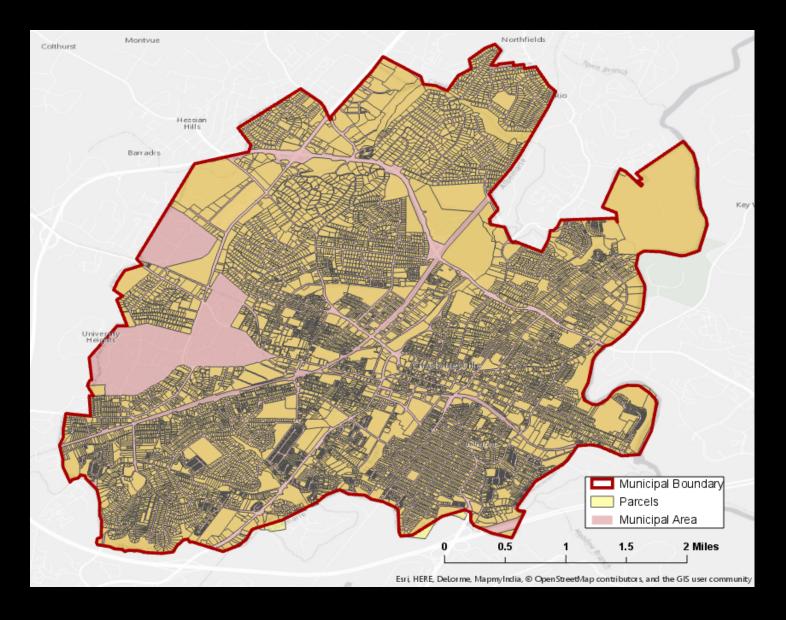
# Charlottesville Open Data - Getting to Know Your Data Parcel Data



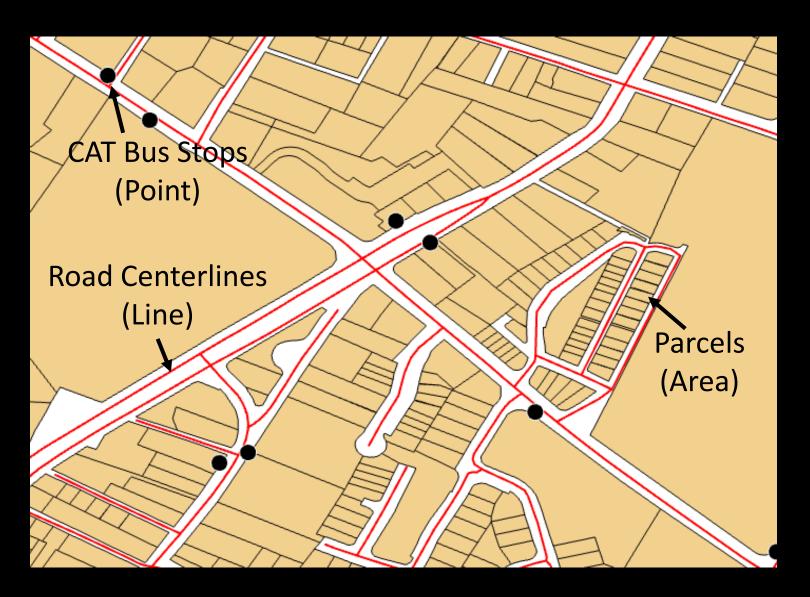


## Know Your Data!!

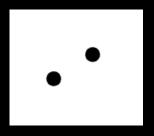
#### City of Charlottesville Parcels (GPIN)



#### **Geometry Basics**



#### **Basic Two-Dimensional Mapping**

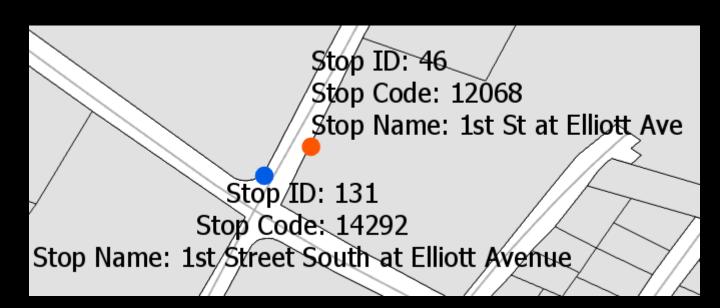




stop_id	stop_code	stop_name
46	12068	1st St at Elliott Ave
131	14292	1st Street South at Elliott Avenue

