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Technical Workshops | July 25, 2012

Editing Parcels with the Local Government Information Model

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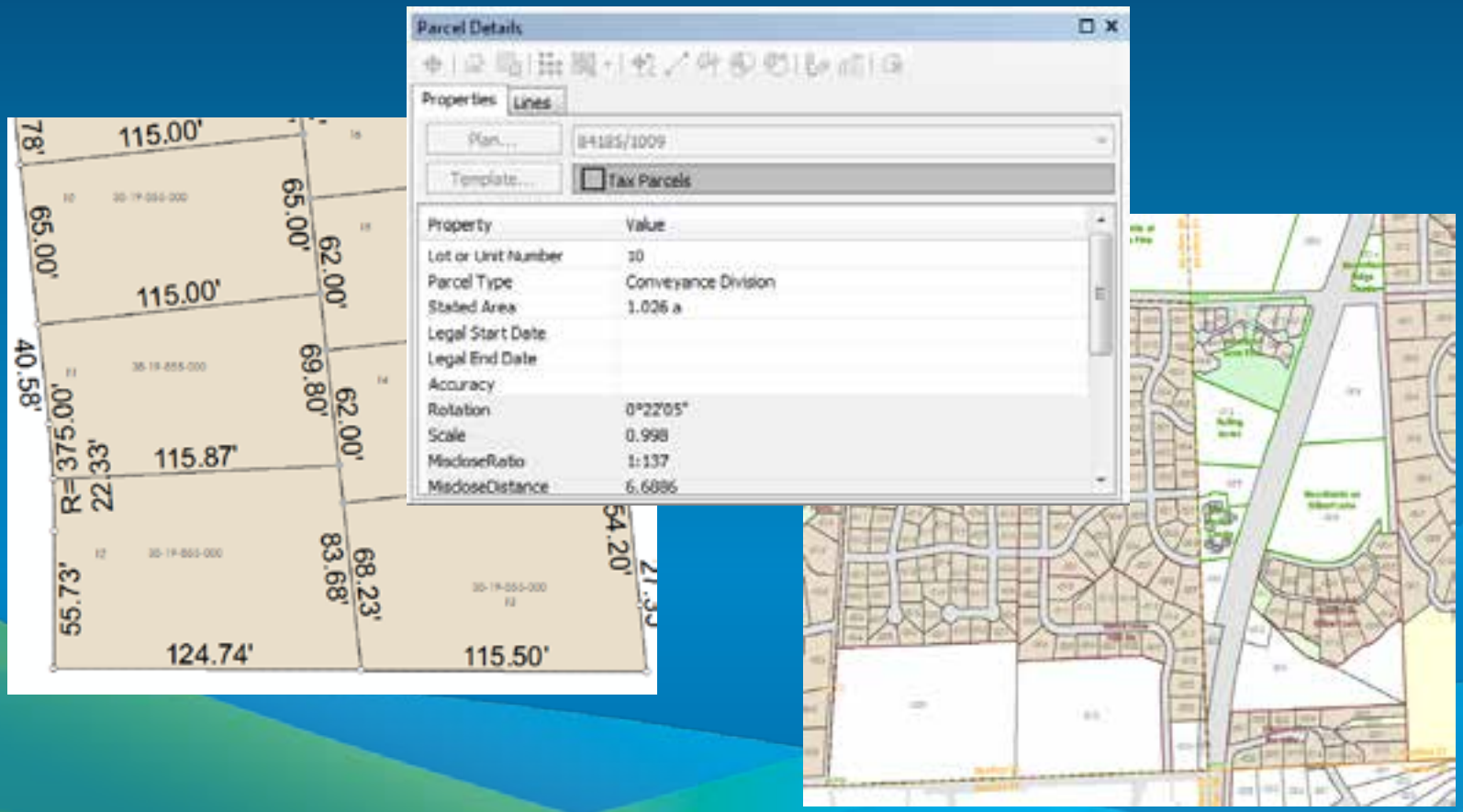
Parcel Editing with ArcGIS 10.1

Improved Parcel Editing Workflows

- Most common Parcel Editing workflows
  - Parcel Splits
  - Parcel Merges
  - New Subdivisions
  - Boundary Line Adjustments
  - CAD integration

