



BEDA Accelerator

March 12, 2019



Agenda

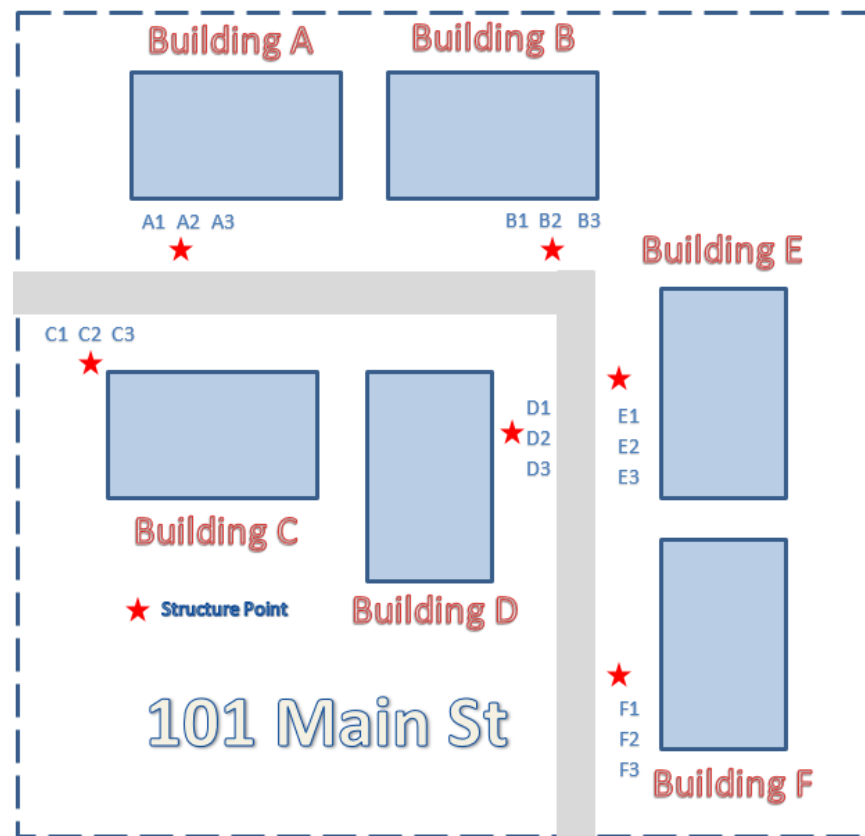
- Welcome our newest partner:
- Round-robin updates on the phone
- FAQ: We have answers!
- Challenges of UBID Integration: Lessons Learned
- Time permitting: CityBlock Demo

Frequently Asked Questions

1. How do you define buildings?
2. When in a building's lifecycle do you create a UBID? Who does that?
3. Who maintains the system and updates it with new information over time?
4. How does the UBID apply to properties that may be owned under a single transaction but are not geographically contiguous?

