

The background is a complex geometric pattern of overlapping triangles in various shades of blue and purple. In the top-left corner, there is a small inset showing a map of land parcels, with one parcel highlighted in yellow and another in purple.

# Editing & Maintaining Parcels with ArcMap

Amy Andis  
Jason Camerano

# What to expect from this Tech Workshop

- **An introduction to the Parcel Fabric**
- **A detailed explanation of the Parcel Fabric Data Model**
- **General editing techniques using Parcel Editing tools**
- **Tips and tricks for data entry**

# Why use the Parcel Fabric?

- **Optimized Data Model for Maintaining Parcels**
- **Preserves original recorded information**
- **Ensures topology between parcels**
- **Supports Overlapping Parcels**
- **Maintain Historic Parcels**
- **Efficient workflows**
- **Adjust to Control Points**
- **Create a More Accurate parcel layer**



# Parcel Fabric Data Model

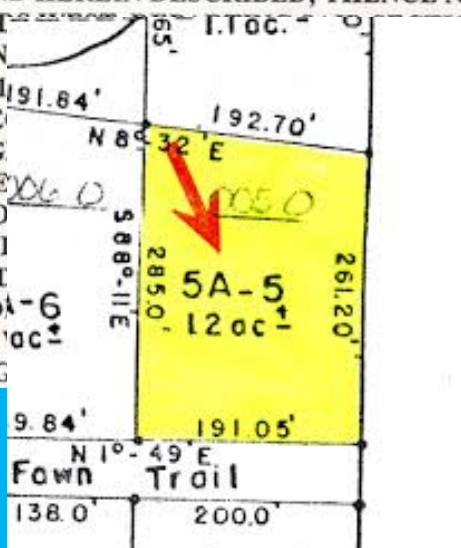
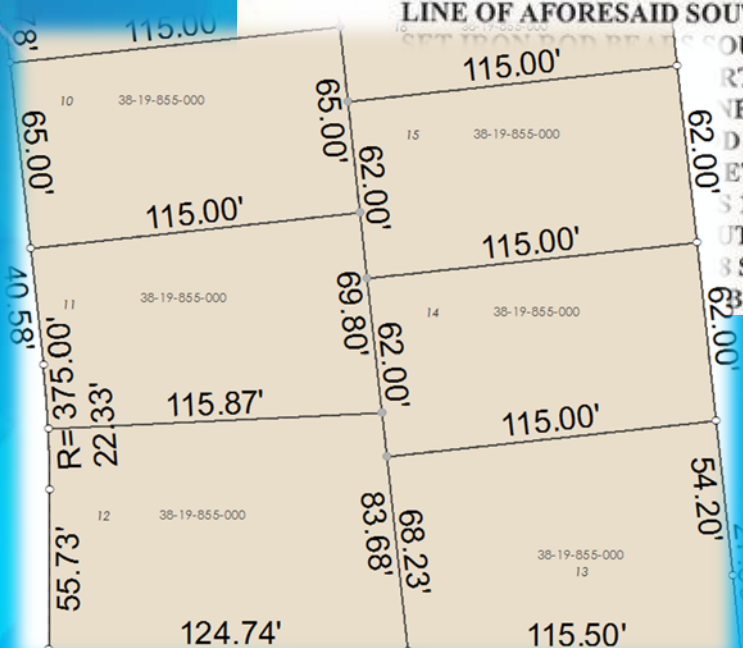
# Parcel Fabric Data Model

## Optimized Data Model for Parcels

### EXHIBIT "A"

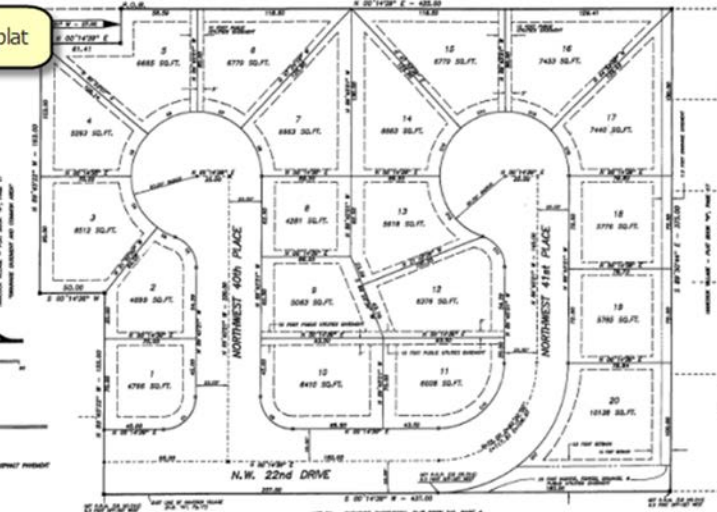
A TRACT OF LAND BEING PART OF THE SOUTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 32, TOWNSHIP 46 NORTH, RANGE 1 EAST

COMMENCING AT A FOUND OLD STONE MARKING THE SOUTHWEST CORNER OF THE SOUTHEAST 1/4 OF SECTION 32; THENCE NORTH 89 DEGREES 39 MINUTES 48 SECONDS EAST, ALONG THE SOUTH LINE OF SAID SECTION 32, 679.80 FEET TO A SET IRON ROD MARKING THE TRUE POINT OF BEGINNING OF THE TRACT OF LAND HEREIN DESCRIBED; THENCE NORTH 00 DEGREES 49 MINUTES 11 SECONDS EAST, 1328.01 FEET TO A SET IRON ROD IN THE LINE OF AFORESAID SOUTHWEST 1/4 OF SECTION 32; THENCE SOUTH 00 DEGREES 49 MINUTES 11 SECONDS WEST, 327.65 FEET TO A SET IRON ROD MARKING THE TRUE POINT OF BEGINNING OF THE TRACT OF LAND HEREIN DESCRIBED; THENCE NORTH 00 DEGREES 49 MINUTES 11 SECONDS EAST, 1328.01 FEET TO A SET IRON ROD IN THE LINE OF AFORESAID SOUTHWEST 1/4 OF SECTION 32; THENCE NORTH 00 DEGREES 49 MINUTES 11 SECONDS WEST, 327.65 FEET TO A SET IRON ROD MARKING THE TRUE POINT OF BEGINNING OF THE TRACT OF LAND HEREIN DESCRIBED; THENCE NORTH 00 DEGREES 49 MINUTES 11 SECONDS EAST, 1328.01 FEET TO A SET IRON ROD IN THE LINE OF AFORESAID SOUTHWEST 1/4 OF SECTION 32; THENCE NORTH 00 DEGREES 49 MINUTES 11 SECONDS WEST, 327.65 FEET TO A SET IRON ROD MARKING THE TRUE POINT OF BEGINNING OF THE TRACT OF L



