

ArcGIS for Land Records

ArcGIS User Meeting

Anna Sokol

Mark Hollingshead

June 2011



Leveraging ArcGIS 10 for Land Records

Agenda

Welcome and Introductions

ArcGIS 10 Best Practices for Land Records Management

- Local Government Resource Center
- Parcel Asset Management with ArcGIS 10

Break

ArcGIS 10 Land Records Resource Center Templates

- Planning & Analysis
- Mobile GIS & Workforce Automation
- Decision Support and Situational Awareness
- Citizen Engagement

Wrap-up and Q&A

ArcGIS 10 is the Foundation

- **New Parcel management tools are core functionality**
 - Fully supported
 - Subject to incremental enhancements
- **Optimized data model for parcel management**
 - Streamlines parcel editing thus saving time and increasing productivity
 - Improves data integrity
 - Allows you to improve positional accuracy over time
- **Templates that extend core ArcGIS platform and promote diverse use of land records data**
- **Cloud-based services that complement your implementation**

ArcGIS

A Complete System for Geographic Information

- Easier
- More Powerful
- Everywhere



Making GIS Available to Everyone

ArcGIS supports your work

Making GIS easier to implement and more effective for government

- **Core Technology**
 - ArcGIS
- **ArcGIS Online**
 - ArcGIS.com
- **Maps and Apps**
 - Templates
- **Best Practices**
 - Resource Centers, resources.ersi.com

ArcGIS for Local Government

ArcGIS

Addresses Common Workflows



Modeling and Analysis



Design and Planning



Asset Management



Situational Awareness



Field Collection



Cartographic Design



Collaboration and Transparency

ArcGIS for Local Government

Useful maps and apps that help local governments implement GIS

- **Organized around the work you do in local government**

- Reference Data / Basemaps
- Land Records
- Public Infrastructure
- Elections
- Planning
- Code Enforcement
- Public Safety
- Public Health

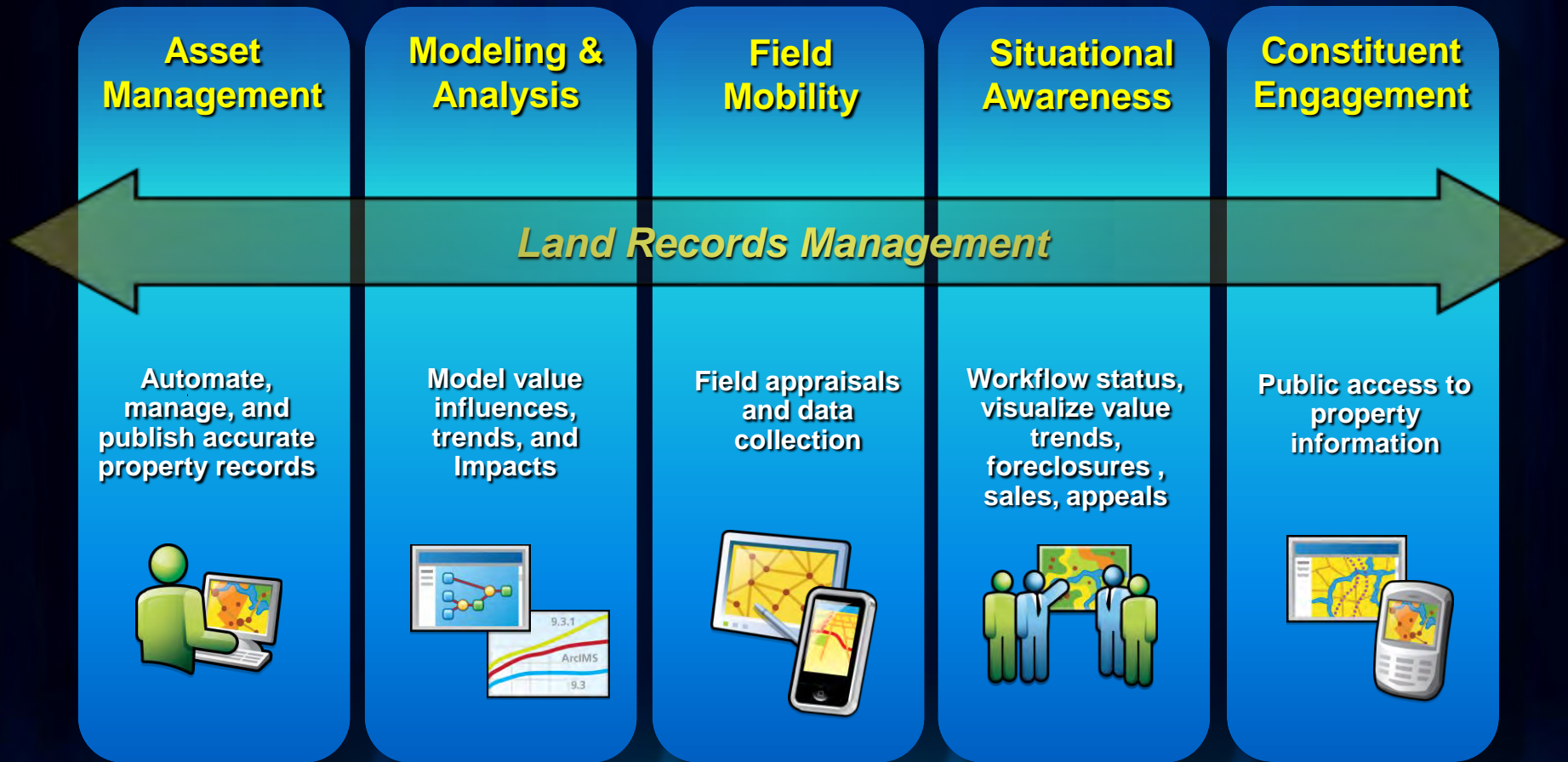
- **Extend the ArcGIS platform**



...a simple pattern to configure and use ArcGIS

Land Record Technology Patterns

Best practices Data models, Cartography and Workflows



... Making GIS Easier to Implement, Maintain and Use

Local Government Resource Center

An online community for Local Government

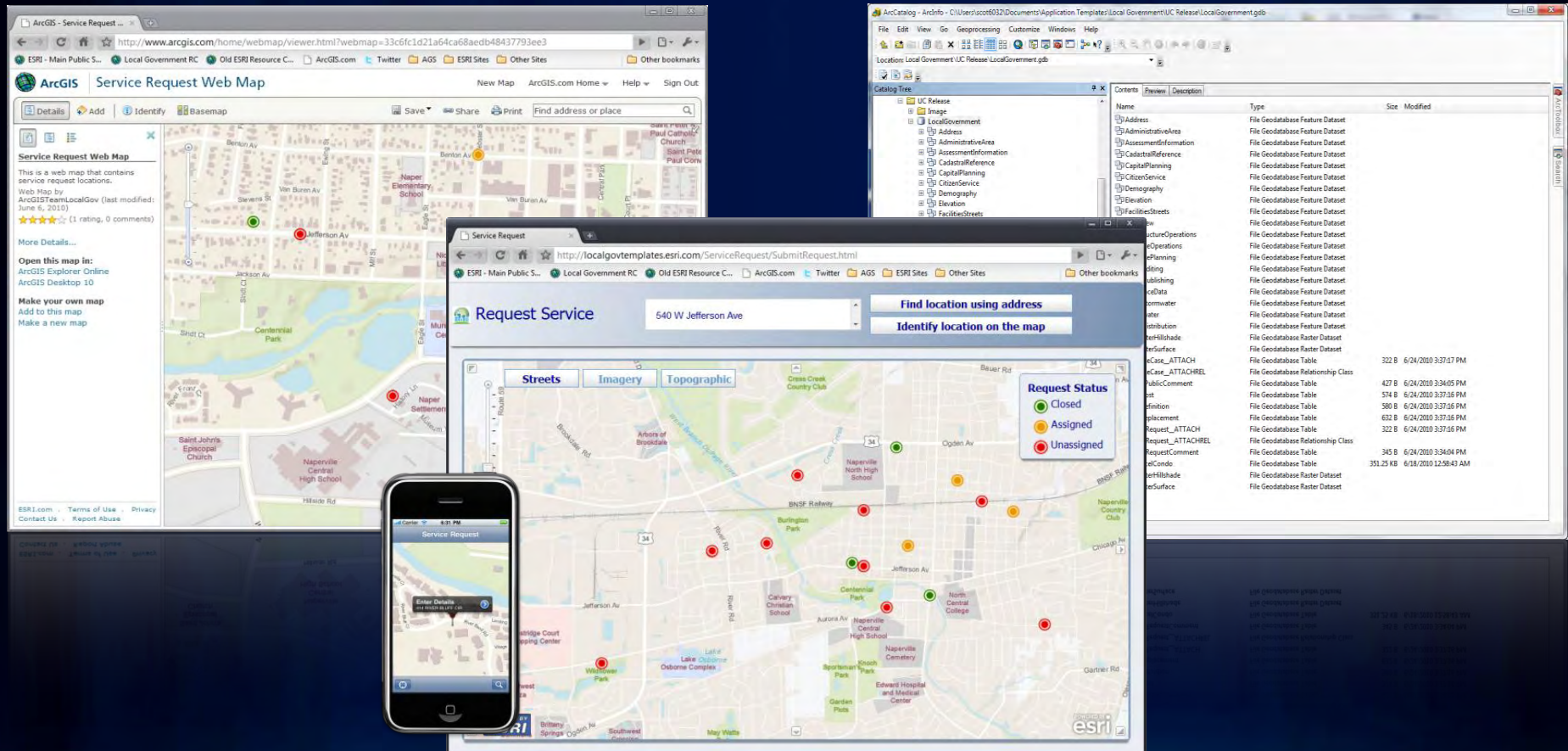
The screenshots illustrate the ArcGIS Resource Center's interface, highlighting its role as a hub for local government users. The main page provides navigation to various resources, while the blog and template sections offer specific guidance and tools. The webinar announcement demonstrates the community's focus on ongoing learning and collaboration.

...a place where users and partners can collaborate

Goals

- **Simplify GIS**
- **Broaden use of GIS throughout organization**
- **Reduce implementation time**
- **Reduce implementation cost**
- **Promote synergy**
 - Each app works everywhere
 - Each map works everywhere

An ArcGIS system for local governments



...desktop, web and mobile apps with meaningful maps and layers supported by a single geodatabase schema

Land Records Maps and Apps

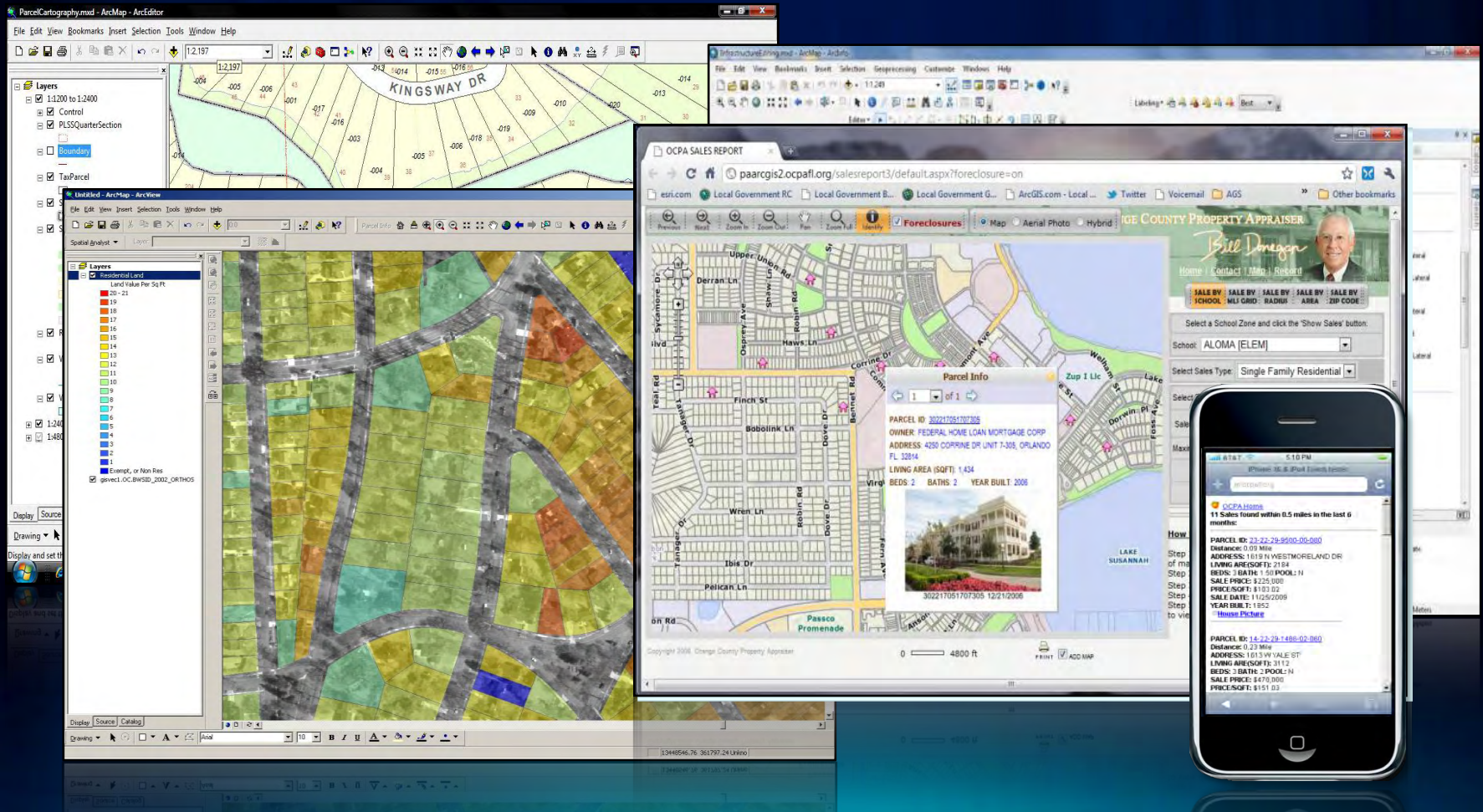
Helps local governments maximize the value of land records information

- **Parcel Value for iPhone**
 - Provides authoritative property maps and characteristics on iOS platform
- **Value Analysis Dashboard**
 - Provides a high-level view into the changes in property assessments and tax revenue
- **Tax Parcel Viewer**
 - Provides focused public access with authoritative property maps and characteristics
- **Parcel Map Templates**
 - Consumer and industry focused multi-scale basemaps

Can be hosted on premise or in the cloud

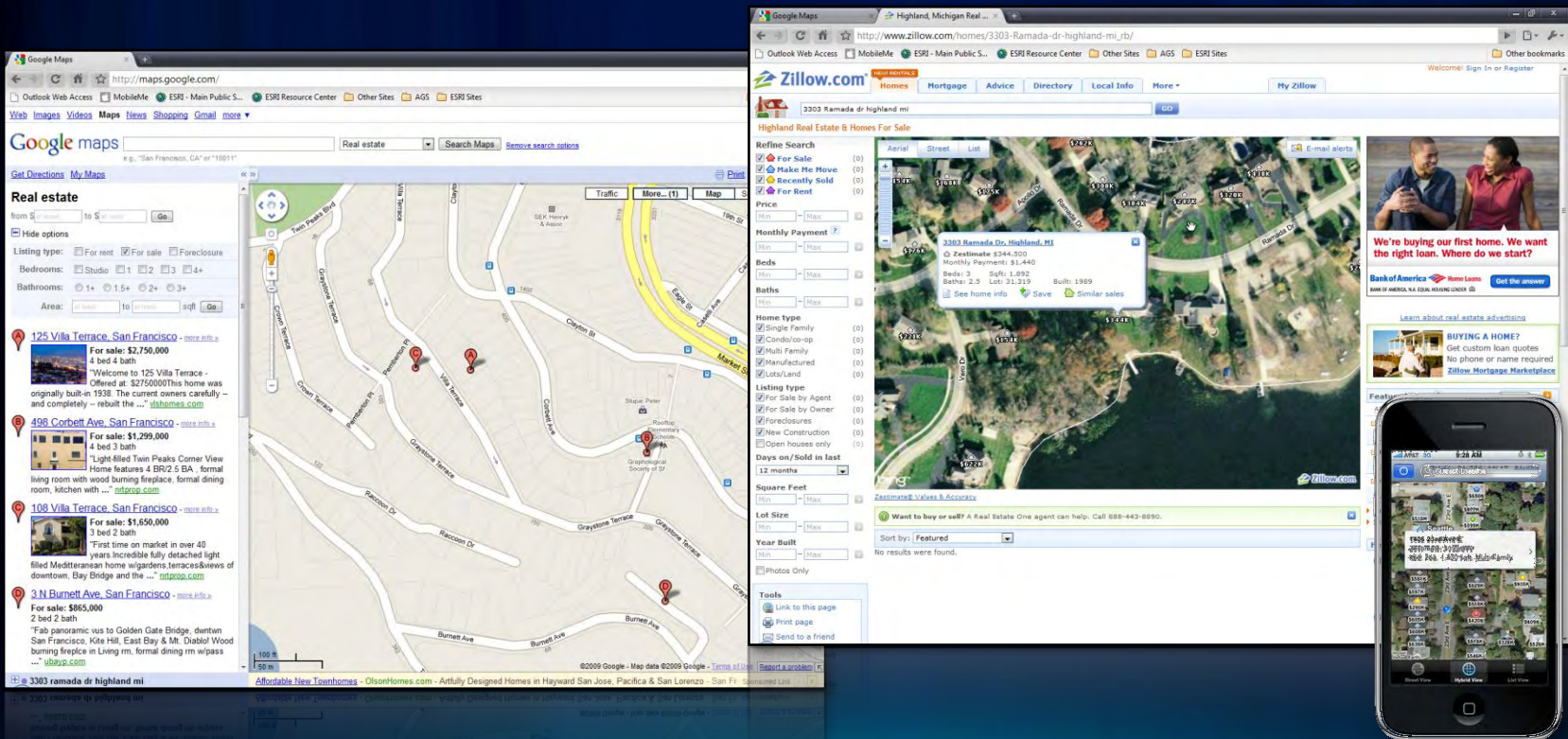
GIS for Land Records

- Statutory responsibility to inventory legal records and value land
- Used in many vital government operations
 - Assessment and Taxation, Land Use, Infrastructure, Deeds and Documents



Evolving Land Records Requirements

- Historically, land records information has been used internally by local governments
 - And under valued and poorly utilized by public audiences
- But that is changing.....