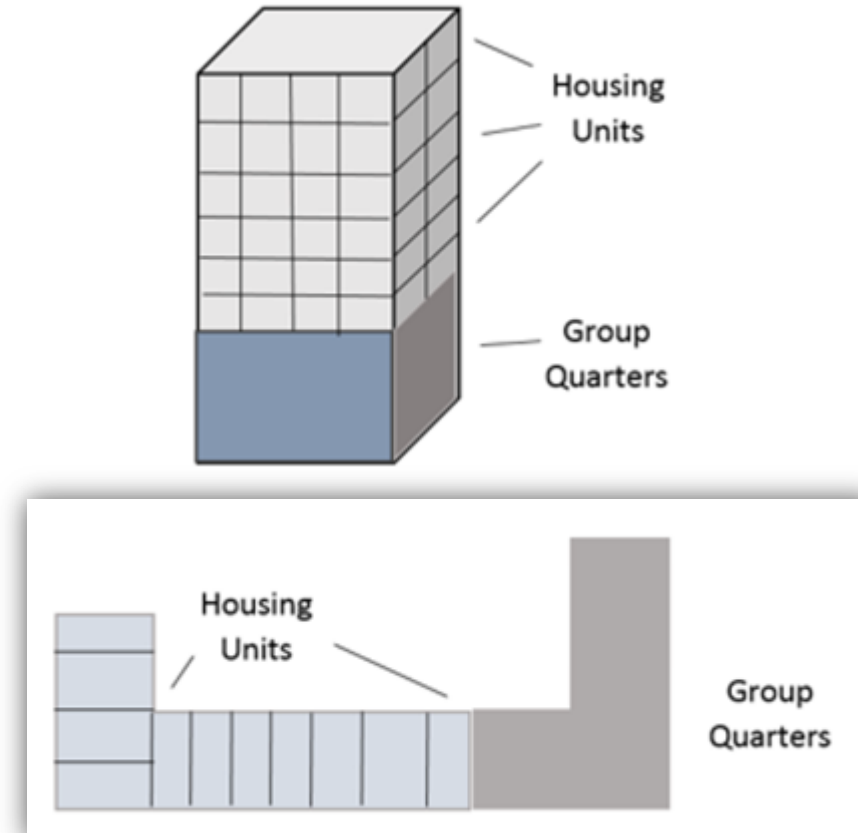
How do you define a building?

