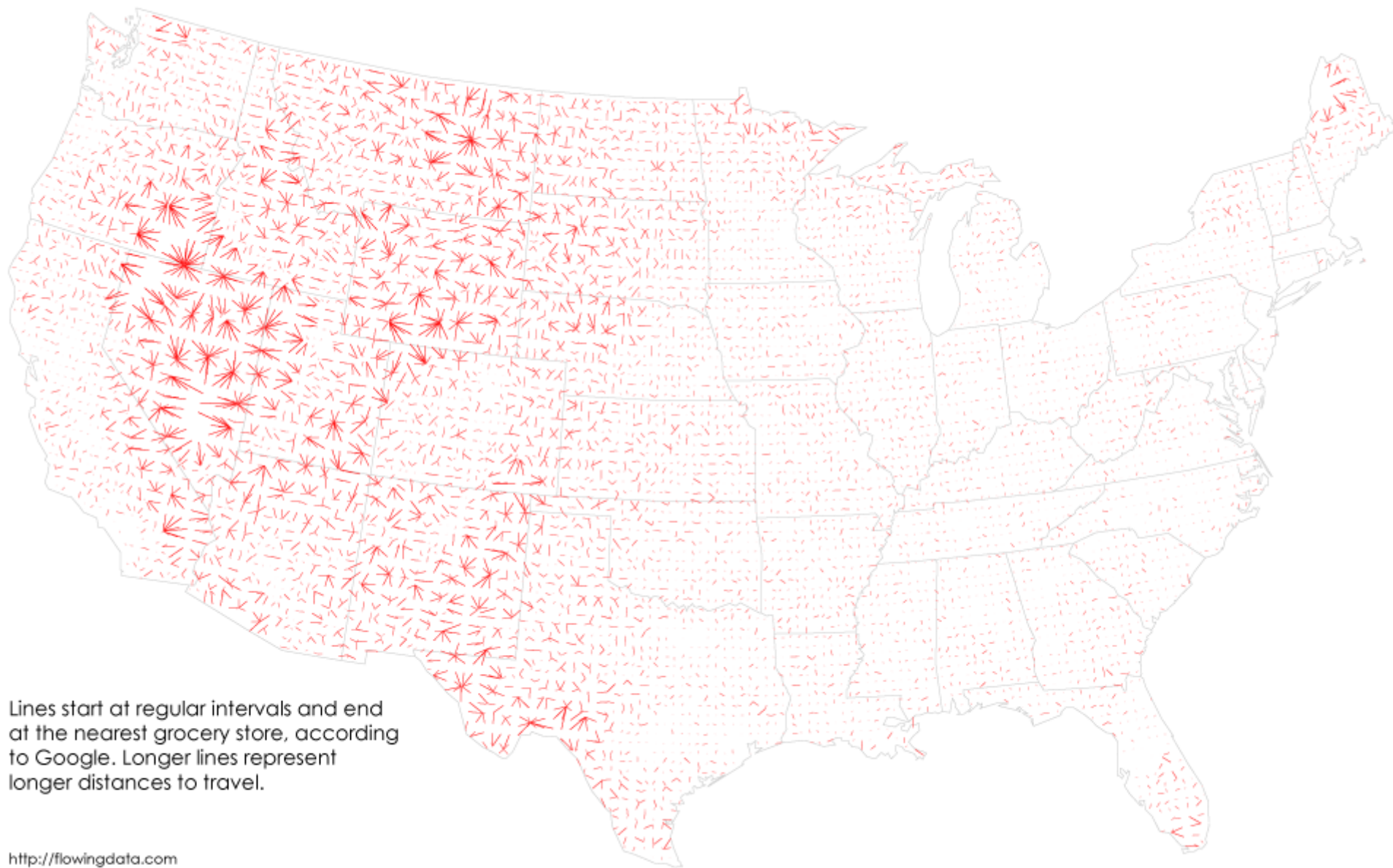
$$A = \frac{1}{2} \sum_{i=0}^{n-1} (x_i y_{i+1} - x_{i+1} y_i)$$

In these formulas, the vertices are assumed to be numbered in order of their occurrence along the polygon's perimeter, and the vertex (x_n, y_n) is assumed to be the same as (x_0, y_0) . Note that if the points are numbered in clockwise order the area A , computed as above, will have a negative sign; but the centroid coordinates will be correct even in this case.

