Automate Planning Department’s GIS Processes With Model Builder
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The purpose of this presentation is to show the use of Model Builder as a planning tool to automate planning Geodatabases weekly updates.
Presentation

- Planning Core Geodatabases
- Maintaining Zoning Geodatabase
- Past History of How The Zoning data was maintain
- Using Model Builder to process zoning weekly updates
- Useful sources on Finding and creating Model Builder tools
The zoning and General Plan Land Use feature datasets are critical components of any Planning Department. Planners, local officials and most importantly the public, depend on the accuracy and constant update of both GIS layers to make critical planning decisions.
Unlike other government entities, which use large polygons for their General Plan Land Use and Zoning feature dataset, the City of Las Vegas maintains a Parcel by Parcel feature datasets of both datasets. The purpose for this is to keep a record of planning case history for each parcel such as Zoning, Site Development Review, General Plan, Variance, Major Modification and Admin cases. This allows for easy and fast research case history of a parcel by our Planners.
Maintaining Zoning Geodatabase

Clark County Assessor’s Parcels

The Assessor's parcel Geodatabase is updated everyday. This requires us to updated the zoning geodatabase at least once a week.
Past History of How The Zoning data was maintain

From 1991 to 2010 Arcinfo AMLS were use to update both GIS Datasets.

/* CLV-ZONING.AML */
/* */
/* City of Las Vegas */
/* Planning & Development */
/* Comprehensive Planning */
/* Jorge Morteo : GIS Analyst */
/* 09/29/99 */
/* revised 5/03/00 by Ervin Kral update */
if [extract 1 [show display]] ne 9999 &then &s term = plots
   &else &s term = plots
&stat %term%
set-sections
&s nme = $jorgecarto/clv-lmt
&s lone = $jorge/data/lonemtn397
&s summ = $jorge/data/westsummerlin
&s plan = $jorge/data/plancommunity
&s free = $COMPPLAN/carto/freeways
&s dt = [date -day] [date -month] [date -year]
&s belt = $COMPPLAN/carto/beltwaytoday
&s mnth = [date -month] [date -year]
&s cmp = %nme%.cmp
&s pltnme = clv-zoning
&s scale = 3200
Using Model Builder to process zoning weekly updates

The use of Model builder has made this process easy to perform and learn. The zoning is updated once a week, it takes about 30 minutes and with minimal manual input.
Using Model Builder to process zoning weekly updates

Most places do not have a GIS programmer and some planning departments do not even have GIS staff but a Planner using GIS. In the Next slides I would show you how easy is to use model builder to automate the process without any programming language knowledge.
Using Model Builder to process zoning weekly updates
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Zoning Update
Copy Parcel Geodatabase, drop items not need it, create a new Zoning layer from the Parcel Geodatabase and populate the new Zoning Layer attribute table with the Current Zoning layer data.
Using Model Builder to process zoning weekly updates

Manual Input - Transfer Data
Transfers Data from current zoning to the new parcels on the new zoning layer
Using Model Builder to process zoning weekly updates

Multizone Process 1

Export all parcels with Multiple Zone designations from the New Zoning and Current Zoning layer.
Using Model Builder to process zoning weekly updates

Multizone Process 2
Using Model Builder to process zoning weekly updates

Multizone Process 3

Transfer the attribute data from all MultiZones from the Current MultiZone polygons to the new MultiZone Polygons.
Using Model Builder to process zoning weekly updates

Multizone Process 4

Copy the new MultiZones to the new Zoning Layer
Using Model Builder to process zoning weekly updates

Zoning Update Code Shade

Add shade symbol to all Zoning Categories.
Using Model Builder to process zoning weekly updates

Zoning Update Done 2

Clean up the temp zoning Update folder.
Using Model Builder to process zoning weekly updates

Zoning Update Tool Box
Useful sources on Finding and creating Model Builder tools

ArcGIS 10 Help

ArcGIS Search

Geoprocessing with ArcGIS Desktop

Introduction to Geoprocessing Scripts Using Python