ArcGIS for Land Records

Helps local governments maximize the value of land records information

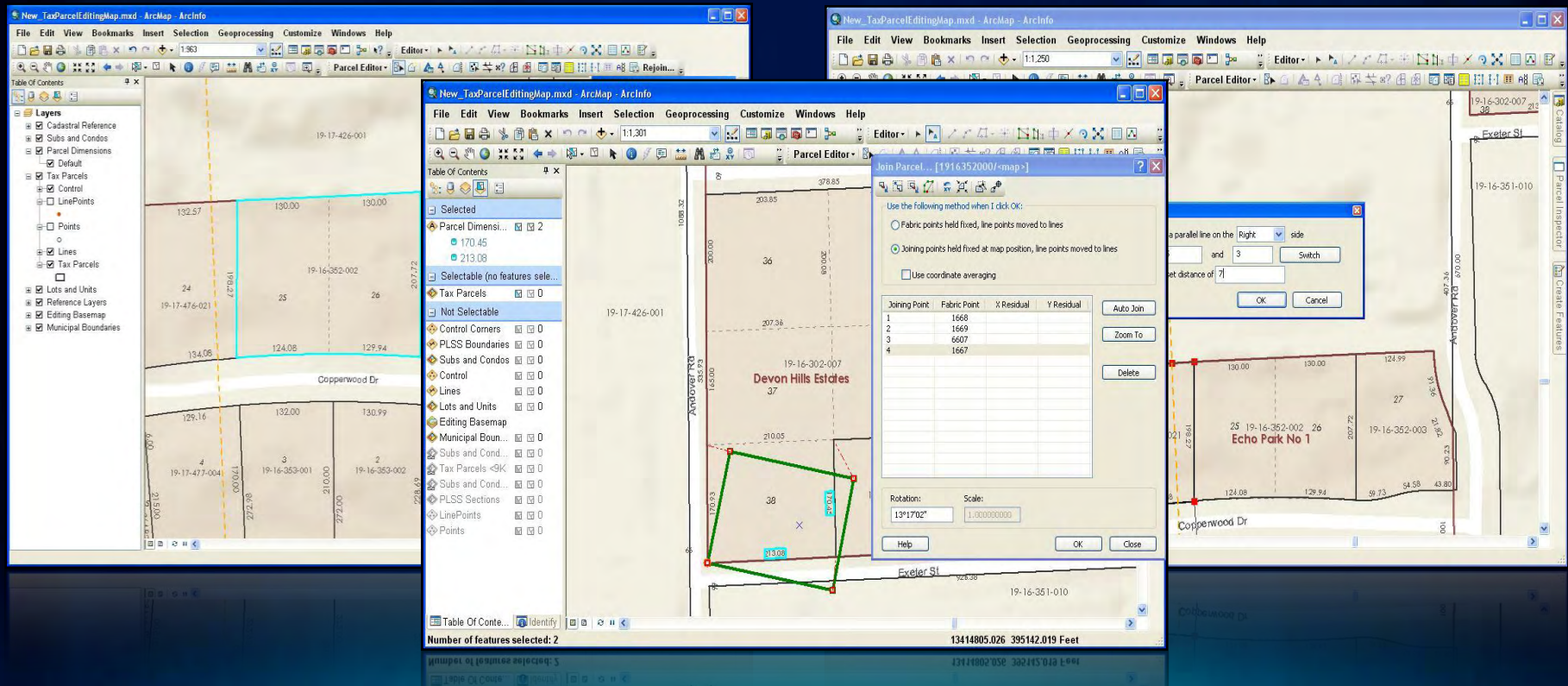
- Efficient data management workflows
 - To manage the land records life cycle
 - Structured parcel content and improved accuracy
 - Imagery management
 - CAMA integration
 - Simple map atlases
- Analytical tools for value analysis and geo-accounting
- Mobile solutions for field data collection and public access
- Great web maps and public access solutions
 - Can be hosted on [ArcGIS.com](https://www.arcgis.com)

ArcGIS 10 is the Foundation

- **New Parcel management tools are core functionality**
- **Optimized data model for parcel management**
 - Streamlines parcel editing
 - Improves data integrity
 - Allows you to improve positional accuracy over time
- **Templates that extend core ArcGIS platform**
- **Cloud-based services that complement your implementation**

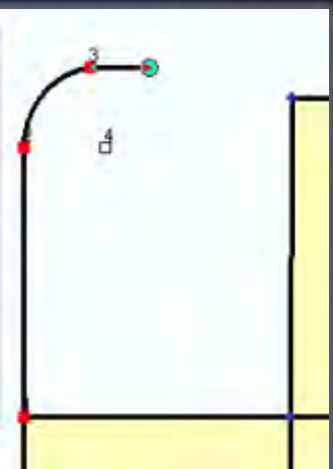
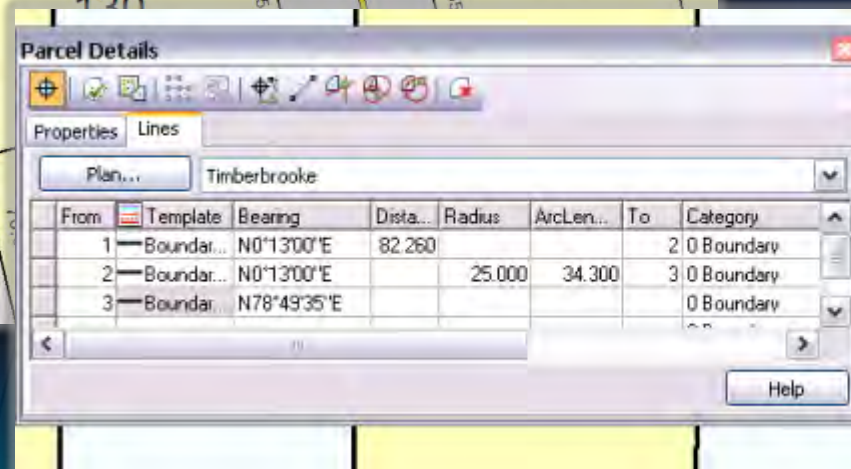
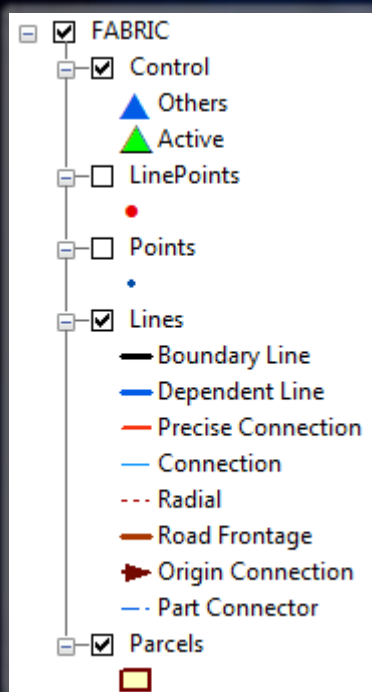
Land Records Asset Management

- At ArcGIS 10, tools within core software support editing workflows
 - Splits, merges, new subdivisions & condominiums, resurveys, etc.
- Optimized information model preserves record measurements
 - Improve integrity and positional accuracy over time



New Set of Tools for Editing Parcels in ArcGIS 10

- Data Model – Parcel Fabric
- Set of Parcel Editing tools



Scope of the Technology

The Workflow

Land Records Submitted to Agency

Agency Creates Digital Parcels

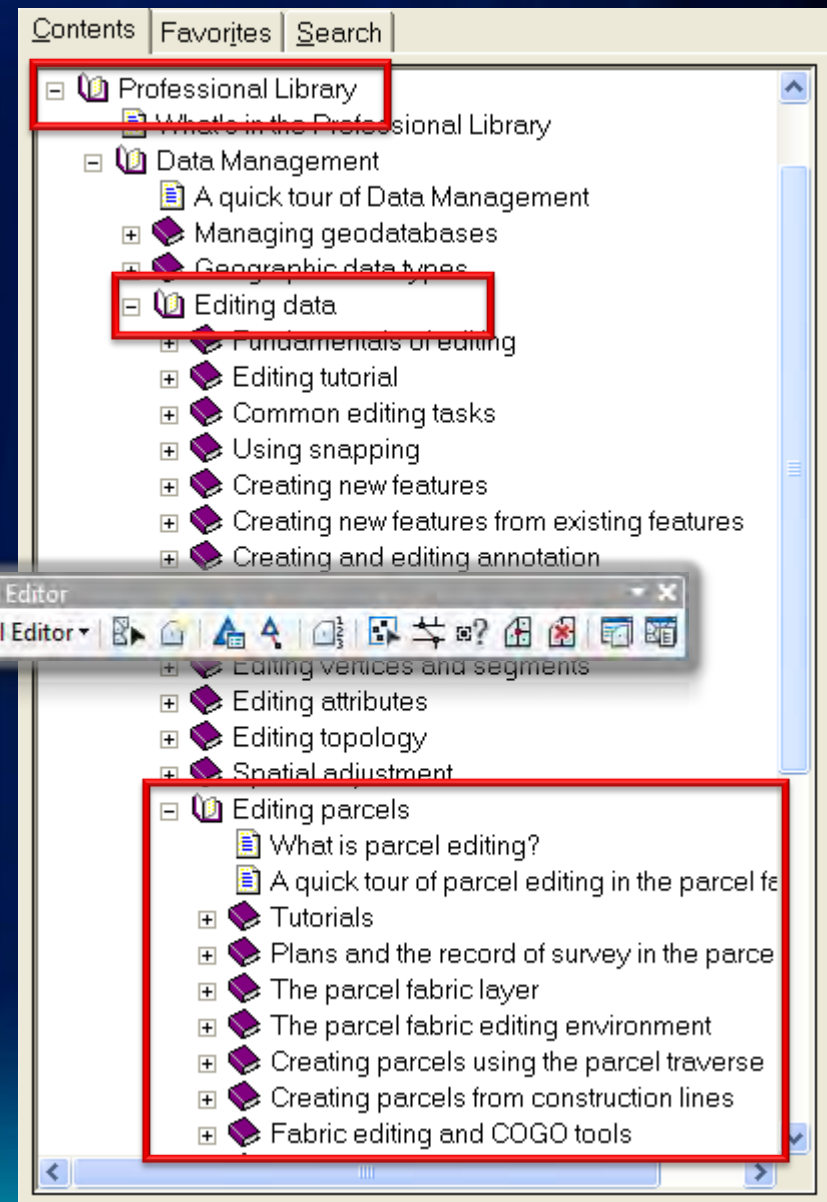
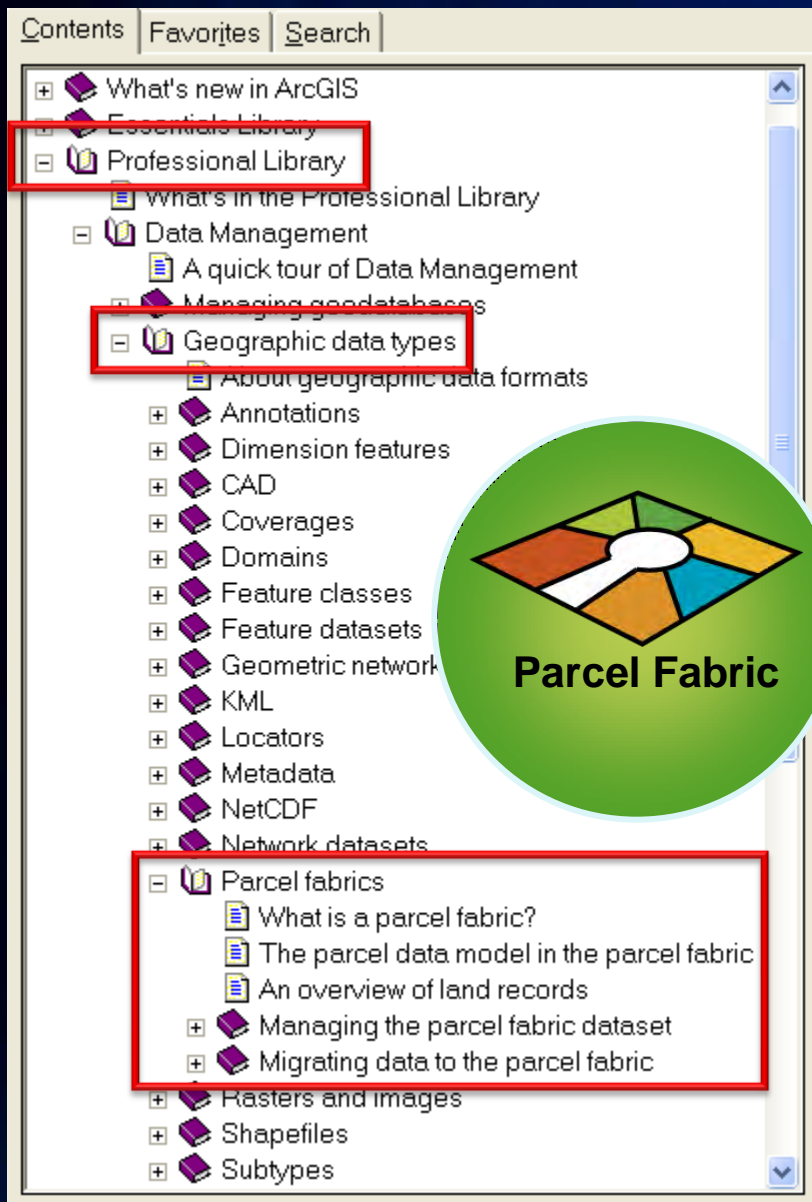
Integrate parcels with the existing Fabric

A Framework for Parcel Information Management

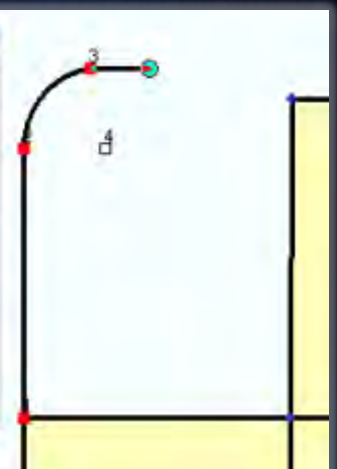
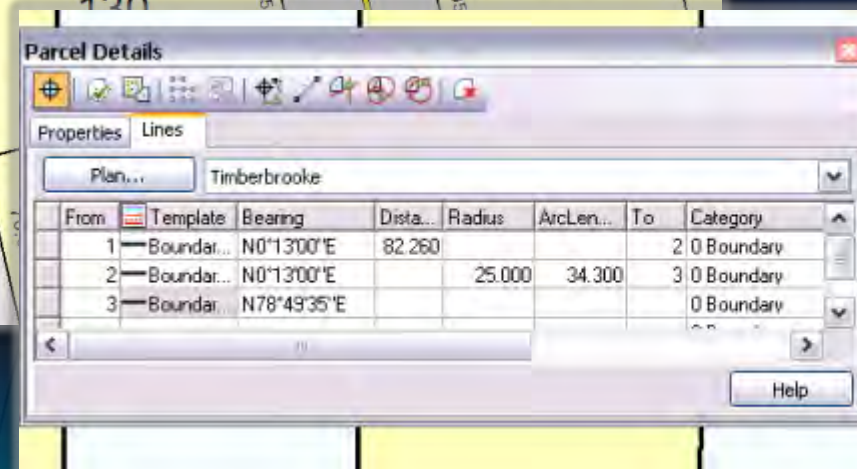
Geodatabase



Learning about Parcel Editing in ArcGIS 10



Demonstration

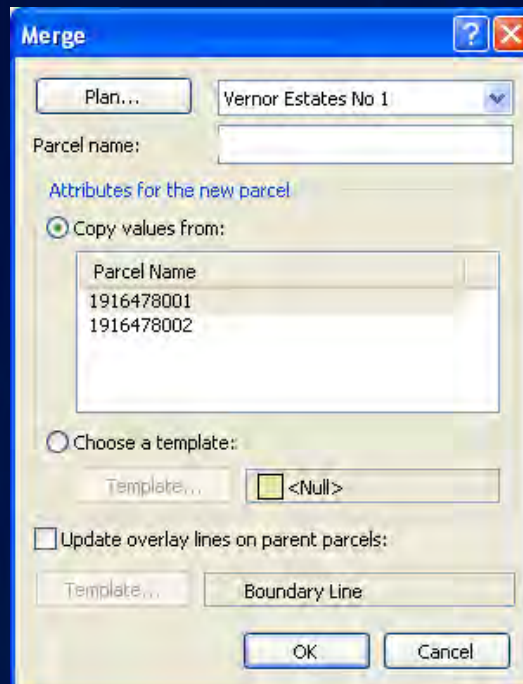
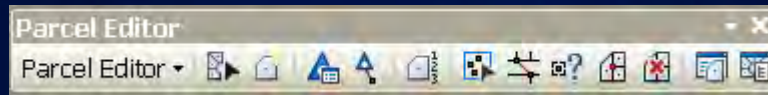


