

Assessor's Office with a Vision

The Boulder County, Colorado Assessor's Office faced a complex task migrating their sizeable application and data set to support their new architecture.

Vision

The Tax Assessor in Boulder County, Colorado comes from a long line of visionaries. Back in the days of the green computer screen with a command line prompt, then-Assessor Bill Goodyear foresaw that geographic information system (GIS) technology would streamline the process of assessing property values. It would enable the Assessor's Office to provide better service faster to Boulder County's taxpayers. It's true; the Office has maintained the same staffing level since the 70s, and citizens would agree that services have expanded. Boulder is a fast-growth county, as well, with a two-year appraisal cycle.

Building on Goodyear's far-sighted vision, the Boulder County Assessor's Office has consistently pursued innovative approaches to meet its responsibilities to taxpayers. It was one of the first county offices in the nation to adopt GIS as a key element in property value assessment.

By using GIS technology in the appraisal process, the Assessor's Office could more easily allow for the effect location has on value. Appraisers know that the houses within a single subdivision or neighborhood, all built at approximately the same time by the same builder are likely to have similar values. However, a house that is adjacent to a golf course may be valued differently from an equivalent house that faces a major street. Location and surrounding properties play a significant part in the value of a house or land.

Cost Of Early Adoption

The Boulder County Assessor's Office was careful to select its GIS toolset from an industry-leading vendor, Environmental Systems Research Institute (ESRI). Over several years, the Assessor's Office developed a large inventory of custom applications and tools. However, early adoption of GIS technology bore a cost. When revolutionary changes occurred in the structure and capabilities of ESRI's software, the Assessor's Office faced a complex task migrating their sizeable application and data set to support the new architecture.

GIS integration has enabled the Assessor's Office to provide better service faster to Boulder County's taxpayers.

Previous to this major migration (moving to ESRI's next-generation ArcSDE™ and ArcMap™ software), the County had written its own tools and applications needed to leverage the ESRI environment. Cindy Domenico, Boulder County's Assessor at that time, learned through experience that developing "home-grown" software utilities was time-consuming and expensive. Such development efforts could also dilute staff members' focus on their primary mission—providing taxpayers with accurate, equitable, up-to-date assessments. Domenico knew that as much as possible, she wanted to purchase off-the-shelf ESRI-enhancing tools, not develop them.

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BOULDER COUNTY TIMELINE

- 1980s**
Edited parcels on paper
- 1985**
Introduced first GIS, ArcInfo from ESRI
- Late 1980s to early 1990s**
Converted paper records to digital format
- Early 1990s to 2005**
Edited parcels with ArcInfo Workstation
- 2004 to 2005**
Prepared for conversion to new ESRI environment
- 2006 to present**
Work in geo-database environment, using new ESRI and ParcelSync tools

Beyond Parcel Editing

One tool the Assessor's Office discovered during preparations for the major migration was being developed for Wake County, North Carolina. This tool was Integrated Parcel Maintenance (IPM), now called FARRAGUT ParcelSync™. ParcelSync's creator, FARRAGUT, was a longtime contractor for Boulder County. Watching the process with Wake County, Boulder County believed that FARRAGUT could tailor the tool to fit their business processes and existing software suite.

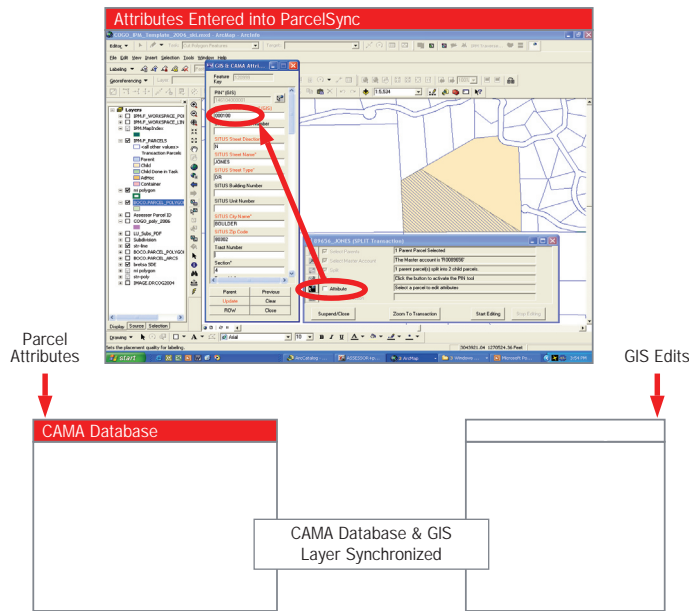
ParcelSync is a GIS software product built on top of ESRI-based technology (more precisely, it's an extension to ESRI's ArcInfo™) that allows a GIS user to simultaneously edit both GIS and computer-aided mass appraisal (CAMA) data and to update the two databases in tandem. Having searched for nearly a year for such a tool, Domenico's staff determined that ParcelSync provided functionality unavailable from other tools on the market. It was also open and versatile.

Implemented in February 2006, ParcelSync now serves as the primary parcel editing environment for Boulder County GIS staff. Beyond parcel editing, however, ParcelSync solves two thorny problems for the County — synchronizing GIS and appraisal data in real time, and reducing processing backlogs that occur at certain times of the year.

Getting In Sync

By adopting GIS technology, the Assessor's Office became responsible for two separate databases—the GIS database and the property appraisal database. The GIS data is stored in an ESRI Geodatabase, while the assessor database is managed in a CAMA system, which records property attributes and calculates property values. Before ParcelSync was implemented, the two data sets were rarely synchronized. While the Assessor's Office rigorously maintained its primary data in the CAMA database, the GIS data often lagged behind until staff found time to update it. Out-of-sync data caused problems, because Assessor's Office constituents, including taxpayers and other County departments, rely on the maps displayed on the Office's Web site.

Implemented in February '06, ParcelSync has eliminated the problem of out-of-date maps for the Boulder County Assessor's Office. By allowing users to



REAL-TIME SYNCHRONICITY

update GIS and CAMA data simultaneously, it reduces the effort required to manage the databases, improves the timeliness of database updates, and ensures that the databases stay synchronized. As stated by Cynthia Braddock, Boulder County's GIS Deputy Assessor, "We're much more current on data, so we're more confident about sharing data. We've gained confidence in using data because a lot of pieces are coming together – mapping is one of them." This up-to-date mapping data was recently added to the Assessor's newly designed Notice of Valuation, which contributed to a noticeable reduction in costly appraisal appeals.

“It's brought us into the modern world of GIS. Our work isn't so isolated. It's broadened our world, and it's fun! We're just scratching the surface.”

Rachel Parrinello | GIS Technician with the Boulder County Assessor's Office