PARCEL LAYER: INTEGRATION AND AUTOMATION OF PACS, GIS, SMARTGOV AND WATER SOURCE DATABASES

Problem:

Every four to six weeks, the parcel boundary dataset was updated with boundary changes and information from the assessment database (PACS). The process was time consuming and cumbersome. Changes that occurred in the geometry or assessment information would not be reflected on any maps until the following update cycle.

Often one needs to know certain information about a parcel. Previously, the information was held separately in different departments, requiring time and energy to track down all the information.

Solution:

In January of 2016 a computer program was created to automate updating the parcel boundary dataset nightly including updated information from the Assessment Database, Smartgov (Permit Database) and the Water Source Databases. Reflecting changes from each department's database provides up to date, quick and easy access to information for county employees and the public.

Integrating these tasks significantly improved efficacy and accuracy. Now, many departments' data is within easy reach as you only have to look up a parcel once in the web map to find quick links to different types of data.

Definitions

Parcel fabric: A parcel fabric stores connected parcel boundary lines. Parcel polygons are defined by lines, which store dimensions and bearings. The fabric ensures shared lines of adjacent properties are on top of each other

Enterprise Geodatabase: A collection of various types of GIS datasets held as tables in a database. This is the recommended data format for ArcGIS.

SQL Query: A formula written in a computer language that returns a specified set of data from one database

AUTOMATED DAILY PROCESS TO UPDATE THE PARCEL LAYER WITH CURRENT DATA

Update GIS Parcel Fabric

- As needed, GIS Administrator makes changes to boundary lines in GIS according to property deeds or surveys
- Implement those lot combinations, boundary line adjustments, short plats, etc. that have been processed by the Land Segregations personnel

Create Parcel Layer

- Calculate acreage as the parcel is drawn
- Export table data from the Assessment Database (PACS) using SQL query
- Create special condo parcels
- Combine parcel boundaries with Assessment Database table

Water Source Added to Parcel Data

- Export data from the Environmental Health Department's Water Source Database
- Add column to parcel data with the water source for each parcel

Imbed Permits Link in Parcel Table

- Export data from permits database (SmartGov)
- URL link is created
- Add link to each parcel with URL

Copy to Enterprise Geodatabase

- Copies Parcel layer to Enterprise Geodatabase making it available to other departments and daily use

Publish to Web Maps

- Determine how layer will look and act on a web map
- Publish layer to web server