Centroid vs trueCentroid vs label point

<http://resources.arcgis.com/en/help/main/10.1/index.html#/Geometry/018z00000070000000/>

<http://gis.stackexchange.com/questions/43384/python-find-a-method-to-calculate-the-inner-centroid-also-known-as-labelpoint>



Lines start at regular intervals and end at the nearest grocery store, according to Google. Longer lines represent longer distances to travel.

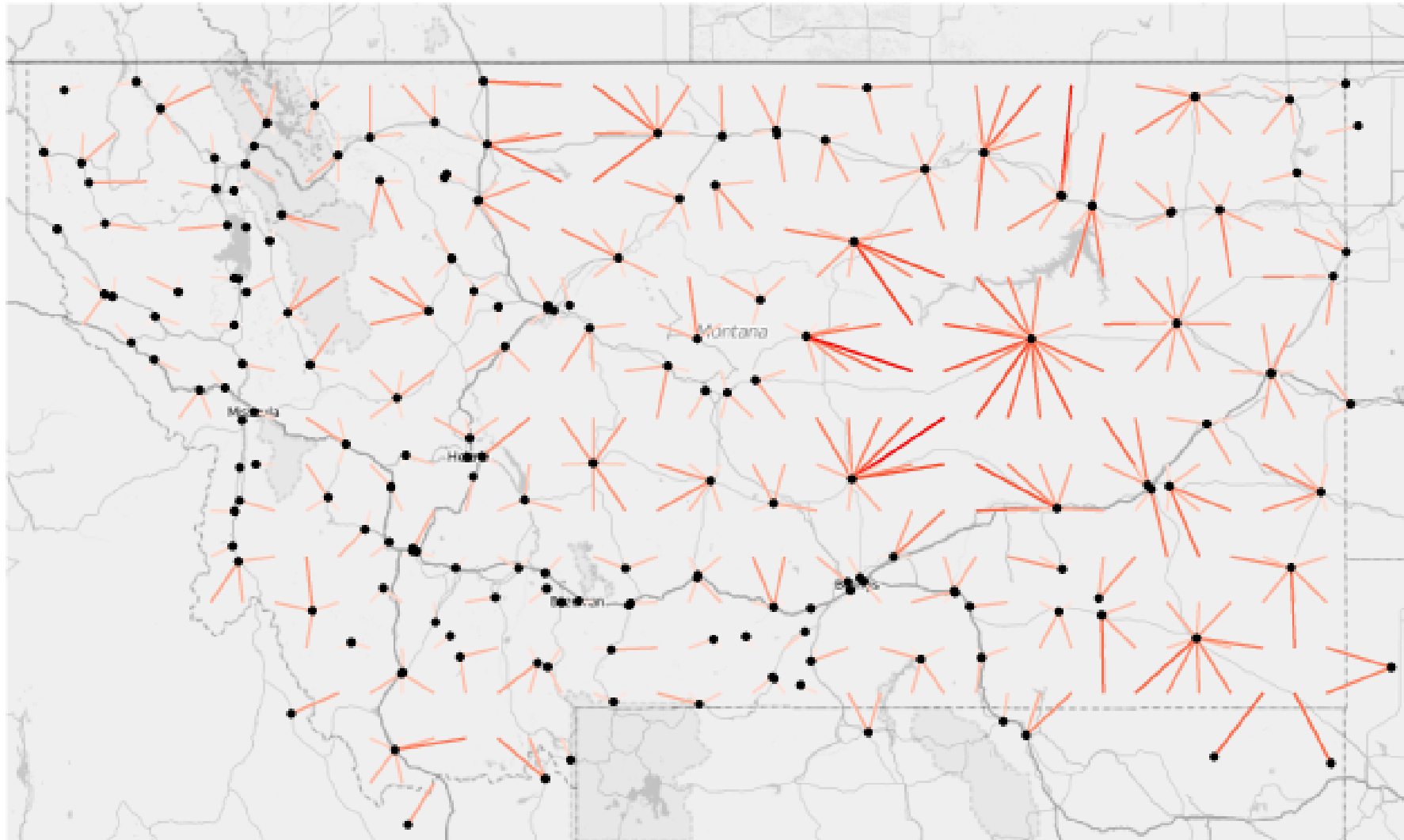
Lattice

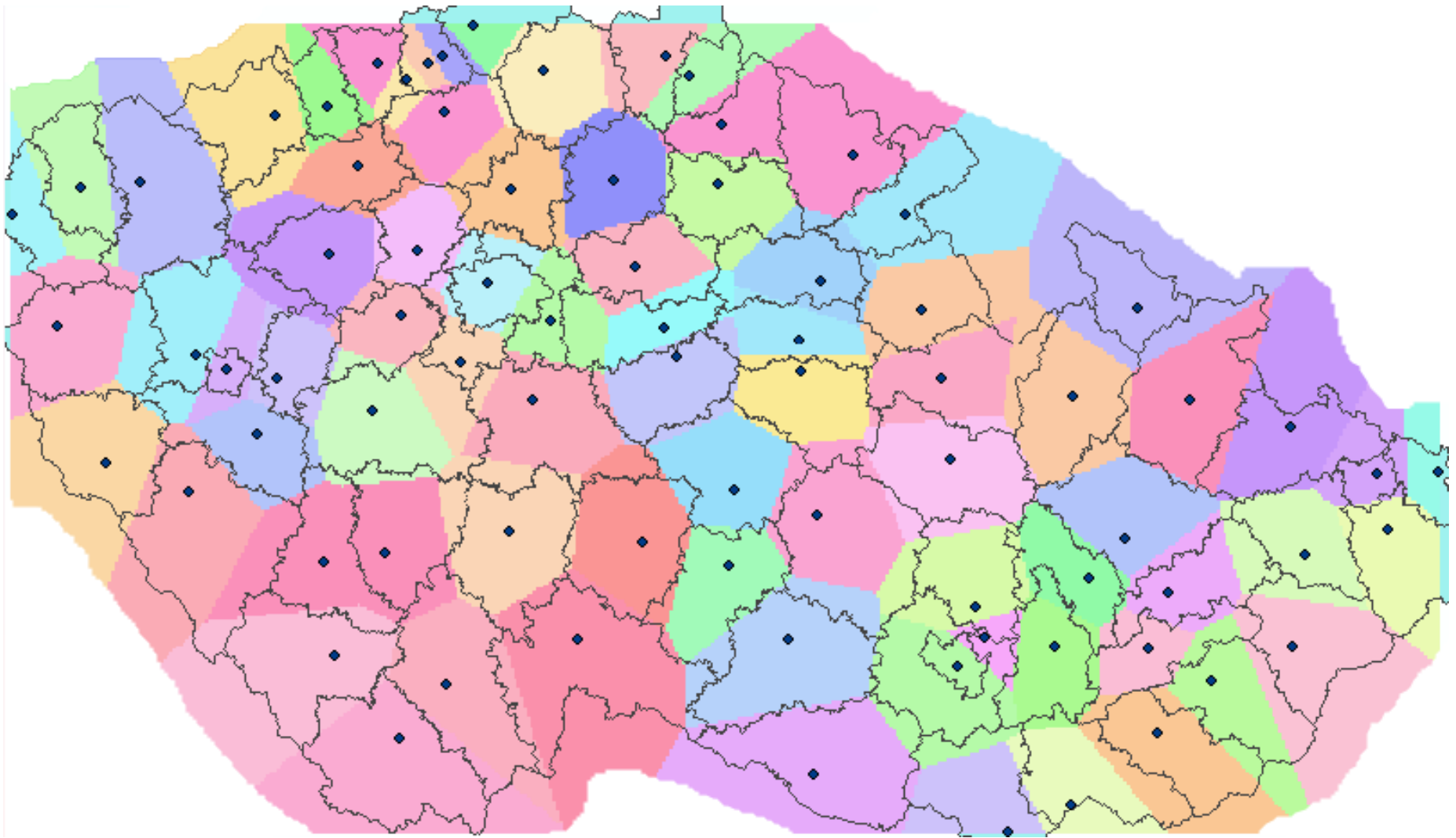
<http://resources.arcgis.com/en/help/main/10.1/index.html#//0103000000sp000000>

