Esri International User Conference | San Diego, CA
Technical Workshops | July 12, 2011

ArcGIS for Land Records: Parcel Maintenance Solution

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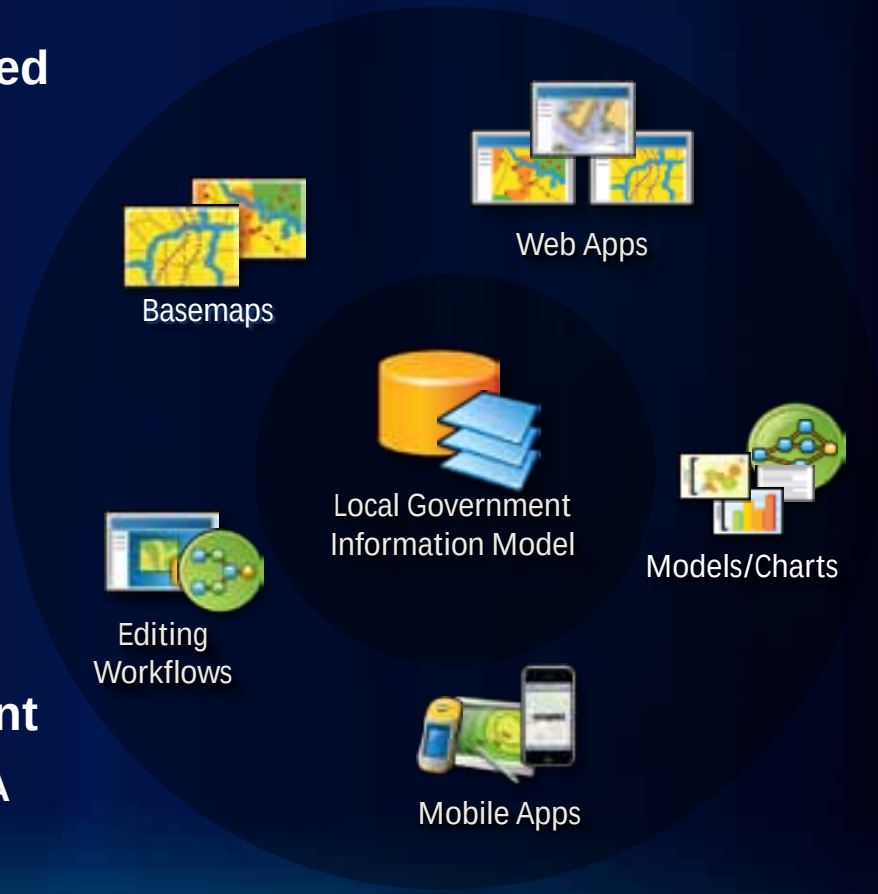
Agenda

- Introduction
- The Parcel Maintenance Solution
- Parcel Maintenance Workflows (Demo)
- Implementing the Parcel Maintenance Solution
- 10.1 Improvements (Demo)
- Your Feedback

ArcGIS for Local Government

A product for Esri's local government customers

- **A series of useful maps and apps focused on local government work**
  - Organized into modules
  - Extensible, configurable
  - A foundation for Partner solutions
- **Participation in the online community**
  - Best Practices / Implementation Support
- **Esri Services and Partner offerings**
  - Help implement, sustain and enhance
- **One ArcGIS product for local government**
  - Freely available for individual customer and ELA engagements



