

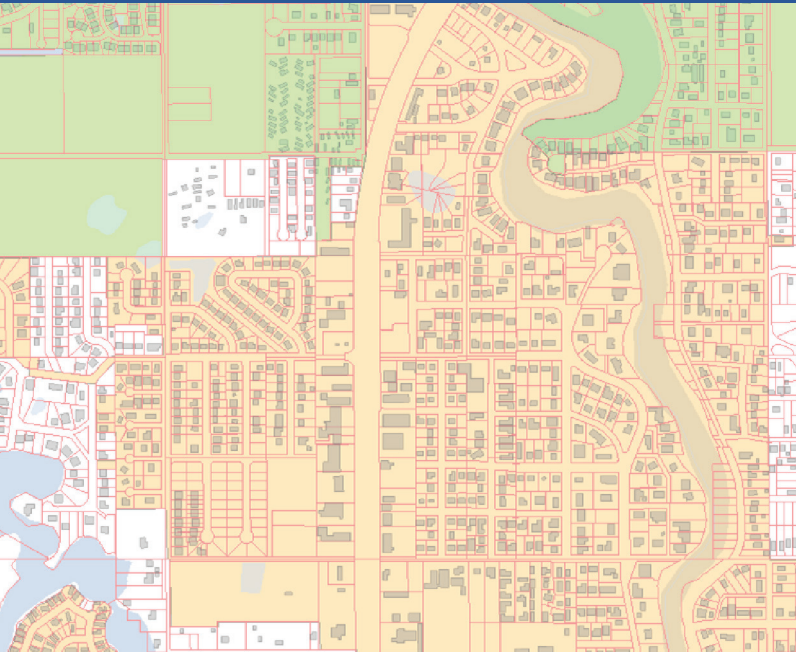


Pasco County Florida Parcel Mapping:

Automating Parcel Mapping: How Pasco County Improved GIS Accuracy and Cut Costs by 50%

In 2004, Pasco County faced mounting challenges managing parcel data amid rapid development and outdated mapping processes. **MNC (Martin Newby Consulting Ltd.) modernized the county's parcel mapping operations by automating complex data conversions, standardizing diverse datasets, and streamlining workflows.**

This transformation improved spatial accuracy and operational efficiency, enhanced public access and transparency, and **reduced costs by 50%**, providing Pasco County with a sustainable foundation for growth and land management.



CHALLENGE

In 2004, among a period of rapid growth, Pasco County found itself struggling to maintain accurate and up-to-date parcel maps. The surge in new developments, including subdivisions, plats, and changes in property status, quickly outpaced the county's existing mapping systems and workflows. With land records falling behind the pace of development, Pasco County urgently needed support to update its mapping operations and keep up with demand.

Image showing Pasco County parcels

KEY CHALLENGES INCLUDED:

- **High volume of development outpacing mapping capacity:** The rapid increase in new subdivisions and property changes caused parcel maps to become outdated almost immediately after plan approvals.
- **Delays in updating the official parcel base:** Inefficient processes resulted in significant lags between plan approval and parcel integration, reducing the reliability of official land records

Faced with these pressing challenges, Pasco County turned to MNC to update its parcel mapping.

SOLUTION

To address the challenges of Pasco County's 2004 Parcel Mapping Project, MNC implemented a series of key solutions designed to bring the county's mapping up to date. The approach included the following steps:

1 AUTOMATED DATA CONVERSION: MNC developed and implemented automated workflows and custom software to seamlessly convert mapping data between Esri Coverage (a GIS format) and DGN (Bentley's CAD format), and then back to Esri Coverage. This automation preserved data integrity, reduced manual errors, and enabled efficient management of extensive parcel datasets.

2 WORKFLOW STREAMLINING FOR RAPID UPDATES: Leveraging digital tools, MNC streamlined mapping workflows to support faster incorporation of new developments and approved plats. This enabled the parcel maps to stay current and keep pace with the county's rapid growth.

3 QUALITY ASSURANCE AND VALIDATION: Quality control measures and regular validation checks were integrated into the process. This ensured that all data met Pasco County's requirements for property assessment and land management.

4 PARCEL BASE MAINTENANCE WITH PROPRIETARY TOOLS: Using their proprietary integration software, AltaPLAN®, combined with in-house AML (Arc Macro Language) and MDL (Microstation Development Libraries) routines, MNC maintained the county's parcel base with a streamlined five-day turnaround for parcel creation following plan approval.

Through this comprehensive and targeted approach, MNC enabled Pasco County to deliver timely, accurate, and reliable property data to both county staff and the public. This effort sustained improved operational efficiency in the Property Appraisers' Office for approximately five years.

RESULTS

The 2004 Pasco County Parcel Mapping Project delivered transformative advancements across land administration, property assessment, and public services.

KEY OUTCOMES INCLUDED:

OPERATIONAL EFFICIENCY GAINS: County staff experienced enhanced efficiency in accessing and analyzing up to date parcel information.

FUTURE-READY FOR GROWTH AND PLANNING: The updated parcel base positioned Pasco County to better manage growth, infrastructure development, and emergency responses.

SIGNIFICANT COST REDUCTION: The initiative achieved a 50% reduction in mapping operation costs, delivering substantial financial savings alongside improved service quality.

Overall, the project fundamentally transformed Pasco County's land records management, producing enduring benefits for both local government operations and the public it serves.

MNC SERVICES & TECHNOLOGY USED

SERVICE CATEGORIES:

- Data Conversion/ Migration
- Needs and Requirements

TECHNOLOGY PLATFORM & TOOLS:

- AutoCAD (Autodesk)
- MicroStation (Bentley)
- ArcGIS (Esri)



CONTACT US TODAY to discuss your geospatial needs.

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ABOUT MNC

The Cadastral and Parcel Mapping Experts



MNC is a trusted leader in cadastral and parcel management with 25+ years of experience delivering GeoAI-ready datasets, modernizing parcel fabrics, and automating GIS workflows. As an Esri Gold and Cornerstone Partner with a Parcel Management Specialty and State and Local Government Specialty, MNC provides scalable advanced GIS, ArcGIS Pro, FME automation, MicroStation, AutoCAD and cloud-ready geospatial systems that improve data quality and support government land administration modernization across Canada, the USA, and the Caribbean.

