

Suitable Locations for New Portland City Parks

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Problem:

What locations within Portland are relatively underserved by parks?

Two factors:

- Distance from existing parks
- Population density

Data:

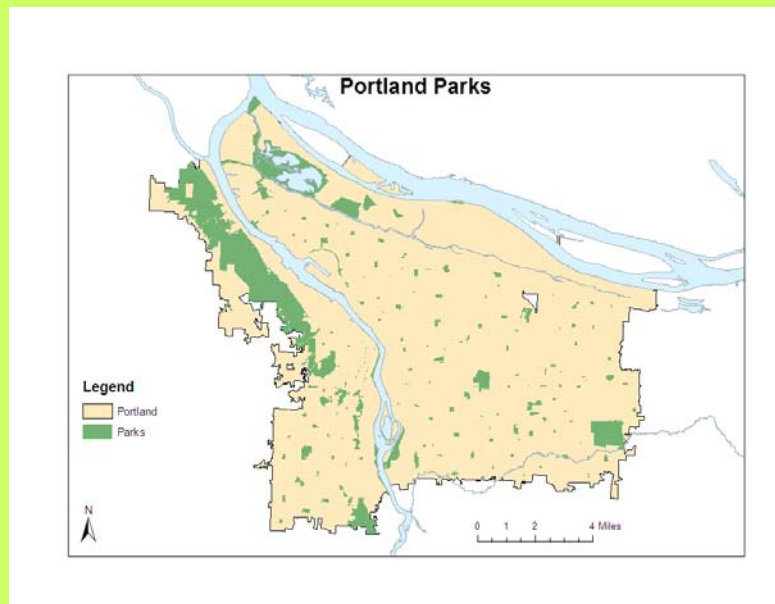
RLIS (Regional Land Information System) 2004

For analysis:

- Parks
- Block groups
- Zoning
- Taxlots
- Cities

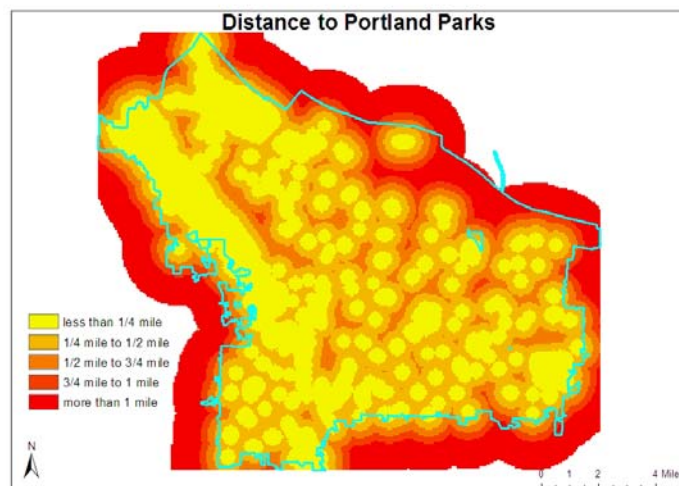
For orientation:

- Rivers
- Freeways
- Streets
- Neighborhoods



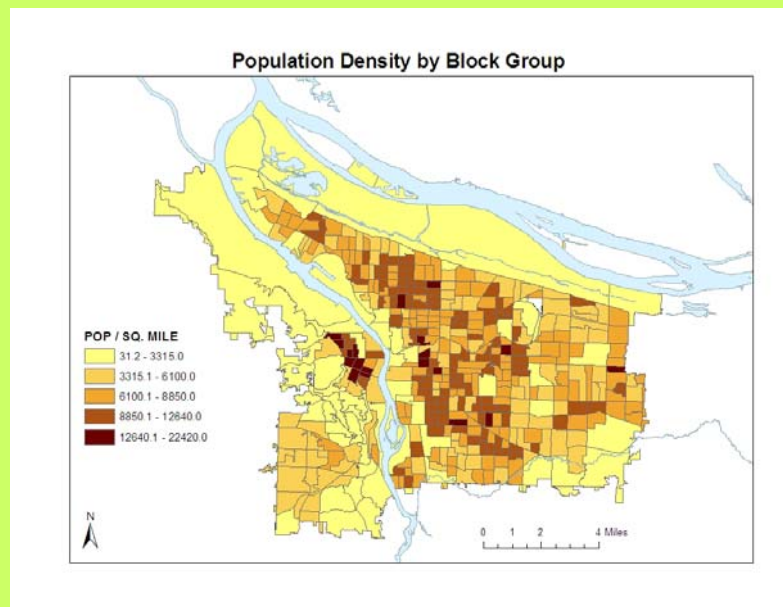
Distance analysis:

- Created straight-line distance raster from Parks using Spatial Analyst
- Reclassified results into 5 manually-defined classes (quarter-mile distance zones)