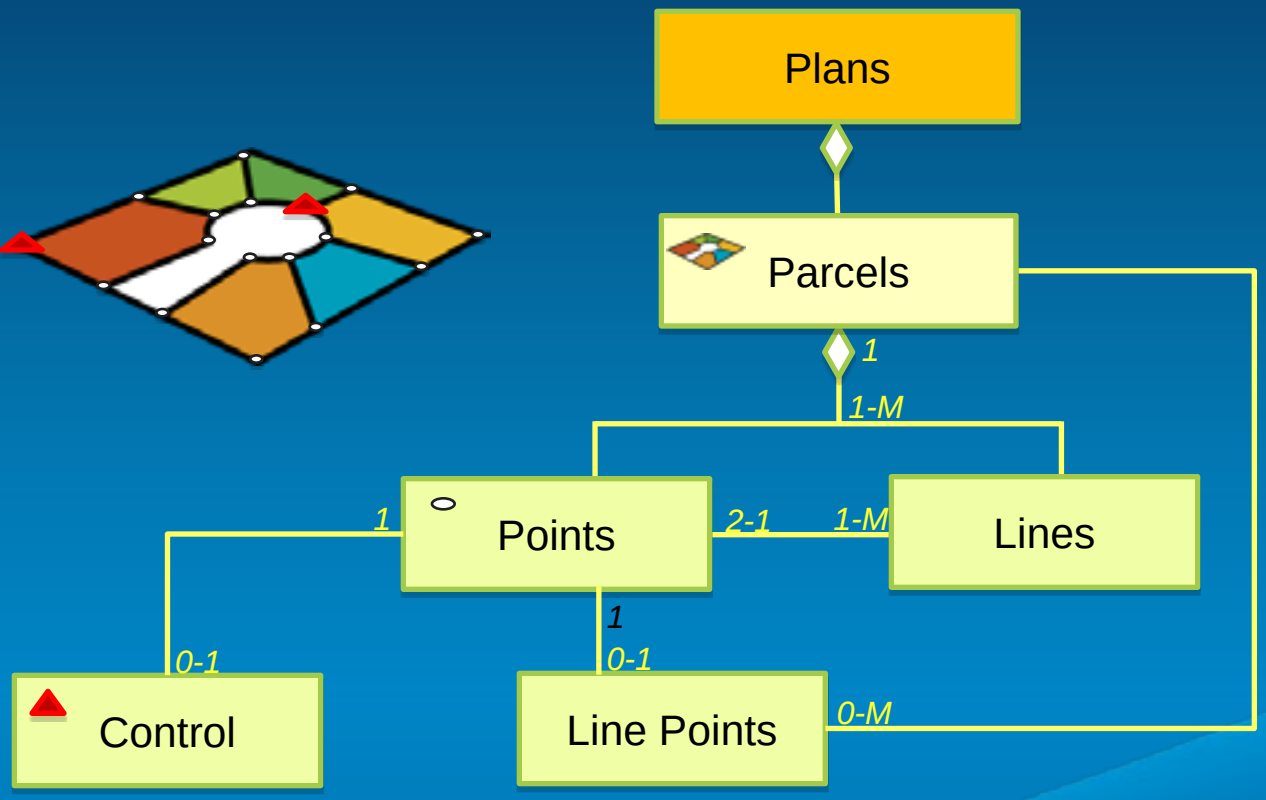
Parcel Fabric Data Model

Optimized Data Model for Parcels



What is a Parcel Fabric?

