

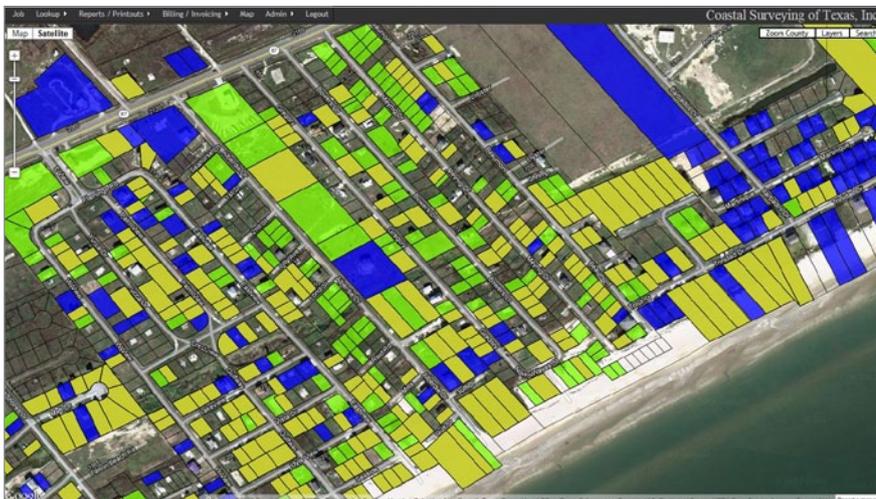
GIS: Just a Tool



By Stephen C. Blaskey, RPLS, LSLS

Stephen Blaskey is a branch manager with Coastal Surveying of Texas, Inc., a mid-sized land surveying company in Galveston County, Texas. Both an RPLS and a Licensed State Land Surveyor in Texas, he also holds a degree in Geographic Information Science.

Common Misconceptions



In the screen capture above, the colors the parcel is shaded reflects whether a survey has ever been done on the tract (Green), an Elevation Certificate has ever been done on the tract (Blue), or both (Yellow).

GIS is a powerful tool that is currently being underutilized by land surveyors. This underutilization is costing the surveying industry time during the business day, which equates to wasted money. I am not here to preach that GIS will save the universe from all which is evil. This approach has been used by the existing proponents of GIS with little effect. In my view, GIS is simply a hammer, and if you need to drive nails a hammer is a great tool, but if you are cutting lumber a hammer is useless. The biggest fallacy of the existing users and proponents of GIS is thinking that the professional surveying industry needs to change the way that they conduct business in order

to fit into a GIS world. Surveying has been practiced for thousands of years and changing the way that surveying is conducted all because of the invention of a new hammer is crazy. GIS is simply a tool for the professional surveyor to be more efficient, not a new way of doing business.

Having expressed my views, I feel I should introduce myself and my background in both land surveying and GIS. I have a Bachelor's of Science Degree in Geographic Information Science from Texas A&M—Corpus Christi; I am also a Registered Professional Land Surveyor, and a Licensed State Land Surveyor in Texas. I have been working in the surveying industry for just over a decade, and using GIS for almost all of that time.

In this series of articles I plan to tackle the myths that I have encountered as to why others in the surveying industry have not developed a GIS system to make their lives easier. A list of some of the myths I plan to discuss are as follows:

With the required software and hardware investment, it is too expensive for a small or mid size surveying firm to build a GIS.

The resources needed to start on the road of GIS will be surprising small when compared to the advantages that will be reaped from such a system. A thorough look at the software and hardware requirements can reveal many low cost—if not free—options to begin the framework of a GIS system. The trick is to be realistic as to what the system will accomplish, and to be sure that there will be a definite net gain on what advantages the GIS will provide. The idea that a surveying firm needs to dump tens of thousands of dollars into the development of a usable GIS is simply not true.

The time it will take to see a benefit from the GIS system is too large to be worth investing the energy to build it.

While there is a definite transition period before reaping the full benefits of a GIS system, the majority of this myth stems from the idea that the surveyor must change the way surveying is done to fit into the GIS. If the GIS is built with the processes of professional land surveying in mind this transition time can be minimized. The best time to

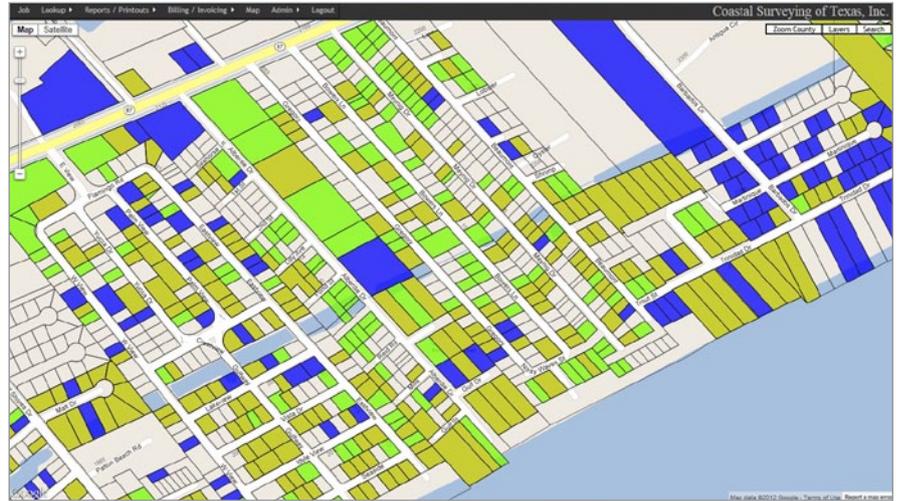
plant an oak tree was 25 years ago; the second best time is today. The time to a full return of investment with GIS can be minimized with intelligent and efficient system design.

Georeferencing all of the historic data of a surveying firm is too much work.

There are many ways to accomplish this task, and not all of them require a surveying firm to go out and reoccupy every point that has ever been measured. Depending on the accuracy required for a typical project, this part can be done extremely fast. Also, it doesn't have to be done all at once to see real benefits from a GIS system.

Between hiring people to design, maintain, and use the GIS system, the surveying firm would have to find and hire specialized personnel.

If the GIS is designed to work the way the surveyor thinks, then its use can be made intuitive for the surveyor and there is no need for specialized personnel. And who better to design the way the GIS



should handle the aspects of a surveying business than a surveyor? Careful planning and a basic knowledge of how databases work will provide the user of the system everything needed to capture all of the benefits of GIS.

In no way do I intend for this list to be all inclusive, and I am definitely

open for discussing any other reasons for not utilizing GIS. Bending GIS to my needs as a surveyor has made it possible for me to get more work done at a lower cost with higher profitability. Contact me with suggestions or questions at Stephen@surveygalveston.com. 



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