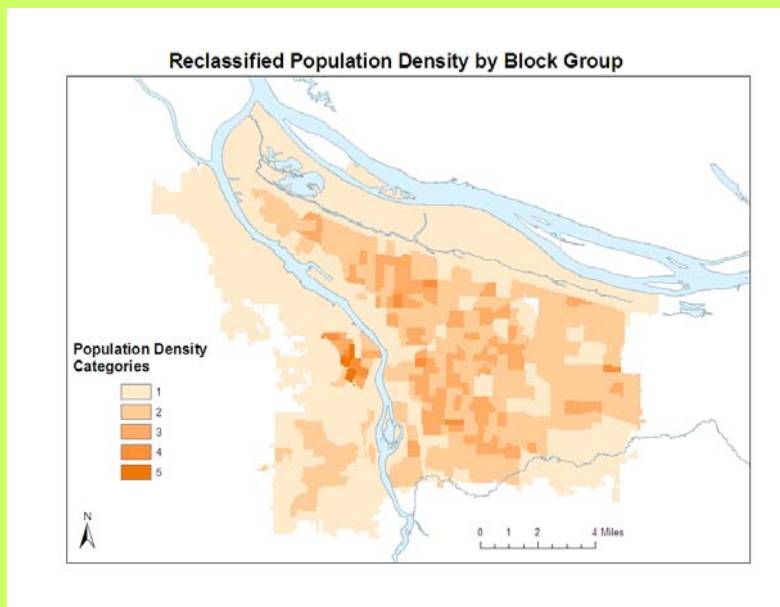
Population density analysis:

- Added area in square miles field to the attribute table of the Block Groups layer
- Added population density field to the attribute table of Block Groups layer and calculated as population divided by area in square miles
- Clipped Block Groups map to Portland boundaries
- Displayed Density in 5 classes (Natural Breaks)

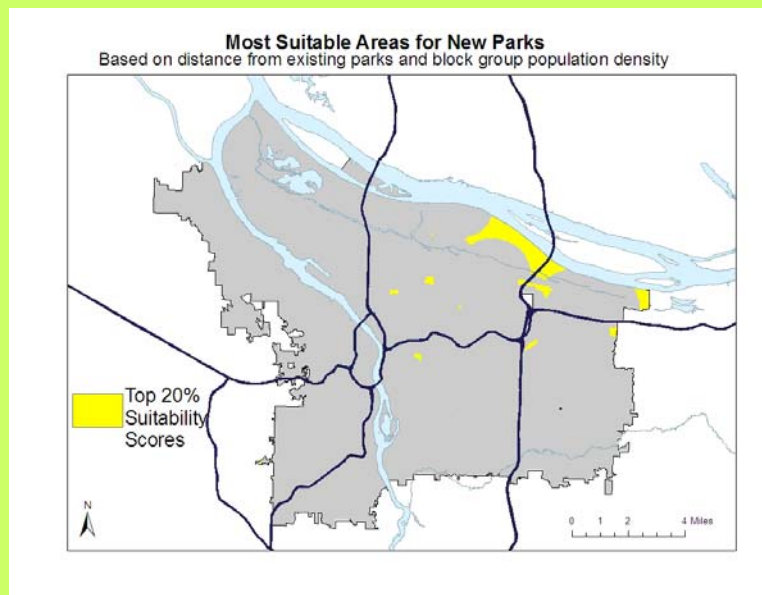
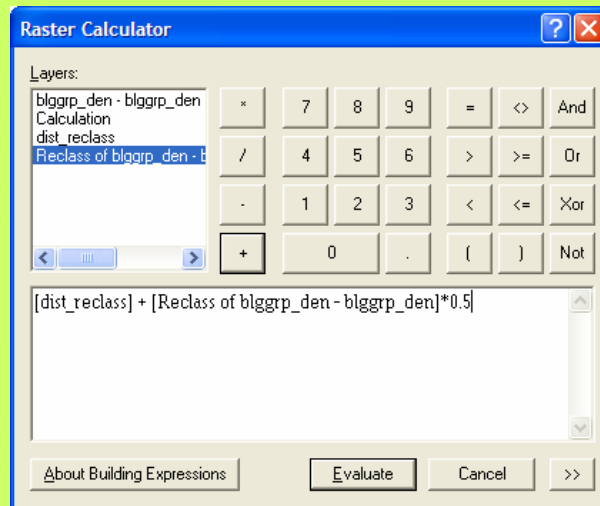


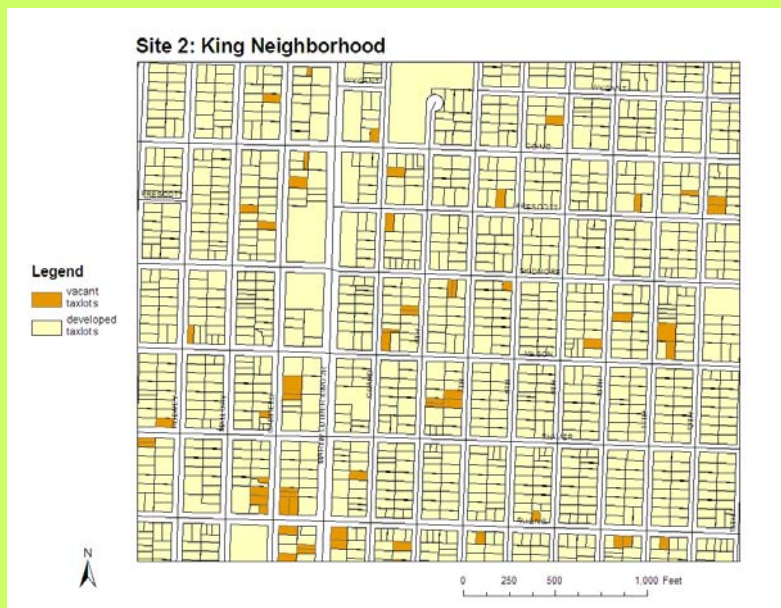
Population density analysis:

- Rasterized clipped Block Groups map by Density field
- Reclassified into 5 classes (Equal Interval)



Next step: Raster Calculator





Problems:

- Modifiable Areal Unit Problem (MAUP)
- Euclidean distance raster, not cost-weighted

Questions?