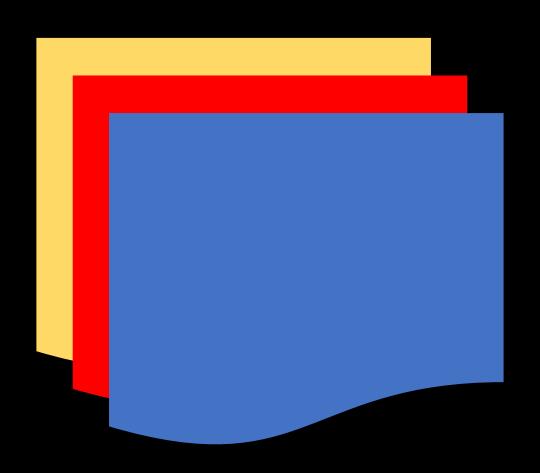
Geometry

Attributes (Information directly linked to geometry)

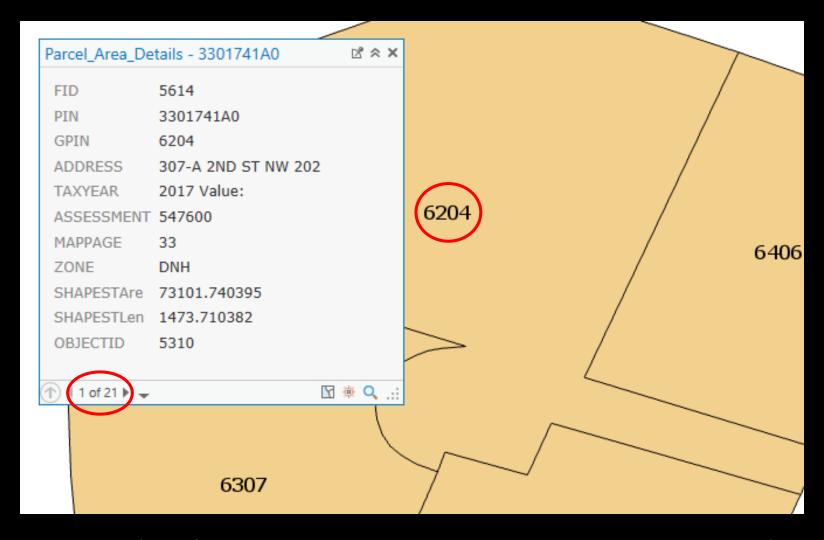


Map (Labeled with attributes, symbolized by Stop Code)