http://gis.mtu.edu/wp-content/uploads/2012/06/Regular_Sampling_Tutorial.pdf

Near

<http://help.arcgis.com/en/arcgisdesktop/10.0/help/index.html#//00080000001q000000>



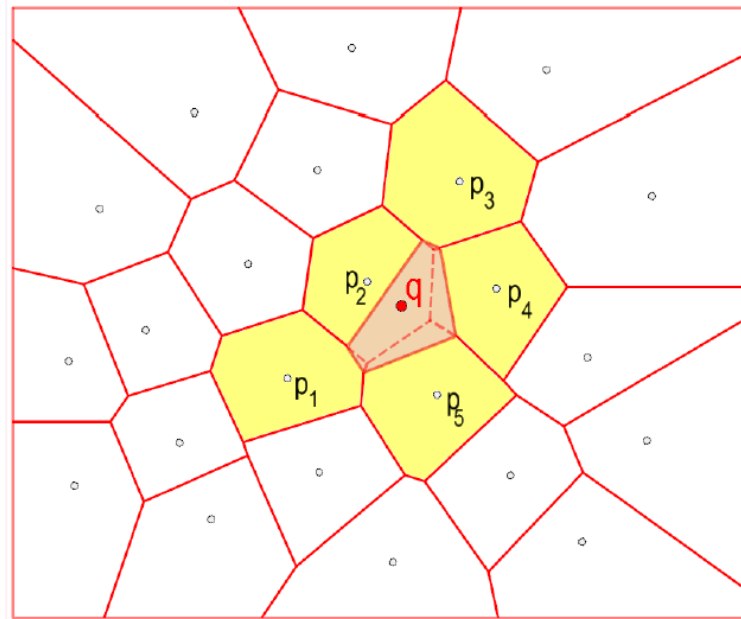
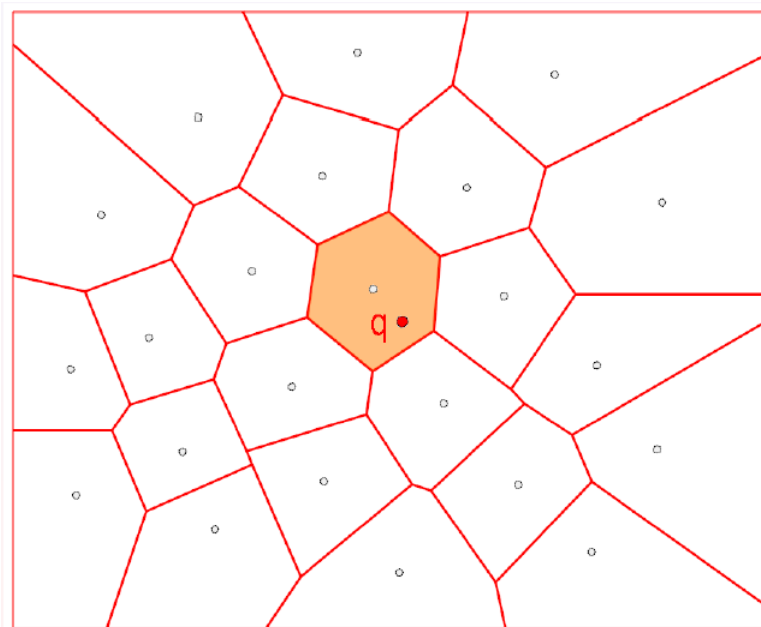