EDGWOOD  
A PLANNED UNIT DEVELOPMENT, BEING A REPLAT OF LOTS 1 THRU 11  
OF "HAWDOCK VILLAGE" AS RECORDED IN PLAT BOOK "N", PAGE 17  
IN SECTION 19, TOWNSHIP 9 SOUTH, RANGE 20 EAST,  
CITY OF GAINESVILLE, ALACHUA COUNTY, FLORIDA

Subdivision plat



LEGEND:

- SET PAAK DA BLIND
- SET PAAK DA BLIND
- SET PAAK DA BLIND
- SET PAAK DA BLIND
- SET PAAK DA BLIND
- SET PAAK DA BLIND

DEDICATION:  
I, the undersigned, being duly sworn, do hereby dedicate to the public use of the State of Florida, the following described land, to-wit: ...  
STATE OF FLORIDA, COUNTY OF ALACHUA

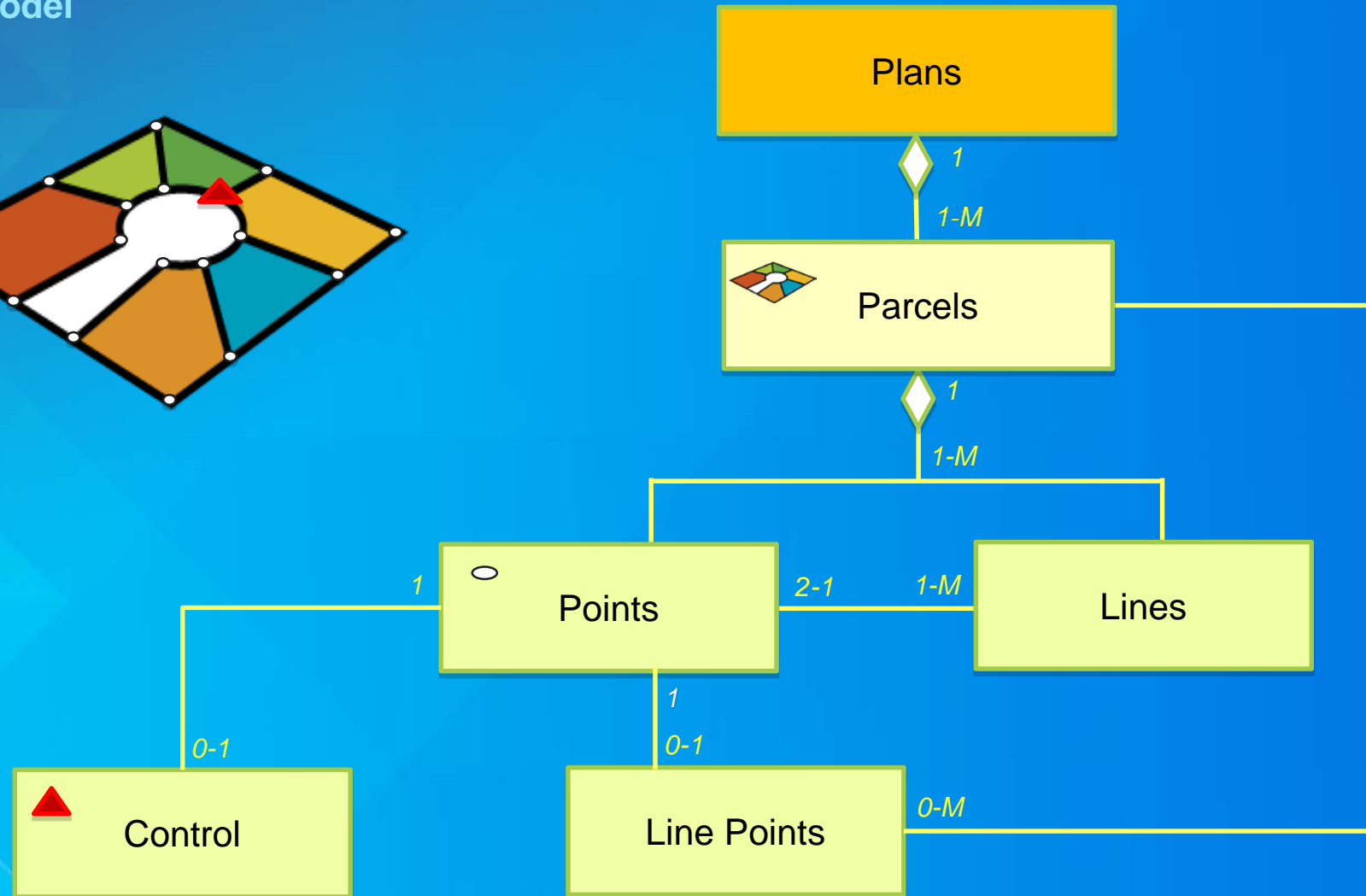
MORTGAGEE'S CONSENT:  
I, the undersigned, being duly sworn, do hereby consent to the recording of this subdivision plat, to-wit: ...  
STATE OF FLORIDA, COUNTY OF ALACHUA

CURVE TABLE:

CHORD	ARC	ANGLE	CHORD BEARING	ARC BEARING	CHORD DISTANCE	ARC DISTANCE
10.00	10.00	10.00	N 10° 00' 00" E	N 10° 00' 00" E	10.00	10.00
10.00	10.00	10.00	N 10° 00' 00" E	N 10° 00' 00" E	10.00	10.00
10.00	10.00	10.00	N 10° 00' 00" E	N 10° 00' 00" E	10.00	10.00
10.00	10.00	10.00	N 10° 00' 00" E	N 10° 00' 00" E	10.00	10.00
10.00	10.00	10.00	N 10° 00' 00" E	N 10° 00' 00" E	10.00	10.00
10.00	10.00	10.00	N 10° 00' 00" E	N 10° 00' 00" E	10.00	10.00

# What is a Parcel Fabric?

## Parcel Fabric Data Model



# Plans

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

Plan Directory

List:

Plan Name	Description	Survey Date	Legal Date	Surveyor
<map>	System default plan			
IDLEWILD ESTAT...				
20070151879				
80239/944				
20070195724				
84084/1646				
2002226/00113				
2003164/55				
99096/70				
99166/4052				
84190/2707				

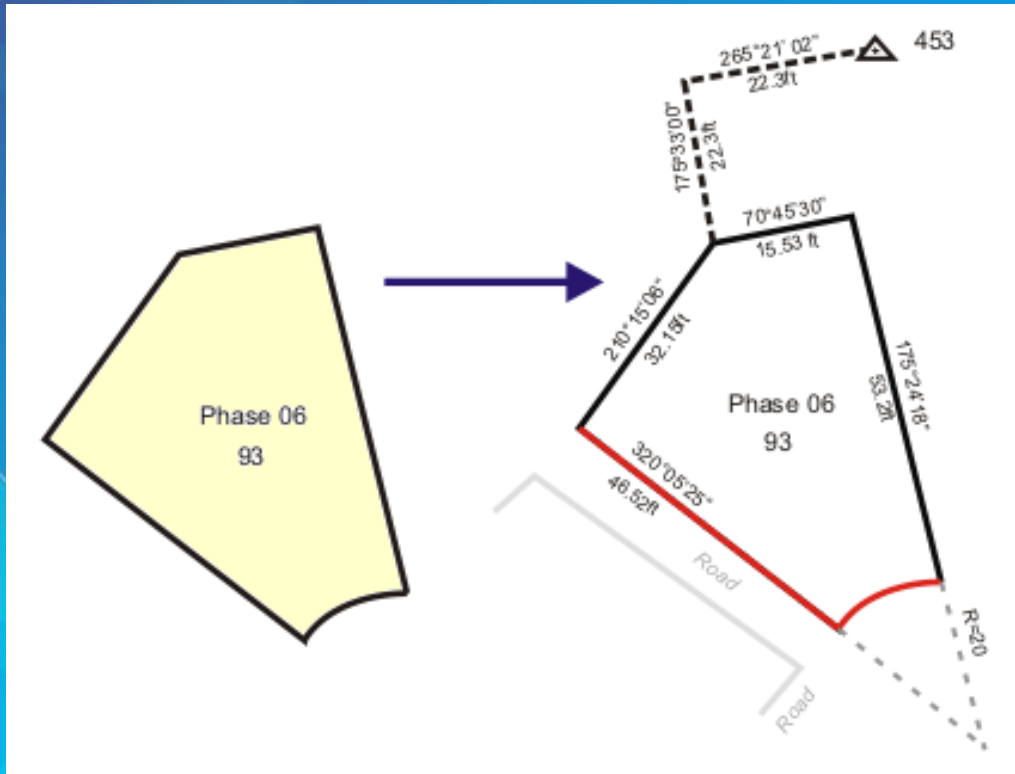
Plan Properties

General | Record Format | Corrections | Attributes

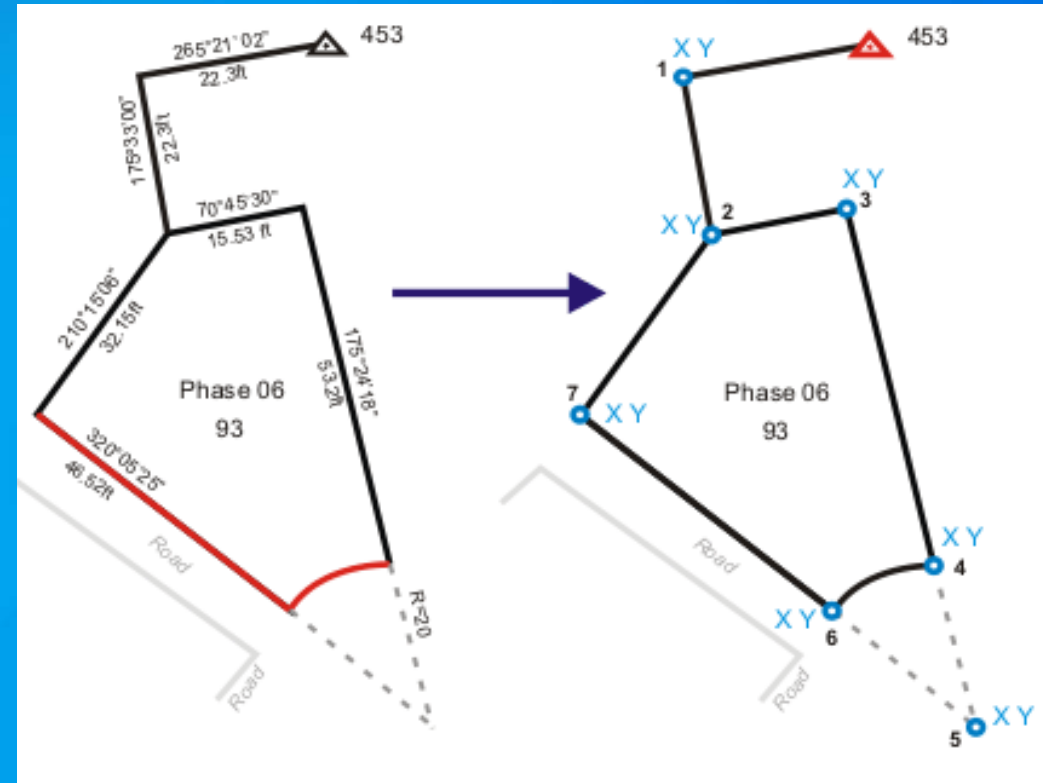
Name:

Description:

# Parcels



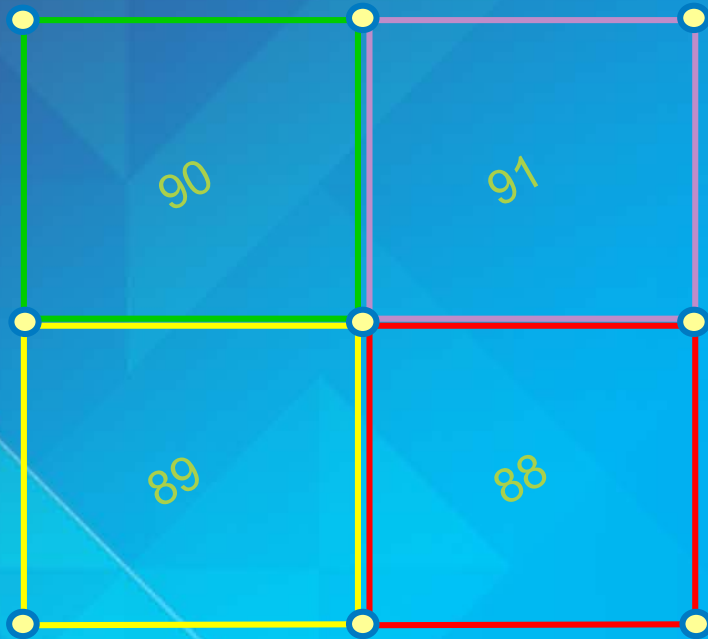
Parcel Polygon has related lines



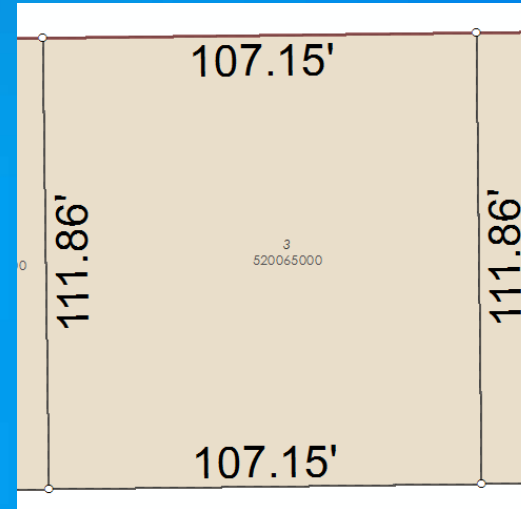
Lines have related points



# Lines and Points



# of lines= 16  
 # of points = 9  
 # of parcels = 4



Lines store record dimensions

From Point

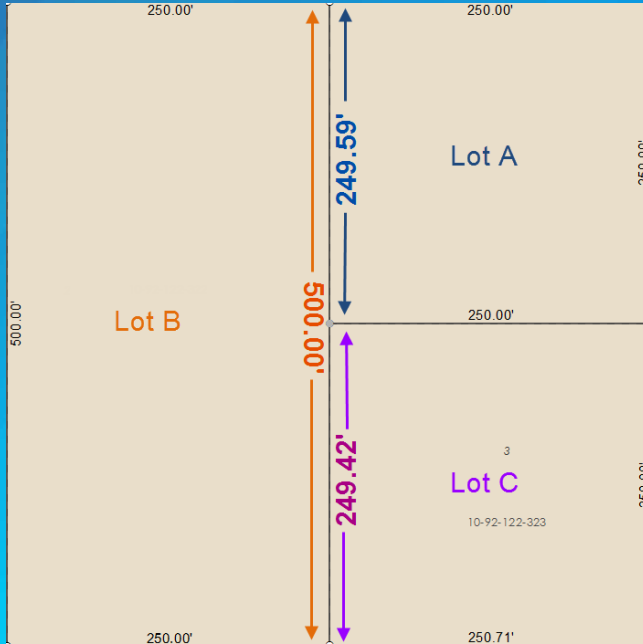
To Point

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

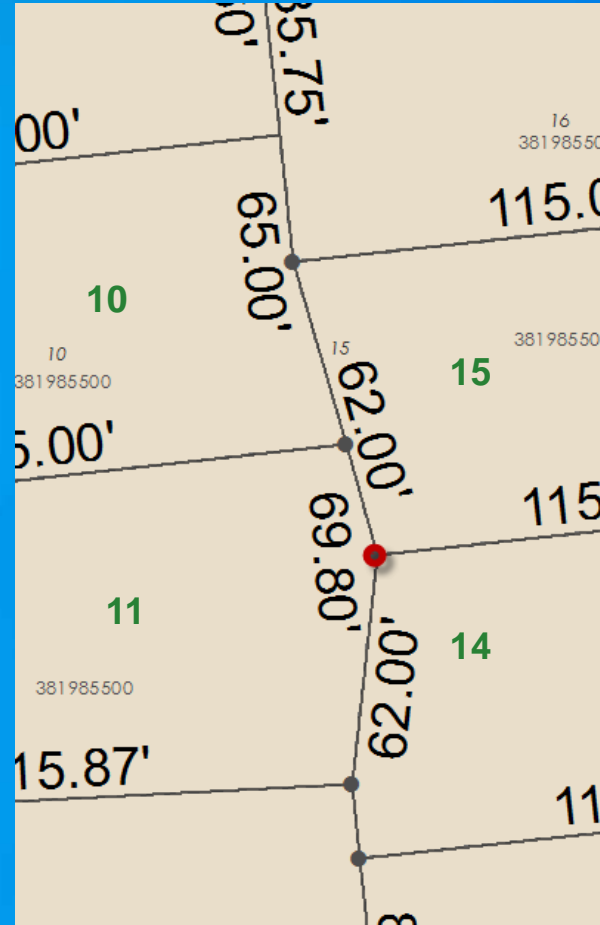
Points are stored on the ends of lines or curves