…..available on-premise or in the cloud

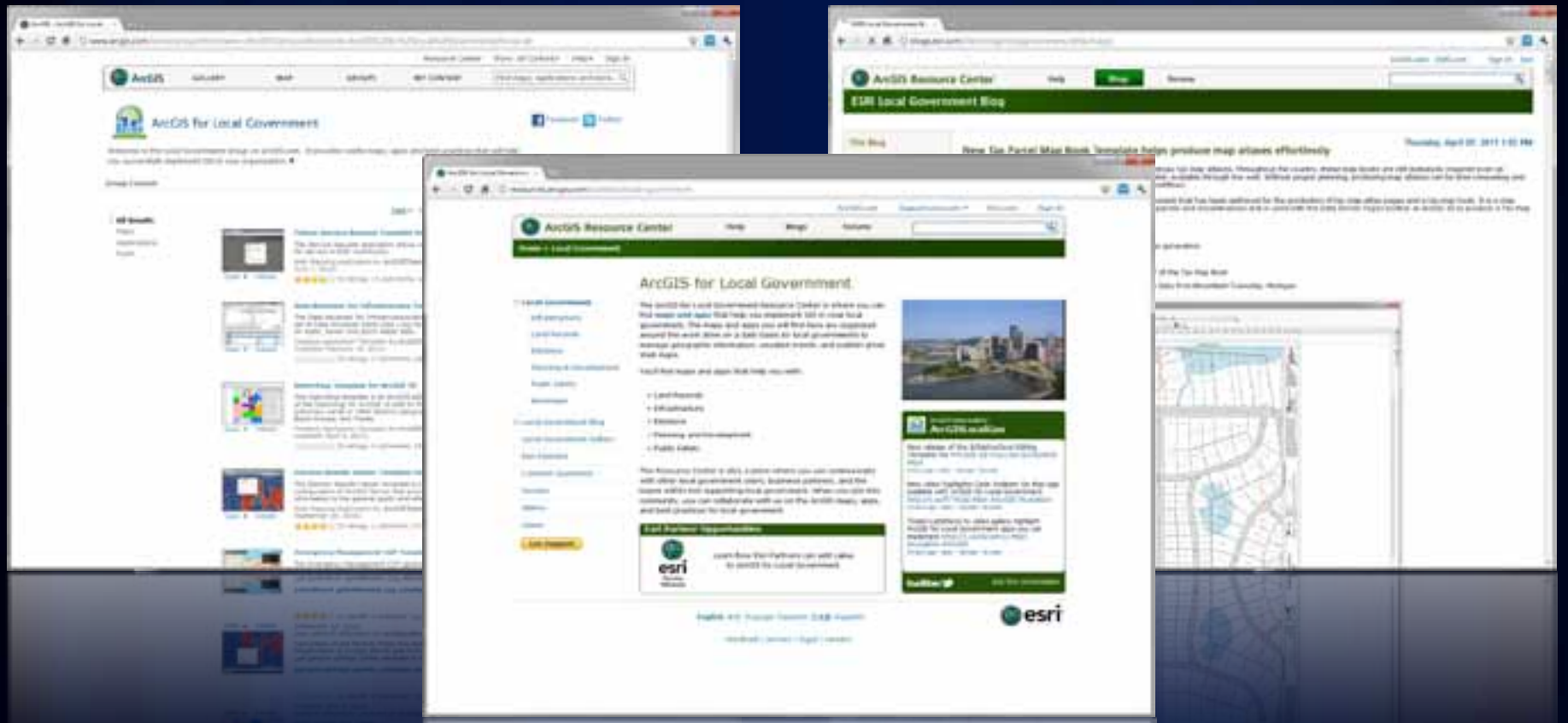
Our Mission

Help you increase the value of GIS in your organization

- **Make it easier to deploy ArcGIS**
  - Deliver applications quickly throughout your organization
  - Stay current with future releases / avoid legacy technology
  - Create a platform of geospatial data that can be leveraged by many
- **Address common constraints in local government**
  - Size and skills of staff
  - Budget and time available to implement
- **Empower the community to contribute**
  - Users
  - Partners