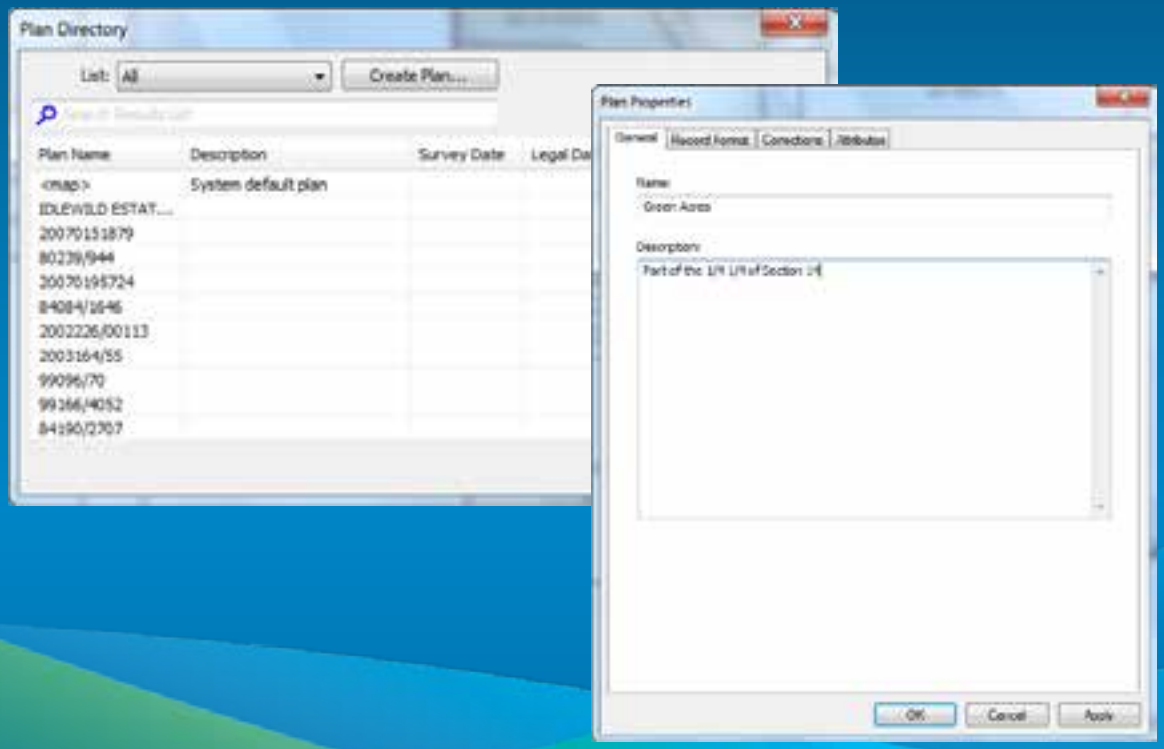
Parcel Fabric Data Model



Parcel Fabric

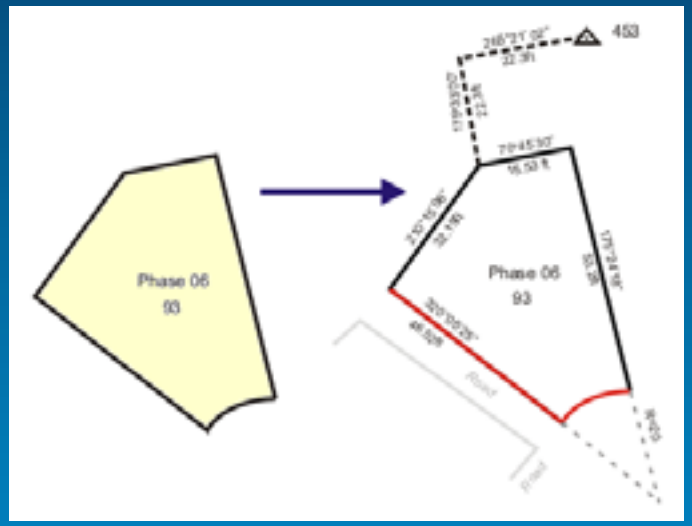
Plans

- Store and Manage recorded information about parcels
- One or many parcels are contained within a plan

