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Session Name:

Addressing for Urban Environments

Session Description:One of the more common and more significant elements of local government database construction is the capture, storage and use of local addresses. This presentation will cover design and maintenance issues of a master address file. This program will provide: conceptual descriptions for files, major design components, generic database structures for both the graphic and non-graphic components, map maintenance and display, and the relationship of a master address file to a street centerline file. In addition approaches for handling cultural names, alias's and PO Boxes will be discussed.

Presenter:

Tim M. Sosinski
PO Box 2348
Kansas City, KS 66110-0348
(913) 281-2881
tsosinski@ema-inc.com

Summary of Address Inventory Uses

In many urban environments the address data base serves many functional needs. Below is a typical needs inventory list for an urban address database.

- Locating a site by address
- Determining PID or Legal Description given an address as input
- Facilities inventory
- Address or incident or facility mapping (feature tagging by address)
- Utility Field O&M
- Utility Facilities location
- Service calls/dispatch
- Location verification/validation
- Address record Standardization/Verification/Validation with respect to format and content
- Location Inventory
- Label Generation
- Around the block view of addresses
- Address range identification
- Display and tracking of address status such as: active, planned or proposed and inactive

Enterprise Addres/ Location Database Requirements

As a result of the User Needs list above, a list of database requirements may now be compiled in order to create an address source.

1. Address DB must be enterprise enabled
2. Address DB must support a common address format that is consistent outside users
3. Address DB must support current, planned and historical or retired address records
4. Address DB must support proposed (platted or prior to construction) addresses
5. Address DB must support a location (X,Y coordinate) for each address
6. Address DB must support ARC/Info data structures
7. Location DB must support location records other than Address, such as cultural names.
8. DB must support graphic Display (Address Text and location)
9. DB must support DB and/or Graphic Query
10. Annotation or address point labeling must be database driven
11. Must support Municipal facilities lying outside of the Corporate limits if necessary
12. Must support other address container system through address validation, standardization and synchronization.
13. Mailing Address Generation
14. Conformance to U.S. Postal Service Mailing Label Standards

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Master Address Inventory Address Type Components

The purpose of the address type is to allow the users and application software to determine which type of address is being viewed or queried. This is critical for maintenance applications and for viewing mapped or graphically displayed addresses. Creative use of the address symbolization may allow the users of graphic applications to distinguish, at a glance, the type of any given displayed address.

Principal Address - This is the address originating from the parcel address. In most cases the Principal address and the Primary address will be one in the same. There will be a one to one correspondence between the principal address and the parcel.

Primary Address - A primary address is an address assigned to any structure or part of a structure, or campus that uniquely identifies its location within the city's address framework. The primary address is normally the address that is displayed on a structure that is commonly used for delivery of mail to a site or the dispatch of public service vehicles. The difference between the principal address and a primary address comes into play when there are many addressable structures or units on a single unit of common ownership such as in the case of many commercial buildings, duplexes, townhouses and condominiums.

Campus Address - Any structural information related to a campus environment. A campus environment is any well defined area containing multiple buildings sharing a primary address and using building names or numbers (and may possibly be accompanied by suite or unit numbers) for the purposes of mail delivery or the dispatch of public service vehicles. Primarily these are structures without the typical number, street name format.

Cultural Features - Any feature that is more commonly know by a name rather than an address but that is not considered an alias or a.k.a that is spatially consistent with a principal or primary address. Cultural features may or may not occur within a parcel or structure. Some examples are: the 'Burger Fountain' in Loring Park or the 'Sculpture Garden' or Parks themselves or significant features within a park

Structure Access Address – Many large structures may have a Principal Address and yet have other points of entry that may also be used from time to time. The prime example of this type of addressing is the Minneapolis City Hall. Assuming the principal address is 401 3rd Avenue South then the addresses 350 5th st South and 315 4th Street South may be recorded as structure access addresses.

Other Address Information

Alias or a.k.a - Any feature that may be known by a situs address or a commonly used name. Alias features must be related to a principal address or a primary address. Alias features names will be associated with a single address point although there may also exist more than one cultural name or alias for a given structure or location.

Secondary Addresses - Any structure containing apartments, suites or units that are used in conjunction with the primary address or principal address for the purposes of mail delivery or the dispatch of public service vehicles are database attributes associated with a principal or primary address but not address types in a of themselves and will not have an independent x,y location.

Box Numbers – Postal box numbers are additional identifiers that are used for mailing purposes. If available these may be placed into a table that can be related to any of the address types for mailing purposes.

Campus Names - This table may contain the name of corporate or educational campuses and possibly parks. It would relate directly to Campus type address names or to cultural type addresses when applicable.

Master Address Inventory Address Status Conditions

Accompanying address types are address dispositions that describe the status of any address.

- **Active Address –** Any address identifying one of the address types above that represents a current parcel, structure or cultural location that is currently in exists as a physical, ownership or cultural entity.
- **Planned Address -** A proposed primary address .
- **Retired Address –** An address that has been retired due to redevelopment or demolition or replatting .

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