Land Records Community

An online community where Land Records users and partners can collaborate



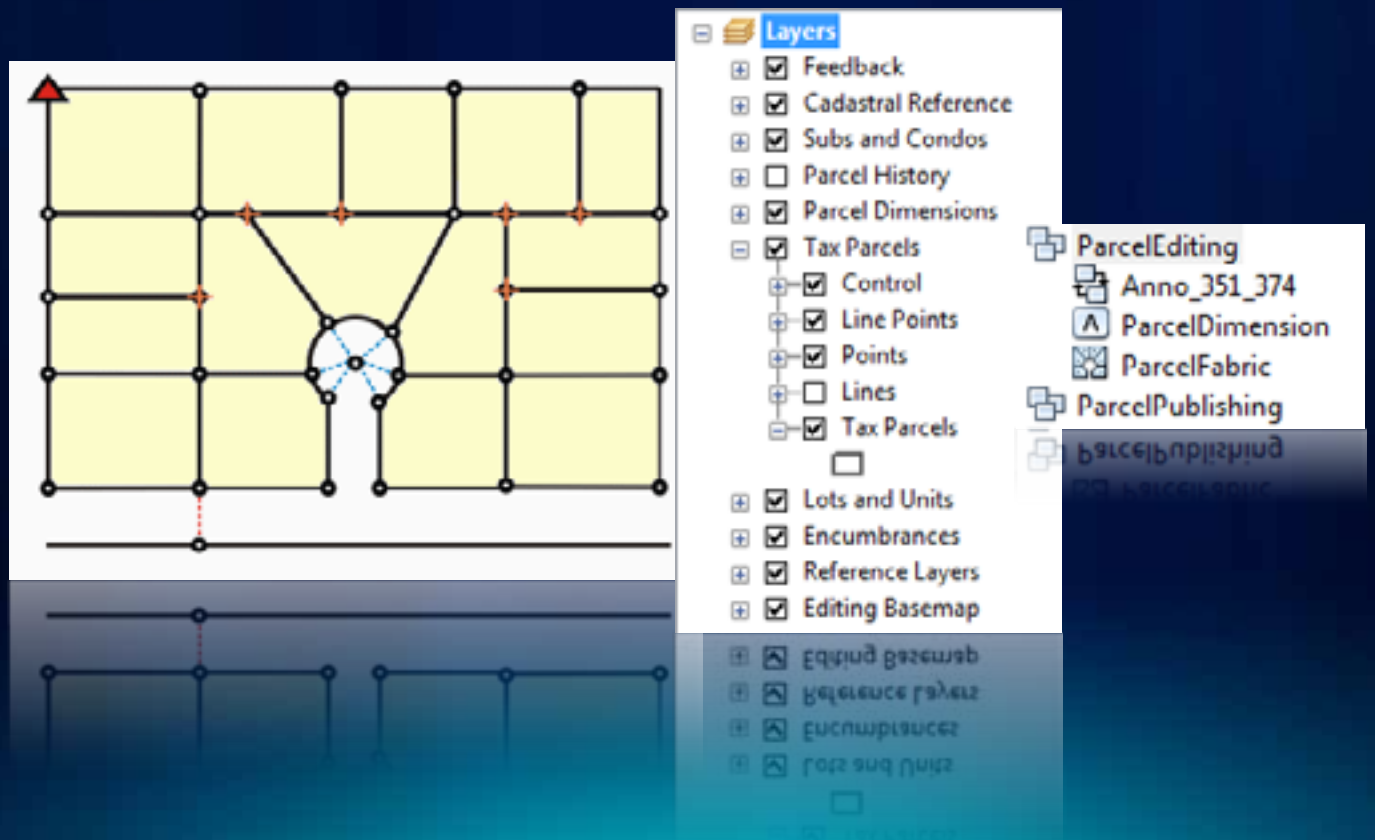
www.resources.arcgis.com/content/local-government

Parcel editing with ArcGIS 10

- Data model (parcel fabric) specifically for managing parcels as part of core software
  - Topological integrity
  - Improve positional accuracy of parcels and related data
  - History Tracking
  - Optionally maintain metadata
- New parcel editor toolbar – streamlines workflows for editing parcels
  - Splits, merges, resurveys, etc
  - Import digitally submitted data (from CAD or other sources)
- Templates to give you best practices

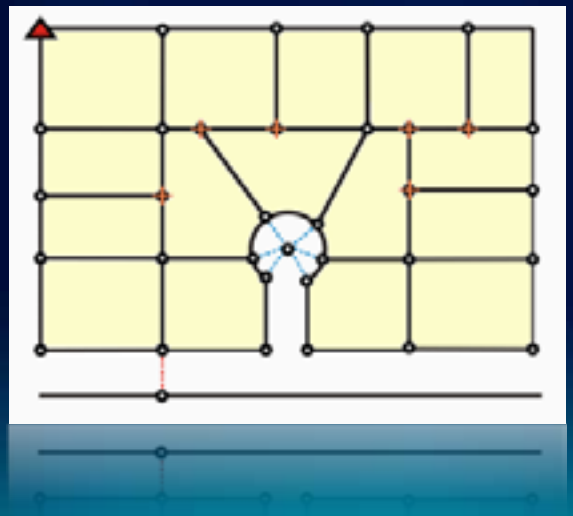
What is a parcel fabric?

