



What is planimetric data?

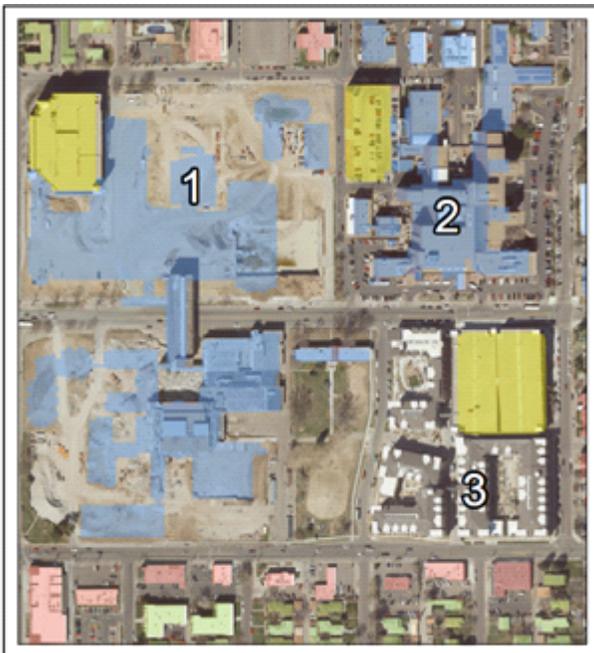
Planimetric data refers to stationary, infrastructure features that can be identified from the air and outlined on aerial imagery (such as building and sidewalks). This very detailed data is expensive to collect but is made affordable through a consortium facilitated by DRCOG.

How are planimetric features used?

This foundational data has many uses, including modeling water runoff, identifying sidewalk gaps, inventorying assets, simulating energy usage in buildings, and urban development scenario planning.

In the images below, planimetric data is overlaid on its 2014 source imagery (left) and subsequent 2016 imagery (right). Some key things to point out are:

1. Building footprint data (shown in blue) helps us quantify change in the region by allowing us to calculate such things as the amount (in square footage) of demolitions.
2. Buildings in aerial images often appear to “lean” because the plane cannot be directly overhead each one during the image capture. This results in image interpreters not knowing exact building dimensions and locations. The planimetric building footprints solve this problem because they are collected in 3D and represent the building accurately.
3. A new addition can be quantified as soon as a planimetric data update is done using the 2016 imagery as the source.



PLANIMETRIC PROJECT 2014

Users around the region have put the data to good use in the following ways:

- The City of Aurora is using the data to better prepare their emergency response teams. By knowing more about the site, they can tell what equipment and tactical plans will be required before they arrive at the scene.
- Jefferson County recently used the sidewalk data to map walking networks to 124 schools.
- Golden is using it as part of their urban tree canopy assessment and has plans to begin a sidewalk inventory.
- Arapahoe County is using the sidewalks as they work on their Bicycle and Pedestrian Master Plan and the ramps for asset management activities.
- Lakewood is using it in police department dispatch maps. They have plans to use the buildings for damage assessment after natural disasters, the sidewalks for asset management, and the impervious surface for storm water billing.
- The National Renewable Energy Laboratory uses building roofprints to estimate energy savings.
- A local start-up uses pavement and sidewalk information to help the visually impaired.
- West Meadows Metropolitan District uses planimetric data for asset management.

By the numbers

Value of data provided to members	\$850,000
Average cost paid by members	\$14,000
Number of partners	21

Accessing data

All of the data produced from this project is available for free public download from DRCOG's Regional Data Catalog: gis.drcog.org/datacatalog/subjects/planimetrics

QUESTIONS

If you have any questions or comments about the planimetric project, please contact DRCOG Information Systems Manager Ashley Summers at asummers@drcog.org or 303-480-6746.