

# Parcel & CAMA Data Maintenance Using an ESRI Geodatabase and Dreammaps Mapper

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# Where we came from ...

- ArcStorm, data maintenance
- Tiled Arc/Info Librarian, published for consortium view/query
- Real Estate Master File (REMF), INFO table; aka the CAMA Database
- Overnight processing to publish parcel data
- Weekly process to publish REMF data

# Where we went to ...

- ESRI versioned Geodatabase
- Land Dataset comprised of four vector feature classes: Boundary, Parcel, Historic Boundary, and Historic Parcel, four annotation feature classes: TaxAnno, ROW Anno, Dimension Anno, and Historic Anno and SDE Topology
- Real Estate Master File (REMF) Oracle table
- Multi\_Unit table: condo & mobile homes

# How much was there ...

- 280,812 polygons
- 273,758 owner polygons
- 7,054 right-of-way polygons
- Approximately 1.3 million annotation features
- 300,505 CAMA records

# Why we did it ...

- Take advantage of the geodatabase data model functionality, expanded editing tools and GIS/CAMA integration:
  - GIS/CAMA integration through an API created by the Manatron Company
  - SDE versioning
  - Subtypes and domains
  - Topology rules
  - Desktop environment

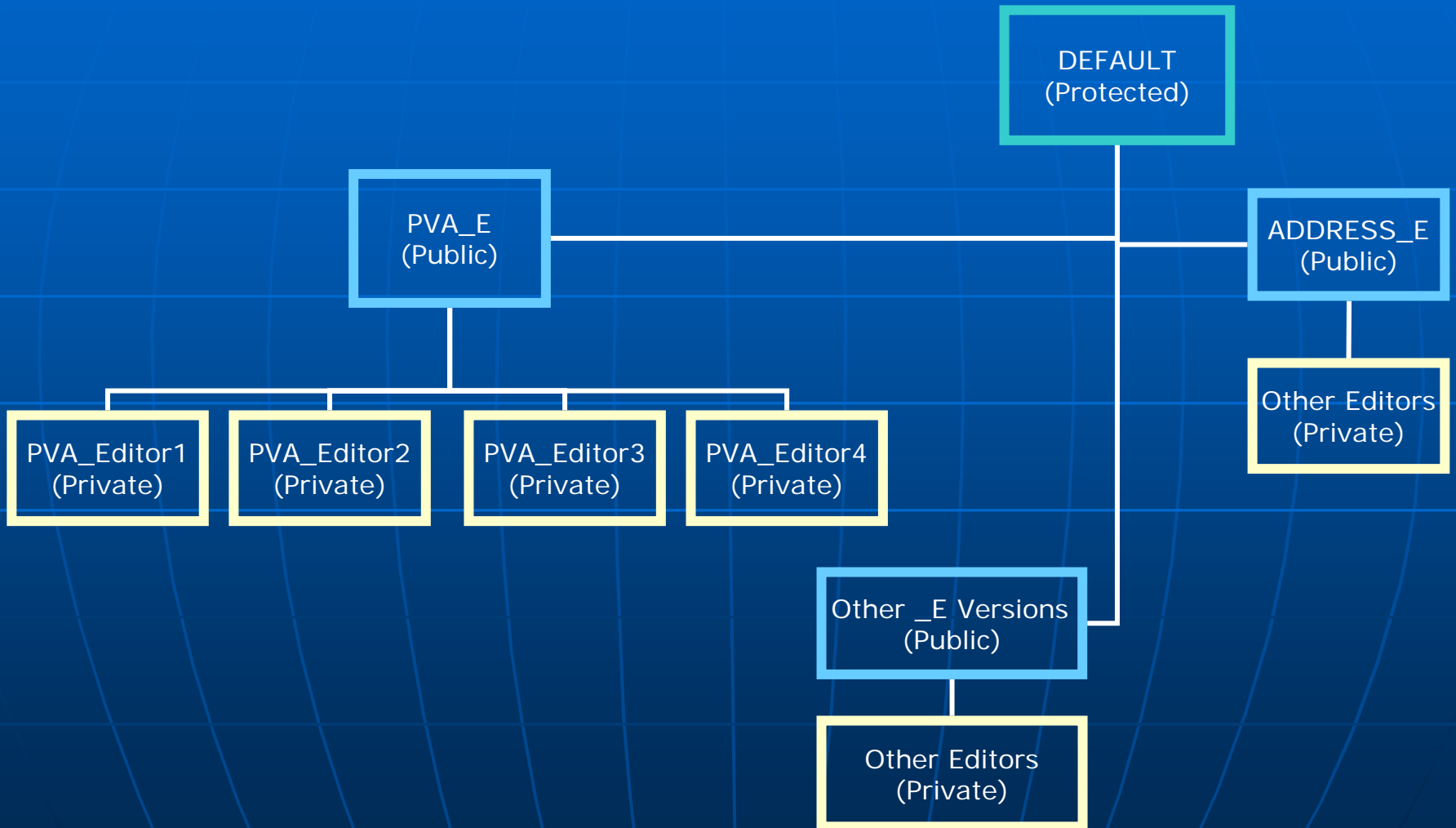
# Some of the new stuff ...