- Continuous network of parcel boundaries
- Record information from plans/deeds integrated into a topologically correct parcel layer



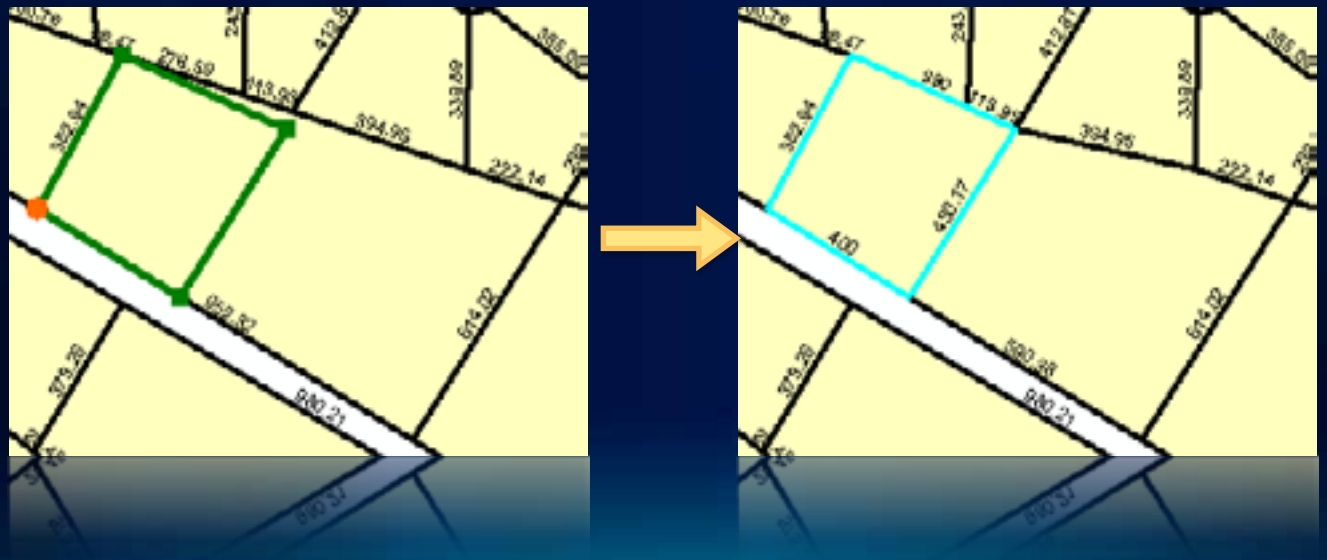
Why is the parcel fabric important to you?

- Data model specifically for managing parcels
- Improved workflows for managing parcels
  - Based on the operations you do every day – splits, combines, etc.
- Data integrity and accuracy
- History tracking (based on both system and legal dates)
- Optional metadata on plans and editors