Land Records Apps

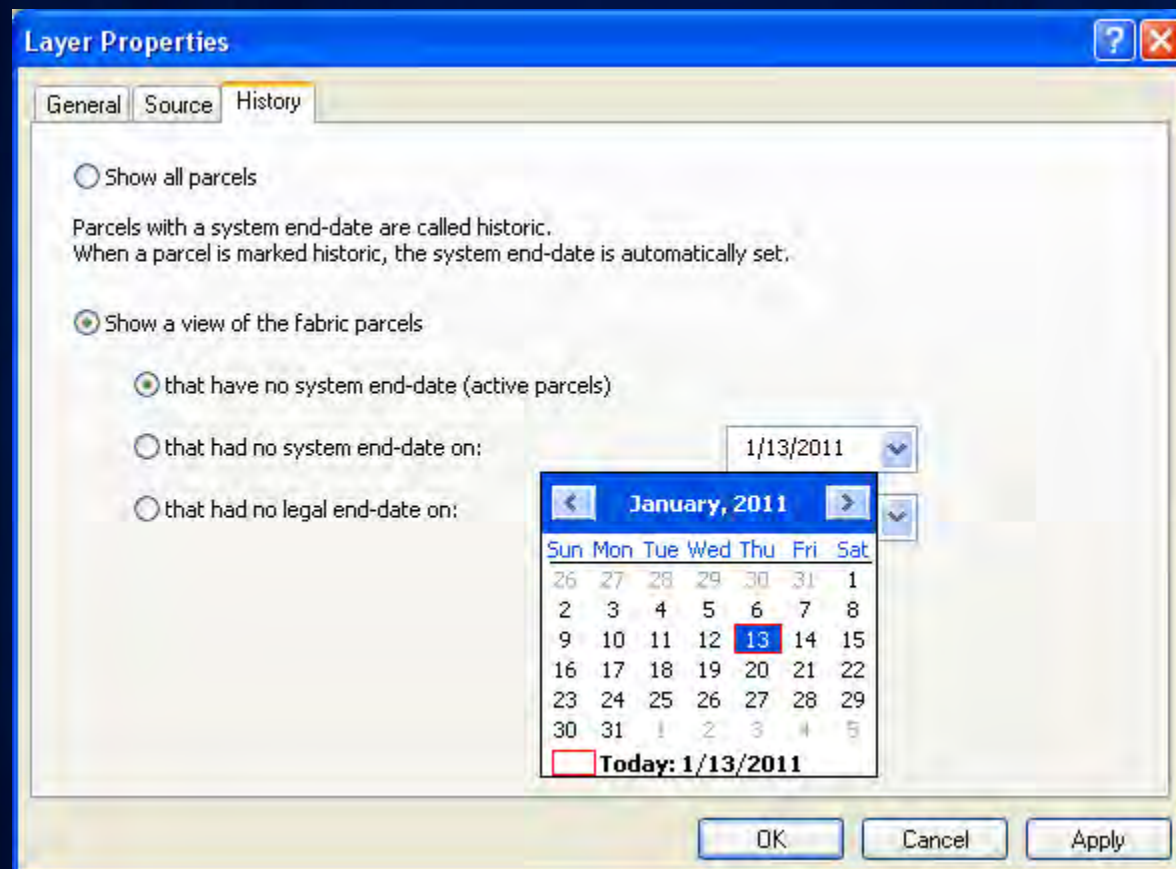
Deliverable	Description	Audience	Platform
Valuation Analysis Web Map	Illustrates real estate trends within a local government and demonstrates the impact of real estate sales on property value	Assessing Department Staff, Tax Collection Department Staff, Finance and Budget Department Staff	ArcGIS Server Flex Viewer Sample Application
Public Access Web Map	Provides in-house and public access to parcel and related assessment information	Assessing Department Staff, Other Local Government Staff, General Public/Customers	ArcGIS Server Flex Viewer Sample Application
Parcel Value iPhone Map	Provides public access to tax parcel value and related assessment information	General Public/Customers	ArcGIS Server iPhone Sample Application
Parcel Editing Map	Supports parcel updates (splits, combos, subs, condos, etc.) and parcel data publishing	GIS Mapping Technicians	ArcGIS Desktop Parcel Editor Toolbar
Tax Parcel Atlas Map	Supports tax map atlas production	Assessing Department Staff, Other Local Government Staff, General Public/Customers	ArcGIS Desktop

Set of Tools for Editing Parcels

- Merge parcels

A screenshot of the 'Merge' dialog box. It has a title bar with a question mark and a close button. Inside, there is a 'Plan...' button and a dropdown menu set to 'Vernor Estates No 1'. Below this is a 'Parcel name:' label and an empty text field. A section titled 'Attributes for the new parcel' contains a radio button labeled 'Copy values from:' which is selected. Below this is a list box containing 'Parcel Name' and two parcel numbers: '1916478001' and '1916478002'. There is also an unchecked radio button labeled 'Choose a template:'. Below this is a 'Template...' button and a dropdown menu set to '<Null>'. At the bottom, there is an unchecked checkbox labeled 'Update overlay lines on parent parcels:'. Below this is another 'Template...' button and a dropdown menu set to 'Boundary Line'. At the very bottom are 'OK' and 'Cancel' buttons.

Parcel Fabric has Built-in History Management



Job Book – Tracks Parcel Edits

Title	Description	Version	Operator	Last Mod
4/2011 4:41:4...	Merge		jd1765	2/24/201
4/2011 4:36:2...	Merge		jd1765	2/24/201
3/2011 1:51:1...	Edit Parcel		jd1765	2/23/201
3/2011 1:48:0...	Edit Parcel		jd1765	
3/2011 1:21:3...	New Construction		jd1765	
3/2011 1:20:3...	Merge		jd1765	
3/2011 12:56:...	New Construction		jd1765	
3/2011 12:54:...	New Construction		jd1765	
3/2011 12:50:...	New Construction		jd1765	
2/2011 7:44:0...	Edit Parcel		jd1765	
2/2011 7:40:1...	Edit Parcel		jd1765	
2/2011 7:36:3...	Edit Parcel		jd1765	
2/2011 7:35:5...	Edit Parcel		jd1765	

2/24/2011 4:41:40 PM

Name	2/24/2011 4:41:40 PM
Description	Merge
Owner	jd1765
Status	Active
ModifiedDate	2011-2-24

Edit Job Parcels:

Parcel Name

1	1920128009
2	1920128017
3	1920128008

Add

Remove

Remove All

Job Parcels:

☐ Neighboring parcels☐ Parcels within:

International Feet

Get

☒ Choose parcels manually:

Parcel Name

Add

Remove

Remove All

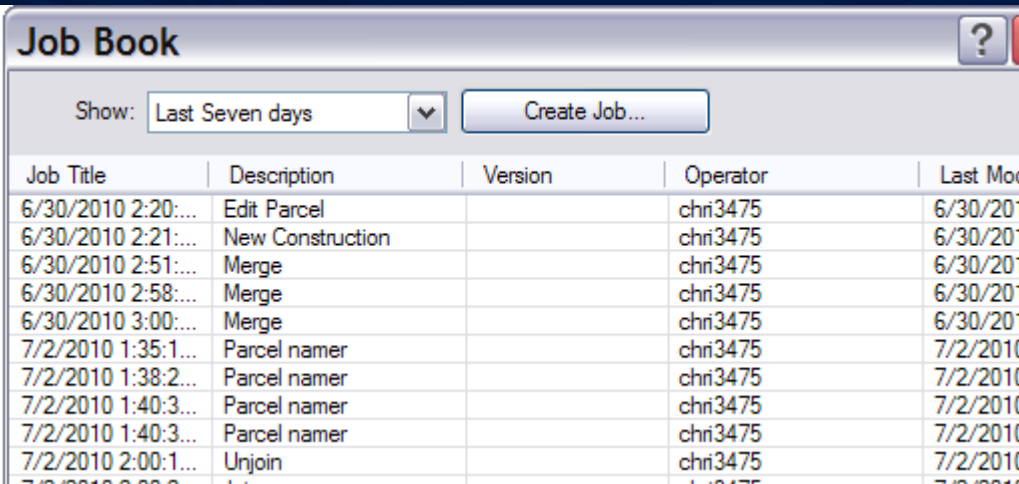
☐ Include parcels to fill gaps in the selection☐ Open job when back OK

OK

Cancel

Tracking Parcel Edits

- **Jobs keep track of edits**
 - **Who** - user name
 - **What** - type of edit
 - **When** - Date/time of edit
 - **Where** - selects edited parcels



The screenshot shows a window titled "Job Book" with a help icon (?) in the top right corner. Below the title bar, there is a "Show:" dropdown menu set to "Last Seven days" and a "Create Job..." button. The main area contains a table with the following columns: Job Title, Description, Version, Operator, and Last Modified. The table lists several jobs, including "Edit Parcel", "New Construction", and multiple "Merge" and "Parcel namer" entries, all performed by operator "chri3475".

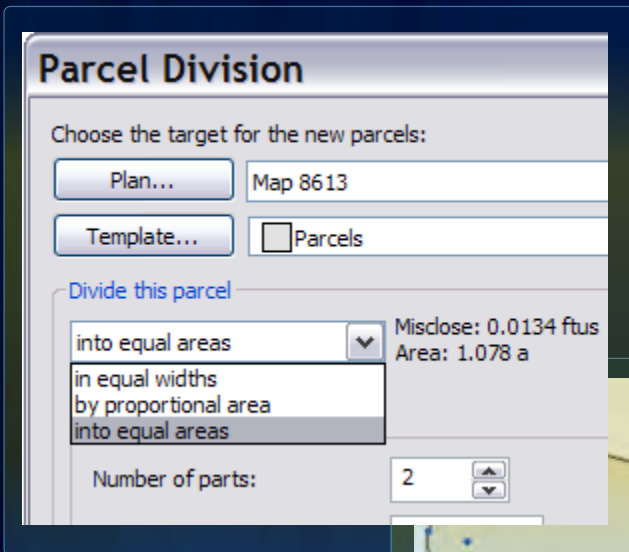
Job Title	Description	Version	Operator	Last Modified
6/30/2010 2:20:...	Edit Parcel		chri3475	6/30/2010
6/30/2010 2:21:...	New Construction		chri3475	6/30/2010
6/30/2010 2:51:...	Merge		chri3475	6/30/2010
6/30/2010 2:58:...	Merge		chri3475	6/30/2010
6/30/2010 3:00:...	Merge		chri3475	6/30/2010
7/2/2010 1:35:1...	Parcel namer		chri3475	7/2/2010
7/2/2010 1:38:2...	Parcel namer		chri3475	7/2/2010
7/2/2010 1:40:3...	Parcel namer		chri3475	7/2/2010
7/2/2010 1:40:3...	Parcel namer		chri3475	7/2/2010
7/2/2010 2:00:1...	Unjoin		chri3475	7/2/2010
7/2/2010 2:00:2...	Unjoin		chri3475	7/2/2010

- Optionally create and manage your own jobs



Streamlined workflows – parcel division

- Divide by area



The image shows a software dialog box titled "Parcel Division". It contains the following elements:

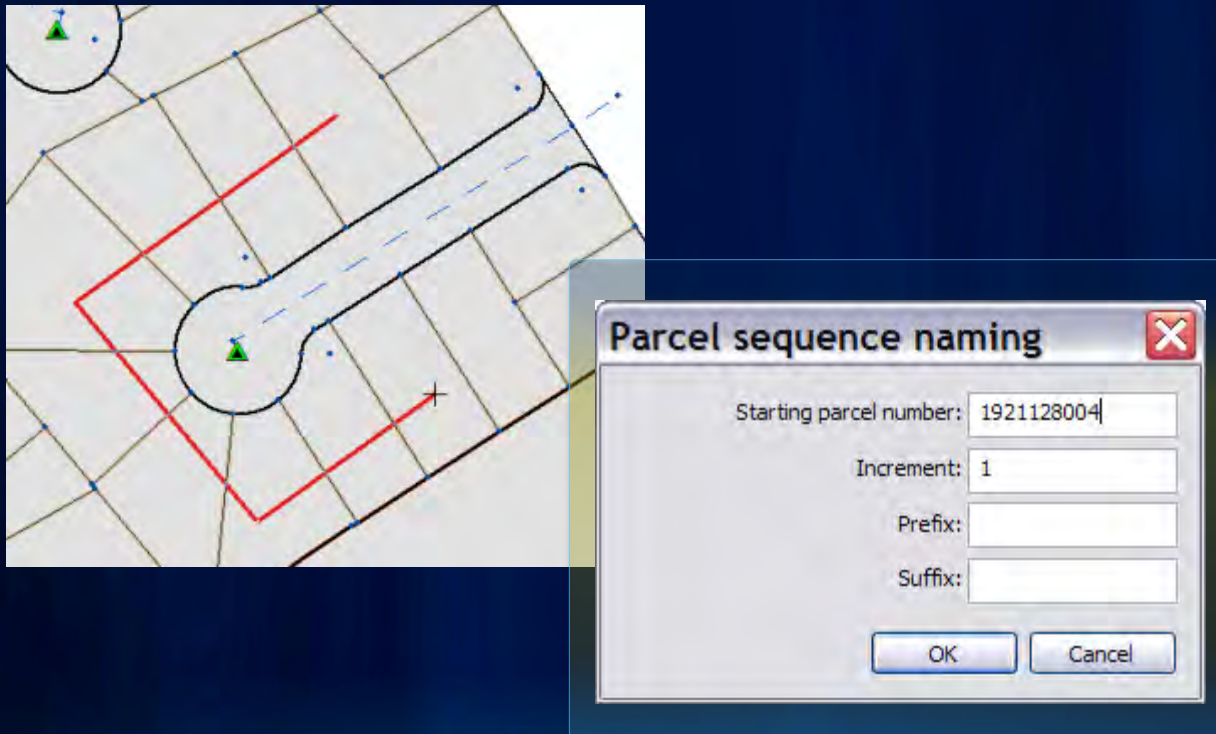
- A section "Choose the target for the new parcels:" with two buttons: "Plan..." and "Template...".
- A text field next to "Plan..." containing "Map 8613".
- A checkbox labeled "Parcels" which is currently unchecked.
- A section "Divide this parcel" with a dropdown menu. The menu is open, showing four options: "into equal areas", "in equal widths", "by proportional area", and "into equal areas". The first and last options are identical.
- To the right of the dropdown menu, the text "Misclose: 0.0134 ftus" and "Area: 1.078 a" is displayed.
- A label "Number of parts:" followed by a numeric input field containing the value "2" and up/down arrow buttons.

Part of the NW $\frac{1}{4}$ Section 20, Township 2 North, Range 10 East, Bloomfield TWP, Oakland Co. Michigan. Further described as the **East half of Lot 3**, Supervisor's Plat of North Devon Acres recorded March 30th, 1949.



Streamlined Workflows – Naming Parcels

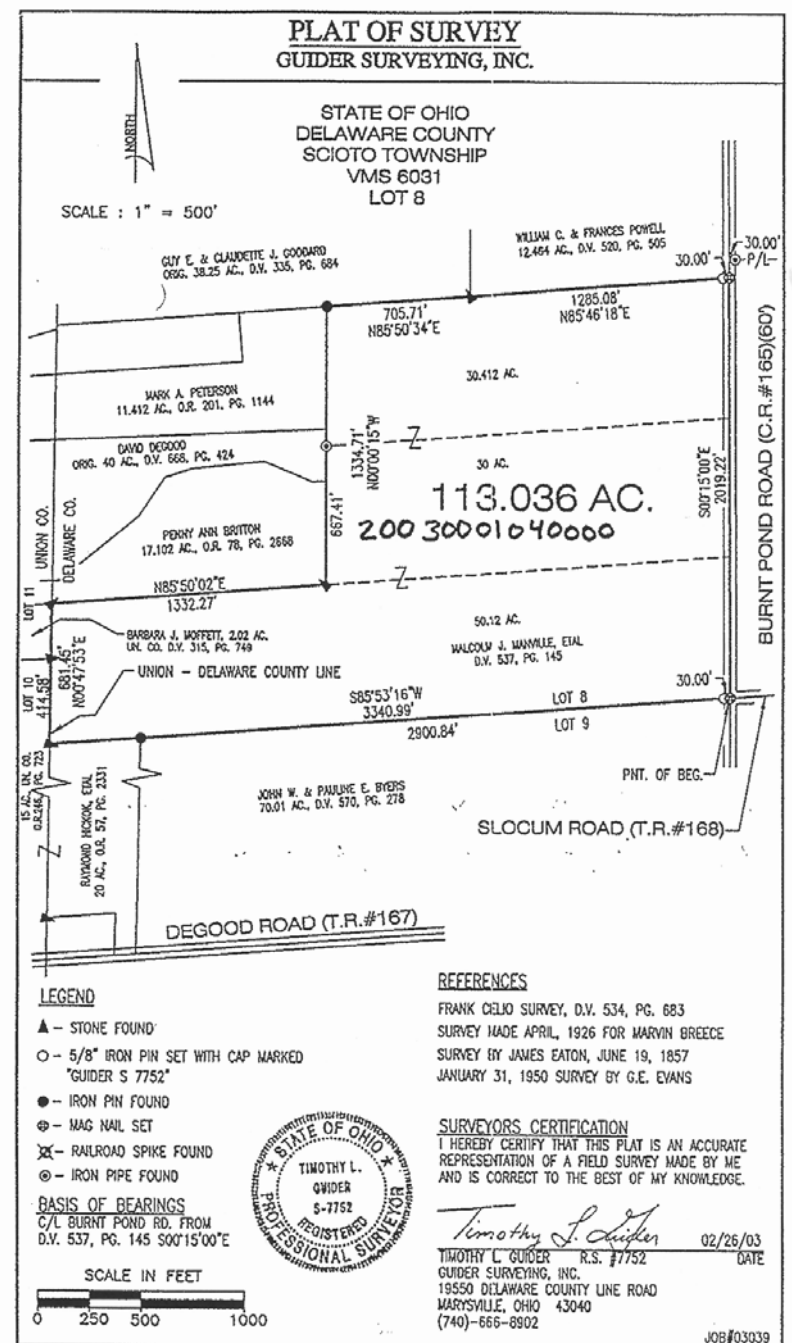
- Parcel Namer aka “Snake” tool



Anatomy of a Parcel

- Parcel is an area of land

Parcel polygon

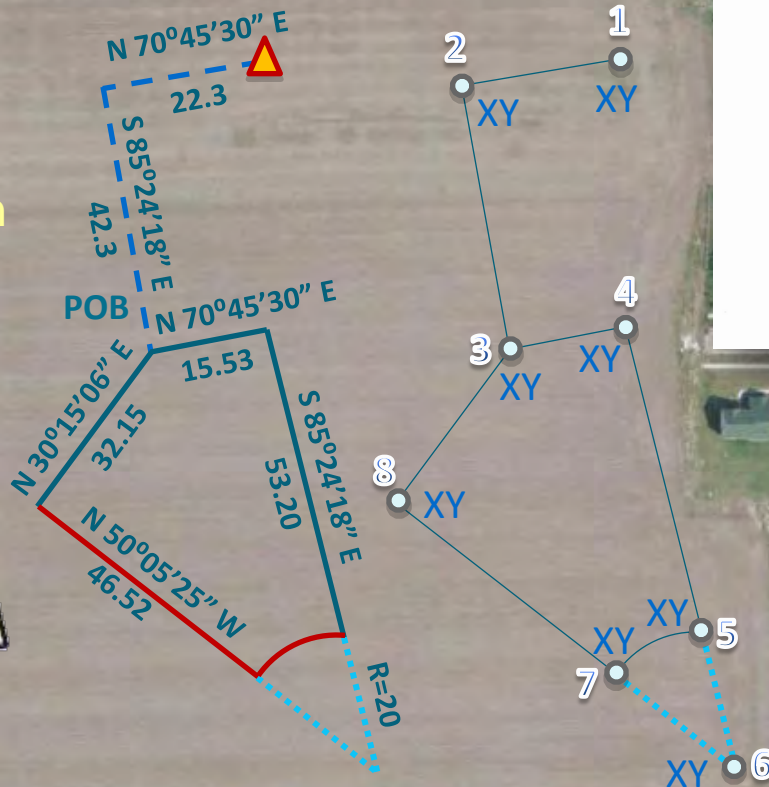


- **Parcel is an area of land**
 - Related set of lines
 - Defined by From/To Points