#### Challenge: Multiple Identical Geometries

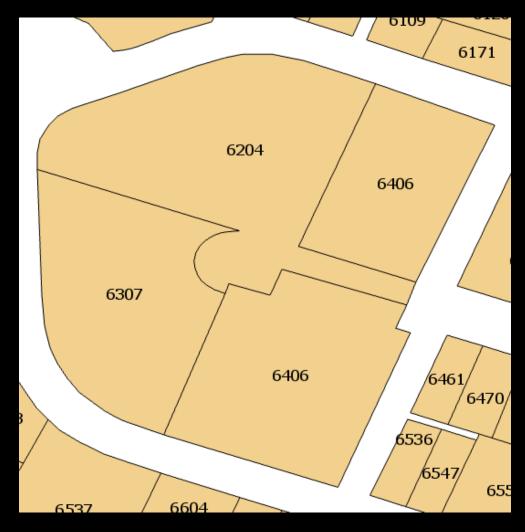


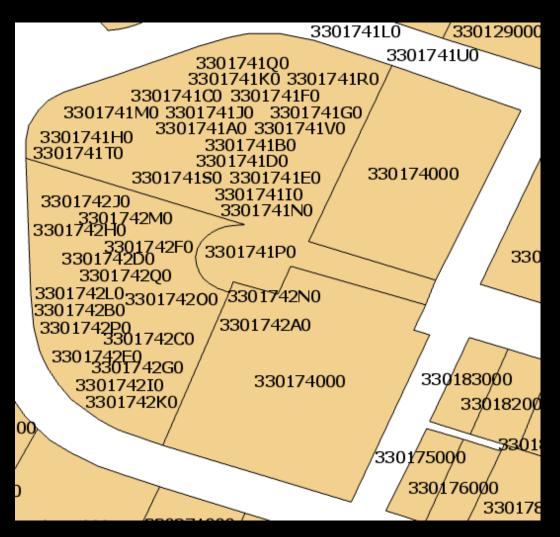
#### Parcel Area Details



Each PIN associated with GPIN area. GPIN 6204 geometry associated with 21 PINs

#### **GPINs and PINs**

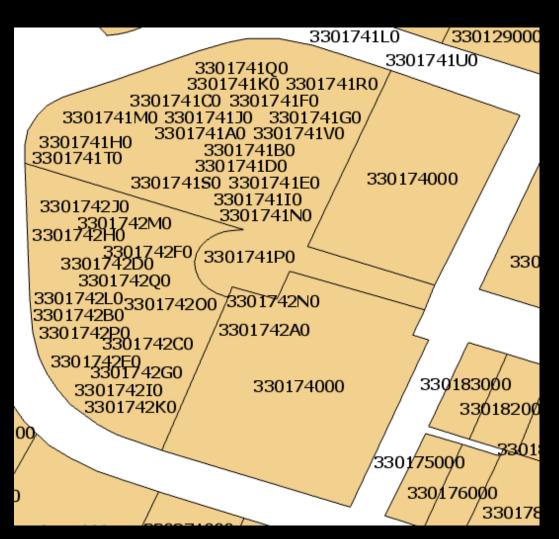




**GPIN (GPIN Geometry)** 

PIN (No PIN Geometry, Geometry from GPIN)

#### Mapping PINs (Parcel Area Details)



Cannot map PINs directly (no geometry)
GPIN geometry associated with PIN

- Only map parcels with a single PIN and GPIN
  - 99% of parcels have a single PIN and GPIN
- Select and analyze data so only one PIN per GPIN
  - Focus on single PINs within a GPINs
- Summarize PINs by GPIN
  - Minimum, Maximum, Sum, Count, Mean
  - Example: Number of PINs per GPIN

PIN (No Geometry, associated with GPIN geometry)

# Challenge: Record Both Aggregated and Individual Values in Same Field

(A) \$500,000 (Parcel 103) (A) \$500,000 (Parcel 107) (A) \$500,000 (Parcel 109)

(A) \$500,000 (Parcel 104)

(A) – Assessed Value

# Challenge: Record Both Aggregated and Individual Values in Same Field

All three bought for a total of \$1,500,000. Sales price in database for each reflects total sale price.

(S) \$1,500,000 (A) \$500,000 (Parcel 103) (S) \$1,500,000 (A) \$500,000 (Parcel 107) (S) \$1,500,000 (A) \$500,000 (Parcel 109)

(S) \$510,000 (A) \$500,000 (Parcel 104)

(A) – Assessed Value

(S) – Sales Value

#### Mapping Sales

Sale Price: 609650 Sale Date: 2017-09-28 GPIN: 17407

Sale Price: 609650 Sale Date: 2017-09-28 GPIN: 17408

Sale Price: 609650 Sale Date: 2017-09-28 GPIN: 17409

Sale Price: 609650 Sale Date: 2017-09-28 GPIN: 17410

Sale Price: 609650 Sale Date: 2017-09-28 GPIN: 17411

Sale Price: 609650 Sale Date: 2017-09-28 GPIN: 17412 A single sale price may be associated with multiple GPINs

Difficult to disaggregate sale by GPIN using Charlottesville Open Data if multiple parcels involved

If single sale associated with multiple PINs, will overestimate parcel sales when analyzed by GPIN.

### Best Mapping Practice

- Analyze data in table(s) before considering mapping
- Check for single PIN or PIN aggregated data for each GPIN geometry (PINs)
- Make sure attribute value applies to single GPIN (Sales)
- Join table(s) to each other and then to Parcel Area layer (GPIN)
- Map joined Parcel Area layer

## Know Your Data!!

#### Open Tabs in Web Browser

ArcGIS Online Map

https://arcg.is/1nL1L9

Charlottesville GIS Viewer

http://gisweb.charlottesville.org/GisViewer/