

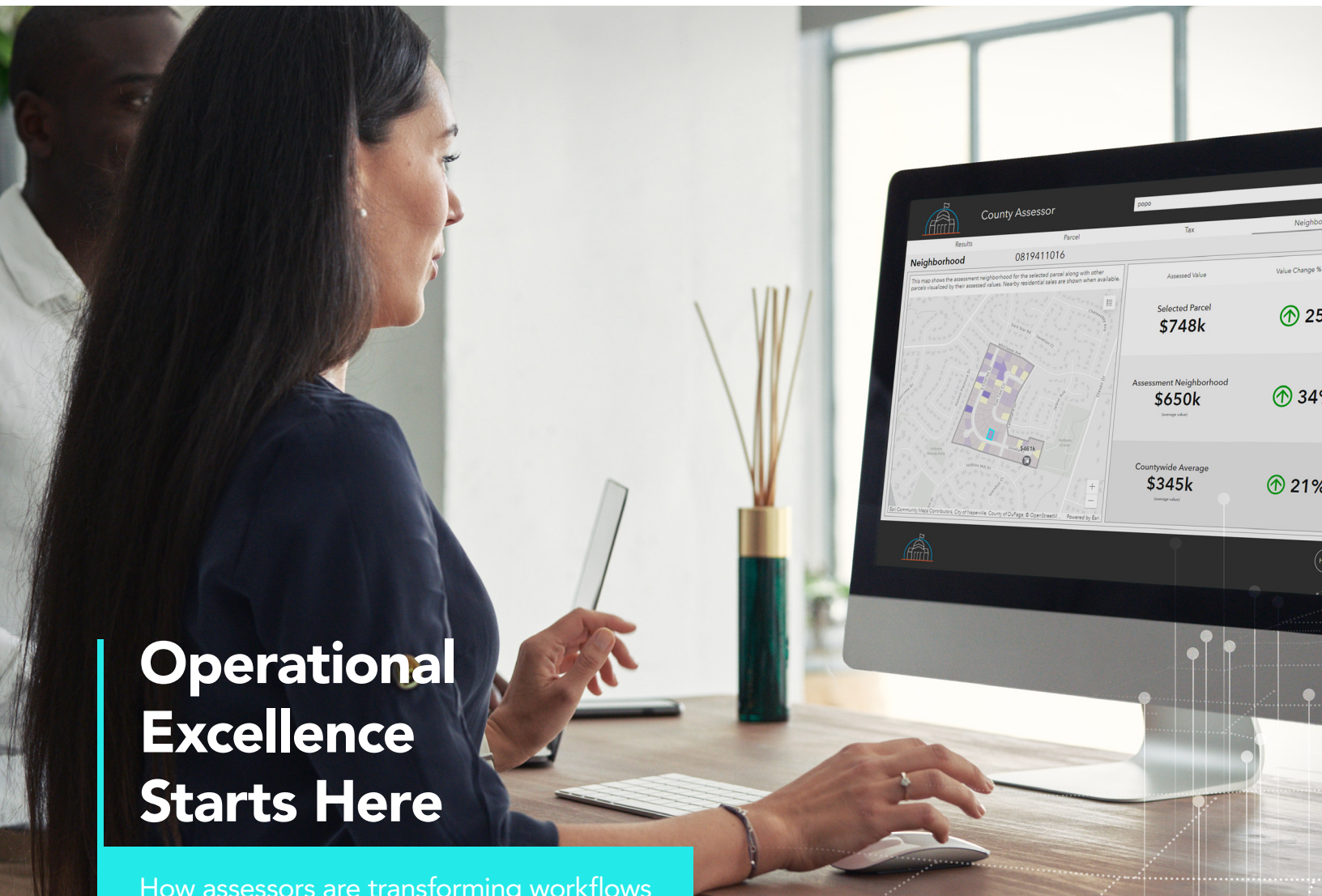


esri®

THE
SCIENCE
OF
WHERE®

Working Smarter in Today's
Assessor's Office

A GUIDE TO OPTIMIZING YOUR LAND RECORDS WORKFLOWS



Operational Excellence Starts Here

How assessors are transforming workflows by leading with GIS-powered operations

Operational management is the foundation of modern land records. It connects every part of the assessor's office, from parcel editing to appeals response, into a unified, efficient system. With geographic information system (GIS) technology as essential infrastructure, assessors are transforming how they work by embracing digital submission, automating tasks, and tracking performance in real time.

