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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