

# Structure Classification



Supplementing the Planimetric Building Dataset

# What are we trying to accomplish?

- Determine how many structures are in the floodplain - FEMA
- Consistency each time we analyze
- It would be helpful (and more beneficial to the City) to be able to provide additional information about the structures other than a single count

# Structure Categories

- Single-family Residential
- Two-family Residential
- Multifamily Residential
- Mixed-use - residential and non-residential uses
- Non-residential - commercial, industrial, office, churches, multifamily development clubhouses, park restrooms and shelters with walls, etc
- Small Accessory - enclosed, usually less than 200 sqft (sheds)
- Large Accessory - enclosed structure and structures not primarily used for storage (detached garages, barns, etc)
- Open - structure that does not have walls and is not a carport (gazebos, sign kiosks, bus stops, pergolas, park shelters without walls, etc)
- Carport - open structure without walls and used for the parking of vehicles (primarily in multifamily developments)
- Unknown - cannot be determined
- Removed - structure no longer exists

# How we did it

- Created a point featureclass from the most recent AIMS Planimetric Building dataset
- AIMS FID was retained in order to join the record back to the building for visualization and analysis
- StructureType field was added and a coded value domain applied
- Other fields
  - Simplified NFHL (from intersect with building footprint)
  - LOMC Status (not always just in our out)
  - Flood 2017 Impact
  - Editor tracking

# Classification Sources

- Current Air Photo
- Oblique Air Photos (AIMS website)
- Google/Bing Street View and Air Photos
- Existing Land Use Survey
- Park Amenities Point Dataset
- EnerGov Permit Dataset

# Results

- 1,865 structures in or near the floodplain were categorized in just a couple of days
- Floodplain Ordinance Review
- All users can view the categorized building layer in desktop products

# Maintenance

- Expansion possibilities
- AIMS Planimetric Building update
  - Share a list of removed structures with AIMS
  - Identify new structures and add them to the point dataset
  - Remove structures from the point dataset that have been removed from the planimetric buildings dataset
- Classification changes could be difficult
  - Existing Land Use Survey
  - Permit Information