

Introduction to Experimental Models

Review of last week's project: Intro to Rasters and [Mapping Continuous Data](#)

Check Out [Reference USA](#): A source of point location data for practically any sort of facility.

Segue: Explore Vector GIS Data Models as laboratories for experimentation.

This week we are going to kick our capability of representing things, and conditions and spatial relationships into high gear by learning how to use GIS procedures to automate the simulation of spatial mechanisms that we have, up-until now simply been working with conceptually and diagrammatically. For a deeper view of this, we should revisit the notes about Using GIS in Decision-Making Situations and Conceptualizing Decision-Making Situations for use in GIS Models.

Re-examining these pages will help to illustrate the fact that using GIS tools to simulate spatial relationships does not relieve us of the necessity of developing clear descriptions of the actual things, conditions and spatial mechanisms of interest. Understanding whether Data and GIS are useful requires us not only to criticize our the fitness of data but also the tools and assumptions behind our simulation of the spatial relationships that we are concerned with.

Creating Re-Useable Models With [Geoprocessing Tools and Models](#)

- The Toolboxes
- Browse / Explore: Reference, Self-documenting tools

Geoprocessing lets you chain together re-useable scripts of operations.

- Write once, then refine.
- Sharable, Self-documenting

The [Vector Procedures in ArcMap](#) tutorial.

- Create a scheme of facility points with a proposed additional facility.
- Build a simple select and sum model:
- Experiments with adding or removing facilities

[Optional: Creating Experimental Schemes Tutorial](#)