This operational layer supports the three pillars of modernization:

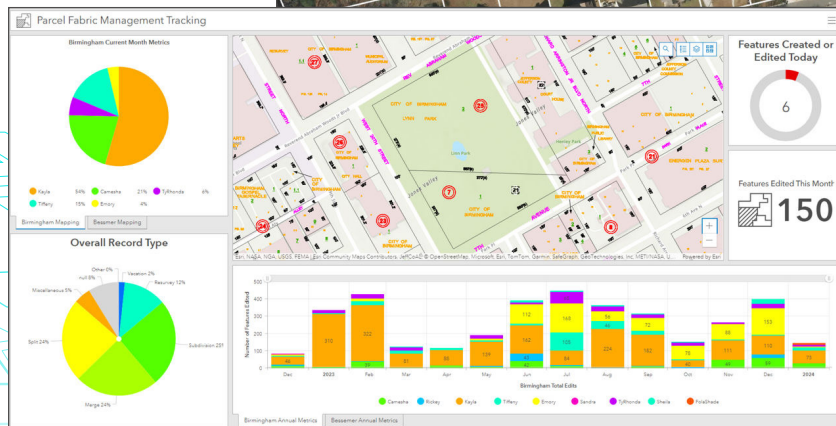
- **Smarter Parcel Management:** Maintain parcel lineage, reduce errors, and streamline editing with a single authoritative system.
- **Fair and Defensible Valuations:** Visualize CAMA data, detect outliers, and apply spatial analytics to improve valuation accuracy.
- **Stakeholder Engagement:** Deliver transparency and build trust through open data, intuitive apps, and self-service tools.

Mapping Land Across the Country

Real-world examples of how maps support land records from coast to coast

Jefferson County, Alabama

The county shifted from outdated scripting languages and coverages to adopting Esri's parcel fabric data model.



Operational management is the thread that connects these pillars. It ensures that every workflow, from field data collection to appeals response, is optimized, measurable, and aligned with strategic goals. With GIS, assessors are not just keeping up, they're leading the way.



State of Montana

Business owners, residents, and conservation trusts in Montana secure landownership using the Montana Cadastral web application, a comprehensive resource for real estate data, parcel details, and property owner tax parcel information.