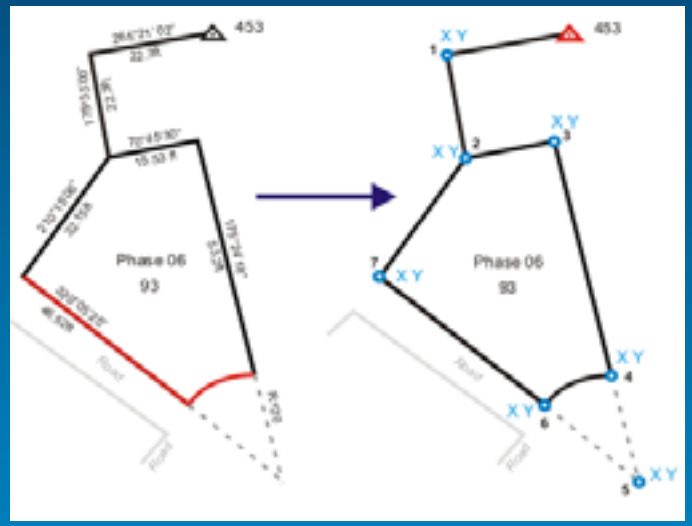


Parcel Fabric

Parcels



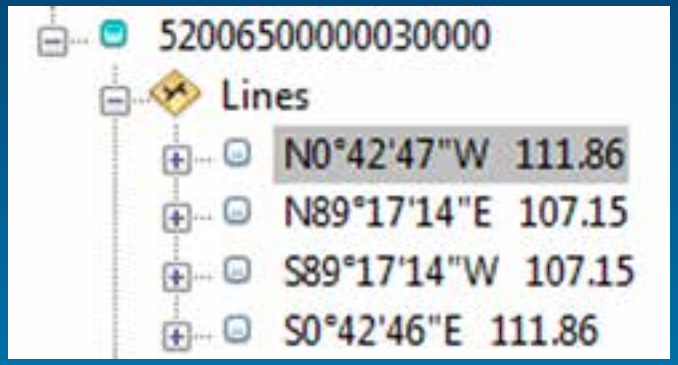
Parcel Polygon has related lines



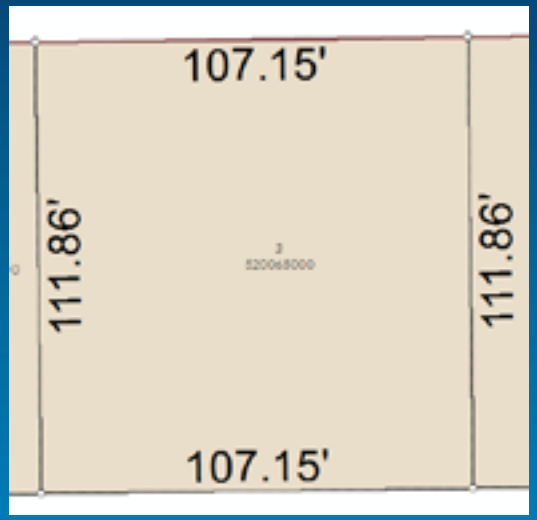
Lines have related points

Parcel Fabric

Lines/Points



Lines store record dimensions

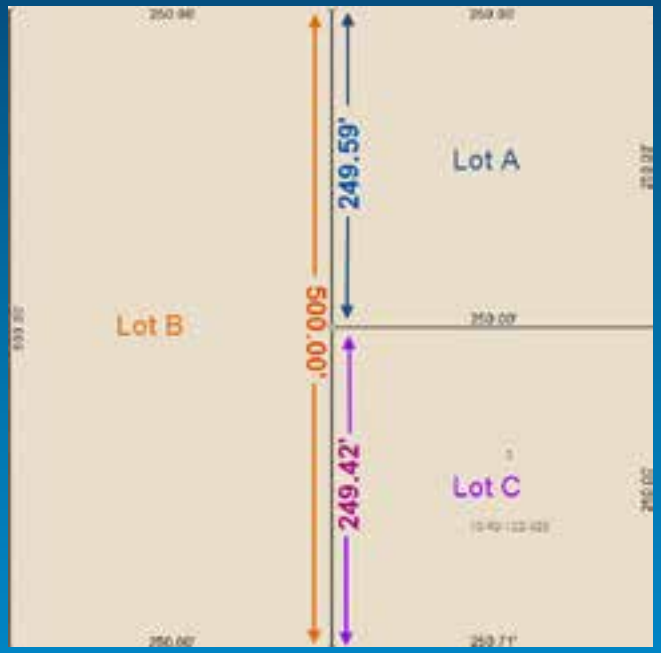


1		N89°17'14"E	107.150			2
2		S0°42'46"E	111.860			3
3		S89°17'14"W	107.150			4
4		N0°42'47"W	111.860			1

Points are stored on the ends of lines

Parcel Fabric

LinePoints



249.42 + 249.59 ≠ 500

Preserve original record dimensions, ensure topology between parcels

Parcel Fabric

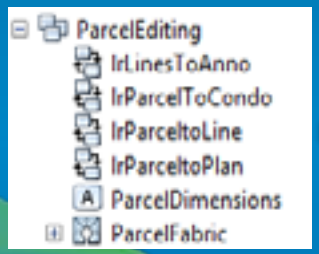
Overlapping Parcels

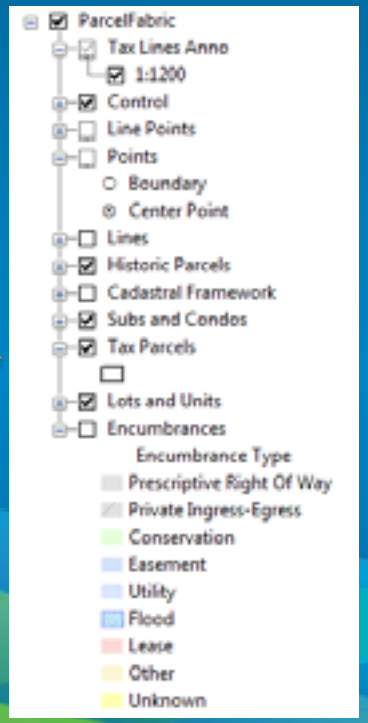
All Subdivisions, Lots, Tax Parcels, etc. are “Parcels” in the Parcel Fabric

Local Government Information Model (LGIM)

Parcel Editing

- Updates to the Parcel Fabric data model
- Optimized for Parcel Workflows
- Configured map for streamlined editing experience

