

Bridging the Great Divide:

Mapping Digital Equity for Colorado's Most Remote County

CATEGORY

Data Management,
Analytics & Visualization

START DATE

October 2024

END DATE

February 2025

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COLORADO
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EXECUTIVE SUMMARY

Hinsdale County, Colorado, is the self-proclaimed most remote area in the lower 48, with 96.5% public land. Lacking a dedicated Geographic Information Systems (GIS) team, the county struggled to maintain property data, hindering public access and administrative efficiency.

In February 2025, the Colorado Governor's Office of Information Technology (OIT) GIS team launched a scalable model using Esri technology to digitize Hinsdale's property records. This interactive parcel viewer provides a blueprint for supporting resource-limited communities and enhancing statewide geospatial collaboration.



This figure is a diagram of Hinsdale County with the private land removed. The majority of the county is public land (96.5%). *Please let me know if you need any revisions to this map. It could be used as a side pane information section.

IDEA

Hinsdale County's Assessor's Office, serving fewer than 800 residents inhabiting only 3.5% percent of the land outside national forests, lacked tools to publicly display vital parcel data, forcing manual inquiries. These requests drained staff time, left the public uninformed on property boundaries, and caused administrative bottlenecks.

The Hinsdale County Assessor's Office had parcel data but needed it in a centralized, interactive application. Contractors were over budget, and private vendors charged \$300- \$500 to display information publicly. OIT created a no-cost solution, the [Hinsdale County Assessor Map](#), enabling unified, efficient access for county staff to visualize parcel data and support their work.

A true partnership was born. The OIT GIS team leveraged state infrastructure to create an interactive map application to host, process, and maintain Hinsdale's parcel data. They incorporated Hinsdale-specific information (such as zoning and historic districts) and enabled key features, including parcel searches by ID or owner. This initiative redefines state-local collaboration, distinguishing itself from typical GIS portals by integrating OIT's cutting-edge programs, including high-resolution Vexcel imagery (15-20 cm), and employing a dynamic data lifecycle that uses the state's annual 'Data Call' to unify local data.

The state maintains and updates addresses, parcels, and county attributes two to four times a year. This cost-neutral feedback loop reduces county expenses, provides high-quality data for statewide geocoding and emergency services, and brings advanced technology to rural regions with lasting impact.

IMPLEMENTATION

Roadmap

Phase 1: Regional Data Integration [October - November, 2024]

Between October and November, a GIS contractor referred Hinsdale County to OIT, establishing the partnership. The teams agreed to store, manage, and process the county's local geospatial data within the state framework. County-specific needs were mapped using the repeatable infrastructure template from Sedgwick County.

Phase 2: App Development [December 2024 - January 2025]

The OIT GIS team created the application in late December 2024 and finalized it in February 2025. Hinsdale County reviewed the application's functionality during a revisionary period in January. The team rapidly drafted the county's assessor map using the optimized system blueprint from the Sedgwick County application. By using Sedgwick's app as a template, we saved at least a week's work because configuring buttons, headers and the overall style from scratch takes time.

Phase 3: Feedback and Continuous Improvement [January 2025 - February 2025]

OIT and Hinsdale teams reviewed and fine-tuned features and instituted an ongoing maintenance phase to make minor tweaks and design updates for continuous performance improvement and finalized and successfully launched the application for public and internal organizational use.

Who was involved?

- OIT GIS Team - GIS Analyst and GIS Manager built the application.
- Hinsdale County Assessors - provided parcel data and local guidance.
- GIS Contractor - Shared parcel and address data between Hinsdale and OIT, and provided feedback on design and functionality
- OIT Communications Office - worked with the OIT GIS and Hinsdale teams to write a success story, which was shared on the OIT public website, internal newsletters and social media.