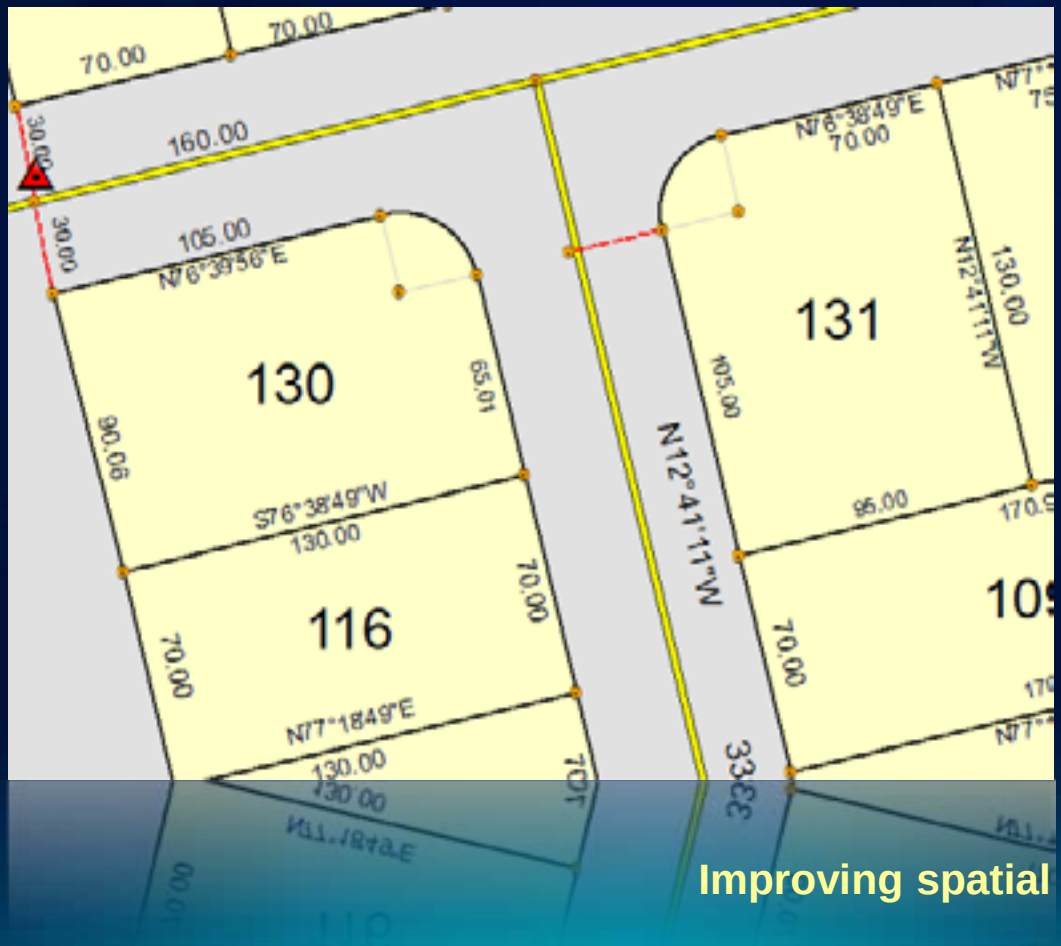
Data integrity

- Land records from plans/deeds are integrated into a continuous, topologically correct parcel layer
- No slivers and gaps
  - Parcel joining preserves parcel connectivity during incorporation



Data integrity

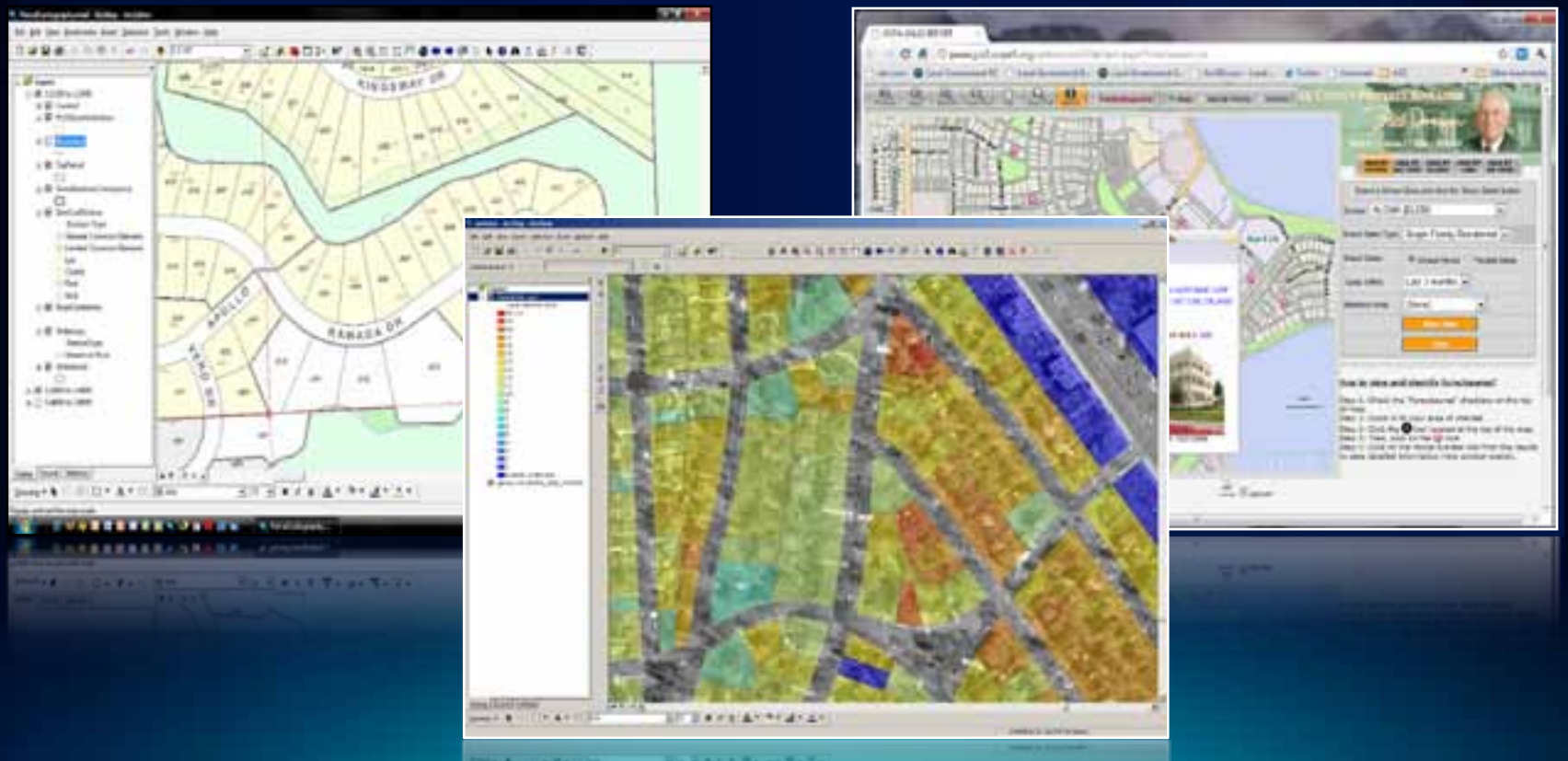
- **Fabric adjustment uses survey control and COGO dimensions to recalculate/update parcel corner points**



