



DRCOG works with <u>more than 50 local governments</u> in the Denver Metro region to plan for urban development, transportation, and aging services. The have hundreds of datasets in their open data catalog that could be helpful in your applications.

DRCOG and the State of Colorado Chief Data Analytics Challenge - Overview of Relevant Datasets

High resolution imagery and related planimetrics data can be useful to the Smart Cities Challenge Track analyses - along with 1ft Contours, Natural Features and Parks, Recreation, and Open Space Data. Many of these datasets could also have application to Water Supply through calculation of impervious surface and similar studies. Locations of Schools, Nursing Homes and , Aging Related Data and Employment Concentrations by County, Denver Metro Zoning and Housing Data. Additionally TIP (Transportation Improvement Program polygon zones) could be useful to all three Challenge Tracks.

Examples of Planimetrics data include Edges of Pavement, Driveways, Sidewalks, Building Roofprints, Trails, Parking Lots and... for the Denver Region

Municipal Boundaries in the Denver Region 1-Foot Contours for the Denver Region Transportation Data for the Denver Region

WOW! There's a lot of Data - How Do I get Started?

First, navigate to DRCOG's Regional Data Catalog at https://data.drcog.org/. One way to explore is by browsing the categories for which DRCOG has data.

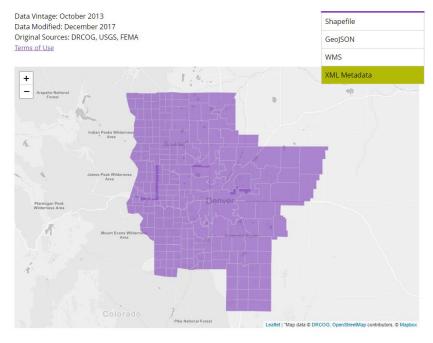


Working with GIS Data

Exploring the data, one will discover the lat/long data reported in decimal degrees. Example coordinate: 3129155.8976578,1845153.99813589. DRCOG offers its data in several formats, including shapefile, GeoJSON, WMS, and KML. The shapefile and KML formats are downloadable files. The GeoJSON and WMS are URL links. Please note that spatial references in GeoJSON and WMS must be edited prior to being used in a webmap. GeoJSON is not available in Internet Explorer. All the data is provided in Colorado State Plane Central (NAD 1983 2011 StatePlane Colorado Central FIPS 0502 Ft US).

DRCOG Metadata

All the datasets in the Regional Data Catalog have metadata. Download it as an xml from the Get Data menu, read the description on the data page, and view the Data Vintage/Data Modified dates to get a good idea of what you're looking at.

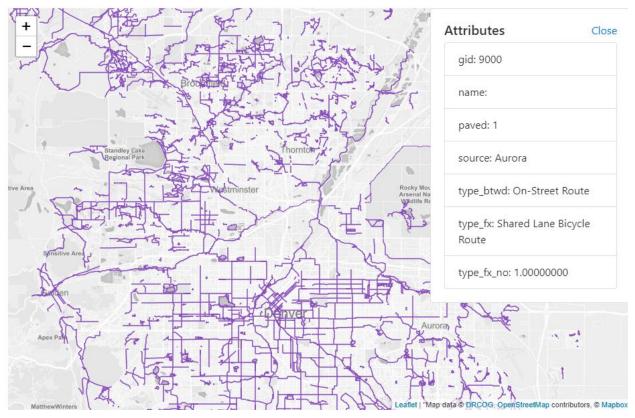


DESCRIPTION

Index file was created by DRCOG in 2017, as the contour data was broken down into smaller more manageable chunks. Contours derived from Lidar data collected as part of the response to the 2013 Colorado Flood. The controur data is at a 1-

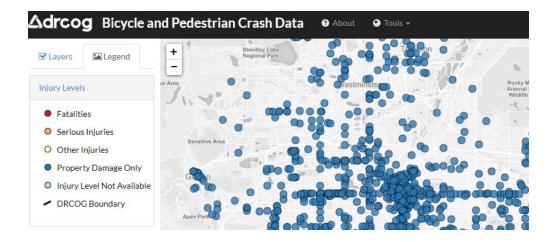
Bicycle Facilities Data

"Bicycle facilities" refers to on-street and off-street routes for bikes within the DRCOG region. Check out both <u>routes and bike share stations</u> here.



Crash Data

DRCOG works with CDOT to provide <u>annual crash data</u>, including historical datasets going back to 2004.



NOTE: Raw crash data used in this map will be added to the Regional Data Catalog late 2018.