thiessen / voronoi diagram

<http://web.natur.cuni.cz/~bayertom/Adk/adk6.pdf>

natural neighbor interpolation

<http://resources.arcgis.com/en/help/main/10.1/index.html#//005v00000027000000>



polygon neighbors (analysis)

<http://resources.arcgis.com/en/help/main/10.1/index.html#//000800000045000000>

```
import arcpy, sys
```

```
# input feature layer
```

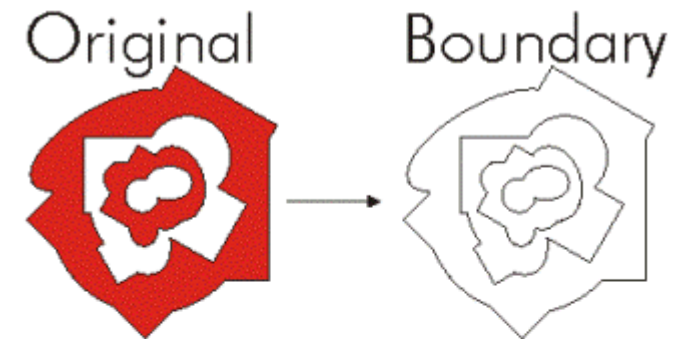
```
inf = arcpy.GetParameterAsText(0)
```

```
# creates "neighbours" table in the default geodatabase
```

```
arcpy.PolygonNeighbors_analysis(inf, "neighbours", ("FID","AREA","PERIMETER","NAZEV"))
```

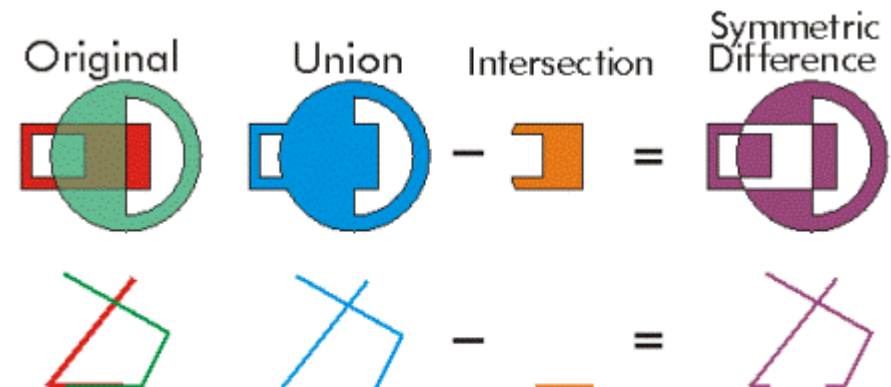
polygon boundary()

<http://resources.arcgis.com/en/help/main/10.1/index.html#/Polygon/018z00000061000000/>



polyline intersect

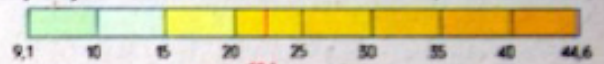
<http://resources.arcgis.com/en/help/main/10.1/index.html///018z00000008000000>