Improving spatial accuracy over time

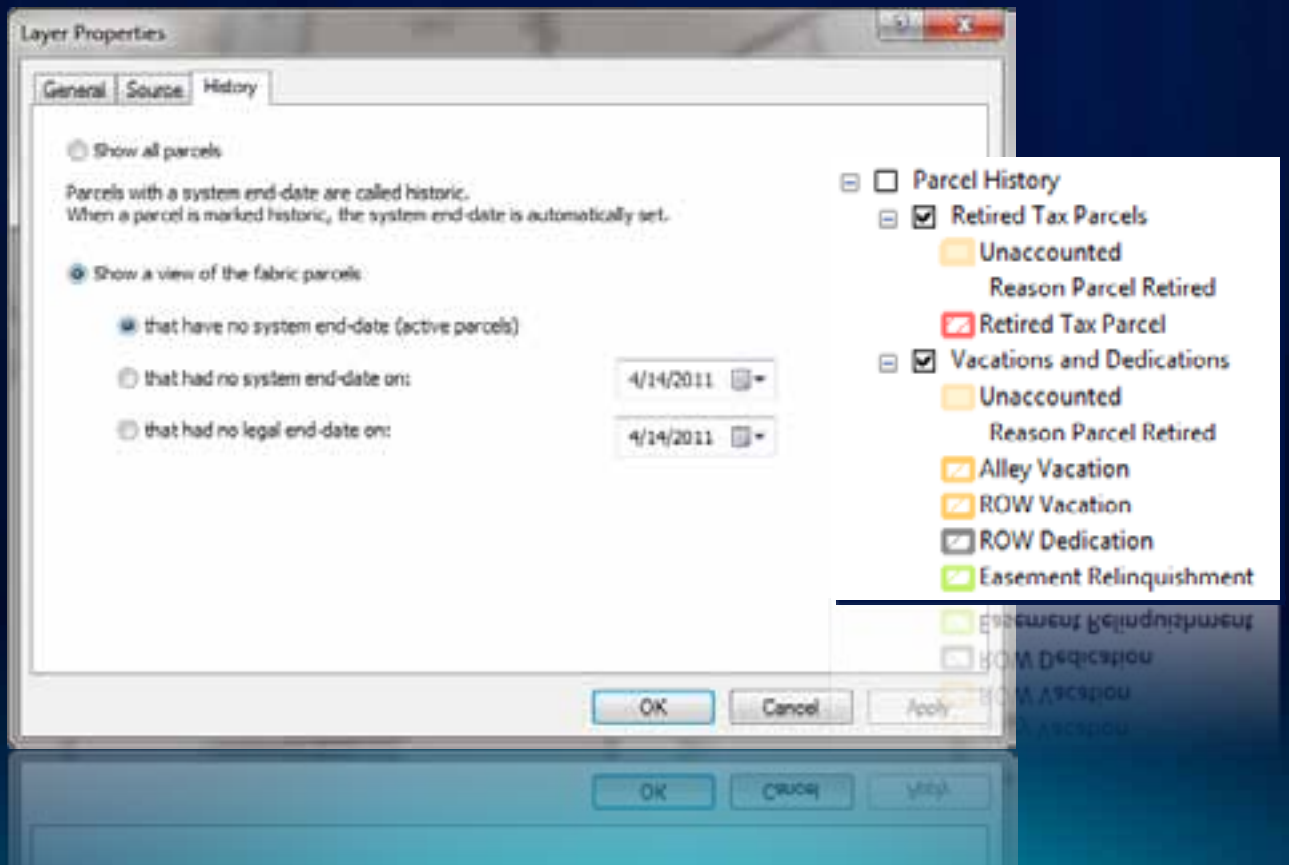
Why are accuracy and integrity important?