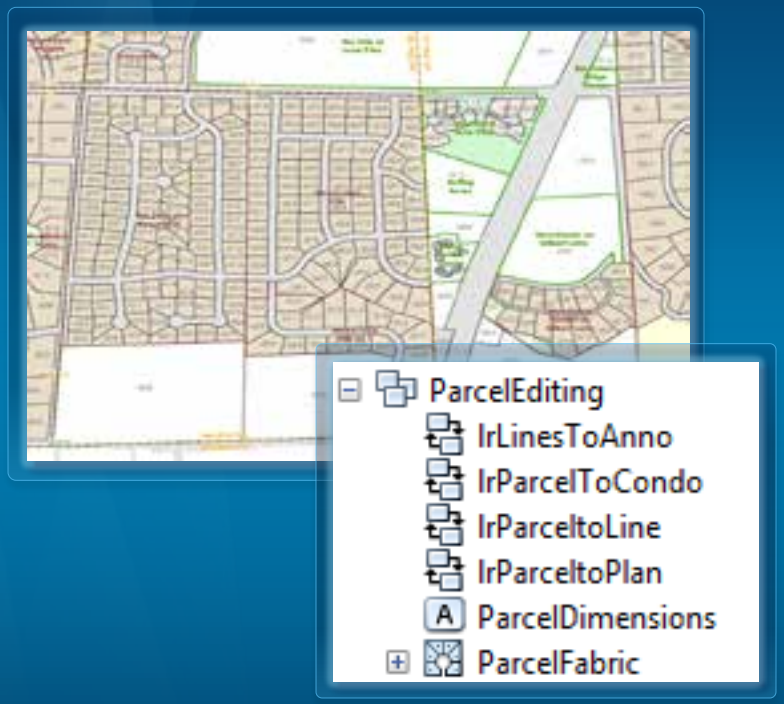




Local Government Information Model (LGIM)

Land Records Maps and Apps

- **Parcel Value for iPhone**
  - Access to tax parcel and assessment information on iPhone
- **Tax Map Book**
  - Production of tax map books
- **Tax Parcel Editing**
  - Parcel editing and maintenance
  - Migration of parcel data
- **Tax Parcel Viewer**
  - Access to tax parcel and assessment information
- **Value Analysis Dashboard**
  - High level view into changes of property assessments



Exploring the Tax Parcel Editing Map

Jason Camerano

DEMO

Parcel Editing Workflows

Efficient workflows for maintaining Parcels

Parcel split: split using a measurement description and point of beginning

ArcGIS 10.1

This topic applies to ArcGIS for Desktop Standard and ArcGIS for Desktop Advanced only.

When the parcel fabric data model is used in conjunction with the Local Government Information Model for ArcGIS, efficient workflows can be used to perform common parcel editing tasks such as a parcel merge and a parcel split. The Local Government Information Model for ArcGIS can be downloaded from the Local Government/Land Records ArcGIS resource center.

This workflow describes the steps for splitting an acreage parcel using a measurement description and point of beginning in the Local Government Information Model for ArcGIS. The workflow uses the sample dataset that comes with the model on the resource center. You can apply the workflow to your own data once it is loaded into or migrated to the model.

Learn how to load an existing parcel fabric into the Local Government Information Model for ArcGIS

Learn how to migrate parcel data to the parcel fabric schema included with the Local Government Information Model for ArcGIS

The workflow consists of the components shown in the diagram below:

Legal description → Search for parent parcels → Locate point of beginning → Enter new parcels → Join and align new parcels → Split existing parcel → Annotate parcels → Attribute parcels

Legal description

A legal description for a parcel split using measurements and a point of beginning may look like this:

Commencing at the northwest corner of lot 15, Echo Park No. 1 the following courses, N4°31'50"W 365 ft. and N87°09'54"E 49.0 ft. to the true point of beginning, thence along a private road N5°47'00"W a distance of 250 ft., thence N87°09'54"E a distance of 265 ft., thence S1°38'34"W a distance of 250 ft., thence S87°06'00"W a distance of 262.62 ft. to the true point of beginning.

Search for parent parcels

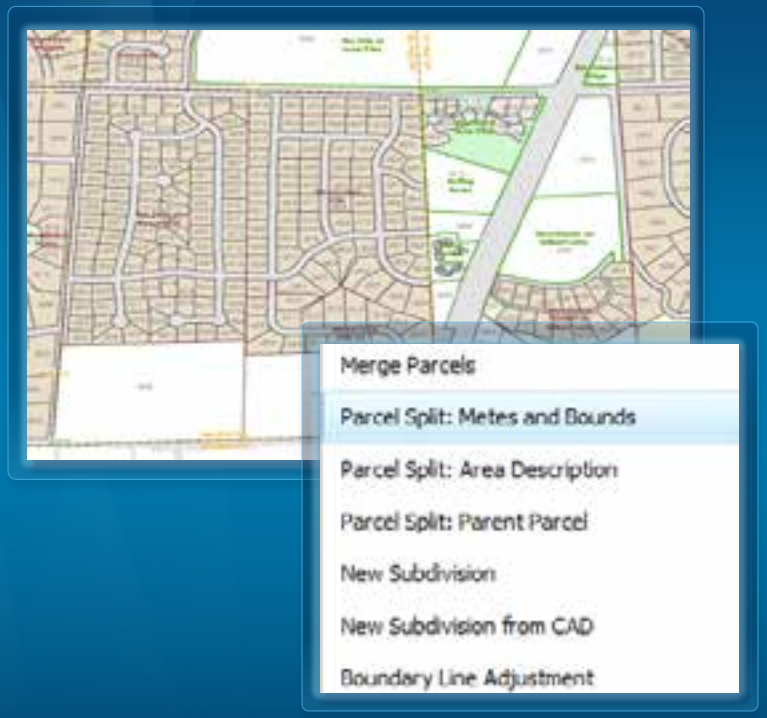
Steps:

1. Open the TaxParcelBillingMap document located in the **MapsandGeodatabase** folder.
2. In the *Table Of Contents* section, make only the **Tax Parcel Lines** and the **Tax Lines Anno** layers visible.

10.1 Workflows

Parcel Workflows

- 10.1 – Available on the 10.1 web-based help system
- Configured to work against the Parcel Fabric and LGIM
- Based on best practice and leverage the core ArcGIS system, no addins/customization needed
- Sample dataset available on the Resource Center



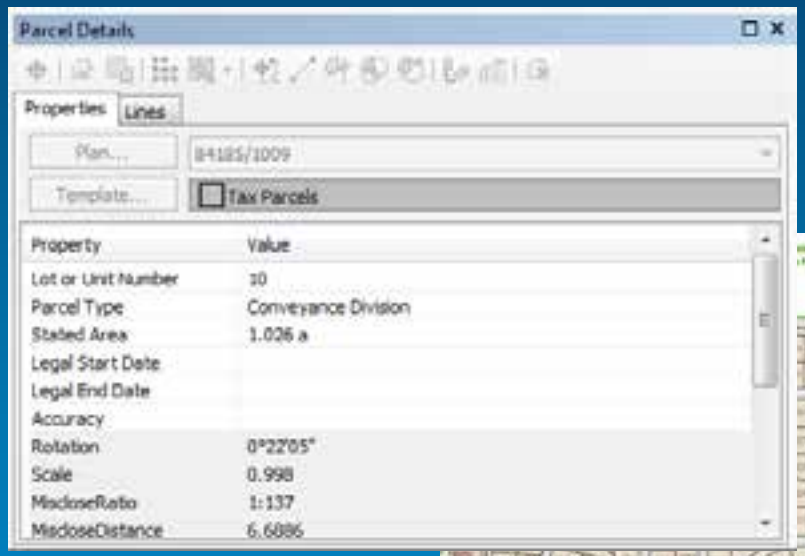
Parcel Split: Metes and Bounds

Jason Camerano

DEMO

Road Ahead: 10.1 SP1

Automated workflows for maintaining Parcels



10.1 SP Automated Workflows

Parcel Workflows

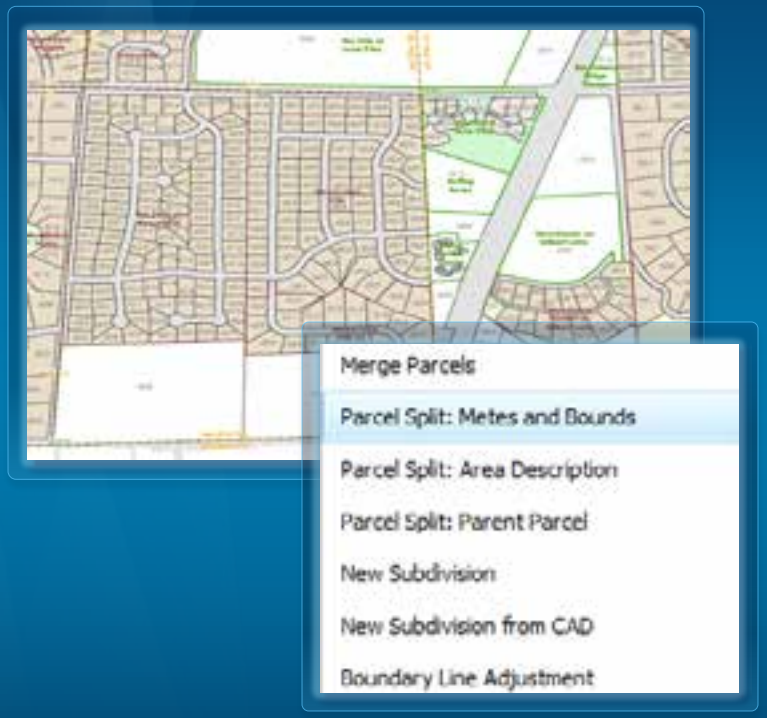
- 10.1 SP1 – even easier, more streamlined
- LGIM enabled Parcel Fabric available with the core ArcGIS system
- Workflows available with the core ArcGIS system, upgrade available at 10.1 SP1