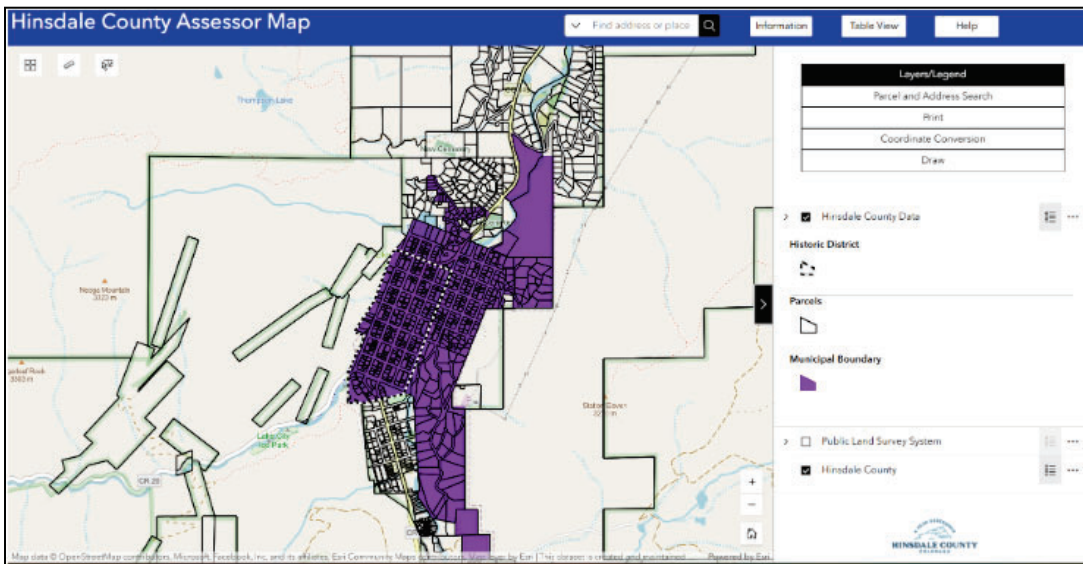
How did you do it?

The project started when the county shared its raw parcel and address data, prompting the OIT GIS team to process and standardize the datasets into unified schemas. Once the data was fully prepared, it was ready to be integrated into a user-facing application built on Esri's Experience Builder platform. Working with the county to meet its criteria, the application was created to consolidate all parcel and address data into a single, unified view, empowering users with the ability to select any parcel or address to view detailed information, search for specific parcels using either the owner's name or parcel number and easily look up any full address.

IMPACT

“The adage ‘a picture is worth a thousand words’ could equate in this instance to ‘an online map is worth a thousand words and as many trips to the Assessor’s office.’”

— Sarah Tubbs, Hinsdale County Deputy Assessor



The resulting interactive map displays Hinsdale County parcels and other reference layers, such as structures and roads. A black outline symbolizes parcels and can be clicked on or searched to view more information.

The Hinsdale County Assessor Map serves as a universal model by leveraging centralized state GIS infrastructure to empower resource-strapped local governments through a sustainable, shared-services model. This centralized system increases efficiency by consolidating diverse data layers in one place and serving a wide range of stakeholders, including government employees, neighboring counties and university researchers. Key elements include:

- **Standardized Integration:** The application is built within the Esri ecosystem. This allows physical data to be pulled directly into other software or used to create physical maps.
- **Unified Data Schema:** Participation in the statewide "Data Call" ensures that local address and parcel data are processed into a single, unified schema for larger state projects.
- **Consolidated Resource Access:** By displaying roads, commissioner, municipal, and zoning data in one application, the county eliminates data silos and improves administrative efficiency.
- **Public and Academic Utility:** The tool provides transparent parcel records and public land access to help citizens avoid trespassing, while also providing raw GIS data for student and university projects.

What did the project make better?

The OIT GIS team's creation of the Hinsdale County Assessor map revolutionized how the county manages and shares its geographic data, transforming a manual, inquiry-based system into a streamlined digital platform. By delivering a centralized tool for local government and the public alike, the project significantly alleviated administrative burdens and dramatically expanded data access across Colorado.