# Line Points

Preserve original record dimensions



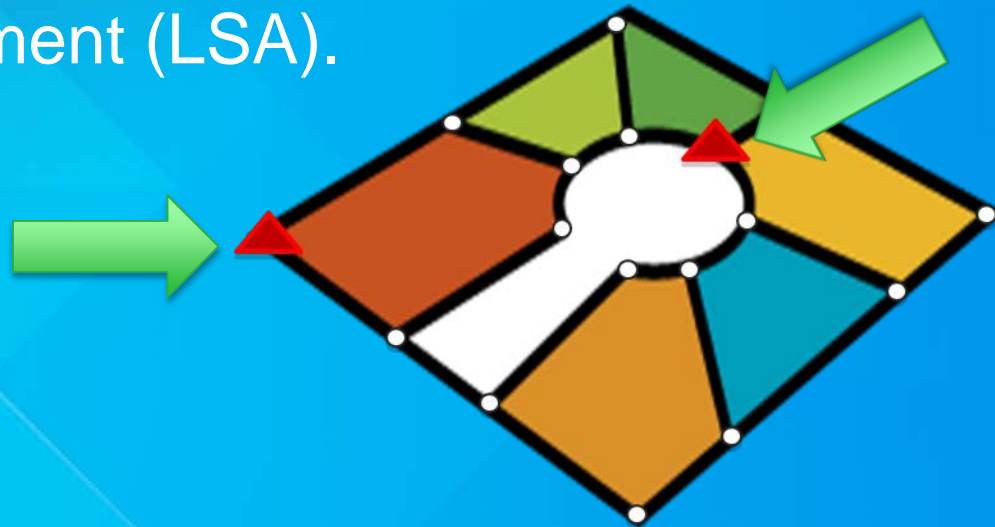
$$249.42 + 249.59 \neq 500$$



Ensure topology between parcels

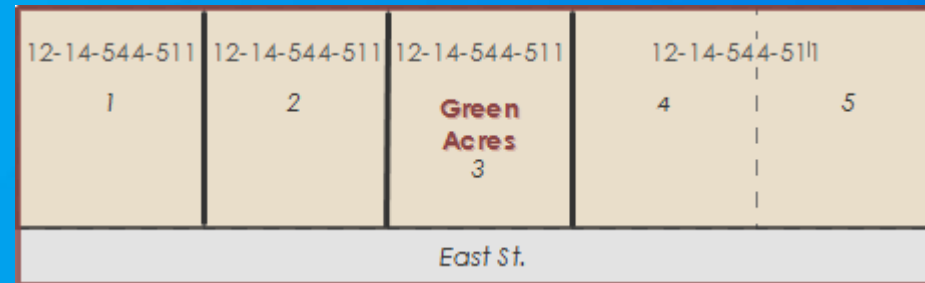
# Control Points

- Related to parcel points
- Can be added by importing or manually added to the Parcel Fabric
- Control points are in the fabric in order to do Least Squares Adjustment (LSA).



# Data Model

Supports

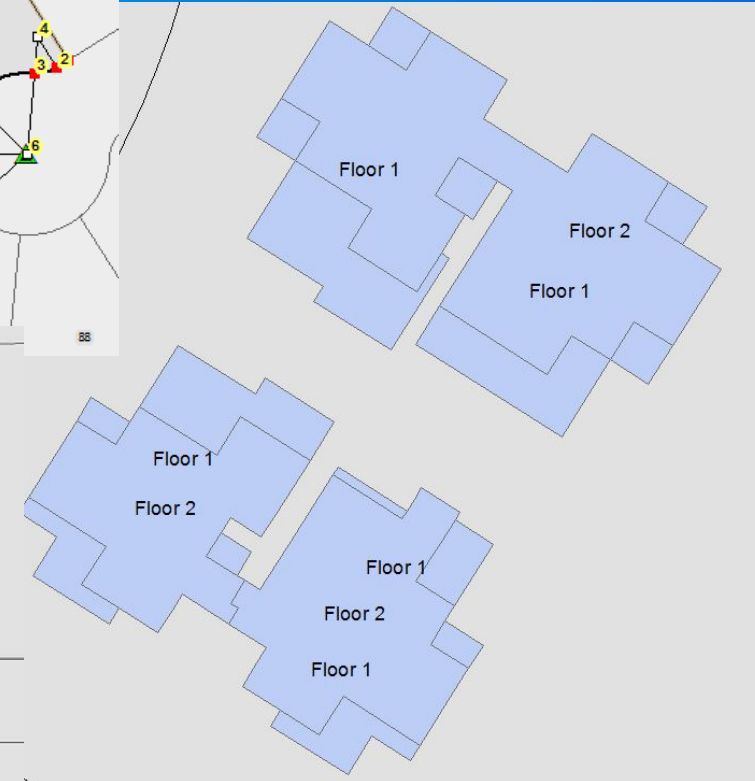
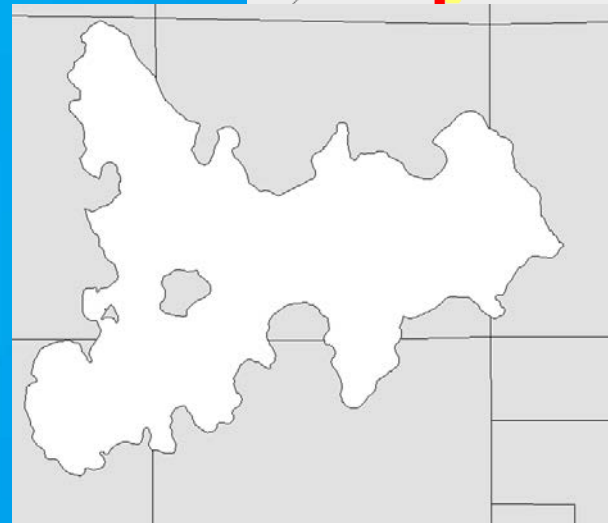
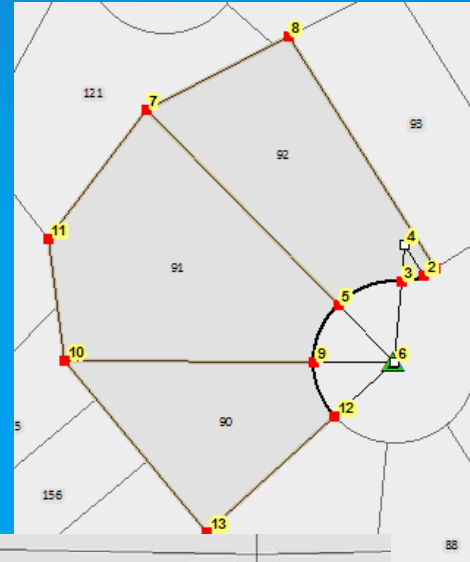