Smarter Parcel Management with GIS

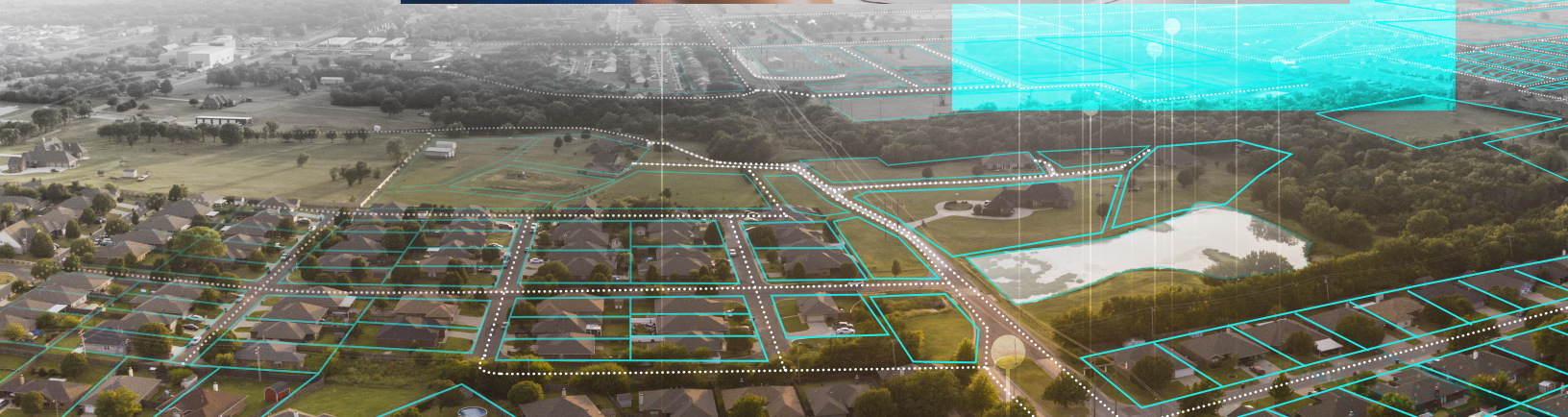
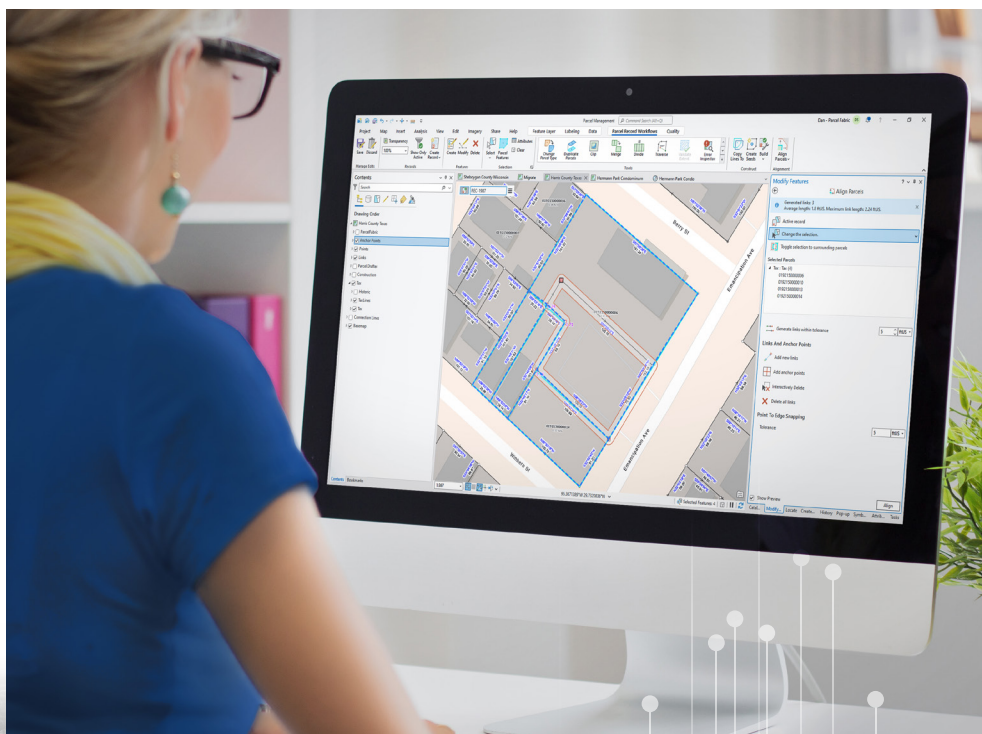
Streamline data,
reduce errors,
and improve
parcel accuracy.

Parcel data is the foundation of land administration and taxation. But managing it accurately and efficiently requires more than just drawing lines. GIS provides a comprehensive framework for maintaining parcel integrity, tracking history, and integrating with business systems.

GIS helps assessors:

- Boost workflow efficiency with configurable business rules
- Improve parcel accuracy and maintain survey records
- Securely share authoritative parcel data
- Integrate with business systems to streamline operations

Learn how the
COGO Reader
tool in ArcGIS
Parcel Fabric can
save hours of time
by automating
the input of legal
descriptions.



Parcel Management in Action

How one jurisdiction streamlined parcel workflows and improved data integrity

Maui County had utilized ArcMap™ to manage its tax parcels with ArcGIS® Parcel Fabric since 2014. With ArcMap nearing retirement, the county initiated a migration to ArcGIS Pro to modernize workflows, reduce manual entry, and improve data accuracy. The transition included customizing the schema, automating input with attribute rules, and enhancing parcel lineage tracking to better support land administration and taxation.

