How Are Title Insurance Companies Using GIS?

By

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Abstract

When you think of GIS, Title Insurance isn't the first thing that comes to mind. However, many title offices are finding GIS is just what they need to help with their mapping and document management needs. Title plants, data centers that process thousands of land records each day, have found several uses for GIS. Adding GIS is a cost effective way to increase productivity: it has a huge impact on their tedious workflow and they are able to reduce the need for overseas outsourcing. In this presentation we'll offer insights into how title insurance companies are benefiting from GIS technology.

Introduction

Attorneys' Title Insurance Fund, Inc. (The Fund) is a title insurance underwriter based in Orlando Florida. A title insurance policy is issued when real property is sold and protects buyer and lender involved in the transaction. In order to issue the policy, a title agent must review documents recorded in the public record to ensure that all outstanding liens and judgments are identified and resolved prior to the completion of the transaction. In addition, deeds from previous transactions are reviewed to ensure that there is a clear chain of ownership and there are no problems that could prevent future sales of the property. To assist its title agents with this review process, The Fund maintains an electronic title information repository, which consists of public record documents from 37 of the 67 counties in Florida. This gives the title agent online access to data and images and greatly improves their ability to quickly identify and resolve title problems.

Current Manual Environment

On a daily basis The Fund's data entry operation inputs approximately 45,000 documents into the repository. Most real property related documents refer to parcels in subdivisions. These documents are simply indexed to a lot, block and subdivision name. However, a number of these daily documents contain metes and bounds legal descriptions. In order to accurately post these documents, the legal description must be mapped to determine the proper posting codes for the data entry process. The Fund uses a grid system based on section, township and range.

The process of mapping out the legal description to determine the indexing codes to post the document into the title information repository is a time consuming manual task. It is
extremely important for The Fund to certify a daily batch of documents as close to the
date they were recorded in the public record. Complex legal descriptions can delay this
certification process, which ultimately impacts service to The Fund’s title agents. The
Fund employs mapping staff in three data entry locations to handle the volume of
documents. With the ever-increasing number of real estate transactions in Florida, it is
becoming difficult for The Fund to meet service levels while controlling costs.

Proposed Solution

In 2004 The Fund initiated a pilot project to determine what tools were available that
might help streamline and automate the mapping process and to measure how effective
implementation of these tools would be. The Fund found that there were a number of
products that assisted in mapping legal descriptions but most did not provide the ability to
save the results of the process for future use. Often documents are recorded with the same
legal description over time and therefore the ability to recall previous results rather than
re-mapping is important.

Due to the need to have a highly efficient mapping tool and the need to save the results of
the process, The Fund selected the ESRI GIS product and IcoMap from Extract Systems.
Although The Fund captures data for 37 counties, it was determined that a single county
pilot would be more manageable. Orange County was selected as the pilot county. Base
maps and data were purchased from the tax assessor’s office and loaded into the GIS.

The technical environment proved to be somewhat of a challenge. The Fund runs its
computing environment from a central location in Orlando. However, the data entry and
mapping operations are housed in separate facilities and connected via The Fund’s wide
area network. Because of concerns over network performance and bandwidth
requirements The Fund decided to provide access to the centralized data via
implementation of a terminal services environment. This enabled The Fund to manage
the environment centrally while still providing good performance. It was also decided to
only install two workstations with GIS and IcoMap. Although the central Florida
operation employees several mappers, the pilot team felt accurate measurements could be
gathered using two workstations while minimizing impacts to the operation.

Pilot Results

The overall results of the Orange County pilot were positive. As Orange County was filed
each day, the pilot mappers would segregate the long or more difficult legal descriptions
from those that could be easily researched and posted using traditional methods. In
Orange County, 4.9% of all recordings are referred to the Mapping Department for
research and/or mapping. Of those recordings 2.7% required extensive mapping. The
2.7% of long legals were mapped the traditional way and by using GIS/IcoMap. The
mappers tracked the mapping time using each method and determined that the
GIS/IcoMap method is three times faster than traditional mapping. They have also
achieved unexpected benefits from the system. The system has identified errors and overages in postings, improving the accuracy of our data. It has virtually eliminated documents that cannot be posted.

Future Opportunities

As a result of the success of the Orange County pilot The Fund has decided to rollout the GIS/IcoMap environment throughout its data entry operations. However, because of the complexity of the environment, impacts to the organization, and the cost of infrastructure and training, the rollout effort will most likely take several years.

Another opportunity The Fund is considering is the closer integration of GIS and its title information repository. GIS could become a key component of future title information applications. The potential exists for the creation of a GIS based system that could tie together all information such as ownership, encumbrances, tax information, and policies related to a piece of property. The Fund’s title agents through an easy to use map-based system could then access this information.

Summary

Implementation of a pilot GIS based mapping system in The Fund’s data entry operation has demonstrated how this automated environment can improve productivity and reduce costs. A key to the success of the pilot was managing risk by keeping the scope of the effort small. Other important success factors were training and an emphasis on creating a solid technical infrastructure.

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