Zoning Map Update Project

Project Summary

The City of Gulf Shores is required to maintain a map showing the current zoning of property within the City corporate limits. In early 2005, the City's Community Development Department started a project to modernize the City's zoning map by adding zoning data City's existing GIS parcel shapefile. The purpose of this project was to allow more frequent updates to the paper maps on display in the department and also create a electronic map available on the City's web site which could be linked to sections and tables of the Zoning Ordinance giving the public quick access to the zoning information for a particular parcel or area.

City of Gulf Shores Zoning Map

The Community Development Department (CDD) manages and enforces of the Zoning Ordinance, first adopted in 1982 and updated frequently since. Section 3-1 of the ordinance states that the ordinance was adopted "…for the purpose of guiding development to meet existing and future needs, …promoting desirable living conditions, … and protecting property from blight and depreciation…", among other considerations. Section 5-2 requires that a zoning map showing the boundaries of those districts be maintained and available for review by the public. The zoning map is used daily by the department for communication with the developers, local officials, city employees, and public for the evaluation of proposed subdivisions and commercial and residential site plans. It outlines and defines the various zoning districts so that those using it can refer to the sections of the Zoning Ordinance that contain the regulations that apply to the properties underlying the district. The City's Framework Plan, updated in 1998, and

2005 Strategic Plan, also guide the department's planning processes and influence

recommendations for proposed amendments to the zoning ordinance.

Community Development Department Staffing

CDD's staff consists of the City Planner, Zoning Administrator, two planners, a code

enforcement officer, and several building inspectors. The department processes applications for

new site plans and subdivisions and enforces the zoning and building codes that apply to the

developments. The department receives technical support from the City's Information Systems

staff on computer related issues, but that staff is currently limited to two full time employees

who deal with network and general computer problems and have no training or background in

geographic information systems. GIS data on parcels, street data, topography, aerial

photography and other similar data created by the County is available on a one of the City's

servers, but the department's staff has limited training in its use, and the City's GIS support is

limited to an employee of the Public Works Department that can only assist in GIS endeavors

part time.

Project Background

Before the mid 1990's, a local surveying company had to cut and reduce existing paper

tax parcel maps so that they could be pasted together to create an overall basemap of the City.

Hand drawn boundaries of the zoning districts were sketched on a clear sheet that was overlaid

over the reduced parcel maps. Changes to the boundaries or zoning labels were done by hand,

and when the parcels beneath them were subdivided, it would require the entire base map

creation process to be repeated from new county parcel maps carefully being reduced to the exact same size so that they would match the clear overlay.

In the mid 1990's Baldwin County undertook a project to update their parcel maps with GIS based software. They provided the City an ESRI shapefile with parcel boundaries and data that the County update and provide copies to the Cities once or twice a year. CDD partnered with the South Alabama Regional Planning Commission (SARPC) to use the data to create a new Zoning Map. As a regional planning commission, SARPC had a grant to create and update zoning and planning maps for the Counties and Cities within their region. SARPC did not have the ability to update the parcels as new subdivisions took place, so they sketched rough outline polygons over the existing parcel shapefile to represent the zoning districts. The districts were not created from directly from the parcels and often district boundaries were approximated for new subdivisions until periodic updates were obtained from the County. The rough approximations were not apparent at the scale that the zoning map was printed. Although not ideal, the maps created served the needs of the Department for nearly a decade.

Zoning Map Update Project

When the pace of annexations quickened, the City was forced to hire a consultant to create and update a second set of annexation maps to distribute to various City departments since SARPC was unable to turn around changes to the Zoning map quick enough to keep the Police and Fire Departments up to date on the areas that qualified for emergency services. These maps also had to be sent to the County so that they could update their records. The County's GIS staff had grown over the years and they had also obtained a grant similar to SARPC's to receive reimbursement for creating and updating planning maps for Cities and Fire Districts within their

County. Since the County already updates the parcels when they were subdivided, and modified

an attribute when they were annexed into a City, they would merely have to create and update an

attribute for the City's zoning districts to create zoning maps similar to the ones they created for

zoned areas within the County. Since the Community Development Department was in the

process of purchasing permit software which would tie permits to parcels in the GIS and was

preparing a RFQ for an update to the Zoning Ordinance which would create an electronic

document that could be linked to the zoning data in the City's GIS, regularly updated zoning data

for each parcel was needed.

In early 2005, CDD staff met with GIS staff from the County and provided a copy of the

current SARPC zoning map marked up with updates and agreed to procedures for providing

information on annexations and newly rezoned properties. Since the project would be a part time

endeavor for the County staff, it was anticipated that the initial map creation would take six

months and that updated maps could be provided quarterly or perhaps monthly if needed.

During the development period the City experienced a number of large zoning changes,

including creating fifteen additional zoning districts for a recently annexed area, and continued to

experience a large number of annexations. Meanwhile, the County experienced a significant

amount of staff turnover. Despite a number of meetings with the changing County staff, they

have not been able to make a number of changes to the appearance of the map that would help

make the zoning map easier to understand by the public. The County's staff, while experienced

in the use of GIS software, has not shown the cartographic knowledge that is apparent in

SARPC's staff. Because of the increased number of annexations and rezonings, number of

properties are still misidentified on both sets of zoning maps. CDD's staff is forced to spend

time meeting with staff from both SARPC and the County to get these corrections made. Over a

year into the project the City is still using maps updated by SARPC as their official zoning map and are unable to get updates as frequently as needed.

Procurement

This project did not require going through a procurement process because both SARPC and the County have grants that to update zoning maps in their jurisdictions at no cost to the City. However, CDD is currently engaged in obtaining requests for quotations for reorganizing and updating the Zoning Ordinance. Having a GIS based zoning map that can be kept up to date and available online to allow access to the underlying zoning regulations is an essential part the plan to provide easy access by the public to the information they are interested in on the City's web site.

Project Fit to the Organization

The project to update the map was a natural undertaking for the department.   The zoning map is essential to the department's daily work and long term planning. However, the department's lack of experience and knowledge in GIS and its reliance on outside agencies for the update of this resource has led to the current zoning map update project no longer being adequate to serve the departments and City's needs.

Conclusions

The bulk of the work needed to create a zoning map with attribute data that is needed for the new permitting software and Zoning Ordinance update has been completed successfully by the County's GIS staff. The City has benefited from having this work done at no cost to the

City. The remainder of the corrections needed, the ongoing updates, and the revisions to the appearance of the map could be accomplished by the Community Development Department staff with a small investment in training and time. Alternatively, if this is not practical at this time, by paying an experienced consultant, the updates more frequently than the outside agencies have been able to perform.