



COLORADO

**Governor's Office of
Information Technology**

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Colorado Address and Parcel Data 2023 User Report

This report will summarize the annual collection, standardization, and publication of address and parcel data by the OIT-GIS team from participating counties in Colorado. A brief overview of the project as well as examples of how this data contributes to various agency applications.

December 2023

OIT GIS Team

oit_gis@state.co.us

<https://geodata.colorado.gov/>





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Overview

The State of Colorado Office of Information Technology (OIT) is responsible for collating address and parcel information for all counties and municipalities in the state. These datasets assist in updating statewide geocoders and can help state agencies provide a number of services that benefit customers and citizens alike.

Parcel data is provided in polygon format and represents the extent of a parcel as it is recorded with the local Assessor's Office. Attribute information for parcel data includes address information, owner name and address, land use codes, appraised, assessed, and last sold prices, and various other attributes. While the state collates and publishes data for public use, attribute information and completeness is subject to availability from local governments.

While parcel data contains address information, the address dataset should be considered the authoritative source for address information. Address data is provided in point geometry and generally represents the geometric center of an address location.

Sharing Restriction Categories

We group address and parcel data into three categories based on a county's sharing preference. Sharing preferences may change year to year, and counties may choose to share their address and parcel datasets at different levels.

1. *Public*

Counties that specify 'Public' as their sharing preference consent to us publishing their address and/or parcel dataset to our public REST endpoint found at <https://gis.colorado.gov/public/rest/services/>.

2. *State Agency Only*

Counties that specify 'State' as their sharing preference consent to allowing any state agency employee to view and use their address and/or parcel data. State employees may request access to these additional datasets.

3. *Emergency Only*

Counties that specify 'Emergency' as their sharing preference consent to the use of their data by emergency organizations.



Schema

The schema we use for parcel and address data can be found below along with descriptions of each attribute.

Parcel Schema and Attribute Definitions

Descriptive Name	FieldName:	Description
	<i>OBJECTID</i>	
	<i>shape</i>	
sharing	<i>sharing</i>	Who this data can be made available to.
County Name	<i>countyName</i>	The county name
Federal Information Processing Standard	<i>countyFips</i>	FIPS code is the Federal Information Processing Standard
Parcel Number	<i>parcel_id</i>	The local parcel number for the parcel record.
Account	<i>account</i>	linked property owner/assessor account
Street Address	<i>situsAdd</i>	Location address number, street, and suffix.
City Name	<i>sitAddCty</i>	Location address city.
Zip Code	<i>sitAddZip</i>	Location address zip code.
Primary Surface Owner	<i>owner</i>	The primary surface owner name.
Secondary Surface Owner	<i>owner2</i>	The secondary surface owner name.
Owner Street Address	<i>ownerAdd</i>	Owner Mailing Address number, street, and suffix.
Owner City	<i>ownAddCty</i>	Owner Mailing Address city.
Owner State	<i>ownAddStt</i>	Owner Mailing Address state.
Owner Country	<i>ownAddCou</i>	Owner Mailing Address Country (if not USA)
Owner Zip	<i>ownAddZip</i>	Owner Mailing Address zip code.
Legal Description	<i>legalDesc</i>	The full tax legal description.
Parcel Square Footage	<i>landSqft</i>	Parcel Area if SqFt
	<i>landAcres</i>	Parcel Area if Acres
Block	<i>block</i>	The block in which the lot is located
Lot	<i>lot</i>	The individual lot
Subdivision/Condo Code	<i>subCode</i>	The code for the subdivision or condo that the parcel is in.
Subdivision/Condo Name	<i>subName</i>	The name of the subdivision or condo that the parcel is in.
Zoning Code	<i>zoningCode</i>	Legal zoning code.
Zoning Description	<i>zoningDesc</i>	Legal zoning description.
Tax Land Use Code	<i>landUseCde</i>	A code for the tax lot's land use category
Tax Land Use Description	<i>landUseDsc</i>	A description for the tax lot's land use category.
Date of Last Sale	<i>saleDate</i>	Date of the most recent sale of the parcel.
Price of Last Sale	<i>salePrice</i>	Price at the most recent sale of the parcel.
Parcel Total Value	<i>apprValTot</i>	Total value of the parcel.
Taxable Value	<i>asedValTot</i>	Total dollar value assigned to the land for purposes of measuring applicable taxes.
	<i>URL</i>	URL link to Assessor data
Date data received	<i>dateReceiv</i>	Month & Year the data was received by OIT-GIS