- Property tax values derived from legal records (plans/deeds)
- Accurate and up-to-date land records information used throughout government to support many vital functions
- Other data (including imagery) becoming more accurate



Parcel history enhances integrity

- **Maintained automatically as you edit**
  - **System start/end and legal start/end dates supported**
- **Not the same as geodatabase archiving**



Parcel Maintenance Demos

Larry Young

Implementing ArcGIS for Land Records

Getting started is quite easy

Identify business priorities

Identify business requirements

Migrate data to information model

Publish your Maps

Configure and deploy the apps

Implementing ArcGIS for Land Records

- Identify your business needs
  - Which land records application will provide the largest business value in your organization
- Review content on the Resource Center
  - Templates, hosted apps, videos, blogs
  - Identify ArcGIS platform requirements
  - Configure template(s) in your organization
- Plan your migration
  - Data, workflows, apps
- Identify areas where you may need help
  - Esri and Partner Network available if needed

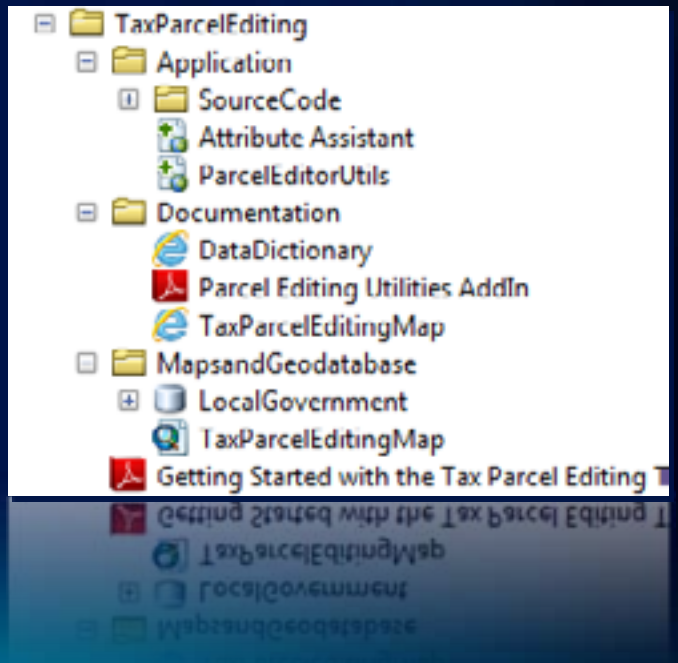
Business Needs

- General Land Records Platform
  - Start with Tax Parcel Editing and then add other apps
- Data Management
  - Start with Tax Parcel Editing and Tax Map Book
- Constituent Engagement
  - Start with Tax Parcel Viewer and Parcel Value for iPhone
- Planning and Analysis
  - Start with Value Analysis Dashboard

…many ways to leverage the maps and apps in the ArcGIS for Land Records system

Resource Center Content

- Review template downloads, they include:
  - Maps and Geodatabase
  - Documentation
  - Application
  - Getting Started Document
- Watch the videos, read the blogs
- Work with sample data
- Review Local Government GDB
- Ask questions