- **Parcel is an area of land**
 - Related set of lines
 - Defined by From/To Points



Phase 06
93



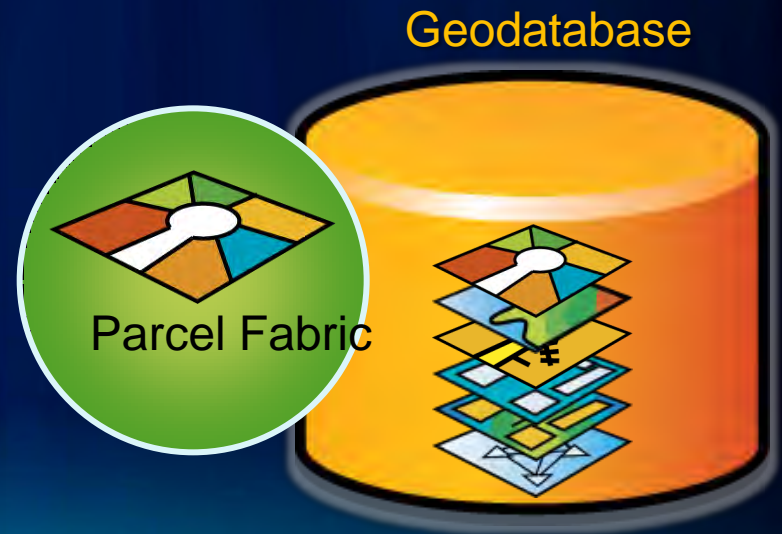
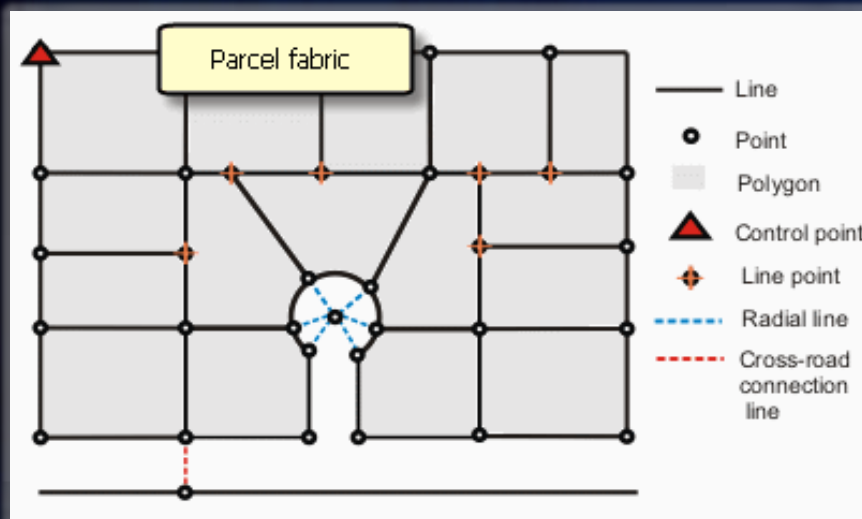
- ▲ - STONE FOUND
- - 5/8" IRON PIN SET WITH CAP MARKED
"GUIDER S 7752"
- - IRON PIN FOUND
- ⊕ - MAG NAIL SET
- ⌘ - RAILROAD SPIKE FOUND
- ◎ - IRON PIPE FOUND

BASIS OF BEARINGS
C/L BURNT POND RD. FROM
D.V. 537, PG. 145 S00°15'00"E



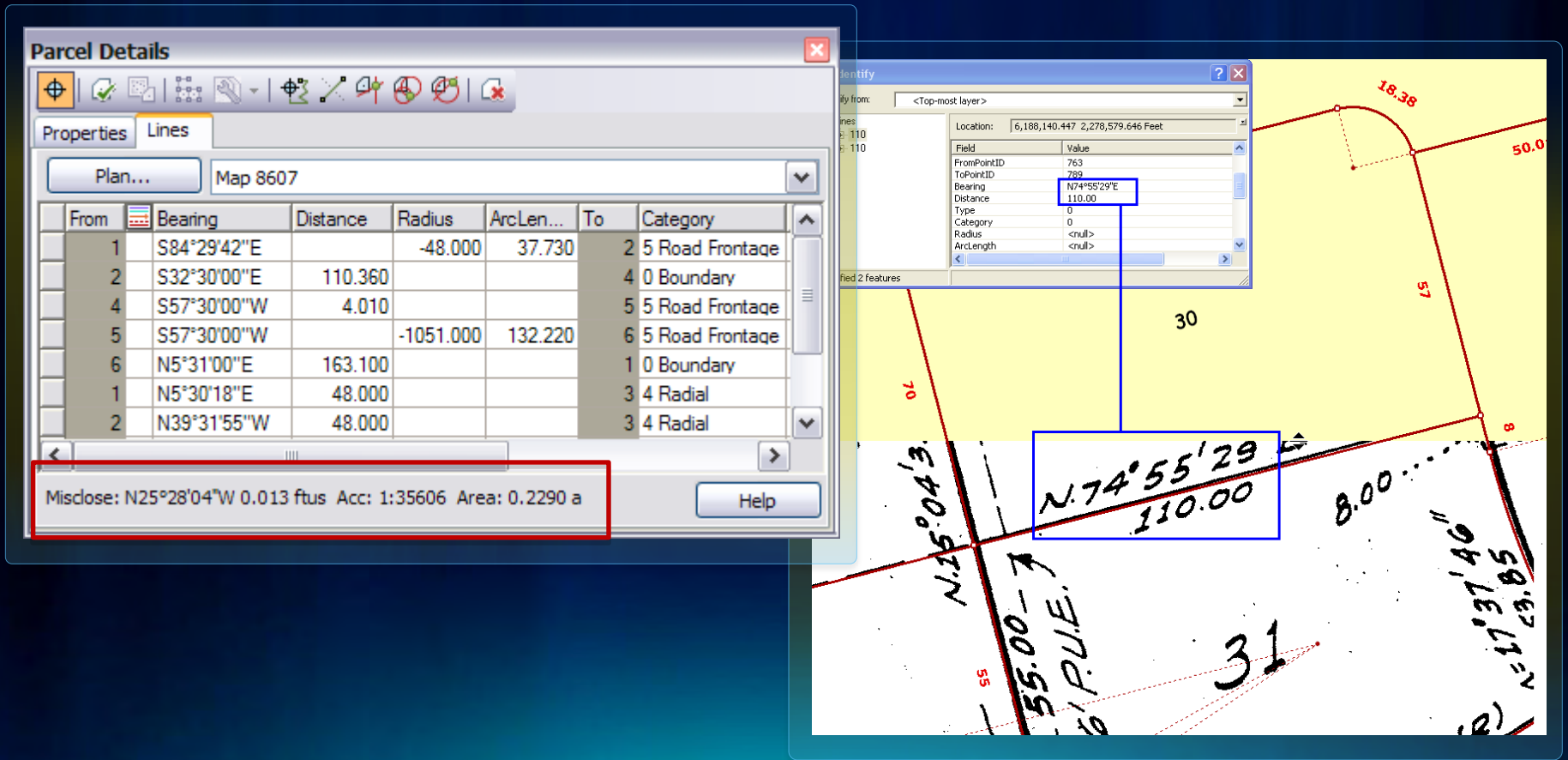
What is a Parcel Fabric?

- Set of **related tables** and **feature classes** stored in a geodatabase
- Forms a **parcel boundary network**
- **Explicit topology**
 - defined by **common parcel corners**, no overlaps and gaps between neighboring parcels



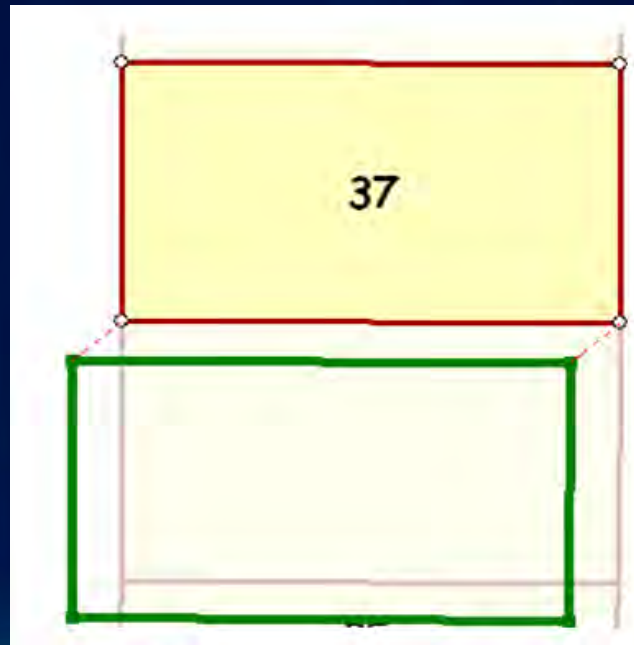
Maintaining Parcel Data Accuracy in ArcGIS 10

- **Attribute data – correct dimensions**
 - Data entry, parcel misclose



Maintaining Parcel Data Accuracy in ArcGIS 10

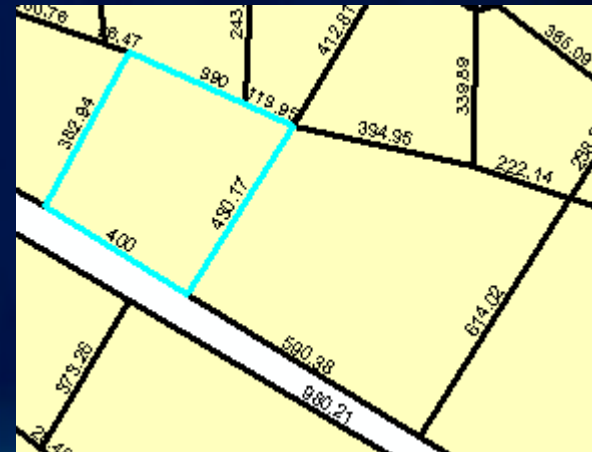
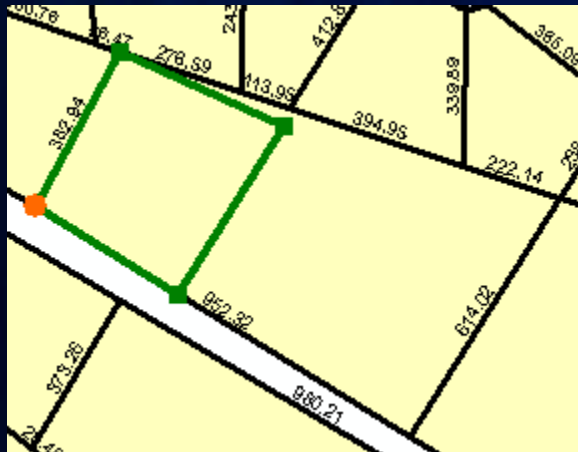
- **Topological accuracy**
 - Parcels are joined using shared points



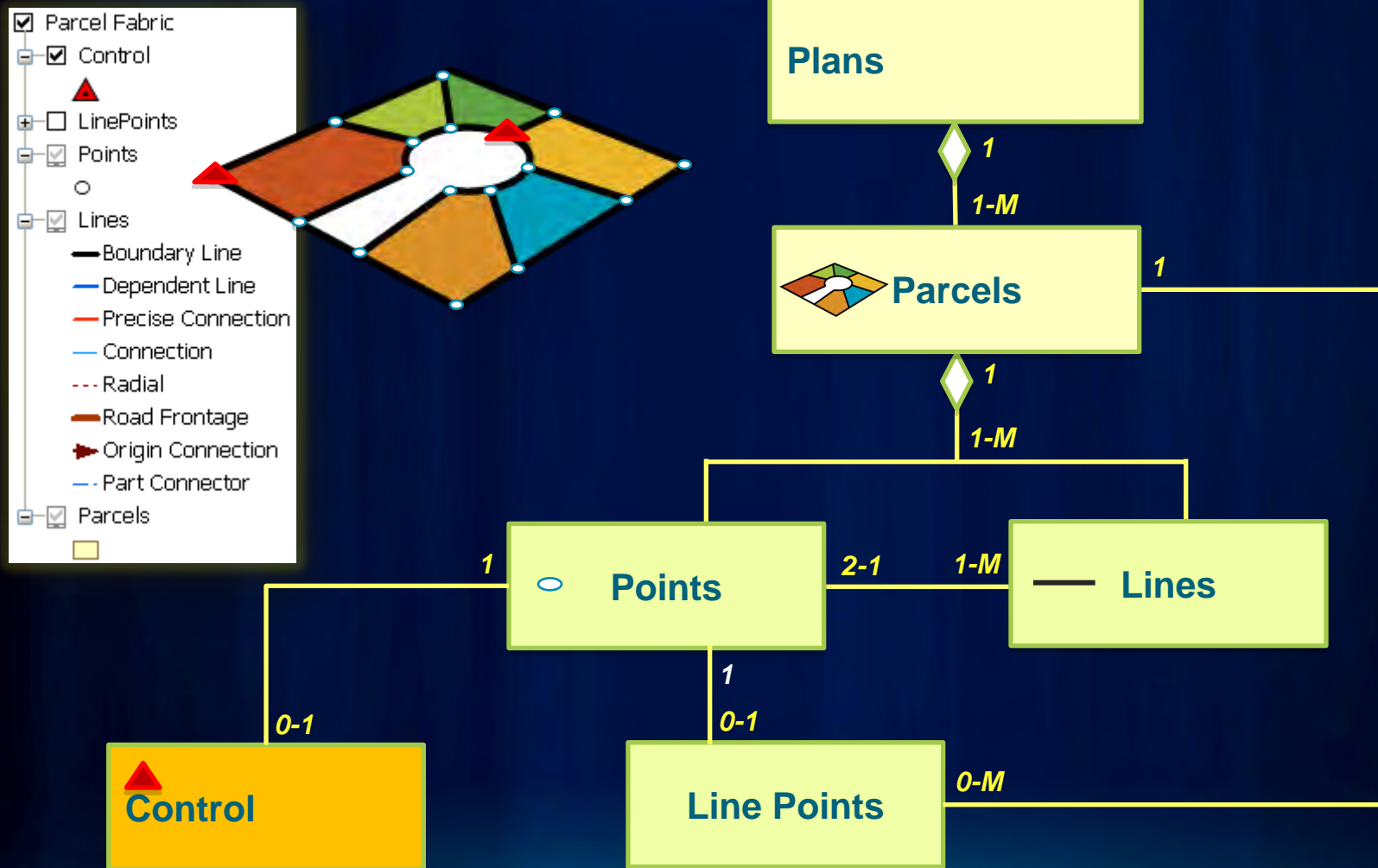
Data Integrity

Eliminate slivers and gaps

- Easily and quickly incorporate new data
- Preserve parcel connectivity during incorporation
- Maintain positional relationships with other layers (easement, right of ways, utilities, etc.)

