Zoning in Westfield and Holyoke Project

This is a short project to wrap-up the semester: analyzing zoning in Westfield and Holyoke. The analysis is similar to our MassGIS Project, but here we are using zoning data (as opposed to land use data).

You should be able to complete this project on your own. As always, you can ask me for clarification as needed. This project, in essence, replaces a traditional final exam.

GIS Mapping Task

Create a zoning map for the Cities of Westfield and Holyoke using the MassGIS zoning data layer. The map includes an analysis table comparing the different zoning classes for each city.

➔ Your map (and the report) have to be professional and meaningful, something we could send to the City of Westfield/Holyoke Planning Department to advertise our GIS program and students.

Map Details

• Create the map in 8.5 by 11 inches with two data frames (same size): one for Westfield and one for Holyoke. Include the required map elements and the ‘current as of’ date(s) for the zoning data for each city.
• Show the three different zoning categories (Residential, Commercial, Industrial) using the GEN_USE zoning code in three different colors.
• Use the same symbology in both data frames and choose colors that can be distinguished when printed in black/white. Use only one legend – which has to be meaningful for both data frames and understandable for a person not familiar with the details of zoning data.
• Include a zoning comparison table on the map as detailed below.
• Include an overview map and useful text explaining the map and the analysis.

GIS Analysis Task

Include an analysis table on the map summarizing the three GEN_USE zoning categories for Westfield and Holyoke. The table consists of five columns:

<table>
<thead>
<tr>
<th>Column 1</th>
<th>Zoning Category (Residential, Commercial, Industrial)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Column 2</td>
<td>Area (acres) for Westfield</td>
</tr>
<tr>
<td>Column 3</td>
<td>Area (acres) for Holyoke</td>
</tr>
<tr>
<td>Column 4</td>
<td>Area (%) for Westfield (i.e. % of total area of Westfield)</td>
</tr>
<tr>
<td>Column 5</td>
<td>Area (%) for Holyoke (i.e. % of total area of Holyoke)</td>
</tr>
</tbody>
</table>

GIS Interpretation Task

1. Interpret and discuss the similarities and differences between Westfield and Holyoke in terms of their zoning (compare both the absolute values and their percentages).
2. How could you make this map and the zoning comparison between Westfield and Holyoke more meaningful and more detailed?
3. Explain the difference(s) between land use and zoning data.
Deliverables

A professional project report (4 to 5 pages) that includes the items as detailed below. Remember to add a title page and to include page numbers. The number of pages is merely a guideline. Some of you will write more, whereas some of you will be able to condense your answers, explanations, and interpretations into less text.

- Include a description of each data layer used in the map. Also include the website links for each data layer used.
- A description of your mapping and analysis procedure (think in terms of writing a cookbook recipe or tutorial that someone else can follow along to reproduce your map and analysis).
- The answers to the three questions (as detailed above).
- Your zoning analysis table (as detailed above).
- Your map, exported as a JPG image, and inserted at the end of your project report.

Use professional, well-written, and proper English language and professional formatting and layout. Think in terms of using this report as a sample of your work for a job interview.

The map, the introduction/documentation, professionalism and attention to detail are all equally important in terms of your project grade.

Due Date

Friday 10 May 2013 at 12:00 noon via Email

➤ Contact me for clarification of this project or my expectations as needed.