- GIS/CAMA Integration:
  - Smart Data Strategies (SDS) provided integration into the CAMA through an API created and provided by the Manatron Company. This was embedded into the Mapper transaction manager.
  - CAMA record creation and updates initiated through the GIS, both land records and condos & mobile homes

# Some of the new stuff (cont.)...

- SDE Versioning
  - Multi-editor maintenance environment
  - Versioning structure of a protected DEFAULT, a public reconcile version and private, individual editor versions (see next diagram)
  - Conflict resolution
  - Extended editing before posting to the geodatabase

# Versioning Diagram



# Some of the new stuff (cont.)...

## Subtypes and Domains

- Supports database consistency
- Adds functionality to database

# Some of the new stuff (cont.)...

## ■ Topology Rules

- PVA.Boundary – Must Not Have Dangles
- PVA.Boundary – Must Not Self Overlap
- PVA.Boundary – Must Not Self Intersect
- PVA.Boundary – Must Not Intersect or Touch Interior
- PVA.Boundary – Must Not Overlap

# Some of the new stuff (cont.)...

- Topology Rules (cont.)
  - PVA.Boundary – Must Be Covered By Boundary of PVA.Parcel
  - PVA.Parcel – Must Not Overlap
  - PVA.Parcel – Must Not Have Gaps
  - PVA.Parcel – Boundary Must Be Covered By PVA.Boundary

# How we did it ...

- A lot of long, late hours
- More long hours
- SDS provided basic geodatabase design to be used for review/enhancement
- SDS provided basic Dreammaps Mapper editor software for review/customization

# How we did it (cont.) ...

- Supplemental Mapper tables:
  - AVAILLRSN – an Oracle table of one record representing the next available LRSN. It is not registered with the GDB nor versioned.
  - CAMAHANDLERUPDATES – an Oracle table for recording pertinent information that needs to be passed to the PVA's CAMA database. It is not registered with the GDB nor versioned.

# How we did it (cont.) ...

- Supplemental Mapper tables:
  - EDITCHANGES – an Oracle table that holds each action performed by editors. Registered with the GDB and versioned.
  - INACTIVEPIN – an Oracle table of retired parcel block, lot and sublots. Not registered with the GDB nor versioned.
  - MULTI\_UNIT – an Oracle table of non-land record ownerships, ie. Condo

# How we did it (cont.) ...

- As well as you may think you know your data, it should be reviewed thoroughly before conversion
- Verify a one-to-one match between GIS and CAMA before freezing both databases
- Involve staff from all levels
- Be flexible
- Train, train and train

# Demonstration of Mapper

- Merge two existing parcels into one
- Split existing parcel into multiple parcels
- Add condo records
- Conflict resolution
- Transaction manager

Smart Data Strategies

[www.sds-inc.com](http://www.sds-inc.com)