10.1 SP Automated Workflows

Parcel Workflows

Demonstration using Dallas Central Appraisal District (DCAD) Parcels

- Dallas Central Appraisal District (DCAD) manages 660,166 tax parcels for County of Dallas (1.3 million total).
- DCAD encompasses 900 sq. miles, and is the 9th most populous county in the US
- In production with 10.1



Road Ahead 10.1 SP1

Jason Camerano

DEMO

UC Presentations

Sessions to attend

Technical Workshops

Using CAD Parcel data with the Local Government Solution Wednesday, 1:30 - 2:45

Migrating Parcel data to the Local Government Information Model Wednesday, 10:15 - 11:30

Editing Parcels with the Local Government Information Model Thursday, 8:30 - 9:45

UC Presentations

Sessions to attend

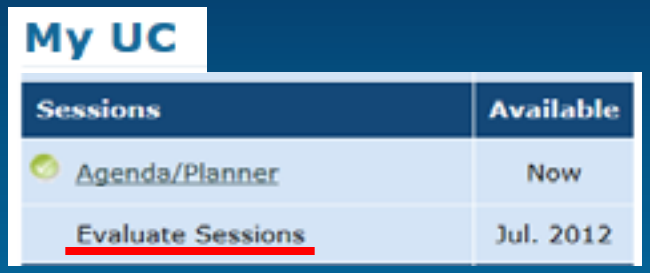
Demo Theaters

Working with Annotation and Labels for Parcels
Wednesday, 1:00 - 1:30; Thursday, 10:30-11:00

Creating a Tax Map using the Local Government Solution
Thursday, 11:00 – 11:30

Steps to evaluate UC sessions

- My UC Homepage >
  "Evaluate Sessions"



- Choose session from planner

OR

- Search for session

www.esri.com/ucsurveysessions

- Thank you for attending
- Have fun at UC2012
- Open for Questions

- Please fill out the evaluation:

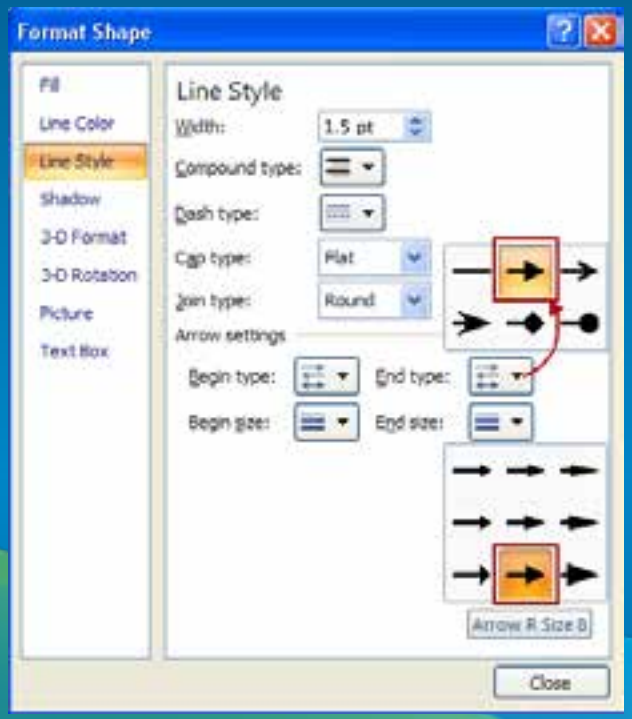
www.esri.com/ucsessionsurveys

First Offering ID: XXXX

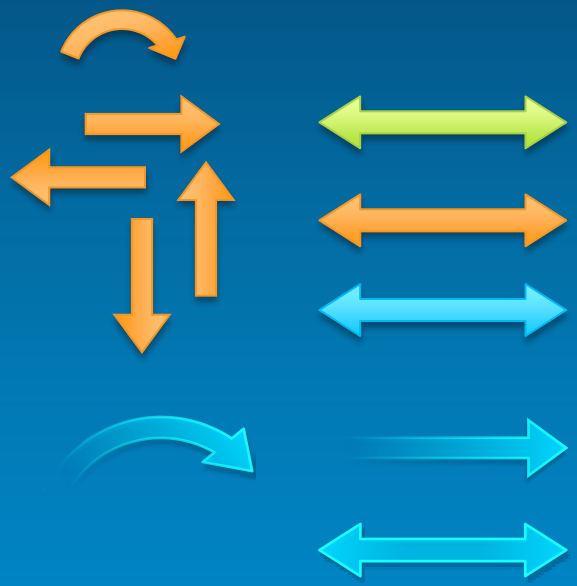
Second Offering ID: XXXX

Arrows

Arrows for Connecting Items



Arrows for Connecting Large Concepts



Shapes for Diagrams

Quick Style: Subtle Effect	Quick Style: Moderate Effect
ArcGIS	ArcGIS
ArcGIS	ArcGIS
ArcGIS	ArcGIS
ArcGIS	ArcGIS
ArcGIS	ArcGIS
ArcGIS	ArcGIS

