GIST602 – Lessons 2

Suitability Project introduction

**PROJECT – Suitability Modeling**

I am all about “learning by doing” so what better way to learn the complexities of the analysis tools and the power of ArcGIS than by completing a simple suitability project over the 2 weeks. During the course of this project you are free to explore and use tools we have not formally discussed. You are also welcome to use a problem that you have at work. If you don’t have a problem at work to use, no worries, there is a guided project below. Hopefully this task will pull of the fabulous details of the first six weeks together. My advice to help you through the next two weeks: keep it simple. You will have an opportunity to expand upon this idea as we progress through the degree adding automated procedures, custom scripts and sharing your project on the web.

STEP 1: PICK A PROJECT OPTION

**OPTIONS:**

1. Pima County would like to identify areas appropriate for future solar energy uses so that they can include as part of their zoning code Renewable Energy Incentive Districts (REID). Within these districts companies that site solar arrays or solar-related projects will receive incentives in the form of shorter permitting review time, tax incentives, and other process related incentives. The county has a list of criteria it is using to identify areas with potential to apply the REID designation. The criteria are listed in a separate document posted on the course site. If you would like to modify the criteria, you can, but you must have at least 3 criteria per goal.
2. Custom project. You may develop a method to address a problem that you identify that could be best addressed using suitability. You can choose to solve your problem outside of Pima County but make sure before you present your project proposal that data is available for your study area.

STEP 2: DEVELOP A PROJECT PROPOSAL

1. Read the Carr and Zwick chapter on stakeholder, goals, objectives, and sub-objectives. If you are choosing a custom project please create a criteria list
2. Using the document GIST601C-StdProjCriteria as a guide, develop a project proposal in Microsoft Word that includes the following information:
   1. A statement of intent, goals, and objectives list
   2. You must have 2 goals (the ones included on the example are fine. Within each goal you must have a physical and economic suitability objective. You must have ONLY three sub-objectives per objective.
   3. State the data you plan to use and the source of that data to analyze the sub-objective criteria.
3. Develop a PowerPoint that you storyboard all of the models you plan on using to complete your analysis. DO NOT RUN ANY OF YOUR MODELS!! I want to see the storyboard so that you can see the flow of the analysis and I can see if you “get it” and have the correct data to use for the analysis.
4. Submit your proposal to the D2L discussion board by Monday, February 22nd at 5p. The discussion is moderated so you won’t see your post immediately. I will release all responses after 5p.

STEP 3: BUILD AND RUN YOUR MODELS

1. You are to build and run the models you have proposed to Iris and she has provided feedback on. You will run the models through determining conflict.
2. BEFORE YOU COMBINE all individual suitability grids together you need to update the presentation you completed for Step 2 above and include a graphic (JPG) of the suitability grid. Post this presentation to the D2L Discussion board for Lesson 6.
3. Once you have received clearance for your revised presentation, combine the suitability grids and produce a conflict surface.
4. Create a quick (no more than 10 minute) presentation that summarizes your statement of intent, process, and final conflict results.