Case 1: One address, multiple Structures

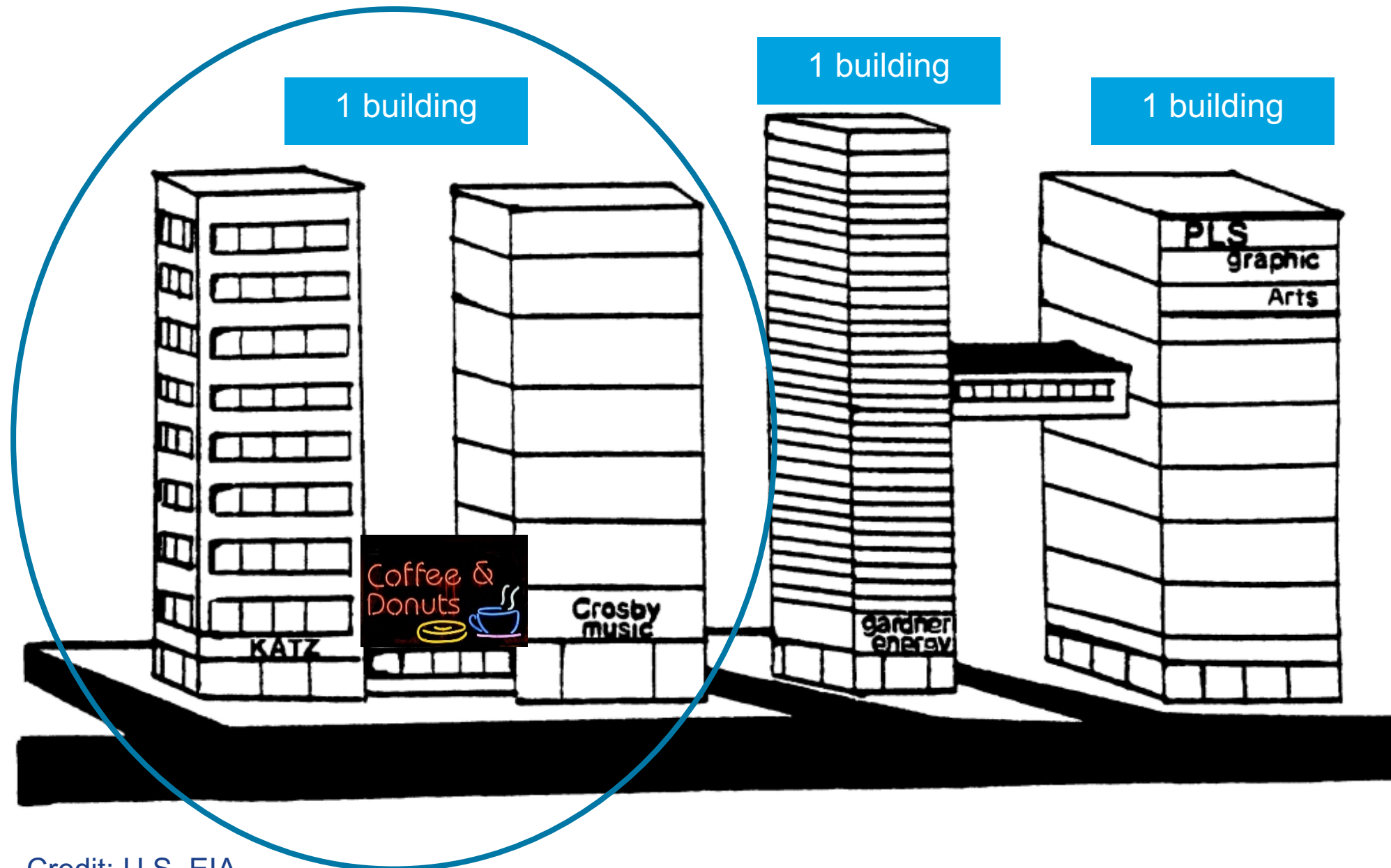


Credit: Census Bureau

Case 2: One structure, with multiple units.



How do you define a building?



Credit: U.S. EIA

Who/when in a building's lifecycle do you create a UBID? Who maintains the system over time?

When?

- New Construction
 - Permitting or official approval of building design
 - Surveying for foundation placement
- Existing Building
 - At any point
 - Adjust as appropriate with any renovation which changes the building's footprint

Who?

- The UBID is created, modified, and managed by the entity which owns the source data.
 - i.e.: if you have the footprint data, you create, change, and manage the UBID
 - Tooling surrounding the UBID code itself can ensure appropriate matches and management throughout the ecosystem

What about property UBIDs which are not geographically contiguous?

- UBID is a geospatial natural key. Therefore, the underlying object to be identified must be geographically contiguous.
- However, there can be a set of discrete geospatial objects identified by a UBID if they are contained by a larger, relevant, geospatial unit.

What about property UBIDs which are not geographically contiguous?