DON'T APPLY EFFECTS from the Design tab

Shapes for Diagrams *(continued)*

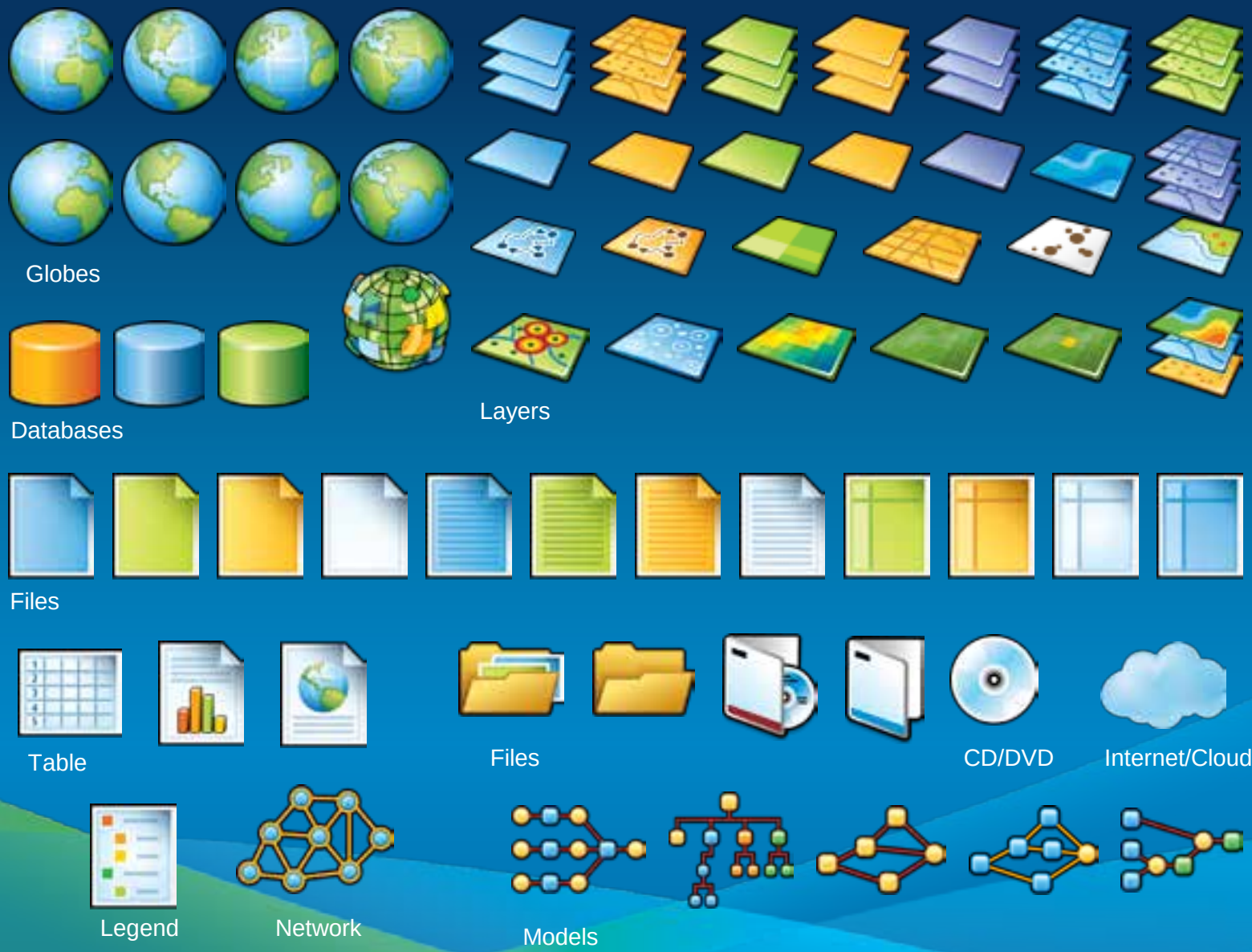
Cloud optimized for use behind diagrams

Cloud for general diagram

Circle behind a group of objects

Content box for each tier (see sample diagrams)

Optional: Use as a frame around showcased screenshots


Globes
Layers
Databases
Files
Table
Files
CD/DVD
Internet/Cloud
Legend
Network
Models

Designing
& Planning
Situational Awareness
Professional Services
Professional
Services
Education
Education
Business
Partner
Mobile GIS User
GIS User

Data Server
Data Appliance
GIS Users
Geodatabase
Web GIS
Mashups