All Subdivisions, Lots, Tax Parcels, etc. are “Parcels” in the Parcel Fabric

# Data Model

## Supports

- True parametric curves and radial lines
- Natural boundaries
- Donut/island and multipart parcels
- Historic parcels
- Stacked parcels (Condos)



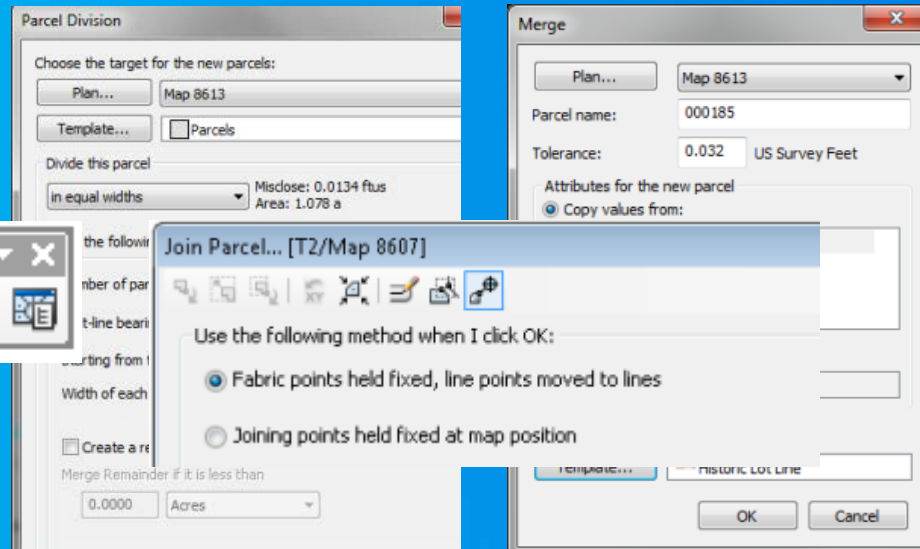
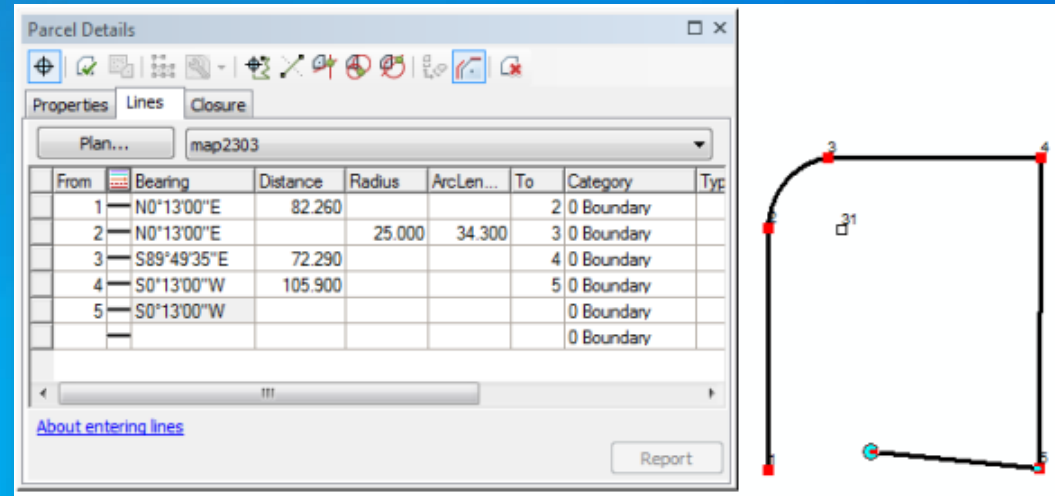
# Demo: Data Model