And then, in August 2023, devastating wildfires struck the island, halting all GIS projects. “When the wildfires hit, the critical nature of parcel data immediately became clear. Recovery would be impossible without it,” said Elisse Deleissegues, GIS analyst in Maui County’s Real Property Assessment Division. Parcel data quickly became essential for recovery efforts, with a high volume of information requests from property owners, other counties, and the state. Despite personal

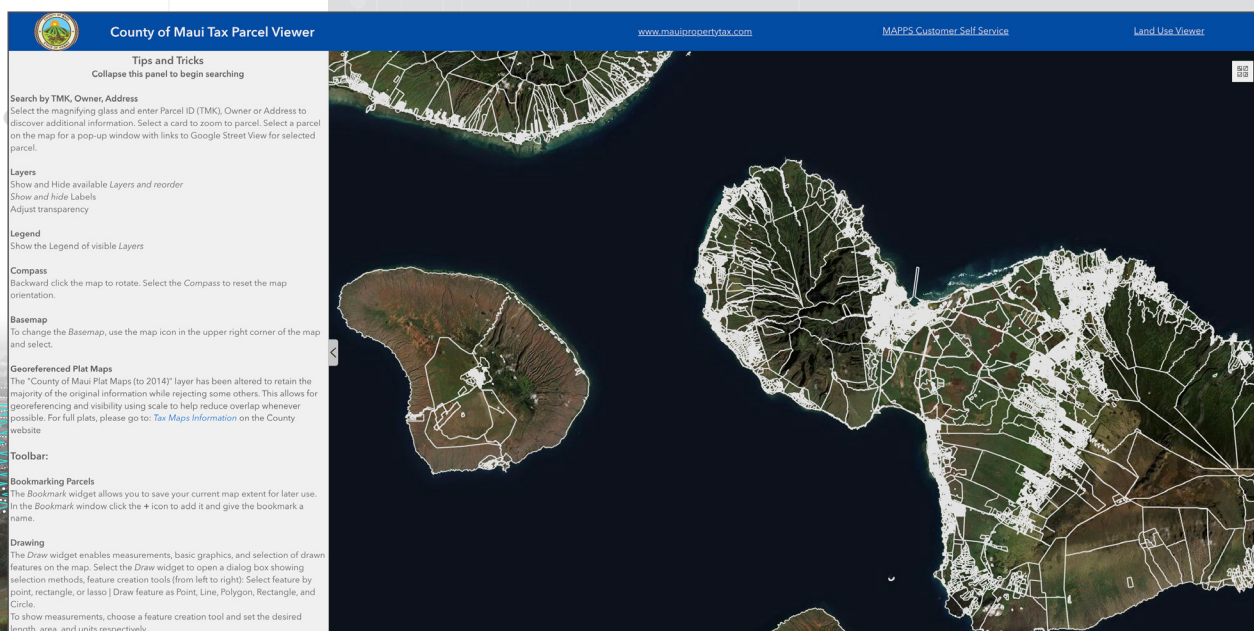
impact, county staff pivoted to meet this urgent need, highlighting the critical role of authoritative parcel data in disaster response.

Once recovery efforts were stabilized, the county restarted the ArcGIS Enterprise upgrade and parcel migration project. ArcGIS Pro enabled more efficient editing, improved visualization, and streamlined QA/QC processes. Staff were trained to manage data independently, ensuring long-term sustainability and operational resilience.

Today, Maui County continues to leverage GIS capabilities and self-service applications to manage land records, track parcel and ownership changes, and support wildfire recovery efforts. These tools track parcel and ownership changes, facilitate compliance checks, and support wildfire recovery, enhancing transparency and operational resilience.

Maui County, Hawaii

Navigating Parcel Migration amid the Aftermath of Maui’s Wildfire



GIS for Fair and Defensible Valuations

Bring clarity, consistency, and confidence to property assessments.

Accurate property valuation is essential for equitable taxation. GIS empowers assessors to analyze property data spatially, uncover trends, and refine valuation models. With location intelligence, assessors can deliver consistent, defensible assessments that reduce appeals and build public confidence.

GIS helps assessors:

- Improve valuations with spatial analytics
- Enrich property data with geospatial information
- Detect errors and visualize data trends
- Maximize field productivity with real-time routing and assignments

Learn more about property valuation analysis.



Driving Equity Through Data

A real-world example of how GIS supports transparent valuation practices

As the fastest-growing county in Utah, Tooele County faced challenges in maintaining fair property valuations across 34,000 parcels using manual processes and limited GIS support. Appraisers relied on spreadsheets and statistical software, which made it difficult to visualize sales ratios and slowed down the entire valuation process.

