CAR & GIS
Within Cobb County

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What is CAR?
Cobb Address Repository

- Describes, stores and retrieves all the official addresses
- GIS is the interface for creating address database features: SQL Database
- Real time and contains nearly 100% of all valid addresses.
- Addressing standards are built into the CAR process - FGDC
CAR Maintenance & Responsibility: Community Development Agency

- County Address Coordinator
- Use ArcGIS Custom Toolset
- Address Field and Database Verification
- Research Address Submissions
- Address Assignments and Updates
What is an Address?

• A method used to describe a location.
• Traditionally, addresses have been assigned only to parcels, based on roads.
Every street has an address RANGE for all potential addresses. See example below: 101-119 for left and 100-118 for right side of road.

RANGE is based on length of road and location within county (grid alignment).
An address contains certain address elements and is presented in a range of formats such as:

- Prefix directional
- Number
- Prefix modifier
- Street name
- Street type suffix
- Street type modifier
- Suffix directional
- City, Zip and/ or State
Addressing History; Pre-2007

- Format and quality varied considerably across the departments
- Nearly impossible to identify all of the activity, such as building permits or police reports, associated with a given address
- No formal coordination in the assignment process with other departments (Assessor, Transportation, Utilities, E-911, Fire Department, etc.)
- Different datasets maintained throughout the county
Process was not well defined, causing lots of frustration... for staff and citizens!

- Creation of the MAD (Master Address Database)
  - Very basic point feature class with status attributes
  - Not connected to any other systems outside ArcGIS
RFP Issued in 2007

- Contract awarded to Spatial Focus in early 2008; it was a 2 year project
- Compared the different datasets, and majority ruled
- Historical plats, databases, maps and files were used to create initial database
- Each database record also had a GIS point created, using relational d-base links.
Continuous Updates

Examples of address anomalies:
- Number out of sequence
- Address point far from its associated street name
- Missing addresses on developed parcels
- Even addresses on the odd side of the street (& vice versa)
- Historic address validation
- Interaction with cities and other municipalities
Of the 250,000 active addresses within Cobb County, we are down to less than 500 with errors. Creating a 99% accuracy rate!
Street Naming Guidelines

- Patterned after FGDC standards
- New streets will be named during the site plan review process.
- Names which may be offensive (slang, double meanings, etc.) shall be avoided.
- Cobb County is divided into four street number quadrants designated by NE, NW, SE, and SW. All streets shall bear the proper quadrant suffix.
- Do not use special characters in road names such as hyphens, apostrophes or dashes.

The Full list of standards is much more extensive than these.
Street Addressing Guidelines

- Numbers assigned according to access (driveway) to the property
- Numbers are assigned by referencing the standard county grid. Address numbers will increase sequentially as they move away from the zero point.

*What is the ZERO-POINT LOCATION in Cobb?*

- Property located on the right side of a street when moving away from the zero-point is given an even number. (Vice versa for odd numbers)
- There should be no use of fractional addresses, alphanumeric address numbers, nor hyphenated address numbers.
CAR Database

Over 40 tables within SQL, such as:

- Address
- AddressAnomaly
- AddressZip
- CompleteIntersection
- CompleteSubaddressOfficialStatus
- CompleteStreetNameTable
- Directional
- LifeCycleStatus
- OfficialAddressNotice
- OfficialStatus
- PostalCode
- RelatedAddress
- StName
- UspsAddress
SQL Relational Database

- Addresses in CAR are based and linked in d-base to road segments (roadsegID).
- Addresses in CAR are LINKED to road Parcels (PIN).
- We track all POTENTIAL, PROPOSED, ACTIVE and DELETED Addresses.
- All points have their own Unique CAR ID.
Cobb Addresses... by the numbers

- Potential Points: over 2.5 million
- Active Points: over 250,000
- We have 15,947 Different Road Names in Cobb County
Over 250 approved Street Types
8 approved directional components
11 Status Codes
So far we have discussed:

- What is CAR?
- What is an Address?
- CAR SQL database overview

Now lets look at how addresses are created within GIS....
Creating Addresses within CAR

- Utilize GIS, ArcMap, version 10.1
- Custom toolkit was developed to automate creation and maintenance of point addresses
- Updates are done by staff in Community Development
ArcMap Software - Project Showing POTENTIAL & ACTIVE addresses
CAR is Mending Broken Fences!

- Implementation throughout multiple agencies and software programs (Accela, IAS World, Firehouse, etc.)
- One central source for addresses
- Less chaos!!
Thank you for your time!

Questions?

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