Ashe: Rural county on the move with GIS

By Sarah Newbill
Guest Writer

Not only is Ashe County's new parcel information system easy and efficient, this technology has the county on the cutting edge.

Ashe's Parcel Information System (APIS) provides a wealth of information like acreage, zoning, current owner, value of the land, and aerial photographs on any of the 30,000 parcels in the county.

Developed with the help of the civil engineering firm Anderson & Associates, the user-friendly Geographic Information System (GIS) is available for public use through a centrally located computer at the town mapping office.

"I used it just to see if computer illiterate people could figure it out. I called up my own property, was able to see my property boundaries, as well as value and tax estimates. I found it to be very user friendly," says County Manager **Jeff Miller**.

For years, the county had been using mylar maps, which were getting brittle. They were difficult to update, hard to write on, and the boundary lines were becoming illegible.

With APIS, parcel information can be easily manipulated in the database, to show anything from a change in ownership to a change in boundary lines.

"Some of our very early thinking about a system was geared around massive work stations, and larger systems that were much more expensive.

"We shared with Anderson & Associates what we wanted to do, and made sure that it would be a phased project that would unfold over several budget years," says Miller.

"I feel we've been innovative in having this type of sophisticated information driven on a PC platform. I think the chief attractiveness of it is the 'off-the-shelf' software. You don't have massive licensing fees and large programs that need continual maintenance."

APIS has been offered to the public since the first of the year, and according to **Joe Ann Poe**, the county's mapping supervisor, it is used constantly. Residents, especially surveyors, lawyers, and real estate agents, utilize it often.

"There is very seldom over an hour a day that there's not someone in here at the terminal. We have a lot of people comment on our user-friendly system," says Poe.

Independent real estate agent **Phil Darnell**, uses the system at least once a day, and sometimes as often as two or three times a day.

"It's much easier to locate property lines, and be able to find adjoining property owners with a click of the mouse," says Darnell, who doesn't have to bother the mapping office employees anymore to find the information he needs.

Darnell hopes the county will soon be able to provide on-line access to the system so he can work out of his home instead of driving down to the mapping office each time he needs information. Poe alludes to this type of "home access" in the near future.

"We plan to somehow develop a system for the user to access it from their own office, via disk or on-line, which will cut down on the unnecessary office traffic."

APIS pulls information queries from the existing Geographic Information System, which was developed in a series of steps, from the basic 911 mapping the county had, to a full-fledged GIS within two years.

For a quick run down on how the system works, the user sits down at a computer, and is guided through the program by easy-to-follow, point and click screens.

The opening screen gives search options. **Amy Phillips**, Ashe County tax mapping clerk, said the system is easy to use.

"You can pull up the exact location showing property lines, the assessed value of the land, deed book page, acreage, and much more. You don't even have to know the exact address."

The second screen is the browse screen. Here you can scroll through the various entries that matched the criteria selected in the first screen.

The third screen shows the detail of the selected entry. All data available on that particular owner is displayed, based on data that has been entered into the mapping office database. A report, along with a graphical map, can be displayed and printed.

One feature of the mapping is the ability to display an aerial photo of the specific area. This can be "zoomed-in" to show more detail of the parcel. This map information can be printed to show the area of a single home, or the entire county.

Technically speaking, the first step in developing the Ashe County GIS was to assign photo control points on the county. The county was divided into 150 grids, based on the county tax grids. All data entered into the GIS were based on this grid system.

The second step was to have the county "flown," resulting in a series of

aerial photographs of the entire county. The photos were then made into a digital orthophoto that corresponded to the selected grid.

The third step was to get accurate base mapping. This was done by collecting various "land" features from the photos. Its first use was to serve as a base for the county's E911 system.

The final step was to digitize county tax maps, and add "layers" on top of that, which includes what APIS now offers to anyone accessing the public terminal at the mapping office—a database of land information on any parcel in Ashe County.

The old way: Rex Blevins researches from old mylar maps.

At the present time, Miller says the county has not yet exploited the GIS capabilities to the fullest, but is looking at many future applications for the whole system.

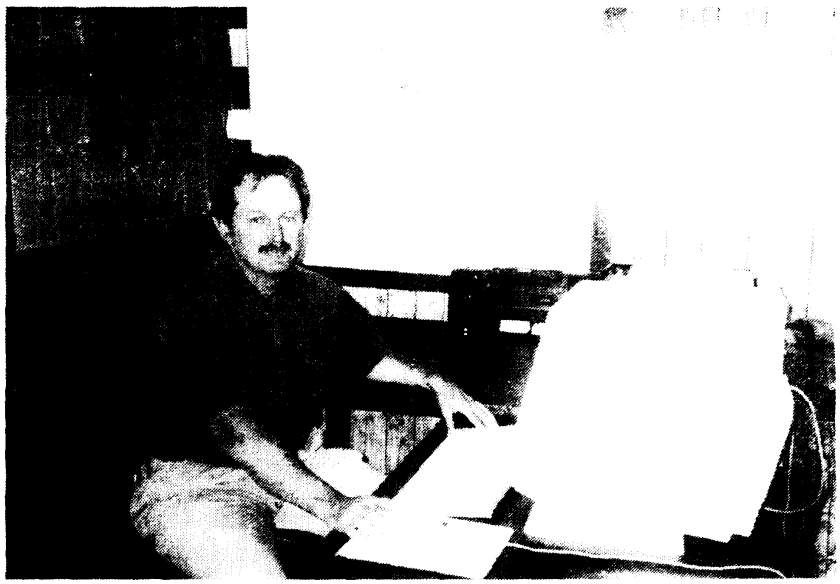
"There are limitless possibilities as far as municipal planning, and potential Department of Transportation implications like having better information as far as road planning projects. We see its potential and we're right on the verge of being able to do that," says Miller.

"What we have done is lay the framework to integrate some of the land records and start building that system, and I'm comfortable enough to say that we have not made a great deal of mistakes along the way.

"In fact, the way we've been going about it, is what I would consider the most bang for the buck approach as you can get."

For more information about APIS, contact **Jeff Miller**, Ashe County manager, at (910) 246-1830, or if you'd like more information on how to develop a specialized GIS, contact **Brandon Moore**, A&A GIS team manager at (800) 763-5596.

Sarah Newbill, public relations coordinator, Anderson & Associates, Inc.



The new way: Phil Darnell, Ashe County real estate agent, uses the public access terminal.