To address these issues, the county adopted the Parcel Value Analysis solution from ArcGIS Solutions. This GIS-powered tool enables appraisers to dynamically visualize sales ratios geographically, stratify data by property characteristics, and uncover market conditions. By replacing static systems with interactive maps and spatial analytics, appraisers can detect outliers, refine valuations, and uncover neighborhood trends in real time.

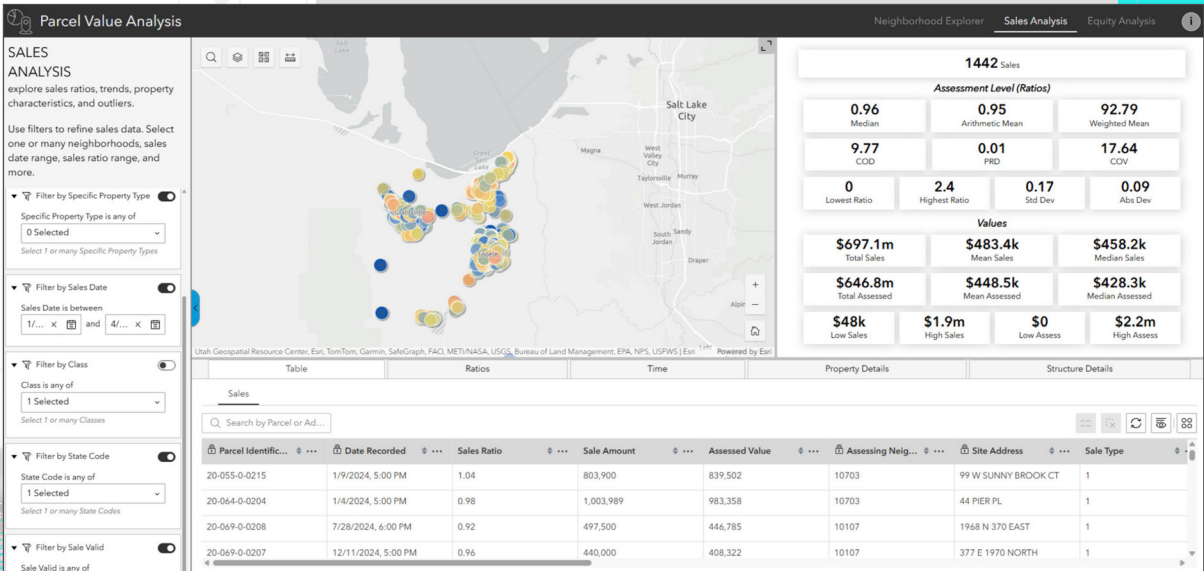
The impact was immediate. Appraisers could now access live data, perform their own analyses, and make

real-time adjustments, cutting nearly three weeks from the appraisal timeline. The solution also enhanced vertical equity analysis by allowing appraisers to visualize ratio discrepancies across price ranges and identify clustering effects—insights that were previously hidden in spreadsheets.

Internally, the tool improved productivity and reduced the need for frequent meetings. With shared access to live data, appraisers work more independently and efficiently. The result is a fairer valuation process that builds public trust and reduces appeals. Tooele County showed how GIS empowers assessors to deliver equitable, data-driven assessments, resulting in streamlined workflows, improved valuation accuracy, and increased public trust.