Amy Andis

# Parcel Editing

# Parcel Editing Tools

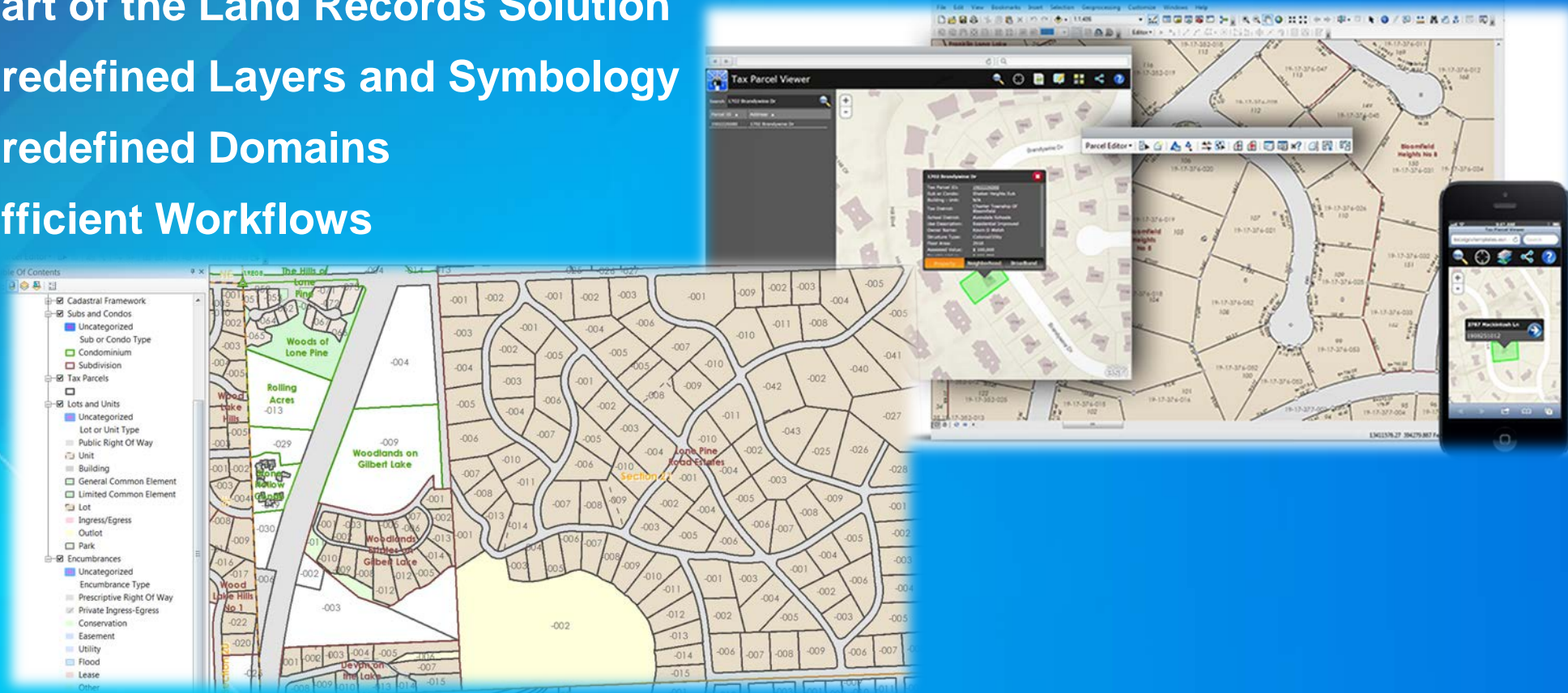
- Construct from Parent Parcel
- Parcel traverse
- Parcel division
- Parcel merge
- Parcel remainder
- Built-in COGO tools
  - Bearing, distance, tangent curve, intersection, parallel, perpendicular, etc.
- Parcel joining





# Utilizing the Local Government Information Model

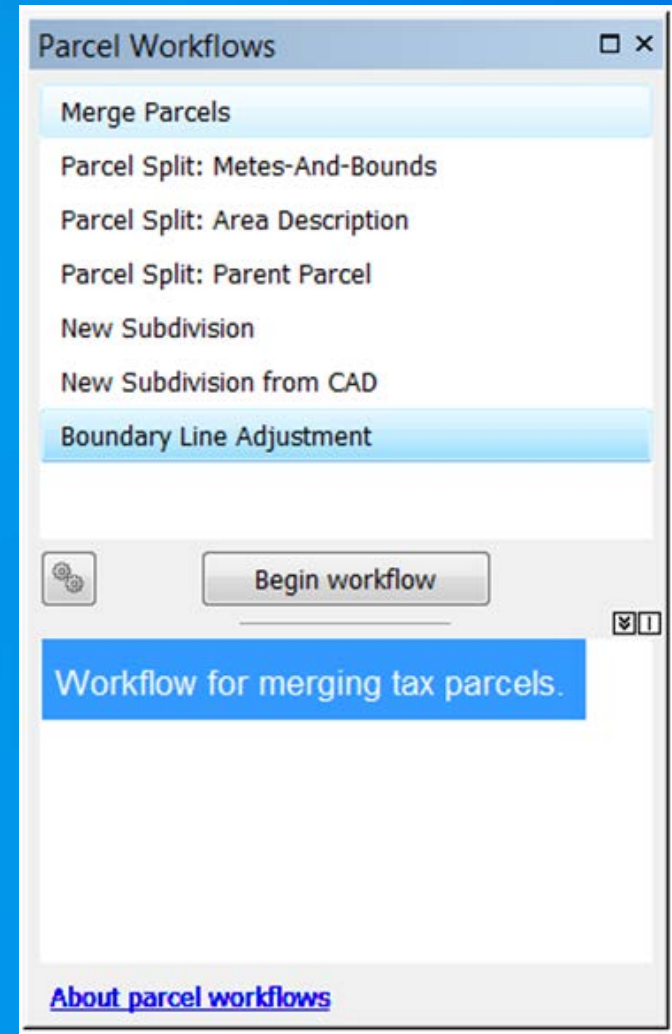
- Part of the Land Records Solution
- Predefined Layers and Symbology
- Predefined Domains
- Efficient Workflows



# Parcel Editing Workflows

## Utilizing the Local Government Information Model

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



# Demo: Parcel Editing

Amy Andis

## Recap: Why use the Parcel Fabric?

- **Optimized Data Model for Maintaining Parcels**
- **Preserves original recorded dimensions**
- **Ensures topology between parcels**
- **Supports Overlapping Parcels**
- **Option to maintain history**
- **Efficient workflows**
- **Adjust to Control Points**
- **Create a More Accurate Parcel Layer**



## Additional offerings - Tuesday

- **An Overview of Community Parcels (Demo)**
  - Tue 7/15/2014, 11:30 AM - 12:00 PM, Demo Theater - ArcGIS Solutions Exhibit Hall B
  - Tue 7/15/2014, 5:30PM – 6:15 PM, Demo Theater - ArcGIS Solutions Exhibit Hall B
- **Editing and Maintaining Parcels with ArcMap (TW)**
  - Tue 7/21/2015, 01:30 PM - 02:45 PM, Room 02
- **ArcGIS for Land Records: An Overview (TW)**
  - Tue 7/15/2014, 01:30 PM - 02:45 PM, Room 31 B
- **Approaches to Building a National Parcel Data Base (Demo)**
  - Tue 7/15/2014, 04:30 PM - 05:00 PM, Demo Theater - State and Local Government