Email: ArcGISTeamLocalGov@esri.com

Scenario: Implement Tax Parcel Editing Template

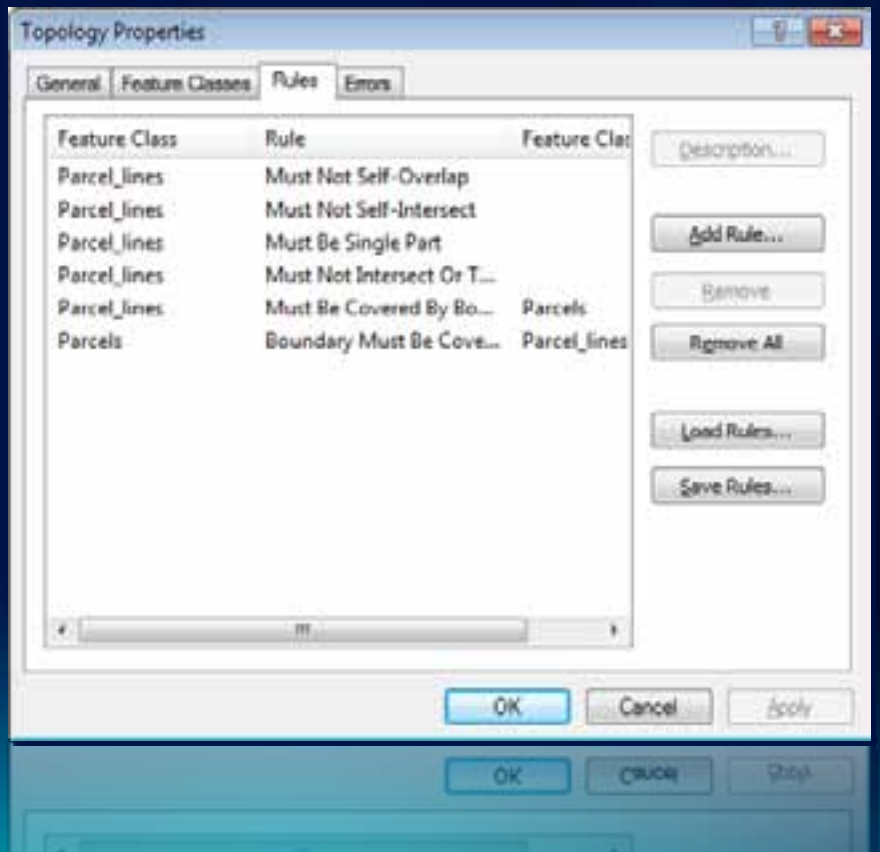
- **Review Tax Parcel Editing Template**
  - **Editing map – well defined layers, label expressions and attractive cartography**
  - **Productivity tools – enhance the core editing environment**
  - **Geodatabase – methods for managing multiple parcel types in a parcel fabric, annotation best practices**
- **Review how consistent your data is with the Local Government Model GDB**

Scenario: Implement Tax Parcel Editing Template

- **Download White Paper - *Loading Data Into a Parcel Fabric***
- **Important aspects:**
  - **Different paths depending on state of source data**
  - **Using a topology to check initial data integrity**
  - **Delineating curves**
  - **Modeling parcel types (lots, subdivisions, etc.)**
  - **Annotation**

Scenario: Implement Tax Parcel Editing Template

- Lets start migrating data
  - The parcel fabric expects some level of spatial integrity to start
- Question #1 – How well do your tax parcels, boundaries, lots, etc. line up?



Scenario: Implement Tax Parcel Editing Template

- **Question #2 – How are curves represented within your data?**

Scenario: Implement Tax Parcel Editing Template

- Ultimately, you'll follow a process similar to this:
  - Step 1 - Prepare your Fabric Data Model
  - Step 2 - Prepare your Source Data
  - Step 3 - Clean up the Geometry on your Source Data
  - Step 4 - Establish Topology Required for Fabric Loading
  - Step 5 - Load your Source Data to the Fabric
  - Step 6 - Set up your Editing Map

10.1 Improvements

Chris Buscaglia

Summary

ArcGIS 10 is the foundation for Parcel Maintenance Solution

- Parcel management tools in core
  - Fully supported and incrementally enhanced
- Optimized data model for parcel management
  - Streamlines parcel editing workflows
  - Improves data integrity
  - Allows you to improve positional accuracy over time
- Maps and Apps that extend core ArcGIS platform
- Service packages that help you implement solution

Summary

- Our Goals
  - Deliver a “land records GIS” that enables your success
  - Evolve and grow the collection of apps
  - Provide a platform for partners to deploy their solutions
- We want your participation and involvement
  - Download the maps and apps
  - Provide feedback on existing content
  - Identify opportunities for new content

Other Sessions @ UC

Wednesday

8:30 – 9:45 – ArcGIS for Land Records Implementation Examples

An overview of the implementations by the Cities of Calgary and Denver

10:15 – 11:30 – ArcGIS for Land Records - Migrating Your Data

An introduction to the Parcel Fabric data model and data migration strategies

Thursday

8:55 - 9:15 - ArcGIS for Local Government's Planning Apps - An Introduction

An introduction to the ArcGIS for Local Government planning and development module

1:30 - 2:45 - ArcGIS for Land Records - Configuring

How to configure the ArcGIS for Local Government land records maps and apps

4:05 - 4:25 - ArcGIS for Land Records - Improving Data Quality

An introduction to a set of ArcGIS Desktop Parcel Editor tools to improve parcel accuracy

Friday

9:00 - 10:15 - ArcGIS for Local Government – An Introduction (Second Offering)

An introduction to the ArcGIS for Local Government maps and apps

Questions

Please fill out your surveys….

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