Tooele County, Utah

Tooele County, Transforms Property Assessments with Parcel Value Analysis



Engage with Confidence

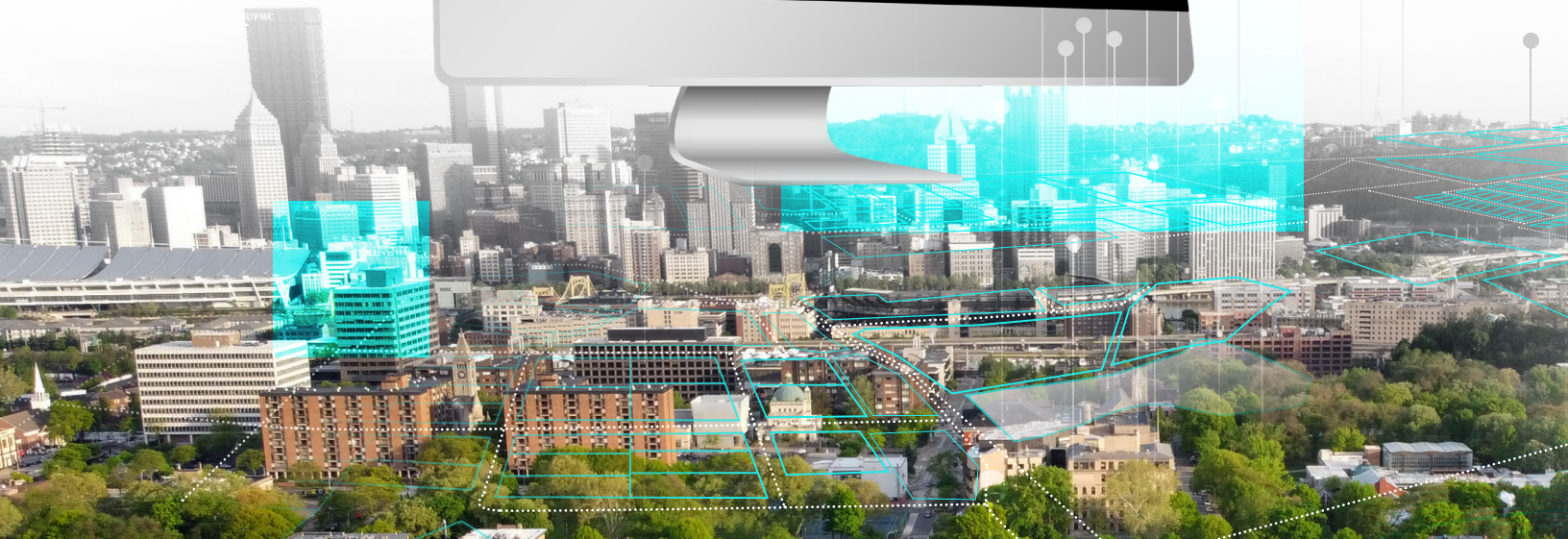
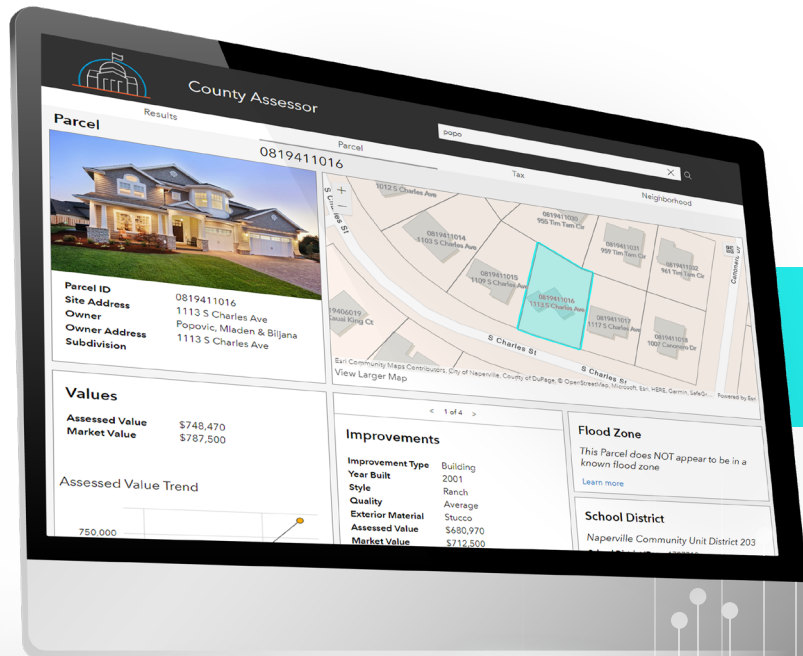
Use GIS to inform, involve, and build trust with the public and partners.

Public trust is built on transparency. Today's constituents expect property information to be accessible, understandable, and available on any device. GIS enables assessors to deliver self-service tools, open data, and intuitive apps that inform the public and reduce inquiries.