## Additional offerings - Wednesday


- **Migrating Data into the Parcel Fabric Solution (TW)**
  - Wed 7/22/2015, 08:30 AM - 09:45 AM, Room 03
- **An Overview of the Urban Land Bank and Tax Reverted Properties Maps and Apps**
  - Wed 7/16/2014, 11:30 AM - 12:15 PM, Demo Theater - Exhibit Hall B
- **Modern Approach to Land Records (Demo)**
  - Wed 7/16/2014, 11:30 AM - 12:15 PM, Demo Theater - Exhibit Hall D
- **Advanced Parcel Editing in ArcMap (TW)**
  - Wed 7/22/2015, 03:15 PM - 04:30 PM, Room 02
- **ArcGIS for Land Records: An Overview (TW)**
  - Wed 7/22/2015, 03:15 PM - 04:30 PM, Room 33 A
- **Approaches to Building a National Parcel Data Base (Demo)**
  - Wed 7/16/2014, 05:30 PM - 06:00 PM, Demo Theater - State and Local Government

## Additional offerings - Thursday

- **ArcGIS for Land Records: Unlock the Potential of Parcel Data (Demo)**
  - Thu 7/23/2015, 9:30 AM - 10:15 AM, Demo Theatre - Exhibit Hall B
- **An Overview of the Land Records Public Access Applications (Demo)**
  - Thu 7/23/2015, 9:30 AM - 10:15 AM, Demo Theatre - Exhibit Hall B
- **Editing and Maintaining Parcels with ArcMap (TW)**
  - Thu 7/23/2015, 10:15 AM - 11:30 AM, Room 02
- **Modern Approach to Land Records (Demo)**
  - Thu 7/23/2015, 10:30 AM - 11:15 AM, Demo Theater - Exhibit Hall D
- **Advanced Parcel Editing in ArcMap (TW)**
  - Thu 7/23/2015, 03:15 PM - 04:30 PM, Room 02
- **Land Records Meetup (SIG)**
  - Thu 7/23/2015, 12:00 PM - 01:00 PM, Room 31 B

# Community – Land Records Meetup

Join the Land Records Meet-up today

 <http://www.meetup.com/Esri-Land-Records-Meet-Up/>



## Land Records Meetup




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Founded Dec 21, 2012

[About us...](#)

Land Records Professionals	689
Group reviews	11
Upcoming Meetups	3
Past Meetups	34
Our calendar	



### Discuss Land Records at Esri UC

**San Diego Convention Center**  
111 West Harbor Drive, San Diego, CA (map)



Thu Jul 17  
12:00 PM

[I'M GOING](#)

46 going  
0 comments

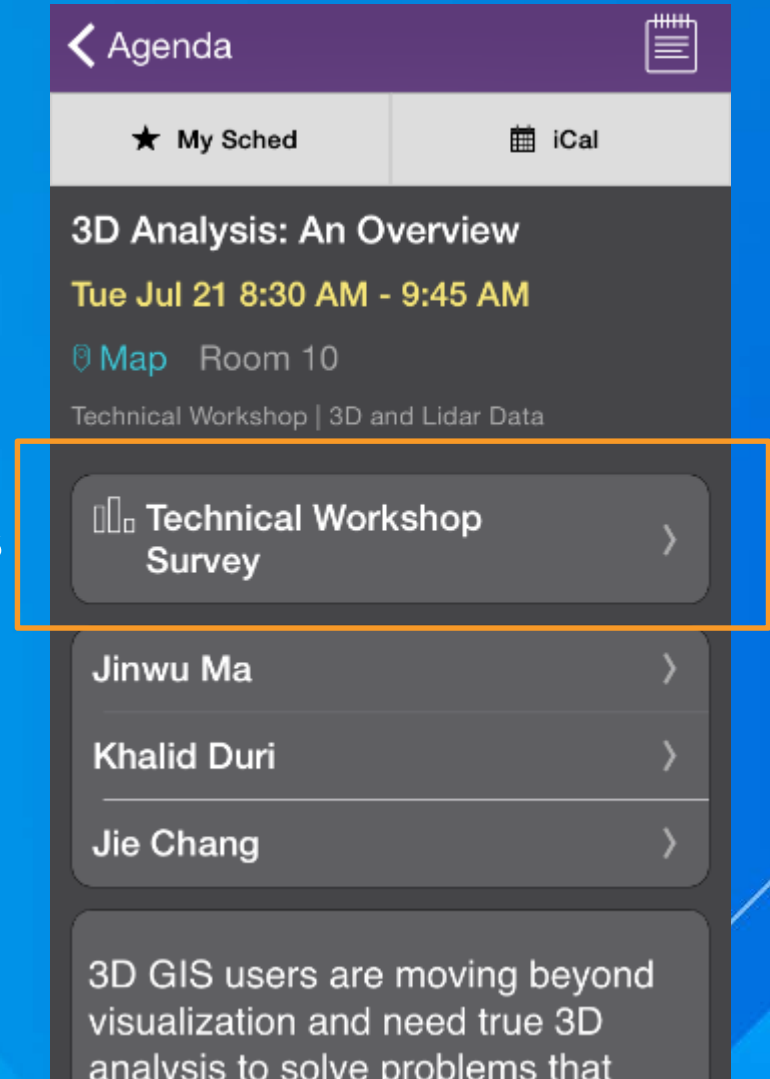
Special Interest Group Meeting will be held at the SDCC in Room 31 B. It is open to Esri UC Attendees. We will not broadcast this meeting online. [LEARN MORE](#)

Hosted by: [Brian Sapp](#) (Organizer), [Amir Bar-Maor](#) (Co-Organizer), [Chris Buscaglia](#) (Co-Organizer), and [Brent Jones](#) (Co-Organizer)



# Thank you...

- Please fill out the session survey in your mobile app
- Select Editing & Maintaining Parcels with ArcMap in the Mobile App
  - Use the Search Feature to quickly find this title
- Click “Technical Workshop Survey”
- Answer a few short questions and enter any comments





Understanding our world.