

AI-Powered Commercial Property Appraisals: New Mexico County Increases Model Accuracy by 50%



Value-Driven Benefits

+50%

point improvement in model accuracy

3X

improvement in appraisal equity in compliance with IAAO standards

6X

improvement in appraisal efficiency

Introduction

The New Mexico County Assessor is responsible for identifying and valuing over 280,000 parcels to ensure fair and equitable property assessments across New Mexico's most populous county. With properties ranging from urban commercial developments to rural agricultural land and tribal areas, the County oversees over \$14 billion in taxable property value — funding critical local services and infrastructure. Delivering accurate, transparent, and defensible assessments is essential to maintaining public trust and effective local governance.

Business Need

Each year, the New Mexico County Assessor conducts mass property reappraisals, including annual valuations, as well as a full county-wide canvass every four years, as mandated by state law. The current appraisal process is tedious and costly. Appraisers manually aggregate and verify data from siloed sources — including the Computer-Assisted Mass Appraisal (CAMA) system, Geographic Information System (GIS), and listing data — while applying valuation methods that vary across property types.

As a non-disclosure state, New Mexico does not require property sales prices to be publicly reported, making it challenging for appraisers to access complete sales data. Appraisers often supplement their analyses with third-party data sources or voluntary disclosures from property owners — sources that can vary in quality and completeness, introducing additional complexity in determining fair market value. These challenges are especially pronounced for commercial properties, which tend to be more complex, heterogeneous, and difficult to compare.

To overcome these challenges, the New Mexico County Assessor sought a solution to make its current property appraisal process more efficient, consistent, and defensible.

The Solution

The New Mexico County Assessor selected C3 AI Property Appraisal for its ability to deliver more accurate and consistent mass appraisals using AI-based Automated Valuation Models (AVMs). In just four months, the C3 AI team ingested and unified over eight million rows of data from CAMA, GIS, and property listings, and deployed the application for three major commercial property types — office, retail, and warehouses. This deployment established a unified data foundation and scalable framework to drive ongoing improvements in valuation accuracy and operational efficiency.

Results

C3 AI Property Appraisal improved property valuation model accuracy by over 50 percentage points across all in-scope commercial property types — a significant shift that reduced manual review cycles, accelerated appraisals, and increased appraiser confidence. The application enabled the New Mexico County Assessor to track parcels from ingestion through valuation, enhancing operational transparency and empowering faster, data-driven decisions in the appraisal process.

Following this initial production deployment, the New Mexico County Assessor expanded the application to incorporate all nine commercial property types and vacant land parcels in the span of just six weeks. These property types varied widely in physical characteristics, data availability, and price distributions, making it historically difficult to maintain high model accuracy. Despite this complexity, C3 AI Property Appraisal achieved rapid scale, delivering consistent valuations across the full commercial portfolio. With more accurate, AI-driven insights, the New Mexico County Assessor team can now deliver fair and defensible valuations with greater speed, consistency, and transparency — setting a new standard for data-driven property valuation across the county.

Inside the Digital Transformation

C3 AI configured and deployed C3 AI Property Appraisal for approximately 40,000 commercial properties, including office, retail, and warehouses. The goal of this deployment was to demonstrate how C3 AI Property Appraisal could improve the accuracy and efficiency of appraisals while enhancing the New Mexico County Assessor's operations through continuous updates of KPIs, streamlined data verification and sanitization processes, and optimized allocation of personnel resources. Additionally, the application unified sales data from multiple disparate sources, including a third-party data aggregator, enabling a comprehensive view of market activity to support more accurate property appraisals.

The team began by ingesting, cleansing, and unifying five years of historical CAMA, GIS, and property listing data, comprised of more than eight million data rows. This unified federated data image includes property characteristics, geographical imagery and boundaries, property images, and historical sales records.

The application used AI-based AVMs to produce highly accurate market valuations of commercial properties. The team configured machine learning features using data on property size, age, location, and condition. They then applied advanced feature selection techniques to identify which inputs contributed most to model performance, iteratively refining the approach to ensure the final models were accurate and explainable.

Continued Engagement

The New Mexico County Assessor is continuing the productive partnership with C3 AI, expanding their use of Enterprise AI tools across different departments and modernizing their property appraisal processes at scale. The C3 AI Property Appraisal deployment began with an initial production deployment for three commercial property types — office, retail, and warehouses — and has rapidly scaled to include all nine commercial property types and vacant land in just six weeks. Together, C3 AI and the New Mexico County Assessor are redefining the property appraisal process for local governments with a modern, data-driven approach, delivering greater transparency, efficiency, and confidence in every assessment.

About New Mexico County

- Largest county in New Mexico by population
- Home to 675,000+ residents
- Covers 1,160+ square miles

Project Highlights

- 16 weeks from project kickoff to production-ready application for 3 commercial property types (office, retail, and warehouses)
- 6 weeks to scale to all 9 commercial property types in production
- 8+ million data rows ingested
- 40,000 commercial properties in-scope
- 3 ML models configured
- 50 percentage point improvement in model accuracy
- 3X improvement in appraisal equity, improving compliance with International Association of Assessing Officers (IAAO) benchmarks

"We're using C3 AI technology to be more efficient in our day-to-day roles, which is what we should be doing as proper stewards of taxpayer dollars."

— New Mexico County Operations

Solution Architecture



Enterprise Data

- Computer Assisted Mass Appraisal (CAMA)
- Geographic Information System (GIS)
- Multiple Listing Service (MLS)

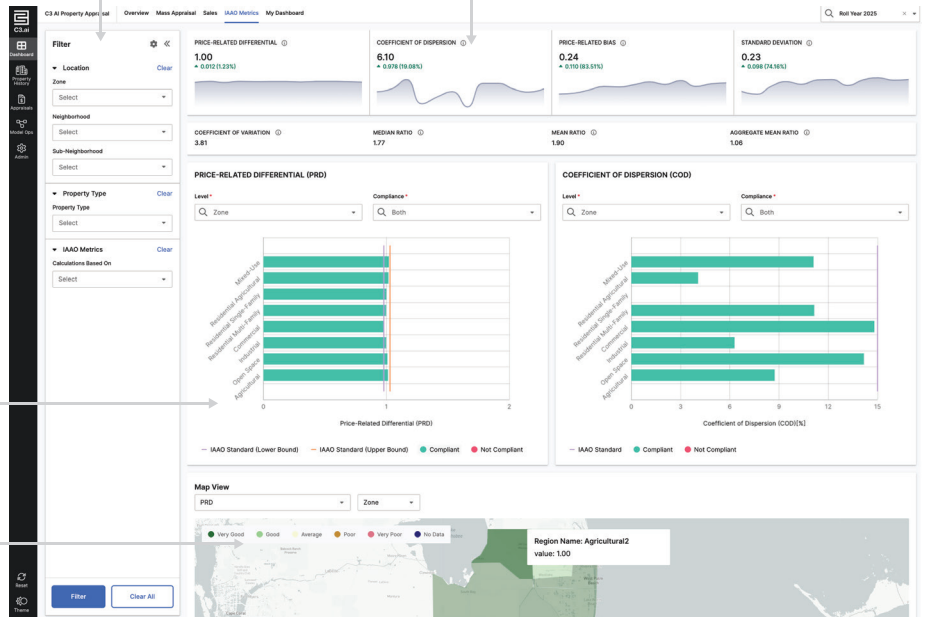


Track AI AVM performance against industry standards

Visualize compliance with heatmap

Explore insights via interactive dashboards

Monitor appraisal quality with key metrics



Proven Results in Initial Production Deployment

Visit C3.ai/get-started