GIS helps assessors:

- Improve transparency with self-service maps and apps
- Enable open data for community decision-making
- Create targeted apps for planners, developers, and surveyors
- Defend property values and reduce appeals through accessible information

See a leading example from the Treasurer's Office in Linn County, Iowa.



From Outreach to Impact

How one organization used GIS to improve communication and transparency

Linn County's Treasurer's Office manages over 106,000 tax parcels and serves approximately 230,000 residents. Previously, staff spent significant time responding to property tax inquiries from taxpayers, title companies, and prospective buyers, often involving multiple departments. The complexity of the property tax process, especially during periods of property value fluctuation, amplified public demand for accessible information.

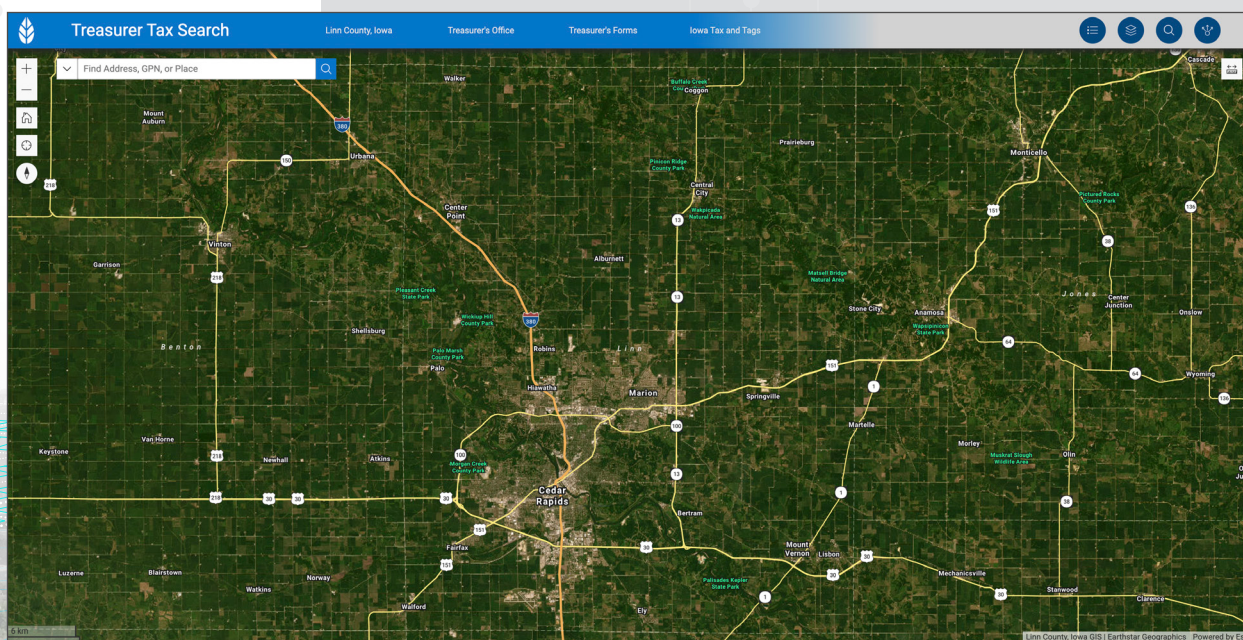
The county implemented the Treasurer's Office Data Transparency Portal using ArcGIS HubSM to improve transparency and reduce staff workload. Built on ArcGIS Enterprise and supported by experienced GIS staff, the portal connects parcel data from multiple departments and presents it through an intuitive, public-facing hub site. Initially used internally, the site was refined through testing and feedback before being released to the public.

The portal now provides instant access to frequently requested information, including current tax year statistics, tax bill cycle explanations, tax rates, and interactive maps showing property tax details and comparisons. A robust FAQ section further supports public understanding. Since its launch, the number of employees dedicated to handling public inquiries has dropped from four to two, thanks to a significant decrease in telephone and counter-traffic inquiries.

Residents can now access property tax data anytime, even outside business hours, improving customer service for those with nontraditional schedules. Linn County's success demonstrates how GIS-powered stakeholder engagement fosters public trust, improves customer service, and delivers accessible property information that supports confident community engagement.