UBID Appli

COMPLETE SLIDE
GRAPHICS

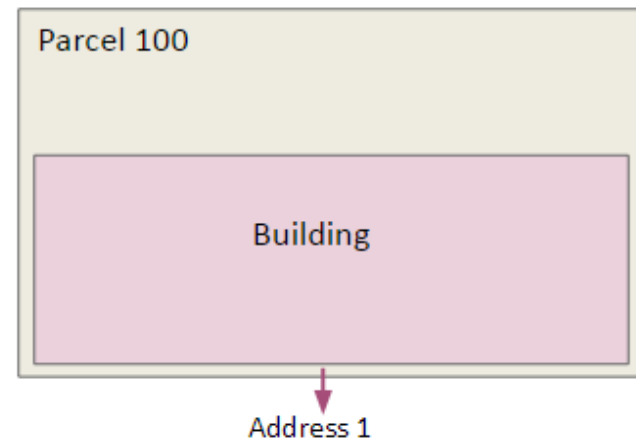


Challenges of UBID Integration

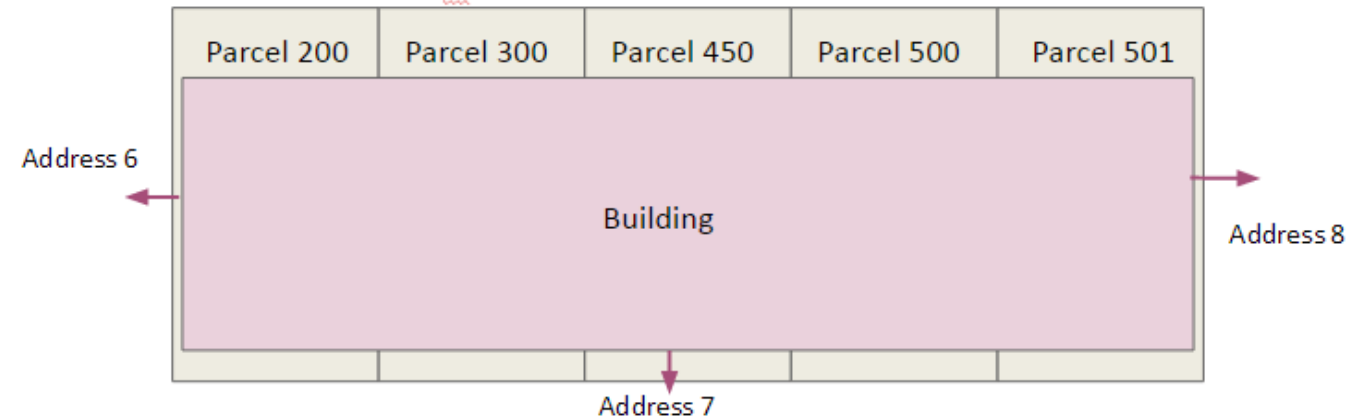
Physical reality of building data

The relationship of Buildings to Parcels/Tax Lots can be complicated

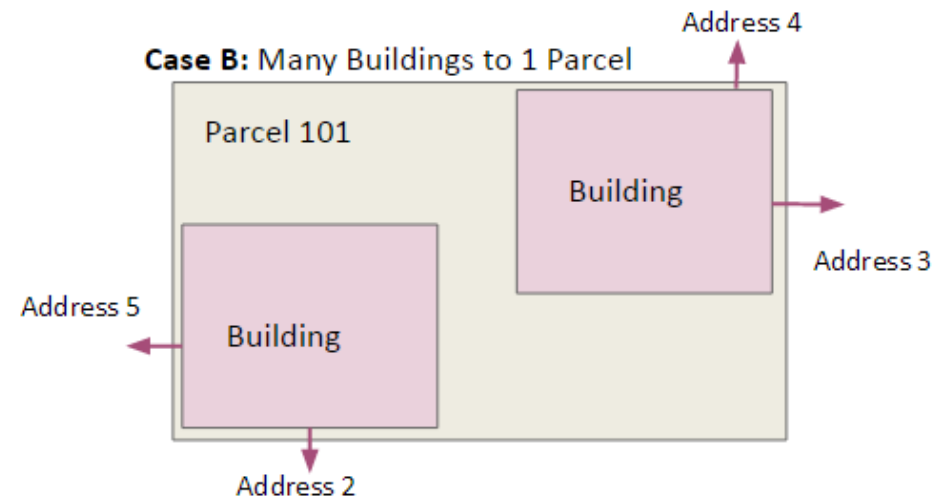
Case A: 1 Building to 1 Parcel



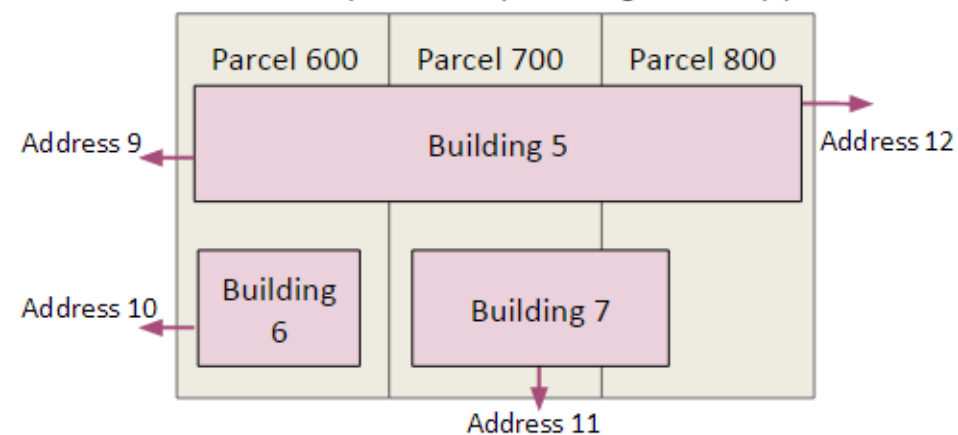
Case C: 1 Building to many Parcels



Case B: Many Buildings to 1 Parcel



Case D: Campus -- many buildings to many parcels



Sources of data to generate UBIDs

- **UBIDs**
 - By definition they are Unique IDs for Buildings
- **Non-Spatial Data Sources**
 - **Tax Assessor Data**
 - Parcel information (with Parcel ID); some limited information about Buildings
 - **Portfolio Manager Data**
 - Information about Buildings (with ESPM ID); possibly includes Parcel IDs where the buildings are located

Sources of data to generate UBIDs

■ Spatial Data

- Shape files for Parcel and Building footprints
- City of San Jose has Shapefiles for:
 - Parcels
 - Building Footprints

Basemap

This zip file contains the data layers of **Parcels**, Single Street Centerlines and Divided Street Centerlines in San Jose.

Format: .shp (Shapefile) and .KMZ (Google Earth file) [Data Download](#)

