County of San Diego Assessor Maintained Parcels: An Update on Integrating Workflows with SanGIS

J. Eric Culp
GIS Project Manager
Assessor’s Mapping Division
eric.culp@sdcounty.ca.gov
Agenda

- Quick Review of AMP Project
- Three Distinctive Workflows
  - Editing
  - Data Conversion
  - Assessor Parcel Map Production
- Current Parcel Workflows
- Future Parcel Workflows
  - Data Models and Data Flows
  - Business Complexity (Zones of Production)
- Anatomy of an Assessor Parcel Map
- Current Project Status
- Q & A
Project Background - GeoSD

2014-2016 CoSD Geospatial Strategy Document (GeoSD)

**Functional Threading Chart and Benefits**

<table>
<thead>
<tr>
<th>Goals/Object</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Take ownership and the responsibility of day forward updates of the parcel layer (which currently resides with SanGIS) (goal 2 and 5).</td>
</tr>
<tr>
<td>11</td>
<td>![Diagram of functional threading chart]</td>
</tr>
</tbody>
</table>

Benefits:
There are redundant efforts to maintain both a CAD based tax parcel map and a GIS based tax parcel map. By moving towards a GIS tax parcel map in the ARCC office, this effort will save money and improve the timeliness of the information that is in the land base and tax parcels.
AMP Project…and Benefits

- Eliminate and/or reduce duplicate workflows and increase timeliness of data
- Data has already improved due to AMP
  - APN_ATR
  - Lots
- AMP will allow for programmatic integration with IPTS
Three Distinct Workflows
(and who cares about them)

• Editing of Parcel polygons

• Conversion of Assessor Parcel Map data

• Production of Assessor Parcel Maps
Editing at Assessor – The As-Is Assessor Parcel Map
Editing at SanGIS – Business Logic and Rules

- Business rules enforced via:
  - Data Model
  - Topology
  - Subtypes
  - Domains
  - Custom Behavior
  - Workflows

- Goal was to develop workflows which did not significantly disrupt existing processes
Editing at Assessor – The To-Be Workflow

1. Delete Old Parcel Polygons if Required
2. Recorded PM/Subdivision Map?
   - Yes: Copy Parcel Boundaries from Lot to Parcel Layer
   - No: Change Boundary Subtypes from Lot to ParLot
3. Create New or Adjust Existing Parcel Polygons
4. Assign APN to Parcel Polygon (Parcel ID) via APN_ATB Table
• APNs are determined via Pre-Cut Analysis process
• Assessor schema will live at SanGIS
• Will replicate specific FCs to serve as source layers
• Will have versioned FCs into which we will “fetch” data from these replicated FCs for editing/updating
Editing at Assessor – The Details

- We need to turn ON/OFF replication during specific times of the year (Zones of Production)
- Custom procedures will stamp each feature/anno with its Book, Page and Sheet value during editing
- A FGDB will be used to transmit Parcel polys and APNs back to SanGIS
- We can submit Cut Package at this point (data to MPR) – No need to wait for APM production
Data Conversion & Assessor Parcel Map Generation at Assessor
SanGIS Parcel Polygons
Data Conversion at Assessor

- Begins with a Preliminary APM Layout process to determine:
  - Preferred layout
  - What features are needed (Course Tables, Detail Maps, etc.)

- UI customizations will streamline the conversion process and preserve data integrity

- Assessor GDB have feature classes and tables to store:
  - Distances and Bearings and others annotations
  - GeoCarto Features
  - Tabular data
Assessor Parcel Map Production

- We will produce the APM via GIS when a Cut occurs
- We will likely make some of the APMs via CAD
  - Have an APM via GIS Suitability Workflow
  - Condo floor plans
  - APM is “challenging”
- Geography is edited in GIS first regardless of APM generation
- UI customizations will streamline the conversion process and preserve data integrity
- Various features such as:
  - Distances and Bearings (Annos)
  - Miscellaneous Annotations
  - GeoCarto Features (FCs)
  - Recorded Maps (Tables)
Future APM Prototypes
Future APM Prototypes
Current Project Status

- To-Be Processes are Mapped
- Customizations for Data Conversion and APM Production are underway
- Hope to be testing workflows and tools in August 2017
Questions?

Thank You!