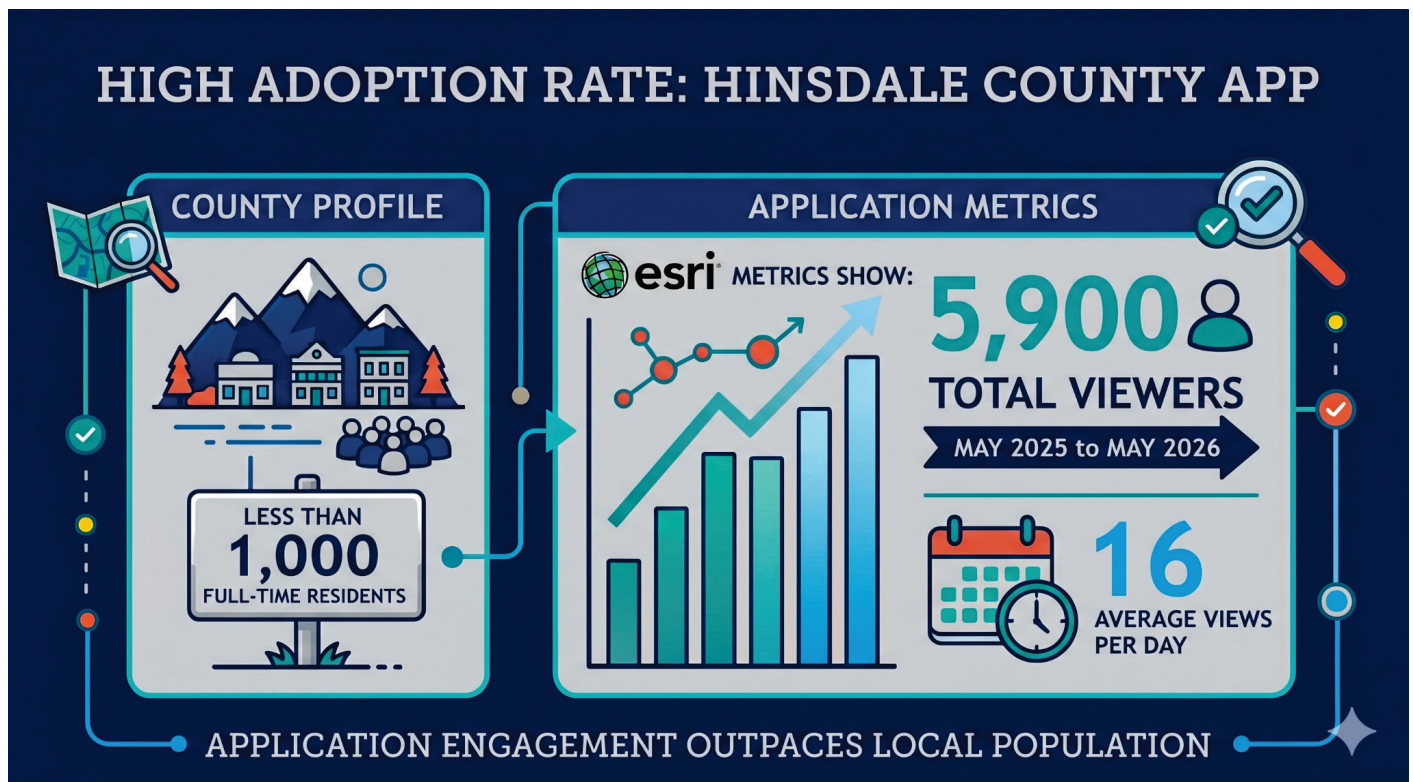
1. Significant Time and Operational Savings

- No more manual inquiries: Previously, the public and county organizations had no direct access to this data and had to contact the assessor's office directly. The new application makes information easily accessible, saving assessors hours of their day by eliminating the need to leave meetings to share and send data.
- One Stop Shop: County departments can now access GIS data in a single, unified place. Examples include:
 - Building Inspectors use the app to view property boundaries before going on-site.
 - The County Clerk uses the commissioner district data to view voter boundaries.
- Simplified discrepancy reporting: Landowners can now easily notify assessors of any data discrepancies.
- Enhanced local utilities: Residents can use the map to assess property values and parcel sizes and to view public and private access to avoid accidental trespassing.

2. No Cost Resource

- Free application build, ongoing maintenance and support: The state hosts, creates and continually maintains Hinsdale's application at no cost, making modern technology accessible to all.

3. High Engagement and Broad State Impact



- **100% Statewide Coverage:** By sharing Hinsdale's address and parcel data publicly, the state achieved [100% parcel coverage across Colorado](#).
- **State-Level Project Support:** The shared data now aids the state with land management projects and allows the state to use the address and parcel data for:
 - Geocoders
 - Additional parcel and address GIS projects
 - Next Generation 911 analysis

This project proves that modernizing local government doesn't require a massive budget, only visionary collaboration. By delivering immense operational value at zero cost, the OIT GIS team has set a new standard for public service: turning a single county's success into a sustainable, scalable catalyst for digital transformation across the entire state of Colorado.