Colorado State Address Dataset (CSAD) Address Schema and Attribute Definitions

Descriptive Name:	FieldName:	Description:
	<i>SAUID</i>	State Assigned Unique ID
	<i>PlaceID</i>	Used by post office to identify addresses
	<i>Longitude</i>	Longitude coordinate of address
	<i>Latitude</i>	Latitude coordinate of address
Address Number	<i>AddrNum</i>	Address street number
Address Number Suffix	<i>NumSuf</i>	Letter or fraction following street number
Street Name Pre Modifier	<i>St_PreMod</i>	A word or phrase that precedes and modifies the Street Name element but is separated from it by a Street Name Pre Type or a Street Name Pre Directional or both.
Street Name Pre Directional	<i>PreDir</i>	Direction proceeding street name
Street Name Pre Type	<i>PreType</i>	Pre identifier for street use
Street Name Pre Type Separator	<i>St_PreSep</i>	prepositional phrase between the Pre Type and the Street Name
Street Name	<i>StreetName</i>	Name of the street
Street Name Post Type	<i>PostType</i>	Type of street
Street Name Post Directional	<i>PostDir</i>	Direction falling after post type
Street Name Post Modifier	<i>St_PosMod</i>	A word that follows the Street Name element, but is separated from it by Post Type or a PostDir or both
Building	<i>Building</i>	Building designator
Floor	<i>Floor</i>	Floor
Unit	<i>Unit</i>	Full unit description
Address Full	<i>AddrFull</i>	Concatenated one line address WITH spaces
Place Name	<i>PlaceName</i>	City or Municipality of address
ZIP	<i>Zipcode</i>	Five digit postal code
ZIP Plus 4	<i>Zipcode4</i>	4 digit postal code
Neighborhood Community	<i>Nbrhd_Comm</i>	unincorporated neighborhood, subdivision, or area
Additional Location Information	<i>Addtl_Loc</i>	Location name, Business name, Building/Landmark name
Place Type	<i>Place_Type</i>	Example: Airport; bank; café; club; office; hotel
	<i>IsCAI</i>	Identifies whether the address is a CAI
	<i>ParcelID</i>	The local parcel number for the parcel record
	<i>MOD_DATE</i>	Date of last modification in processing
	<i>ACT_STAT</i>	Address activity status
	<i>PROD_STAT</i>	Processing step last executed on address
	<i>County</i>	County



OIT-GIS Use Cases

Public Geocoders

Address data categorized as 'Public' collected during the annual data call is used to create up-to-date geocoders available for public use. The [State of Colorado Geocoder](#) accepts a .csv with address, city, and zip code attributes and returns the same .csv with associated coordinate information.

Parcel and Address Viewers

Public Viewer

This year, the OIT-GIS team created the [Colorado Public Parcel and Address Viewer](#) to quickly visualize the aggregated county parcel and address data. The app includes links to the various locations and formats which users can integrate the data into their own projects.

State Agency Restricted Viewer

In addition to the public viewer, a State Agency Restricted Parcel and Address Viewer was also created to allow for the visualization of additional counties that specified sharing as state agency use only. Users of this application are authenticated using a State Government group in ArcGIS Online.

State Agency Use Cases

The following section will highlight some of the ways in which Colorado State agencies are using aggregate address and county parcel data to improve the lives of Coloradans.

Colorado Department of Public Safety

Division of Fire Protection & Control

DFPC staff use parcel data to identify dollar amounts of properties at risk during a wildfire or those damaged from a wildfire. The results of this analysis are used to evaluate where resources should be allocated. Additionally, DFPC uses address points to conduct analysis on density in wildland urban areas.

