



Young and Associates, Offering the Latest in Technology and Setting New Standards in Surveying

Young and Associates and Digital Mapping Services, provide turnkey professional services from oil and gas lease mapping to parcel mapping, well location survey, pipeline survey, and engineering design. Using GIS technology combined with their growing team of “high performance” professionals, Young and Associates and Digital Mapping Services, provides unmatched service.

The synergism of Young and Associates and Digital Mapping Services adds more value to their work, as they can create a base map of the leases using Digital Aerial Photography. These base maps are adjoined to the ever growing GIS Base Map of Texas, which all projects end up being a part of.

Summary

Customer: Young and Associates offers traditional land development survey, as well as, oil and gas survey.

Challenge: Timeliness and accuracy of recording data for surveying projects while using traditional methodologies, pen and paper.

Solution: Capturx for ArcGIS mapping software provides surveyors greater flexibility and control without changing their pen and paper method.

Results: Surveyors collect and share data in real time and update their database efficiently. What normally takes days and meticulous planning, is done in minutes. Untrained personnel collect digital data and integrate it into ArcGIS.

Challenge: Updating databases promptly, accurately

It takes an enthusiastic organization to stay on top in today's technologically advanced culture. This is especially true in the highly competitive oil and gas industry. In order to achieve this goal, a company must be able to efficiently balance experience and knowledge of traditional techniques, with a thorough understanding of innovative technologies. Young and Associates and Digital Mapping Services is doing just that.

A great deal of time and resources is used in compiling survey data, shooting lines, taking center lines, getting master plan data from government entities, and looking for roads in shape files. Cumbersome and expensive electronic devices are not always suitable or easily adopted by personnel in the field. Information is often gathered in multiple ways and has to be consolidated and then manually entered in a database. Consistent and efficient data collection techniques are needed to get genuine data for customers. Once all the field data has been collected, key personnel are tasked with getting it into the databases that are used to report findings and issue results.

Solution: Capturx for ArcGIS Desktop

Capturx has been identified to help with GIS updates of existing maps. Field personnel are often more comfortable with a map and pen, rather than an expensive laptop. Field workers conducting pipeline routing with a map, can sketch a proposed route, based on what he or she visually sees on the ground. Many times an aerial won't provide enough detail and an existing map often deficient, because it is out of date.

In terms of GIS, the pen will be a natural tool for updating the maps in order to maintain map books. President, Robert Young, said the map legend is critical because it contains not only all the symbols, but the layers as well. A user can simply pick a symbol (say, a fire hydrant) and wherever he or she touches the map, that symbol will be added to the geodatabase on the correct layer.

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ROBERT YOUNG
President
Young & Associates

The printed map can be marked up with ink, using traditional techniques that teams use today. In addition to ink, the digital pen also has an infrared sensor, processor and memory. As the pen writes, the handwriting is digitized and stored on the pen. When the pen is docked to a PC, Capturx uploads the data and integrates it directly into ArcGIS. "By utilizing this technology with our base map in a box product and geodatabases, Young and Associates & Digital Mapping Services are now able to streamline our production, providing even more accurate data to our clients, in some cases, in just a few days" says Robert Young, President of Y&A.

Results: Data Available Faster & More Accurately

Now with Capturx software, survey crews can go into the field with tried and true techniques using pen and paper. The use of Capturx for ArcGIS Desktop is continuing to grow and enables field personnel to obtain accurate data for projects in all conditions.

A unique feature of Capturx allows personnel to work directly on the paper map and updates the data in real time to the geodatabase, making for much faster and more efficient topographic surveys. "The system is very user friendly," confirms Mike Letterman of Y&A, "the convenience of using traditional paper maps with a digital pen is simply so much faster! Docking the digital pen to a PC to directly update the geodatabase saves time and avoids transcription errors, which occur when data is manually re-entered."

Capturx can be used to improve the turnaround time on cadastral surveys, land boundaries, subdivision plats/maps, and registered land surveys.

Summary

Capturx software and digital pen compliments surveying techniques by providing surveyors with greater flexibility and control on how to perform surveys. Data can be combined either in the field or in the office to provide real-time access and sharing opportunities. The ability to easily combine the data and survey technologies, provides an overall increase in survey productivity.