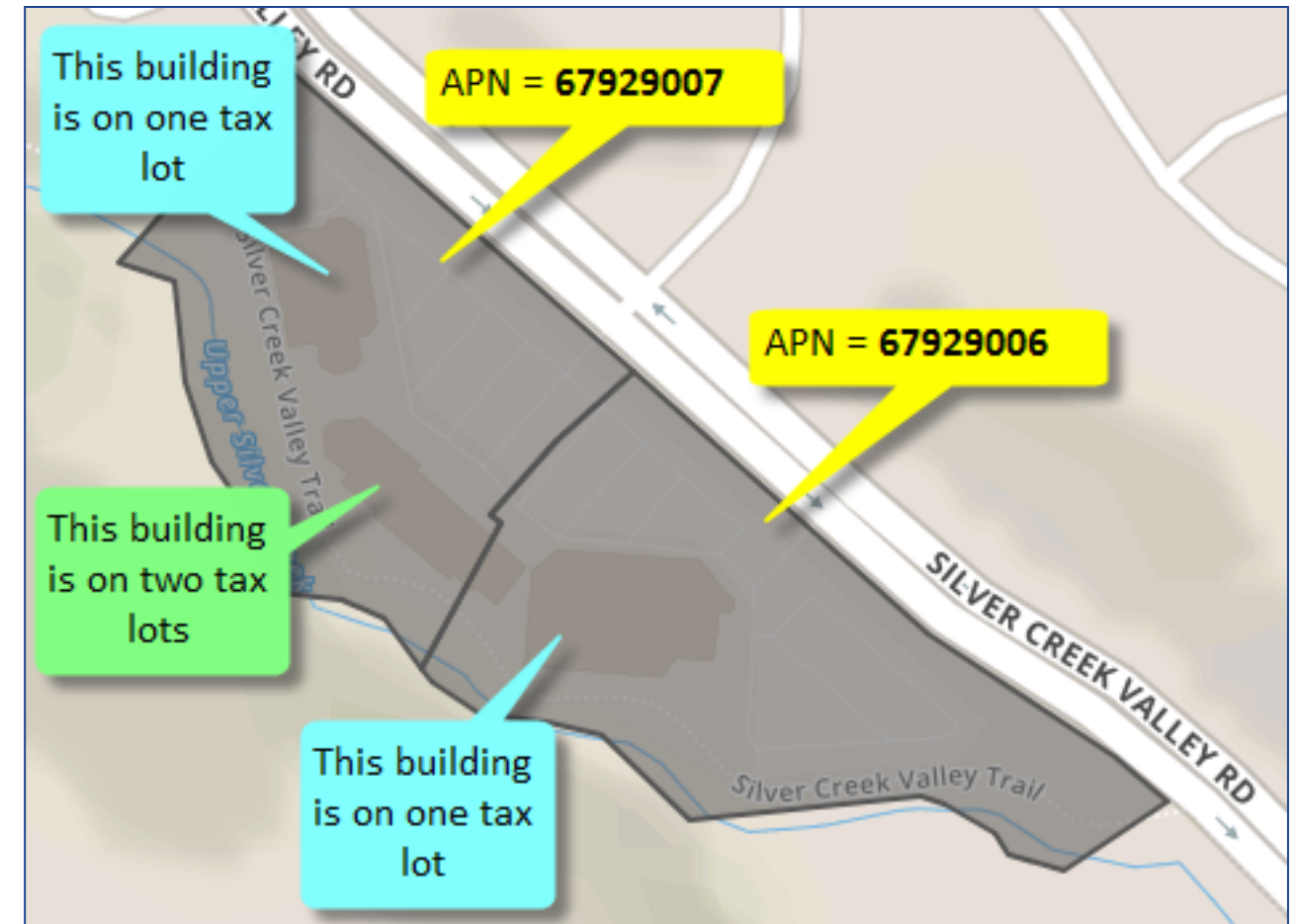
Basemap_2

This zip file contains the data layers of Address Points, **Building Footprints**, Condo Points, Intersections, Side Walk Areas, and Tract Boundaries in the City of San Jose.

Format: .shp (Shapefile) and .KMZ (Google Earth file) [Data Download](#)

Parcel Footprint Spatial Data

- Two Tax Lots (ID = APN)
- **APN = 67929007**
 - 3 buildings entirely on that parcel
 - 2 of the buildings are small
 - 1 building partially on this parcel
- **APN = 67929006**
 - 3 buildings entirely on that parcel
 - 2 of the buildings are small
 - 1 building partially on this parcel