Division of Homeland Security and Emergency Management

The Division of Homeland Security and Emergency Management use parcel data for their Crisis Tracker system when conducting damage assessments after incidents such as floods or wildfires. Having this data on hand helps confirm the locations of damaged sites.

Colorado State Demography Office

Parcel data make updating municipal and special district boundaries easier and more accurate at the Colorado Demographer's Office.



Colorado Department of Natural Resources

Staff at the Division of Natural Resources use parcel data in coordination with Colorado Parks and Wildlife when conducting land use reviews and participating in local planning efforts with counties.

Colorado Parks and Wildlife

“CPW leverages the address and parcel datasets in a variety of ways to work with local landowners. When OIT GIS first began collecting these data and making them available to state agencies it was probably the singular most important service they provided from several perspectives. Prior to that the process entailed the aggravating and inefficient process where each agency (and sometimes multiple entities within an agency) would request these data from the counties.”

Identifying Landowners for Communication/Outreach

Parcel datasets are used by Colorado Parks and Wildlife staff for:

- Identify landowners by their parcel sizes, land use types, and mailing addresses
 - This is required by statute to do stakeholder outreach when regulations change
- Identify who owns private parcels within wildlife study areas in order to contact them for access
 - Up to date parcel data is critical to assessing grouse habitat management options based on owners of private surface land and their relationship with Colorado Parks and Wildlife
- Cross referencing land owners
 - For example, figuring out issues with trespass, game recovery, and real estate
- Verifying boundaries provided by landowners for Colorado Parks and Wildlife private land access programs
- Connecting to landowners to request access
 - For example, retrieving collars, monitoring grouse leks, or other general wildlife surveys
- Sorting out water quality rules

State Park Operations

Parcel datasets are used by Colorado Parks and Wildlife staff for:

- Creating internal maps for park managers to understand who and where their neighbors are in order to help park operations such as grazing, fencing, trail easements, search and rescue
- Parcel owner communication
 - For example, communicating about state park management efforts such as prescribed fires and management plan meetings

Planning

Parcel datasets are used by Colorado Parks and Wildlife staff for:

- Determining ownership to request information such as raptor nest surveys
- Finding large land holdings for potential conservation



- Landowner outreach for herd management planning
- Developing maps that help delineate boundaries for development of easements and generating county level summaries.
- Determine ownership for permission requests and target landowners in target areas
- Mapping and planning efforts of the Colorado Natural Areas Program (CNAP)
 - State Natural Areas can be designated on any land ownership type, including private lands. Parcel data is used to help identify ownership boundaries, evaluate conservation effectiveness, and measure buffers.

Field Work

Parcel datasets are used by Colorado Parks and Wildlife staff for:

- Planning wildlife captures
- Conducting research on how different parcel sizes affect wildlife distribution
- Creating field outings to avoid trespass

Water

Parcel datasets are used by Colorado Parks and Wildlife staff for:

- Managing water resources that cross property boundaries, either in a ditch conveyance or as a historical place of use associated with an original water right
 - County parcel data contributes to understanding ownership and which landowners may benefit from creative agreements to utilize CPW water resources that may benefit wildlife.

Colorado State Forest Service

Field foresters and GIS staff at the Colorado State Forest Service for a variety of needs:

- When working with landowners on forest health and wildfire mitigation projects, they use parcel boundaries in the field (Avenza Maps, ESRI Field Maps, etc.) to ensure they are traveling and working in the appropriate property
- Use parcel boundaries to delineate project polygons for landowner maps, submission to our own work tracking software, and submitting accomplishments to Federal, State, and Private partners and funders
- Foresters and Wildfire Mitigation Specialists use the data for planning purposes, highlighting properties that fall within areas of high wildfire risk for current or future work planning

“Our hope is to also integrate the public parcel layer into our Colorado Forest Atlas applications so that the public can use their property boundary as project areas to generate reports and data exports of our wildfire risk products that can inform them and their neighbors of risk and mitigation options available to them.”