To understand what the codes mean, download the PDF from the Get Data menu. It contains a sample police report and other useful information about how the data is created. For example, the fields that contain accident types/codes are:

- ACT1 Harmful event sequence driver 1
- ACT2 Harmful event sequence driver 2
- ACT3 Harmful event sequence driver 3
- MHE Most harmful event
- ACCTYPE Accident type

The codes in these 5 fields are shown on the pdf document to be Block Code "B." The codes for Block code B are shown on page 7 of the pdf under "B. HARMFUL EVENT SEQUENCE." There are codes 01 through 40, and the following codes relate specifically to ped or bike:

COLLISION WITH PEDESTRIAN

COLLISION WITH OTHER VEHICLE

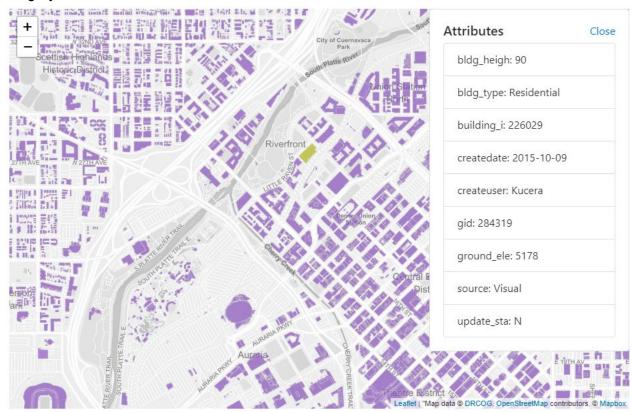
03. School Age To / From School

15. Bicycle

- 04. Pedestrian on Toy Motorized Veh.
- 05. All Other Peds

Building Roofprints

DRCOG and its partners have been collecting building roofprints since 2014. These INCREDIBLY DETAILED features are manually drawn from high-resolution (3-inch, 6-inch) imagery. Check out the newest data here.



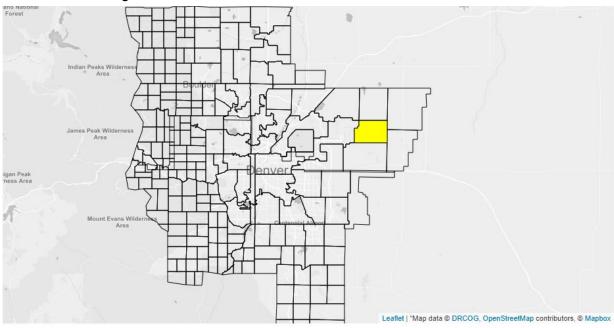
Other Planimetric Features

In addition to building roofprints, we also have the following features <u>edge of pavement (line)</u>, <u>edge of pavement (polygon)</u>, <u>parking lots</u>, <u>sidewalk ramps</u>, <u>sidewalk centerlines</u>, <u>sidewalk polygons</u>, <u>driveways</u> and <u>trail centerlines</u>.

Not all the datasets cover the same area so be sure to check the extent for each feature - you'll find it in the Related Datasets section.

Contours

DRCOG has <u>1-foot contours</u> derived from 2013 LIDAR. The data is broken into many sections because it is so large.



DESCRIPTION

Contours derived from Lidar data collected as part of the response to the 2013 Colorado Flood. The contour data is at a 1-foot interval and was machine-generated for 3,600 square miles. Contour lines have been smoothed and were developed to be non-crossing, solid, and unbroken features. Contour lines are attributed with elevation values. Data was not validated by USGS, as were the other deliverables collected as part of this contract.

History of the project: USGS Contract: G10PC00026 Task Order Number: G14PD00001; CO_Flood_2014: The Colorado Flood Lidar project called for the planning, acquisition, processing and derivative products of LIDAR data to be collected at a nominal pulse spacing (NPS) of 0.7 meter (QL 2). Project specifications were based on the U.S. Geological Survey National Geospatial Program Base LIDAR Specification, Version 1. The data was developed based on a horizontal projection/datum of UTM Zone 13 North, NAD83, meters and vertical datum of NAVD1988 (GEOID12A), meters. LiDAR data was delivered in RAW

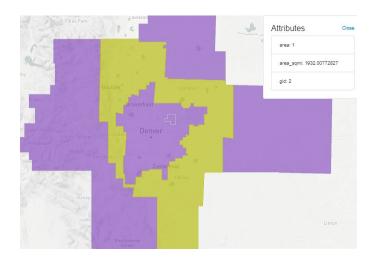
DRAPP

The Denver Regional Aerial Photography Project (<u>DRAPP</u>) is facilitated by DRCOG for the benefit of local and regional partners. The goal, which has been pursued since 2002, is to acquire high resolution aerial photography of the Denver Region every two years. Imagery is the primary deliverable, but other products such as elevation data (e.g. LiDAR, DEMs, contours)

and planimetrics (e.g. edge of pavement, building footprints) may be procured under the DRAPP umbrella if the need and funding exist.

These three links provide an overview of how to identify which tiles have overlap with the study area of interest, and their corresponding file names.

2014 Areas



2014 Tiles



Download Location



You can locate the imagery you want to download by first navigating to the area folder under the year you are interested in. Within the area folder is tile data.

Past DRAPP imagery is available for purchase from <u>Harris MapMart, Inc</u>. and <u>Sanborn MapCompany, Inc</u>.

Much More

There's a lot more on the site - go see for yourself! https://data.drcog.org/

DRCOG FAQ

Still under construction - email Ashley Summers at asummers@drcog.org for specific questions.