Five Year Development Plan For Small Municipalities:

Alachua, Newberry, High Springs and Hawthorne Alachua County, Florida

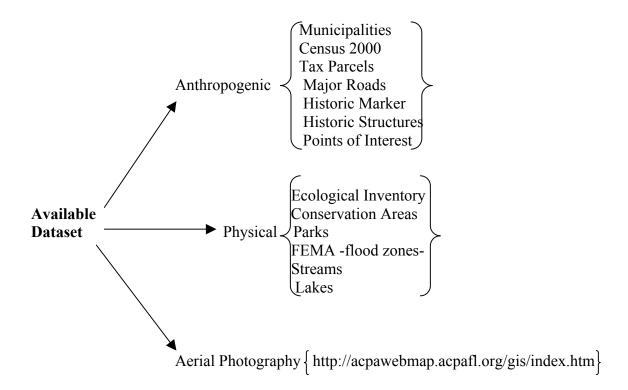
Team 2

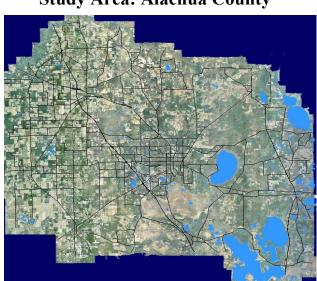
Erika Barraza Chandra Gertzlin Amanda Merrit Maria Riestra Stuart Thiel

Five Year Development Plan For Small Municipalities:

Alachua, Newberry, High Springs and Hawthorne Alachua County, Florida

The main objective of this project was to identify suitable areas in four municipalities - Alachua, Newberry, High Springs, Hawthorne- that have the most potential for redevelopment and investment. In order to accomplish these goals, ArcGIS was used as the main tool to select, query and manipulate an extensive set of database. Only those that were most relevant to the assignment were considered to develop the final display.





Study Area: Alachua County

The municipalities of Alachua, Newberry, High Springs and Hawthorne are part of Alachua County. This is a 960 sq miles county, located in the north central part of Florida (one of the fastest growing states in the country). Alachua County's population is close to 219,000 and in the last 10 years its population has increased by 20%. One can infer from these facts that Alachua County is in need for expansion plans to meet with the demands of a growing population.

Municipalities Background

Prior to explaining the process involved in developing this project, it is necessary to have a background of the areas being studied. It is always important to know the history of the development sites before making any decision. Background information allows one to determine the economy/social pattern followed by the different sites, and then make assumptions of future outcomes.

Alachua

Located in North Central Florida, northwest of Gainesville, with immediate access to Interstate 75 and Highway 441. Its total area is 46.6 sq miles, with a 6,500 population.

Alachua is most known for its agriculture and commercial development.

Newberry

Located southwest of Alachua, with a population of 3,316 and a total area of 2.21 sq miles, it is important for its phosphate industry and the extension of the Savannah, Florida and Western Railroad in 1853

High Springs

Located off I-75, 15 miles northwest of Gainesville. It is best known for its recreational activities such as Kayaking, cave diving, hiking, cycling and horse back riding. Its population is 3,863 and covers an area of 9.19 sq miles.

Hawthorne

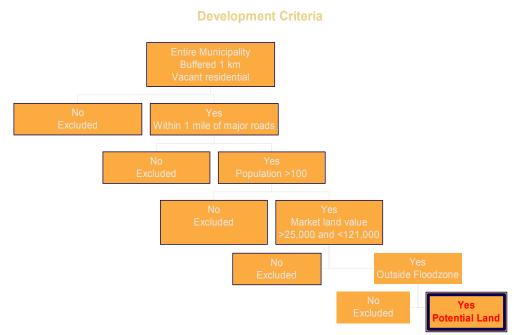
The smallest municipality -1.27 sq miles- located 15 miles east of Gainesville, with a strong business development that provides excellent quality of life for its 1,500 population.

Criteria

Once familiar with the data and metadata, as well as with the municipalities' background, a set of criteria was developed based on the team's objectives. The criteria -described in more detail below- included construction considerations, existing infrastructure and demographics.

It was determined that the area should be a vacant residential plot easily accessible to utilities such as electricity, gas, water and sewer. Easy accessible utilities ensure optimum supply and reliability, and usually a competitive price. To avoid future problems with flooding and permits, all the flood zones and conservation areas were excluded from the construction sites. Preference was given to existing infrastructure with vacant residential

areas and with a close proximity to major roadways for mobility convenience purposes. There are more chances for development when the community population is high. In this case study it was set to be greater than 100. Family income is an excellent indicator to determine the most potential site to establish a profiting business. Unfortunately, family income was not provided in the attribute table, and thus it was decided to take market land value to determine their income. The market land value needed to fall between 25,000 and 121,000 these numbers were chosen to get an appropriate range that was neither too expensive nor too cheap so the average middle class person could afford purchasing in that location. After the criteria were set, it was then possible to apply a GIS analysis. As the analysis was performed, a methodology followed along. This methodology is best described using a "flow chart", which allows one to describe the process involved in analyzing the data, it lists the ArcGIS tools applied to solve the problem and it also describes the specific values and variables used in the methodology.



^{*}Please refer to the project map attachment for map display.

GIS Final Project – Team 2

Conclusion

ArcGIS was a great tool in identifying the suitable areas with most potential for

redevelopment and investment in the cities of Alachua, Newberry, High Springs and

Hawthorne. The data, though extensive, was not used entirely; it was found to be less

difficult and more effective to discard and choose those that met the criteria set to

develop the project. Once the final map was obtained, it was concluded that the five-year

development plan should consist of mixed land use development, such as condominiums

or apartment complexes in the larger sites within Newberry and Residential Development

in the scattered sites of High Springs and Alachua. The city of Hawthorne should take

last priority on development due to its small amount of available land.

References:

www.floridaview.com

www.alachuacounty.gov

www.hawthorneflorida.com

6