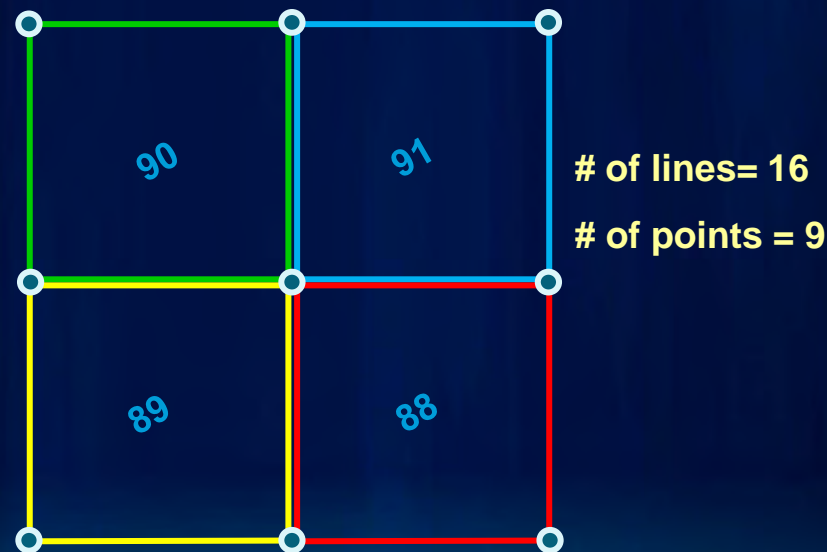


Data Model : Relationships



Data Model : Redundancy supports Spatial Quality

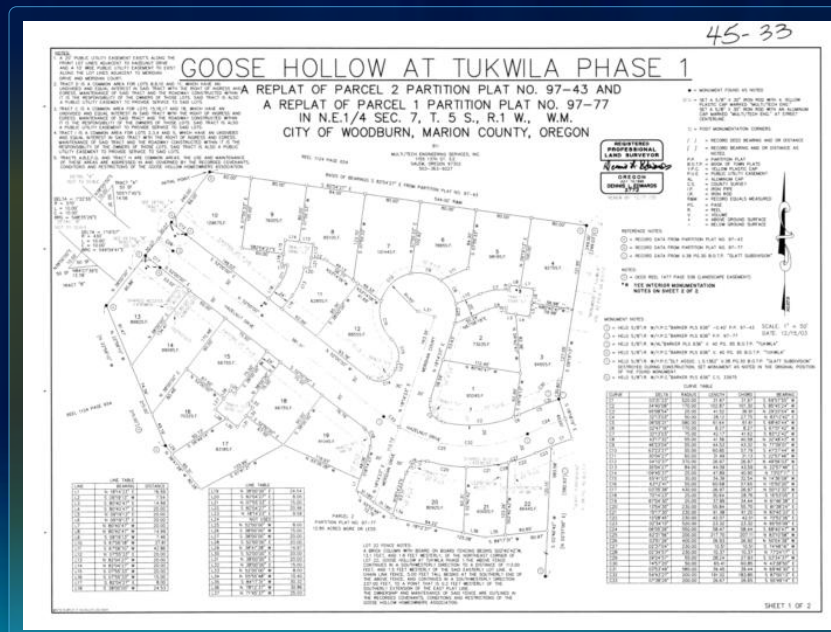
- Each parcel has its own set of related lines
 - Overlapping lines for a common boundary
- Redundant network
 - More boundary lines define relatively fewer points



Data Model

- Fabric allows overlapping parcels
- Natural boundaries
- Donut/island and multipart parcels
- Historic parcels





Break



**Modeling and
Analysis**



**Design and
Planning**



Asset Management



**Situational
Awareness**



Field Collection



Cartographic Design



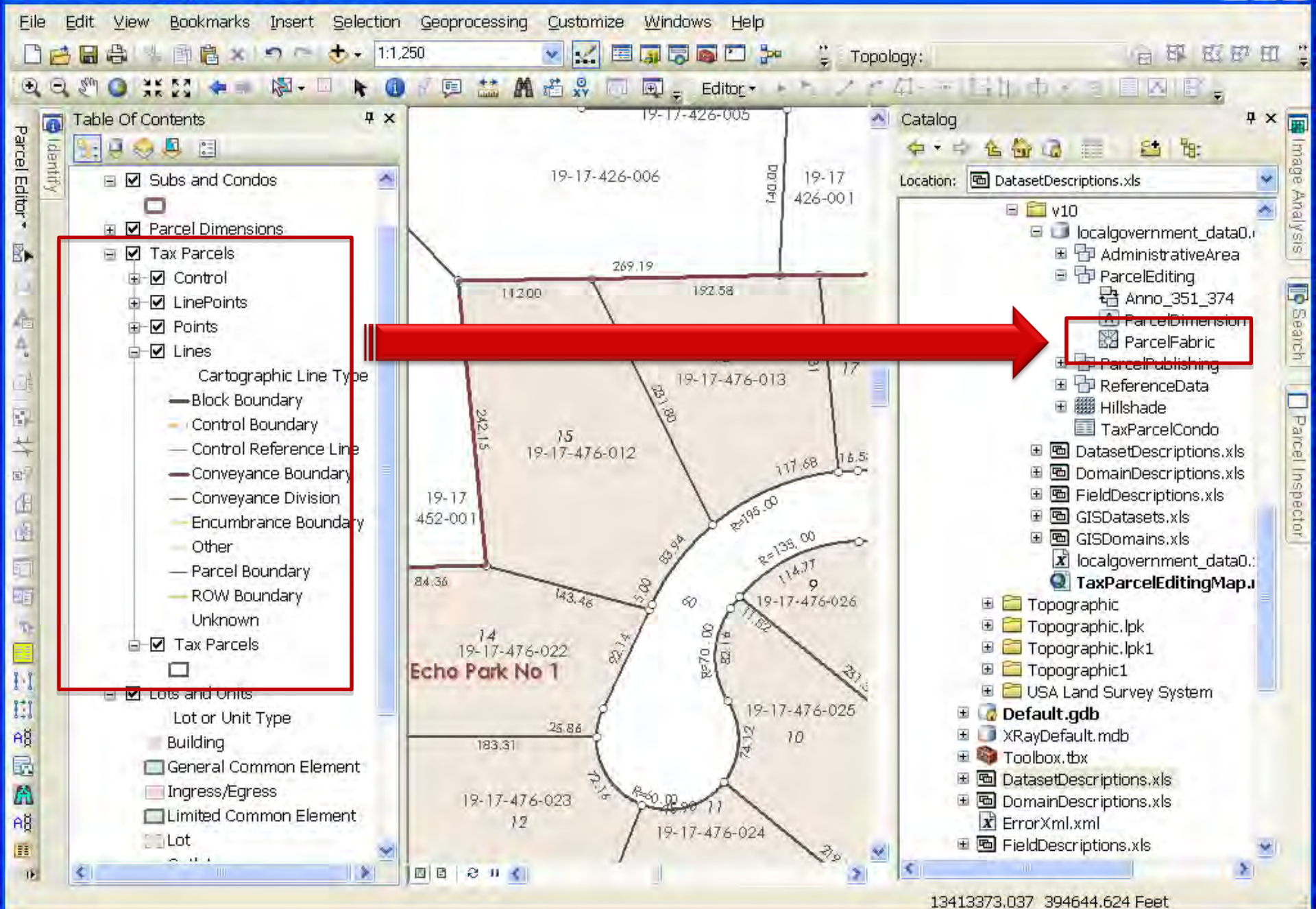
**Collaboration
and
Transparency**



esri

Remaining Agenda

- **Asset Management**
 - Parcel types
 - Workflow Manager
 - Task Assistant
- **Other Patterns**
 - Field Mobility
 - Planning and Analysis
 - Situational Awareness
 - Constituent Engagement
- **Implementation**
- **Final Thoughts**

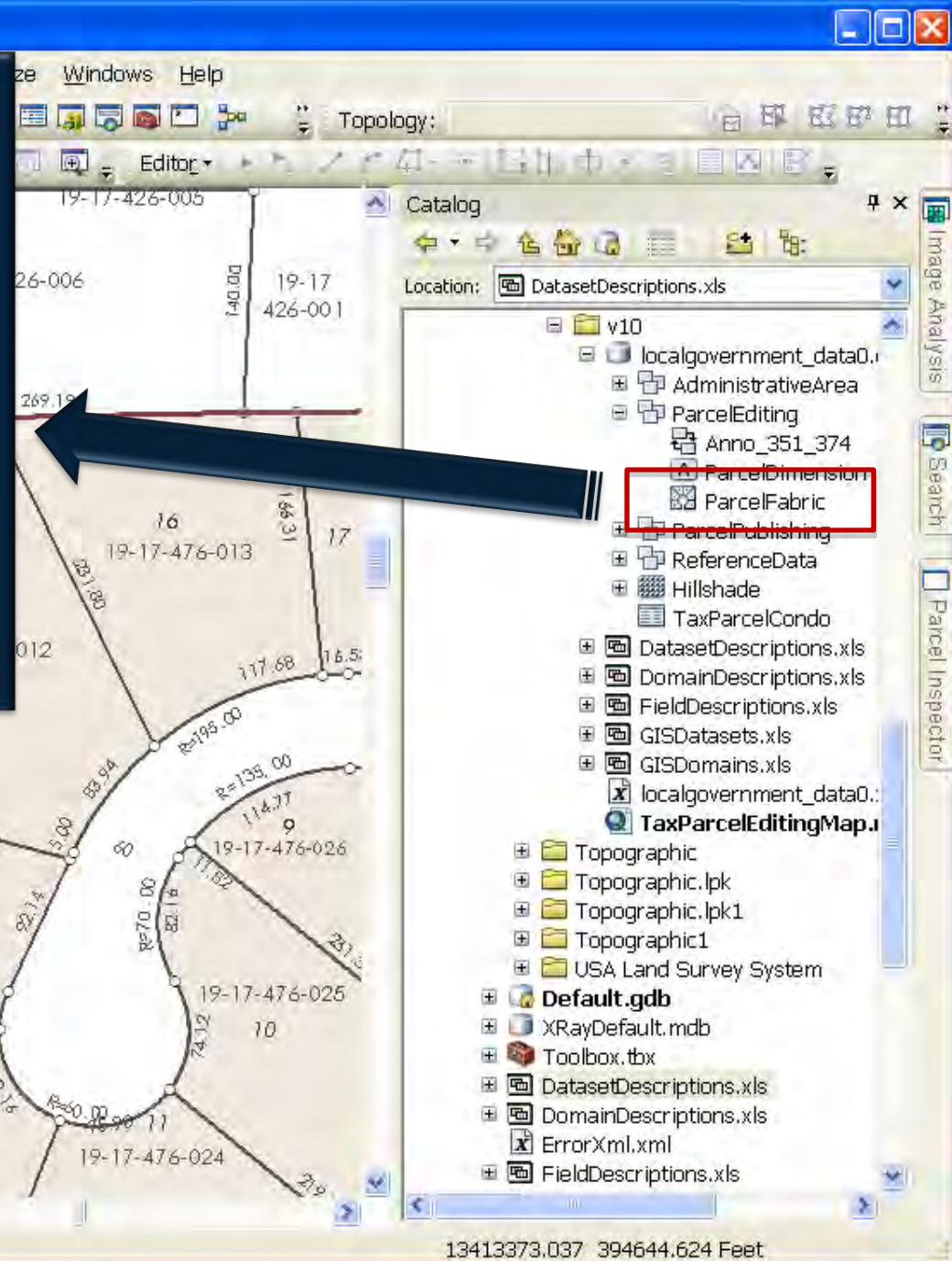


ParcelType Domain

- 1 PLSS Township
- 2 PLSS Section
- 3 PLSS Quarter Section
- 4 Special Survey
- 5 Simultaneous Conveyance
- 6 Conveyance Division
- 7 Tax
- 8 Ownership
- 9 Encumbrance
- 10 Separated Right
- 11 Other

- Conveyance Division
- Encumbrance Boundary
- Other
- Parcel Boundary
- ROW Boundary
- Unknown
- ☒ Tax Parcels
- ☐ Lots and Units
 - Lot or Unit Type
 - Building
 - General Common Element
 - Ingress/Egress
 - Limited Common Element
 - Lot

Echo Park No 1



Tax Parcels

Table Of Contents

- Subs and Condos
- Parcel Dimensions
- Tax Parcels
 - Control
 - Active
 - Inactive
 - Active
 - LinePoints
 - Points
 - Lines
 - Cartographic Line Type
 - Block Boundary
 - Control Boundary
 - Control Reference Line
 - Conveyance Boundary
 - Conveyance Division
 - Encumbrance Boundary
 - Other
 - Parcel Boundary
 - ROW Boundary
 - Unknown
- Tax Parcels (highlighted with red circle and green arrow)
- Lots and Units
 - Lot or Unit Type
 - Building
 - General Common Element
 - Ingress/Egress

Layer Properties

General Source Selection Display Symbology Fields **Definition Query** Labels Joins & Relates Time HTML Popup

Definition Query:

(SystemEndDate IS NULL) AND ("Type" = 7)

Query Builder...

ParcelType Domain

- 1 PLSS Township
- 2 PLSS Section
- 3 PLSS Quarter Section
- 4 Special Survey
- 5 Simultaneous Conveyance
- 6 Conveyance Division
- 7 Tax**
- 8 Ownership
- 9 Encumbrance
- 10 Separated Right
- 11 Other

Parcel Editor

- ☒ Subs and Condos
- ☐ Parcel Dimensions
- ☒ Tax Parcels
 - ☒ Control
 - Active
 - ☐ Inactive
 - Active
 - ☒ LinePoints
 - ☐ Points
 - ☐ Lines
 - Cartographic Line Type
 - Block Boundary
 - Control Boundary
 - Control Reference Line
 - Conveyance Boundary
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 - Unknown
 - ☒ Tax Parcels
- ☒ Lots and Units
 - Lot or Unit Type
 - Building
 - General Common Element
 - Ingress/Egress

Subs and Condos

Layer Properties

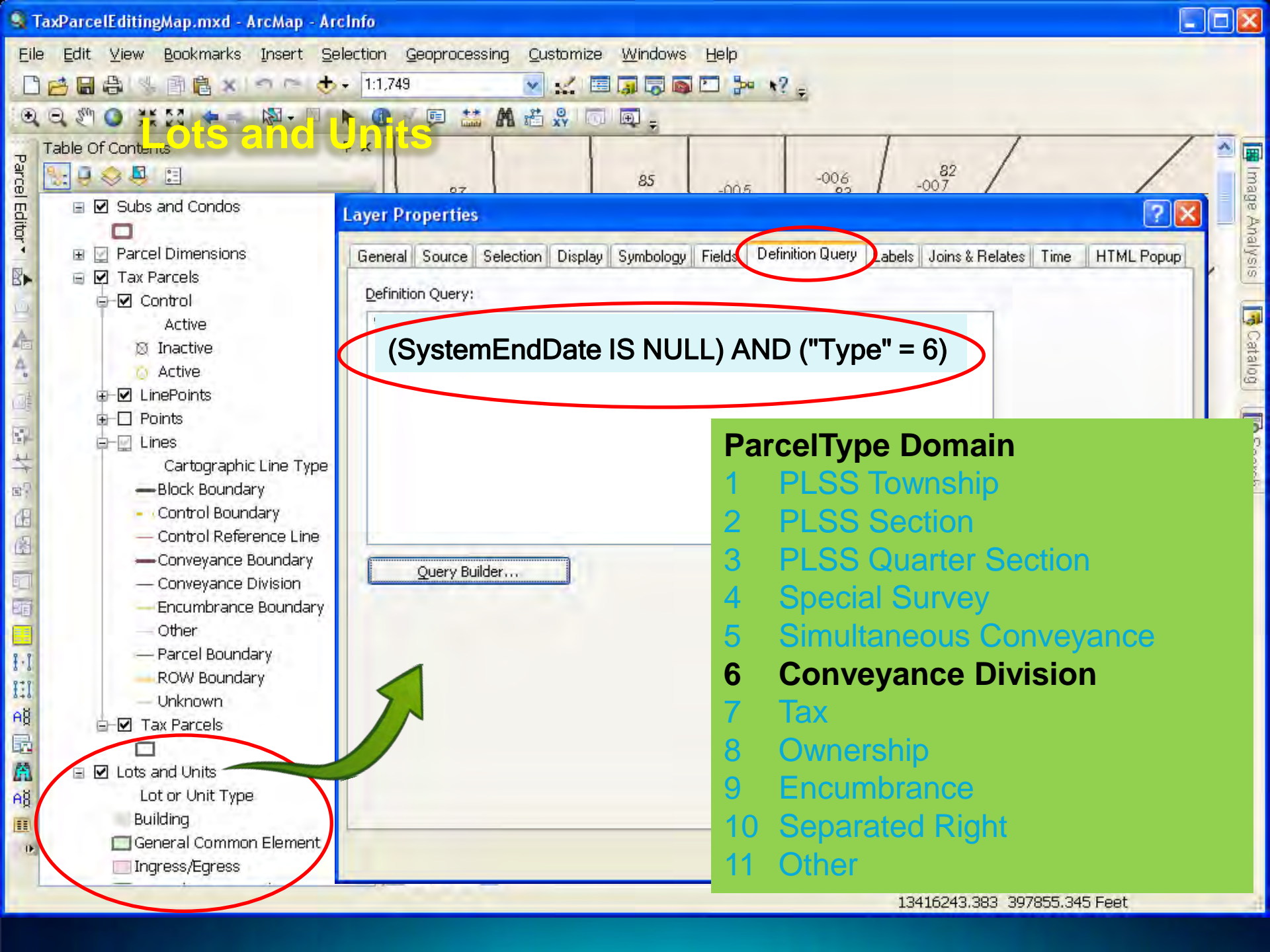
General Source Selection Display Symbology Fields Definition Query Labels Joins & Relates Time HTML Popup

Definition Query:

(SystemEndDate IS NULL) AND ("Type" = 5)

ParcelType Domain

- 1 PLSS Township
- 2 PLSS Section
- 3 PLSS Quarter Section
- 4 Special Survey
- 5 Simultaneous Conveyance**
- 6 Conveyance Division
- 7 Tax
- 8 Ownership
- 9 Encumbrance
- 10 Separated Right
- 11 Other