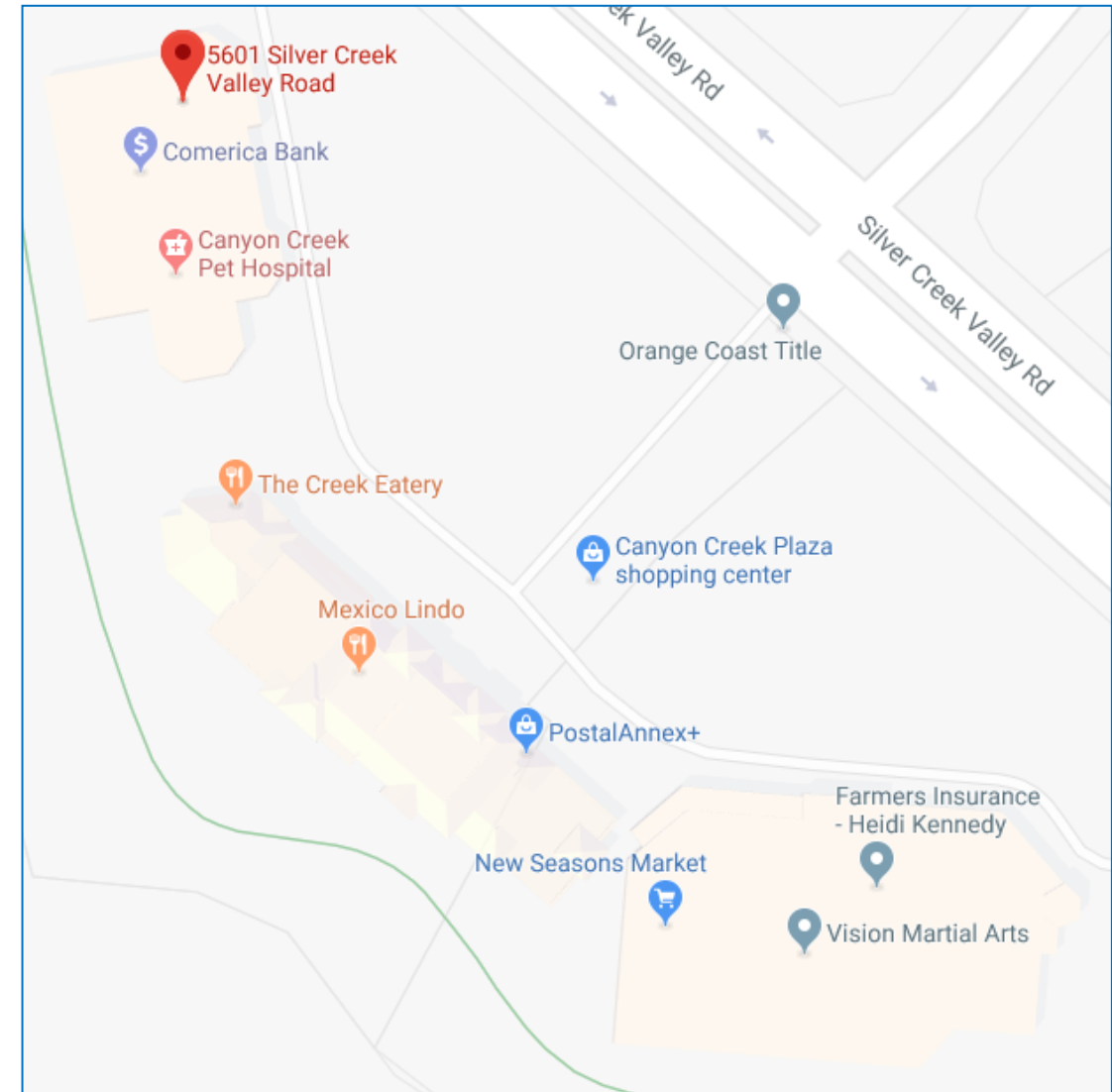
Building Footprint Spatial Data

- **APN = 67929007**
 - 3 buildings entirely on that parcel
 - 2 of the buildings are small
 - 1 building partially on this parcel
- **APN = 67929006**
 - 2 buildings entirely on that parcel
 - 1 of the buildings is small
 - 1 building partially on this parcel
- A UBID was generated for every building footprint



What do the buildings represent?

- **Canyon Creek Plaza Shopping Center**
 - These multiple buildings are part of a shopping center
- **ENERGY STAR Portfolio Manager (ESPM)**
 - The owner will (generally) enter data based on how the buildings are metered
 - Metered separately?
 - They will probably be entered as separate buildings.
 - Same meter (unlikely)
 - Probably entered as one building
 - Could be a combination of metering



The city doesn't know how the owner will group the buildings until they get the ESPM data

What should the final UBIDs be?

- An individual UBID for every building
 - Even if the buildings are on the same meter and will be represented by one ESPM report?
- One UBID to represent the correct grouping of buildings
 - By meter or other criteria?
- What is the best / easiest / most efficient way to determine this?

Actions ▾

Filter by label:

Canyon Creek Plaza Shopping Center ✕

Add a label

Cycle:

2018 UBID Test ▾

View by Property

View by Tax Lot

+	✓			Facility ID ▾	Jurisdiction Tax Lot ID (↔)	AREA ▾	BLDGHEIGHT ▾	UBID	
+	✓		i	280428	67929007	173.34822...	10.69	849W76Q9+P52-1-1-1-1	
+	✓		i	280433	67929007	15370.040...	17.7	849W76Q9+H7C-10-6-10-7	
+	✓		i	280458	67929007	148.48705...	0	849W76Q9+78F-1-1-1-0	
+	✓		i	280454	67929006; 67929007	19165.933...	30.41	849W76Q9+7CR-13-14-12-13	
+	✓		i	280459	67929006	28816.545...	21.94	849W76Q9+5P8-8-14-9-13	
+	✓		i	124961	67929006	586.41192...	12.12	849W76Q9+3VQ-2-2-2-2	



CityBlock Demo



Thank you!

Next call:

April 9th, 2019





Authoritative UBID Process