4

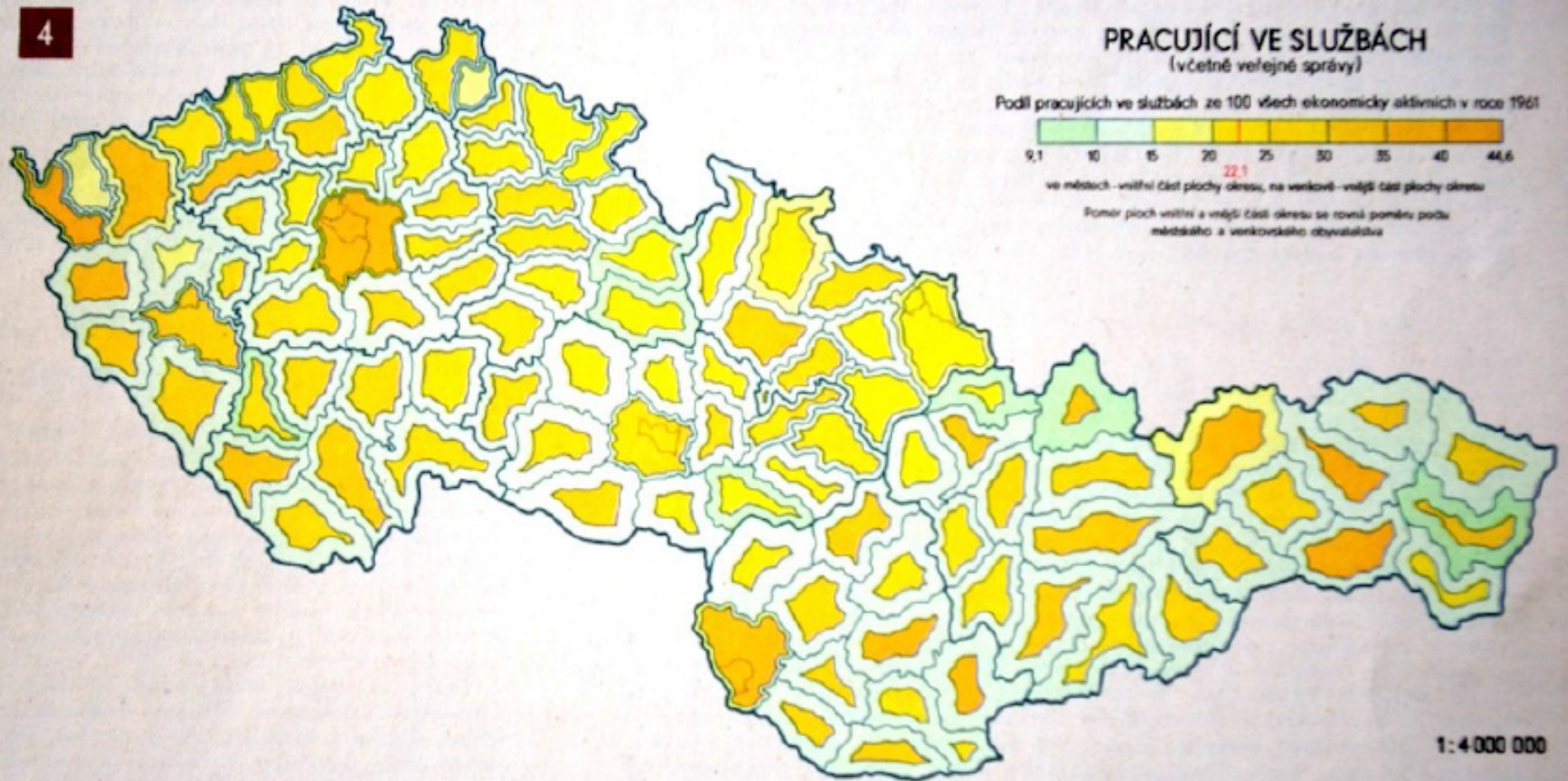
PRACUJÍCÍ VE SLUŽBÁCH (včetně veřejné správy)

Podíl pracujících ve službách ze 100 všech ekonomicky aktivních v roce 1961



ve městech – vnitřní část plochy okresu, na venkově – vnější část plochy okresu

Poměr ploch vnitřní a vnější části okresu se rovná poměru počtu
městského a venkovského obyvatelstva



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