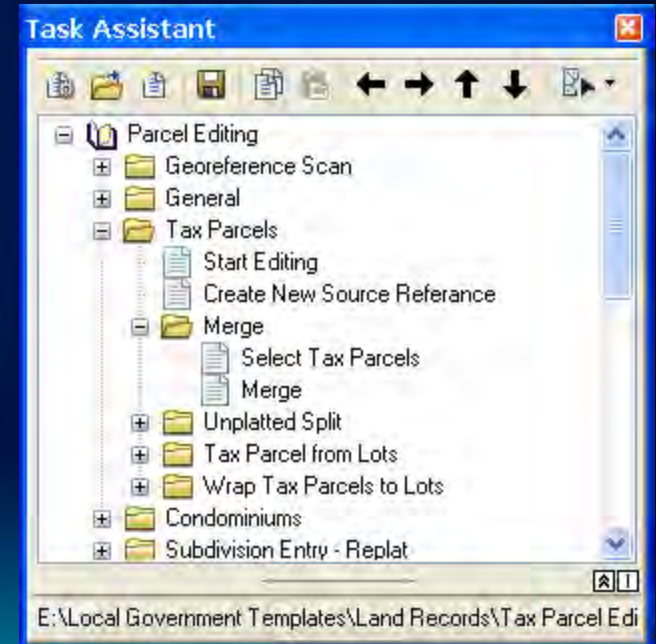
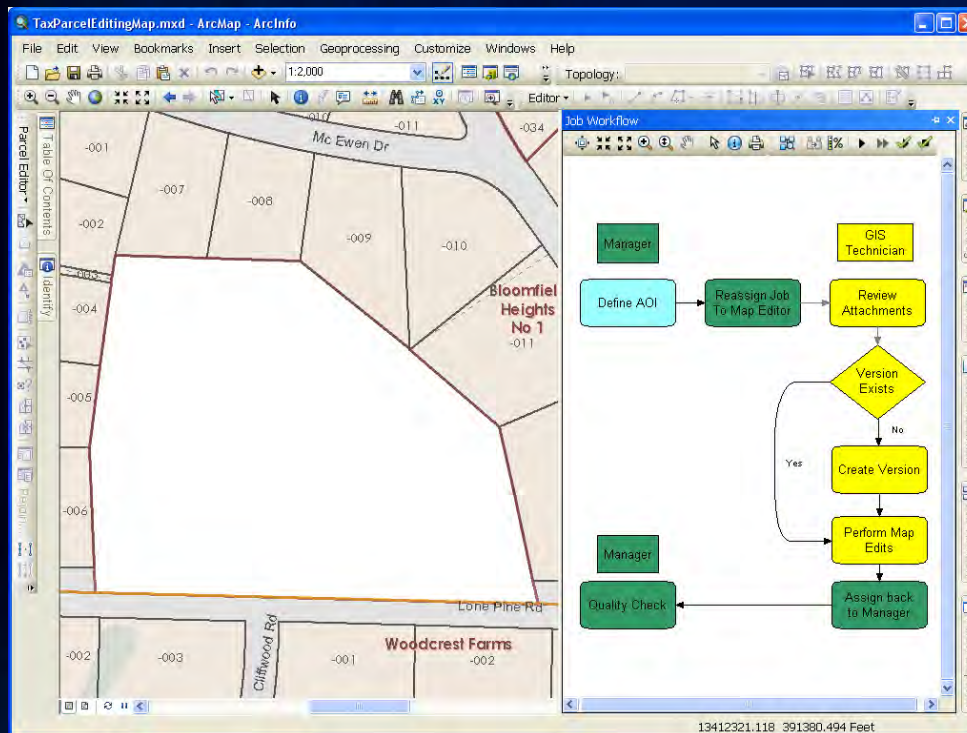
Lots and Units

(SystemEndDate IS NULL) AND ("Type" = 6)

- ParcelType Domain**
- 1 PLSS Township
 - 2 PLSS Section
 - 3 PLSS Quarter Section
 - 4 Special Survey
 - 5 Simultaneous Conveyance
 - 6 Conveyance Division**
 - 7 Tax
 - 8 Ownership
 - 9 Encumbrance
 - 10 Separated Right
 - 11 Other

ArcGIS Workflow Manager

- Enterprise workflow management application
- Key Features
 - Workflow management ; Job/Task tracking
 - User/Role/Version management



Jobs – Unit of Work

The screenshot displays the ArcGIS Workflow Manager application. On the left, a 'Jobs' tree shows a hierarchy of queries. The main area is divided into two panes: 'Job Query Results - List View' and 'Job Properties'.

Job Query Results - List View

ID	Name	Assigned To	Job Type
1	TRANS_JOB_1	TStark	Transportation Updates
3	HYDRO_JOB_3	BWayne	Hydrography Updates
5	HYDRO_JOB_5	PParker	Hydrography Updates
7	TRANS_JOB_7	BBanner	Transportation Updates
8	TRANS_JOB_8	MJWatson	Transportation Updates
9	TRANS_JOB_9	LLane	Transportation Updates
10	TRANS_JOB_10	MMurdock	Transportation Updates
401	HYDRO_JOB_401	student	Hydrography Updates

Job Properties

Created by student user on 8/26/2009 at 4:54 PM
Job ID: 8 Job Type: Transportation Updates

Job Status

Job Status: Editing Current Step: Edit Data
ADI Defined 30% Complete

Ownership Dates Data Workspace Description

Job Ownership

Job Owner: student user
Job Name: TRANS_JOB_8
Priority: Low
Parent Job:

Job Assignment

☒ User
☐ Group
☐ Unassigned
Mary Jane Watson

student user VMAP2TLM@localhost_sqlexpress 12 jobs found. 11:17 AM

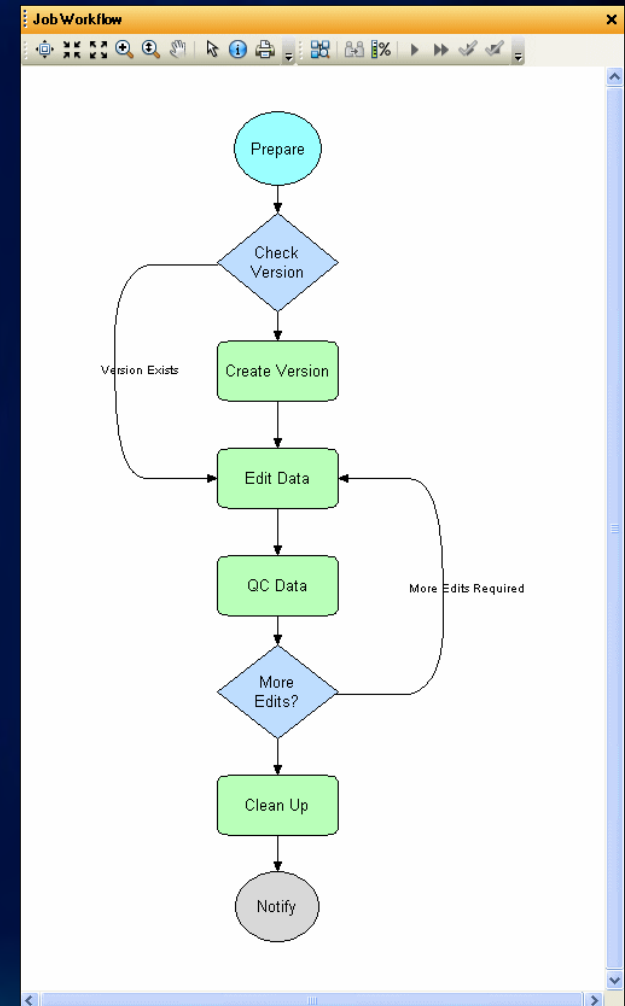
Job List

Job Queries

Job properties

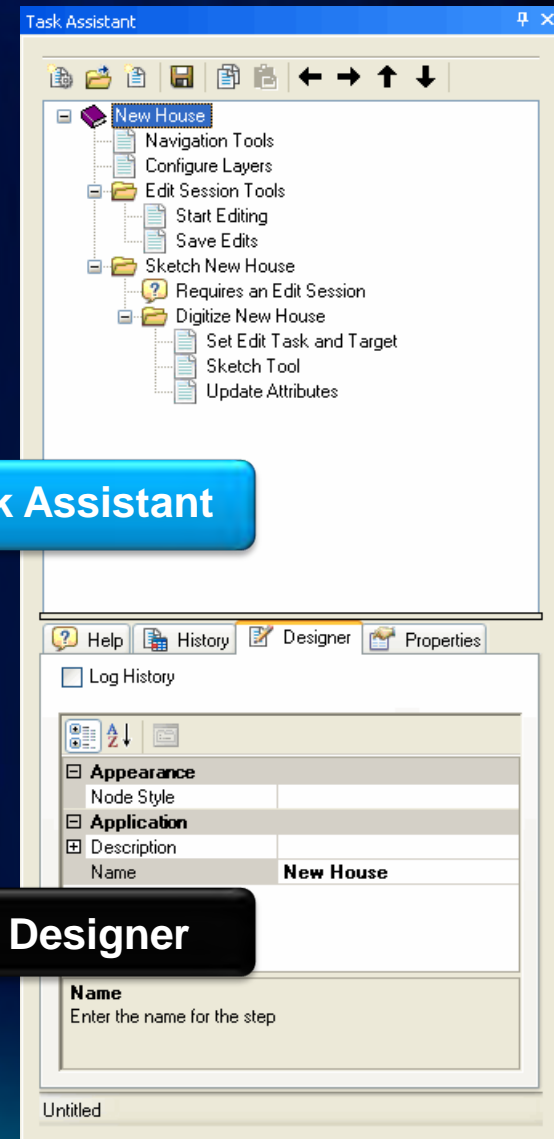
Workflows

- Defines steps/tasks that need to be completed
- Standardizes tasks
 - Create Job Types
- Supports:
 - Streamlining standardization of job tasks or steps
 - Visual task management and execution



Task Assistant

- Links a series of tasks together in a workflow
- Design step-by-step instructions
- Include ArcMap commands and geoprocessing tools
- Assists GIS users in completing workflow



Scope of Technology

The Workflow

Land Records Submitted to Agency

Agency Creates Digital Parcels

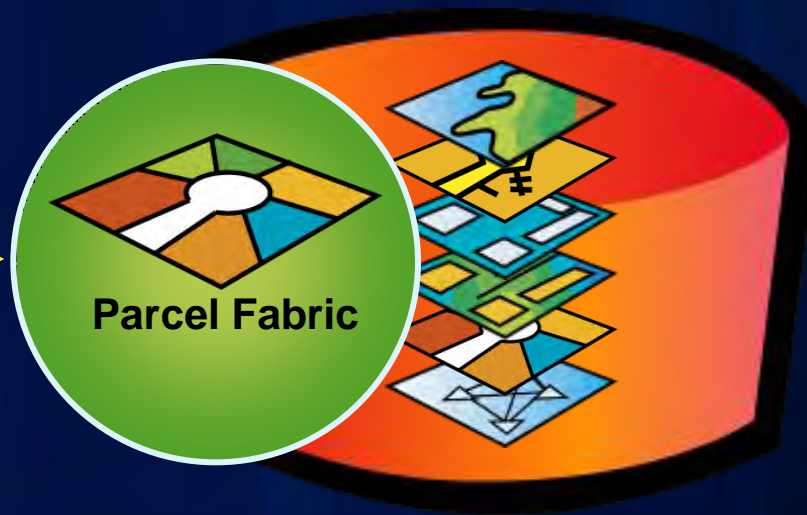
Integrate parcels with the existing Fabric

Adjust Fabric

Adjust other GIS Layers

A Framework for Parcel Information Management

Geodatabase



Adjustments

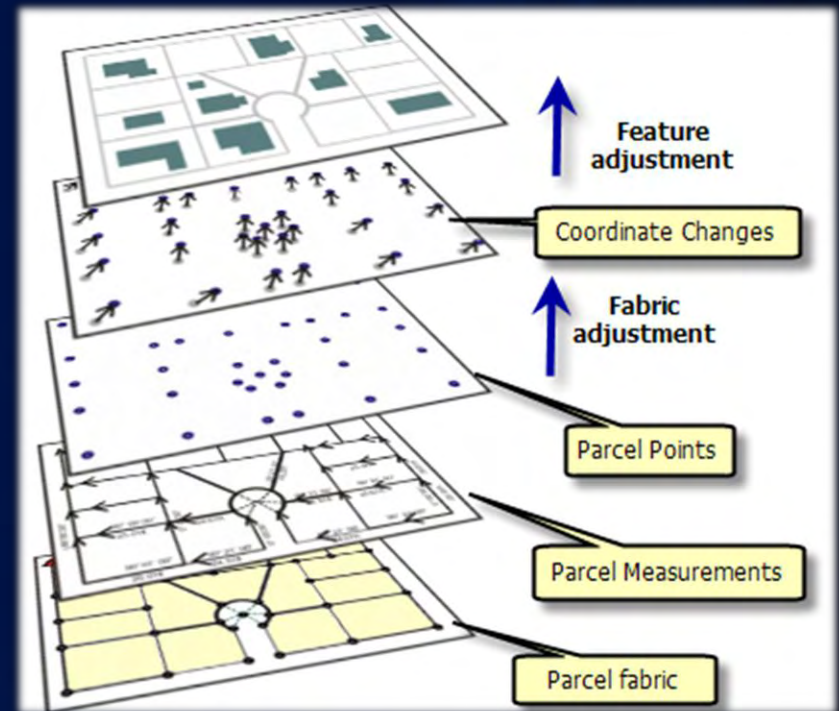
Two types of adjustments



**Fabric adjustment
(least-squares)**



Feature adjustment



ArcGIS 10

Foundation for Land Records Solutions

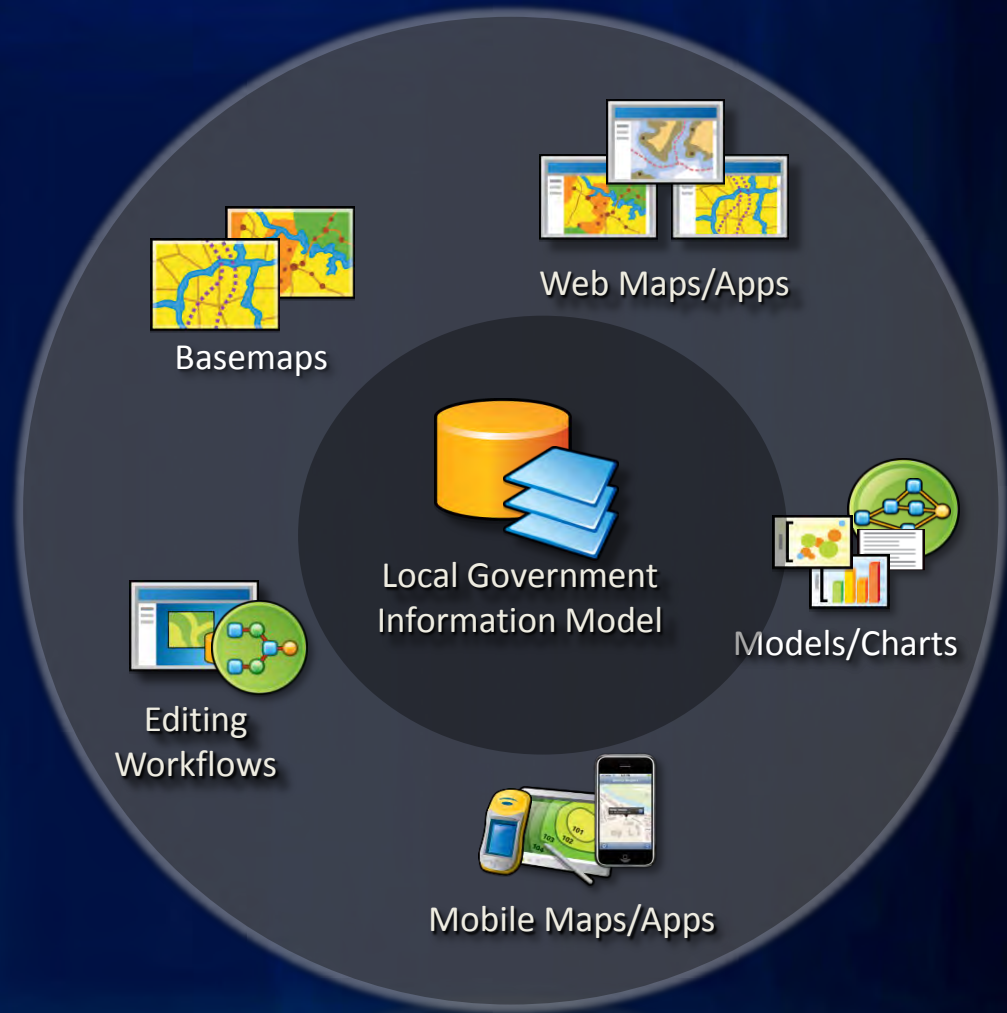
- ☑ Many new tools and templates are available for free at the Local Government Resource Center
- ☑ New Parcel management tools are now included within the ArcGIS Desktop
- ☑ Optimized geodatabase parcel fabric model
 - Streamlines parcel editing workflows
 - Integrated COGO and survey control capabilities
 - Provides for improved positional accuracy over time

Field Mobility

- Access to relevant information in the field improves productivity
- Efficient data collection workflows improves data quality
- Mobile technology is a great platform for public access applications

