Introduction

E.M.A. Services, INC.

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Address Database Design

Purpose

- To demonstrate a method and tool for graphic and textual address file storage

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Definitions

- Situs
- Relational Database

County vs City Needs

- County Needs are not the same a city requirements

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Counties

- One Parcel on address
- (or maybe two)
- Driven by Tax Collection Policy

Cities

- Many Addresses per Parcel
- Many Buildings, Apts etc.
- Many Addresses per Buildings
- Driven by Service (emergency & other)

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Reference

- Address Point Geospatial Dataset
- Kansas Geospatial Data Addressing Standard
- February 1, 1998
- Draft Rev. 3.0
- http://gisdasc.kgs.ukans.edu/dasc/docs.html#stand

Parcel Neutral Addressing Scheme

- Map-centric (Spatial-centric)
- Query-centric(Database-centric)

Address Assumptions

- Principal Address
  - Same as Parcel
- Primary Address
  - 2241 N Elm St
  - Blake Hall
- Secondary Address
  - Bldg 3
  - Apt 141
  - Suite 12

Primary Address Types

- Single Family Residential
- Duplex (2 Family)
- Shopping Center (Strip Mall)
- Campus
- Apartment or High Rise
- Condo/Public Housing

Addresses Conditions

- Active/Current
- Planned
- Inactive/Retired/Historic

Record Component

- For Every Principal Address, and most primary addresses, there is:
- One Point
- One annotation (label) string each joined by a common unique ID number

Single Family

One Address Point
One Annotation String
One Principal Address
No secondary Addresses
No Apartments, Suites or Buildings

Vacant

One Address Point
One Annotation String
One Principal Address
No secondary Addresses
No Apartments, Suites or Buildings

Half/Rear Address

Two Address Points
Two Annotation Strings
One Principal Address
One Primary Addresses
No Apartments, Suites or Buildings

Strip Mall

One or more Address Points
One or more Annotation/Label Strings
One Principal Address
One or more primary addresses
Two (or more)secondary Addresses
No Apartments, Suites or Buildings

Office/Suite

One Address Point
One Annotation/label Strings
One Principal Address
Many Secondary Addresses

Apartment

One Address Point
One Annotation Strings
One Principal Address
Possible multiple Primary Addresses
Many Secondary Addresses

Campus Environment

One Address Point
One Annotation/label Strings
One Principal Address
Many Primary Addresses (Structure Names)
Multiple Secondary Addresses

Condo/Public Housing

One (or more) Address Point
One (or more) Annotation/label Strings
One Principal Address
Many Primary Addresses

Cultural Feature Address

One Address Point
One Annotation Strings
A possible Principal Address
One Primary Address (Named Feature)

Alias Addresses

- One Principal or Primary Address Point
- One Annotation/label String
- Alias Addresses stored in a table and are linked to an existing address point by ID number

Table Structure

Advantages

- Maintain Address files Updates the Map
- Points allow for quick address sub-lists
  - give me all addresses in this area
- Easy to maintain building/address relationship
- Easy to maintain building/parcel relationship
- Alias table allows for non-situs address listing

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