Linn County, Iowa

Linn County, Leverages GIS to Provide Transparency to Taxpayers



A System That Powers Modern Land Records

Explore GIS products and solutions that support every step of the assessor's workflow.



ArcGIS Pro is Esri's desktop GIS application for visualizing, maintaining, and analyzing your land records data, district boundaries, and other spatial information necessary for assessment and taxation.



ArcGIS Parcel Fabric is Esri's parcel management software for mapping, maintaining, and accessing land records information across your organization. It extends ArcGIS Pro and ArcGIS Enterprise with a fully digitized land records management system and offers built-in tools for creating efficient workflows to maintain accurate land information.



ArcGIS Workflow Manager is a scalable workflow management system that acts as the conductor to orchestrate repeatable land records and assessment GIS and non-GIS workflows across your organization, improving efficiency, accuracy, and operational resilience.



ArcGIS Hub is a configurable community engagement platform that organizes people, data, and tools. State and local governments can use this platform to create a one-stop shop for land records, valuation, and assessment data, improving transparency to the public and reducing an organization's workload.



ArcGIS Enterprise is a powerful software that informs decision-making and transforms complex spatial analysis into easy-to-understand maps, apps, and content. With this comprehensive spatial analysis and data management system, you can integrate your business systems for a holistic view of your land records and assessment operations to boost efficiency across your organization.



Field Operations is a suite of applications that improves the coordination and efficiency in field data collection operations. Use field apps to replace manual paper inspection processes. Improve accuracy and boost productivity by using the same authoritative data and real-time capabilities.



ArcGIS Solutions is a set of preconfigured maps and apps that require little or no coding, leverage your authoritative data, and are designed to improve operations. Esri has a collection of land records, assessment, and taxation solutions that empower your organization to quickly begin realizing the benefits of implementing GIS.



Are You Ready to Modernize?

Take the next step toward smarter, more transparent land records operations.

Land is a finite resource that underpins social stability, economic development, and equitable taxation. To manage it effectively, assessors need systems that are efficient, transparent, and resilient. GIS provides the foundation for this transformation, supporting parcel management, property valuation, and stakeholder engagement in one integrated platform.

Operational management is the connective tissue that brings these pillars together. With GIS-powered operations, assessors can automate tasks, integrate systems, and monitor performance in real time, ensuring every workflow is optimized, measurable, and defensible.

With Esri's land records solutions, you can:

- Establish a single authoritative system for parcel data with ArcGIS Parcel Fabric
- Deliver fair, transparent valuations using spatial analytics and geospatial insights
- Build public trust through open data, intuitive apps, and self-service tools
- Integrate systems across departments to eliminate redundancy and improve collaboration
- Track operational KPIs and maintain chain of custody to ensure accountability
- Support fit-for-purpose land administration with scalable, standards-based tools

Whether you're looking to improve data quality, reduce appeals, or better serve your community, Esri's GIS technology equips you to lead with confidence and deliver lasting impact.

"The more information I have available, the more transparent I am, the easier it makes my job. And the happier the public is too."

— Gary Hamm | Chief County Assessment Officer, Massac County



Esri, the global market leader in geographic information system (GIS) software, location intelligence, and mapping, helps customers unlock the full potential of data to improve operational and business results.

Founded in 1969 in Redlands, California, USA, Esri software is deployed in hundreds of thousands of organizations globally, including Fortune 500 companies, government agencies, nonprofit institutions, and universities.

Esri has regional offices, international distributors, and partners providing local support in over 100 countries on six continents. With its pioneering commitment to geospatial technology and analytics, Esri engineers the most innovative solutions that leverage a geographic approach to solving some of the world's most complex problems by placing them in the crucial context of location.

Visit us at esri.com.



Contact Esri

380 New York Street
Redlands, California 92373-8100 USA

1 800 447 9778

T 909 793 2853

F 909 793 5953

info@esri.com

esri.com

Offices worldwide

esri.com/locations

Copyright © 2026 Esri. All rights reserved. Esri, the Esri globe logo, ArcGIS, ArcMap, Hub, The Science of Where, @esri.com, and esri.com are trademarks, service marks, or registered marks of Esri in the United States, the European Community, or certain other jurisdictions. Other companies and products or services mentioned herein may be trademarks, service marks, or registered marks of their respective mark owners.