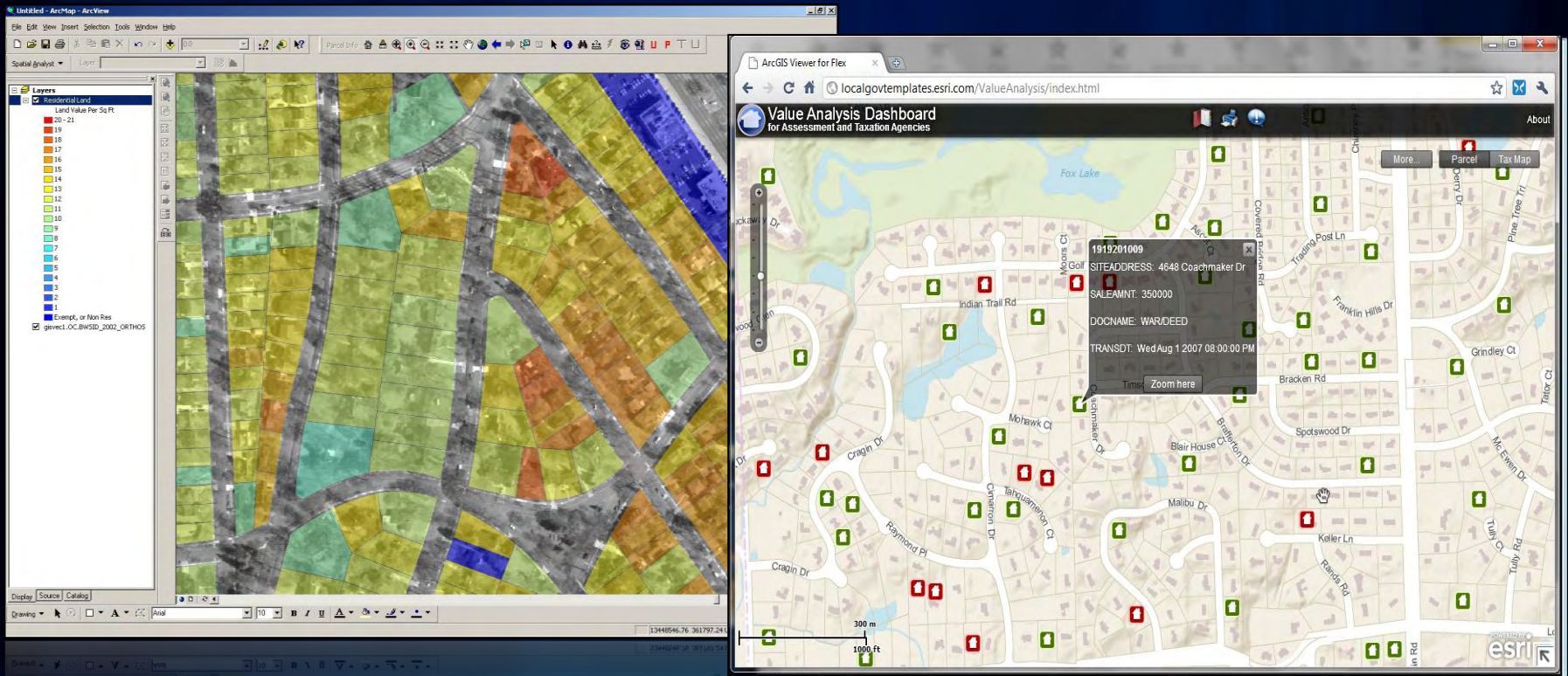


Demonstration



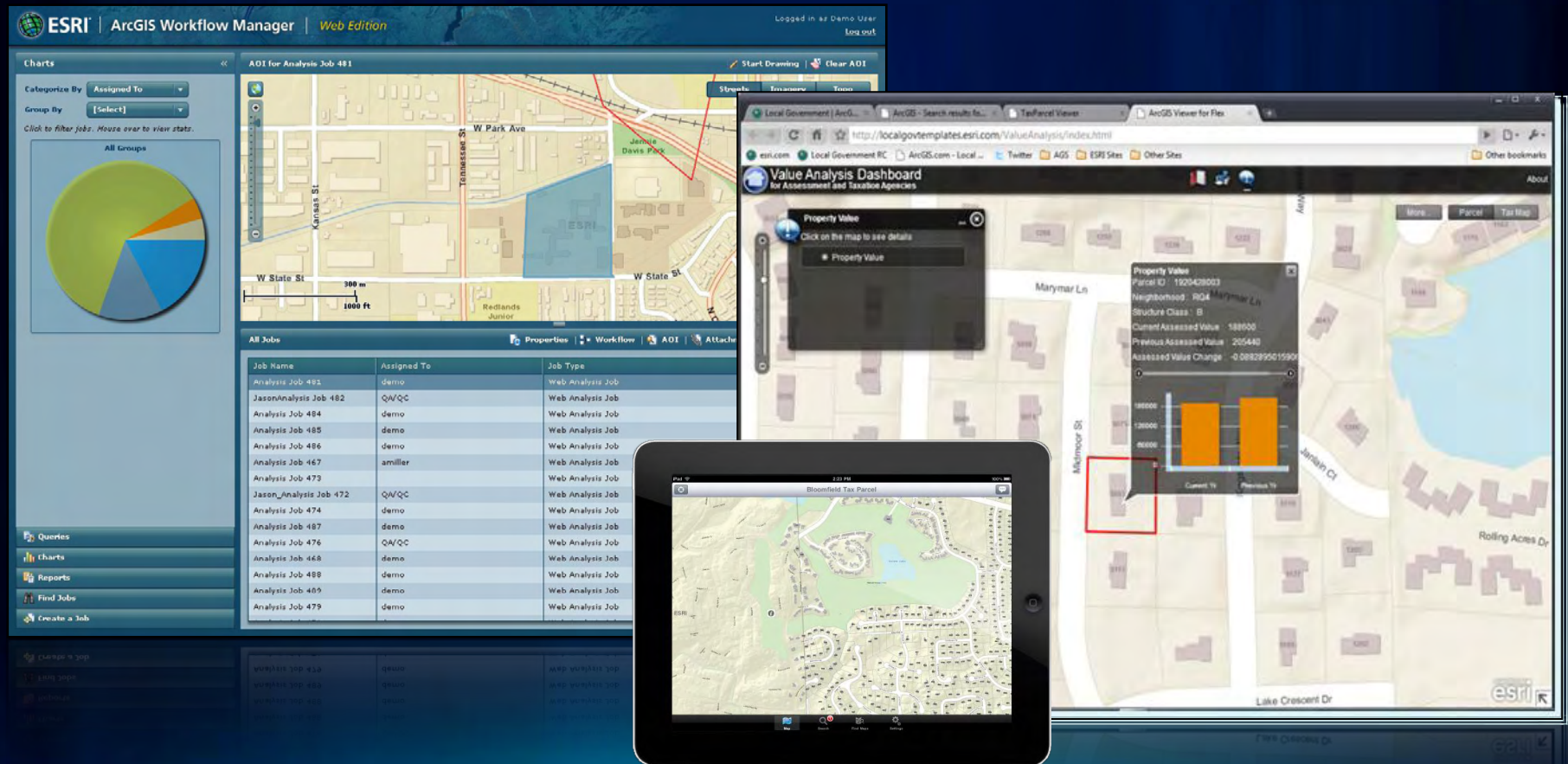
Planning and Analysis

- Visualize property characteristics and analyze trends
 - Integration with Assessment and Taxation systems
- Identify geographic influences on property value and land use



Operational Awareness

- Tools to manage the performance of your organization
 - Increase internal accountability and transparency



Constituent Engagement

- Provides access to authoritative land records information
- Invokes feedback from constituents

The image displays a web application interface for constituent engagement, featuring two main components: a Land Use Public Comment portal and a TaxParcel Viewer.

Land Use Public Comment Portal:

- Page 27 - Agenda Item B.3:** Naperville Downtown 2030 Plan Commission Agenda Item.
- Case Number:** 10-1-114
- Case Name:** Naperville City Hall
- Hearing Date:** Sep 14 2011
- Case Description:** Naperville 2030 is an update to the Master Plan and includes recommendations related to transportation, parks, and urban design.
- Case Type:** Regulatory Change
- Case Status:** Plan Commission Review
- Background:** It has been about two years since the last plan for Downtown Naperville was adopted. In that decade, the city has seen a significant increase in population and a corresponding increase in the number of people who live and work in the downtown area. The city is now looking for ways to make the downtown area more attractive and functional for its residents and visitors.

TaxParcel Viewer:

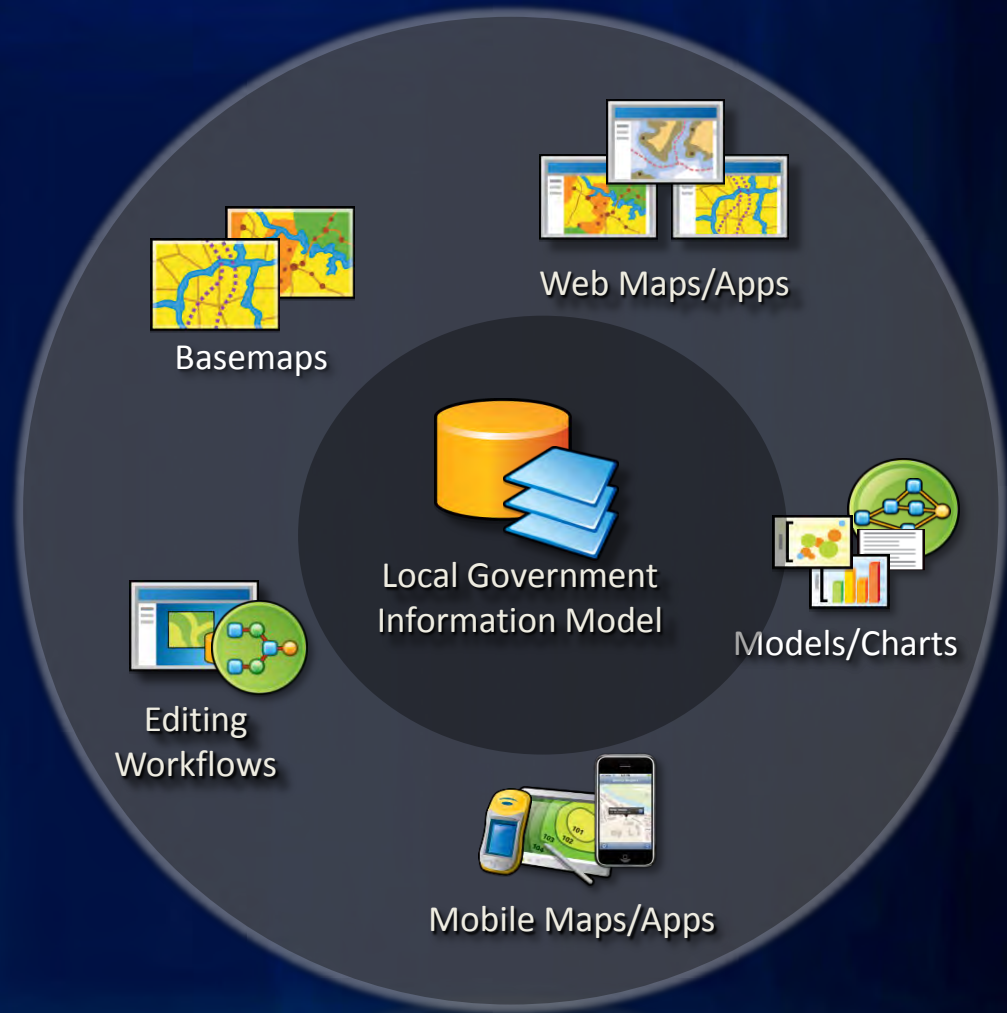
- Search:** sandhurst
- Parcel ID Address Table:**

Parcel ID	Address
1916452019	980 Sandhurst Rd
1916452020	968 Sandhurst Rd
1921201001	979 Sandhurst Rd
1921201002	967 Sandhurst Rd
1921201009	927 Sandhurst Rd
1921201010	905 Sandhurst Rd
1921202006	920 Sandhurst Rd
1921202007	900 Sandhurst Rd

- 927 Sandhurst Rd Details:**

Field	Value
TaxParcel ID	1921201009
Use Description	Residential Improved
Sub or Condo	Vernor Estates No 2
Building : Unit	Not Applicable
Tax District	Bloomfield Township
School District	Bloomfield Hills Schools
Owner Name	Terence Desmond
Structure Type	Colonial/2Sty
Floor Area (Res)	3,978 Square Feet
Assessed Value	\$ 298,950
Taxable Value	\$ 285,420
Current Taxes	\$ 9,983

Demonstration



Implementing the Land Records Solution

- **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

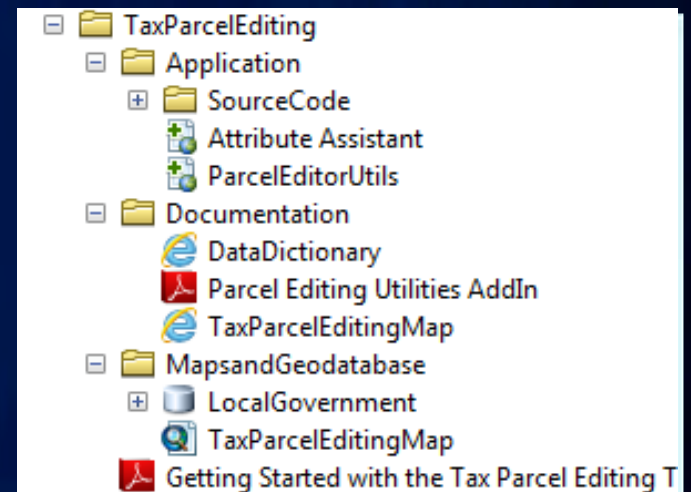
Business Needs

- **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 on the ArcGIS for Land Records system

Resource Center Content

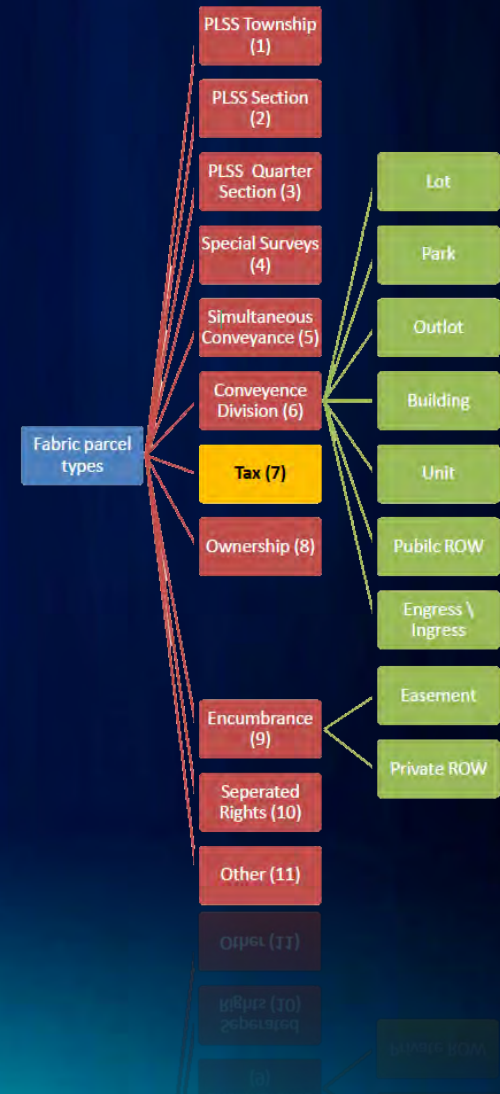
- Review template downloads, they include:
 - Maps and Geodatabase
 - Documentation
 - Application
 - Getting Started Document
- Watch the videos, read the blogs
- Work with sample data
- Review Local Government GDB
- Ask questions



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

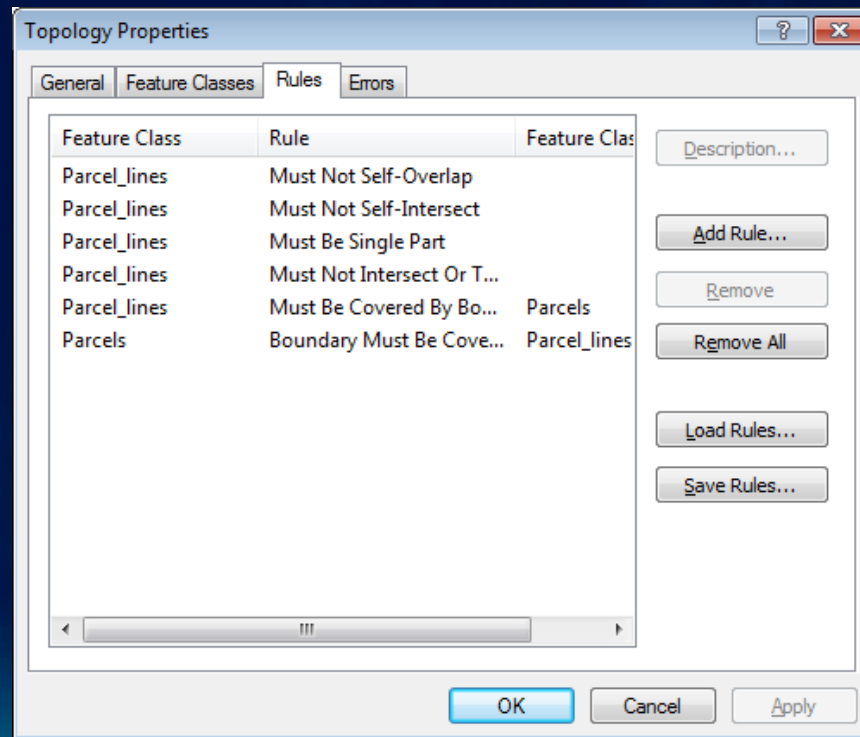


Scenario: Implement Tax Parcel Editing Template

- **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 different parcel types (lots, subdivisions, etc.)
 - Annotation

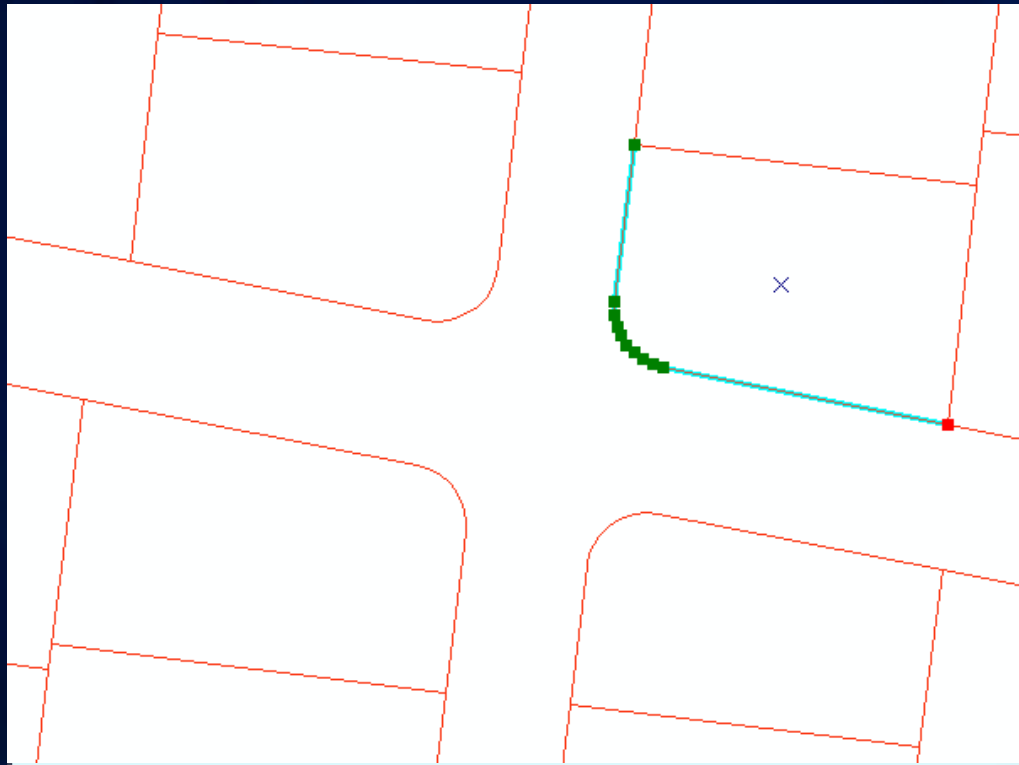
Scenario: Implement Tax Parcel Editing Template

- 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?

