Customer features in your GIS – what's the value?

DENVER WATER

History

- Established in 1918
- Colorado's oldest and largest water utility
- Over 1 million customers
- 237,000 customer accounts
- The distribution system covers 350 sq miles
- 2574 miles of pipes
- 14,600 fire hydrants

DENVER WATER

Denver Water

- The collection system covers a large part of the state

- Almost all of our water supply comes from mountain snow melt

- The water is brought from the mountains to the treatment plants via tunnels and conduits

DENVER WATER

Denver Water

- Denver Water's GIS stores data in both the collection areas and the distribution areas

- New applications are being identified and developed to assist in operations

DENVER WATER

The Project

- Something was missing
- No customer locations exist in the database
  - Over the history of our facility database customers were not added
  - Create application that will allow for collection of all customer meter pits and stop boxes from field survey using GPS coordinates
  - Generate tap locations from collected points and tap data recorded when tap was set
  - Continue to collect new taps and meter pits as they are set

DENVER WATER

Challenges of the project

- The number of people needed to do the field collection
- The time needed to validate each individual customer location after field collection
- The overall project duration – new customer points set after field collection completed were not captured
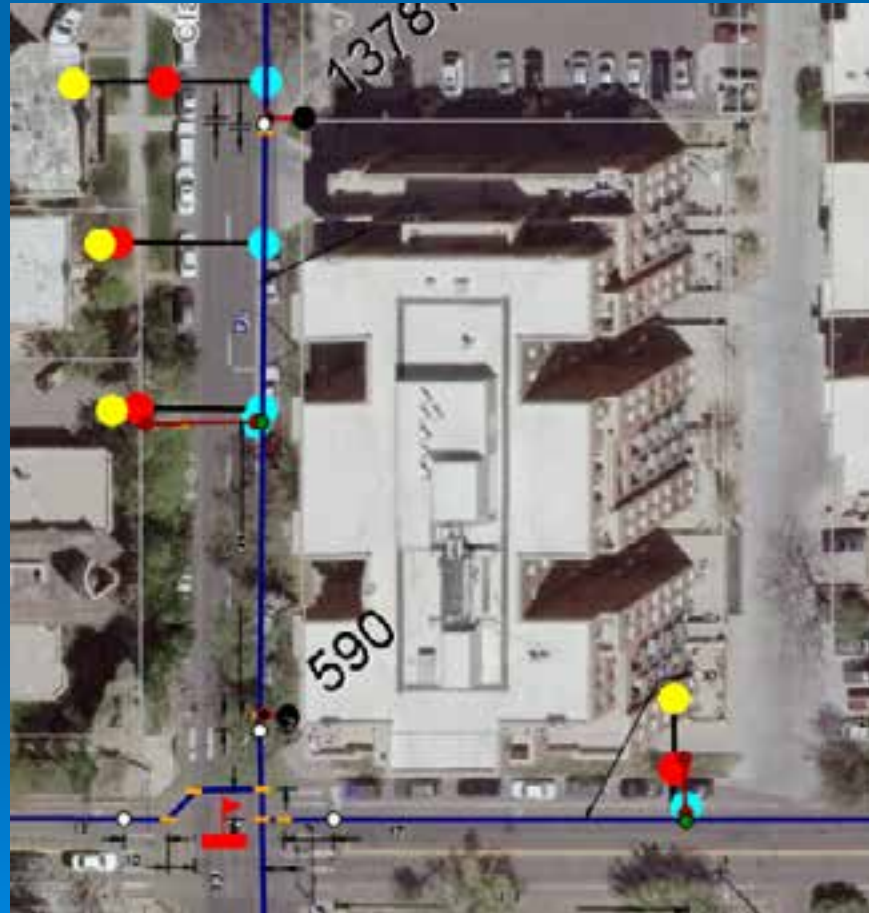
Challenges of the project

ø Equipping and training the crews that set taps and meters to use the GPS equipment – it's not their area of expertise

ø Technology changes over the length of the project

ø Establishing new workflows for keeping the data current

How does the data look?

Example of why the data is helpful

Benefits

- Locate meter pits & stop boxes in the field quickly for service or shut offs
- Manage meter reading routes better
- Identification of customers impacted by main breaks - DEMO
- Assist with projects and planned maintenance - DEMO
- Consumption analysis

What's the data used for today?

- Viewing customer locations in the office and field
- Identification of customers impacted by main breaks
- Identification of customers impacted by construction activities
- Consumption planning

What's the data used for today?

- Location of meter pit – if the ERT isn't working they can find the pit easier
- Better points in data collectors for meter reads
- Operations and Maintenance field crews use this information daily

DENVER WATER