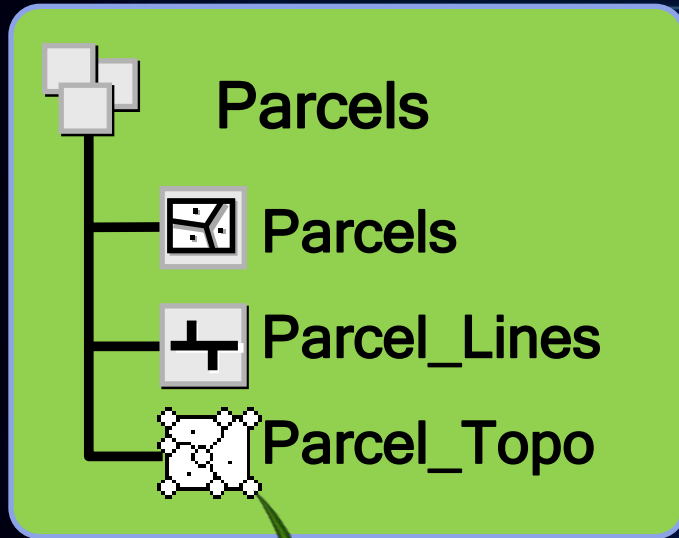


Scenario: Implement Tax Parcel Editing Template

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



Loading data into the Parcel Fabric Data Model

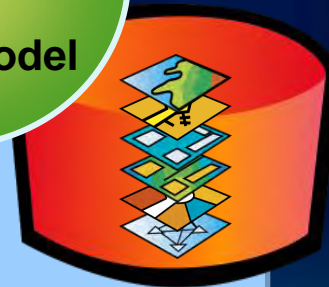


"Name" = Parcel_ID

"Type" = 7

ParcelType Domain

- | | |
|----------|-------------------------|
| 1 | PLSS Township |
| 2 | PLSS Section |
| 3 | PLSS Quarter Section |
| 4 | Special Survey |
| 5 | Simultaneous Conveyance |
| 6 | Conveyance Division |
| 7 | Tax |
| 8 | Ownership |
| 9 | Encumbrance |
| 10 | Separated Right |
| 11 | Other |



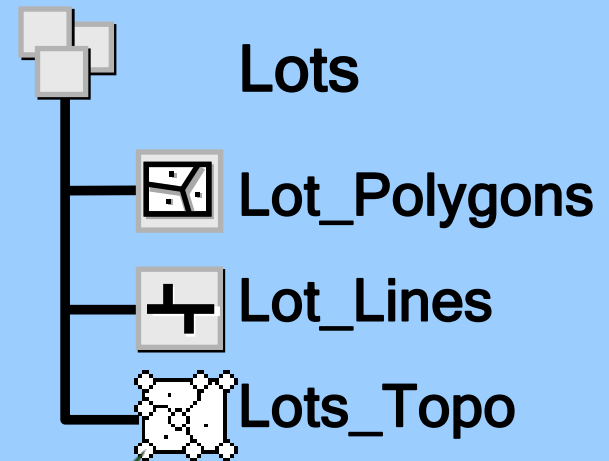
- Line—Must be Single Part
- Line—Must Not Self-Overlap
- Line—Must Not Self-Intersect
- Line—Must Not Intersect Or Touch Interior
- Line—Must be Covered by Boundary Of (polygon)
- Polygon—Boundary Must be Covered By (Line)

Loading data into the Parcel Fabric Data Model

"Name" = Lot_Number

"Type" = 6

"SimConDivType" = "Lot"

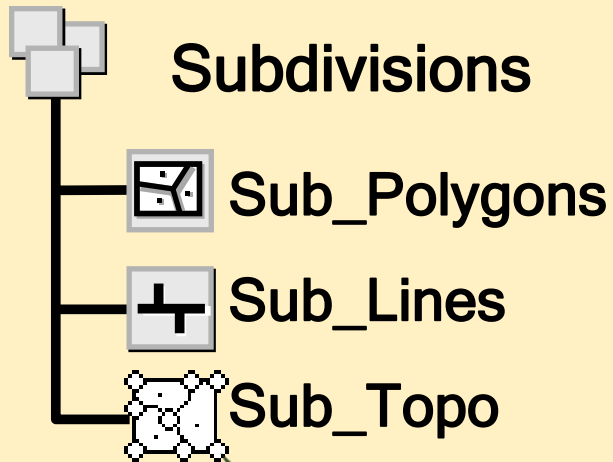


- Line—Must be Single Part
- Line—Must Not Self-Overlap
- Line—Must Not Self-Intersect
- Line—Must Not Intersect Or Touch Interior
- Line—Must be Covered by Boundary Of (polygon)
- Polygon—Boundary Must be Covered By (Line)

ParcelType Domain

- 1 PLSS Township
- 2 PLSS Section
- 3 PLSS Quarter Section
- 4 Special Survey
- 5 Simultaneous Conveyance
- 6 **Conveyance Division**

Loading data into the Parcel Fabric Data Model



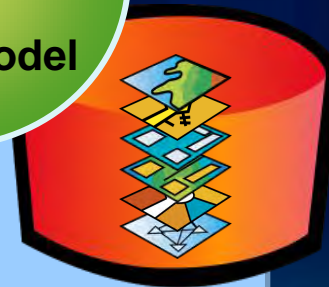
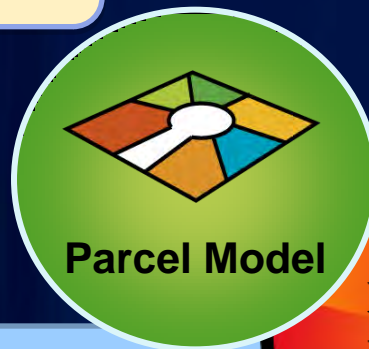
"Name" = Sub_Name

"Type" = 5

"ConveyanceType" = "Subdivision"

ParcelType Domain

- | | |
|---|--------------------------------|
| 1 | PLSS Township |
| 2 | PLSS Section |
| 3 | PLSS Quarter Section |
| 4 | Special Survey |
| 5 | Simultaneous Conveyance |
| 6 | Conveyance Division |



Geodatabase



- Line—Must be Single Part
- Line—Must Not Self-Overlap
- Line—Must Not Self-Intersect
- Line—Must Not Intersect Or Touch Interior
- Line—Must be Covered by Boundary Of (polygon)
- Polygon—Boundary Must be Covered By (Line)

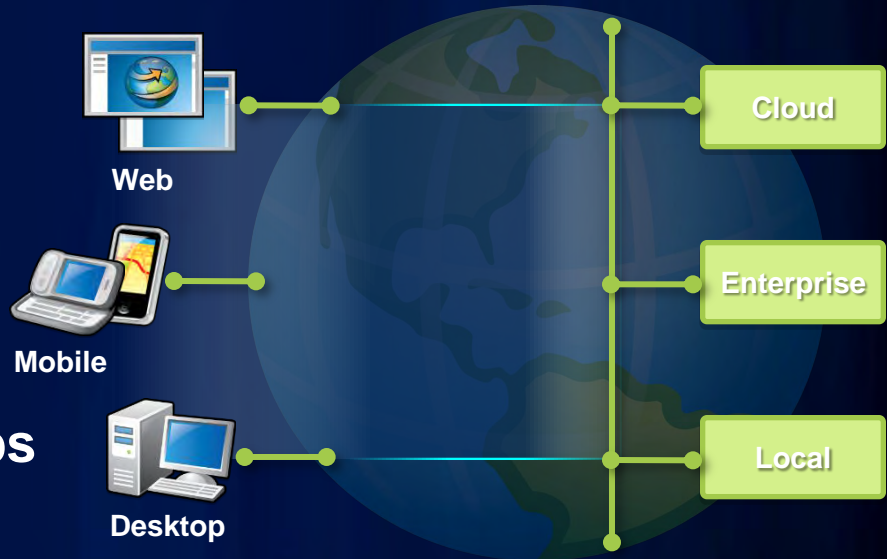
Scenario: Implement Tax Parcel Editing Template

- **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**

GIS is a *destination*

For accessing and using geographic information

- For **creating and sharing** intelligent maps and related geographic information.
- For **discovering and using** maps and geographic information



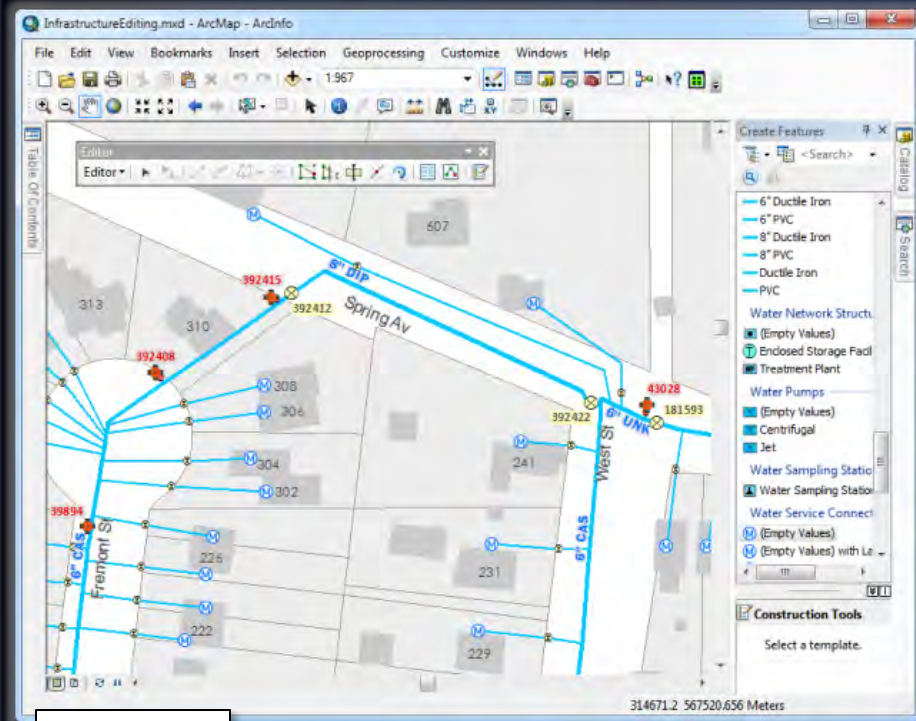
... Online

Using GIS maps

The map is the app

Professional GIS maps to share with
peers

Web maps to share with everyone



ArcMap



- Web
- Mobile
- Tablet
- Desktop

To share geographic data, editing, analysis, reporting, workflows, . . .

ArcGIS provides an information surface

Of useful maps and apps

Mobile
workforce



Web
communities



Developers



Professional staff



Use

Publish

An Information Surface

- Maps
- Apps
- Services

Author

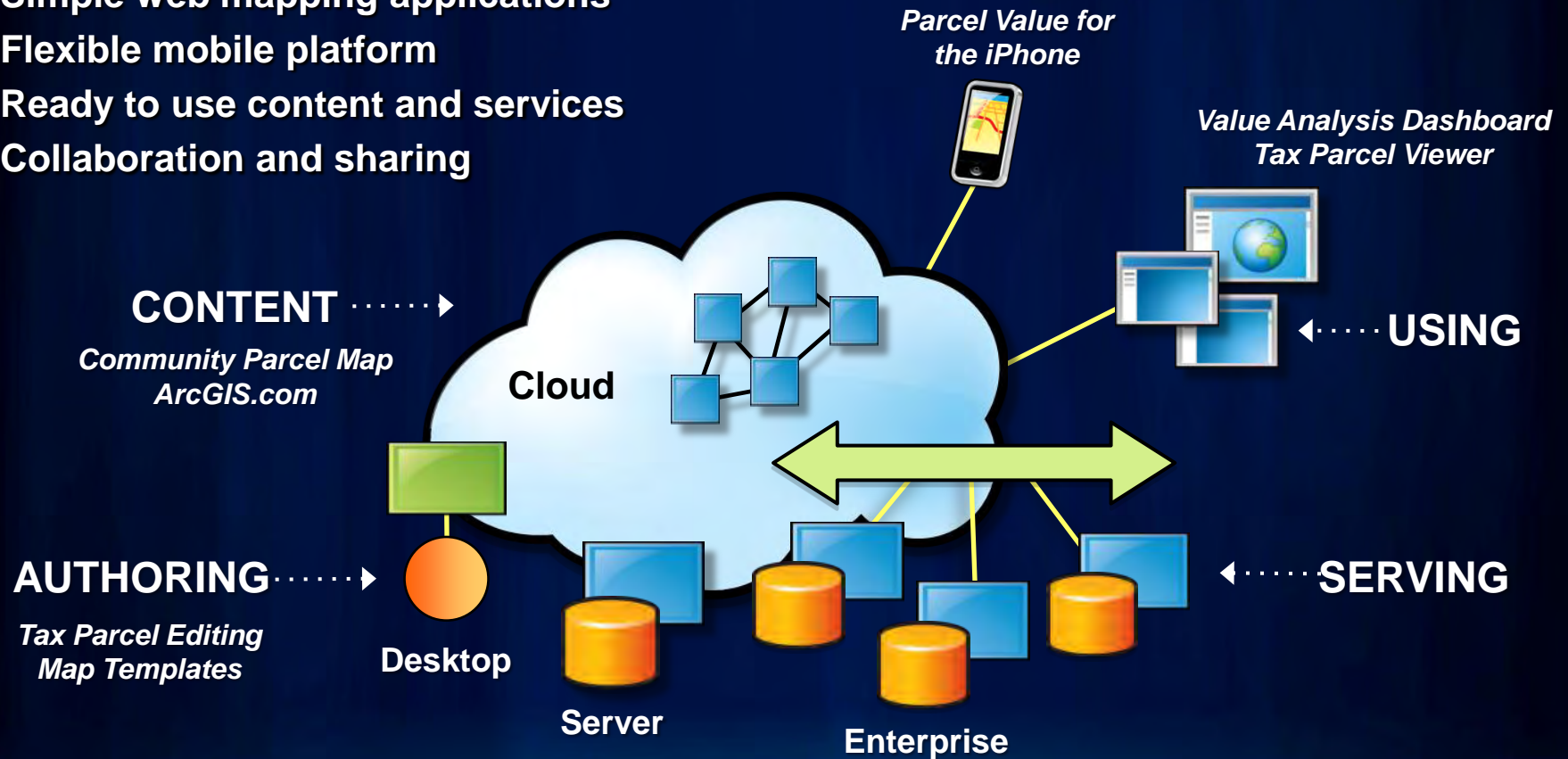
GIS “Back Office”



The ArcGIS for Land Records Solution

A scalable solution for your organization

- Robust desktop tools
- Simple web mapping applications
- Flexible mobile platform
- Ready to use content and services
- Collaboration and sharing



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Foundation for Land Records Solutions

Summary

- ☑ GIS can now be a destination for useful maps and apps
- ☑ Access to powerful planning and spatial analysis capabilities
- ☑ Full access to your data with Smart Phones and Mobile GIS
- ☑ New Generation of Web 2.0 capabilities that can provide easy near-real-time access to your land records data
- ☑ Citizen Engagement tools for transparent inquiry and feedback
- ☑ Enterprise Licensing provides simple low-cost access to the full range of ArcGIS tools
- ☑ Comprehensive application support from Esri and our Business Partners



esri