



Indiana Department of Environmental Management
Protecting Hoosiers and Our Environment Since 1986

Office of Land Quality



Indiana Map Resources: Cadastral, Boundaries, PLSS Workgroup Projects

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Office of Land Quality

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Office of Land Quality

IGIC Cadastral, Boundaries, PLSS Workgroup

Cadastral, Boundaries, PLSS Workgroup Projects

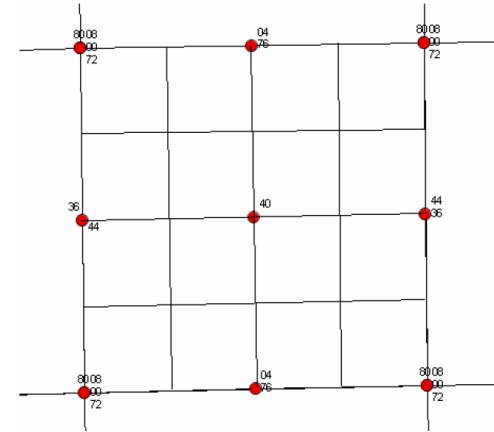
- **Tie Card Project** – GIS PLSS Surveyor Tie Card Layer (INMAP)
 - State-wide naming convention enables uniform look and feel across the State
 - Helps in identifying Corners to use in revising GIS PLSS layers
- **New GIS County Boundary** - Point, Line, and Polygon Layers
 - Pilot – Five Counties: Allen, Gibson, Noble, Wayne, Marion
- **Government Land Office (GLO) Records**
 - IGIC Workgroup focusing on GLO State Records
 - Eventually like to have GLO Federal, State, & County Records linked to GIS



Tie Card Pilot Project

Components

- **Grid Points – (approximate ¼ section, Sec, T,R)**
- **Statewide Grid Point Naming Convention**
 - IN02_T23NR06E03_08
- Scanned Tie Cards
- Renaming Software (need PDFs & Adobe Reader)
- Database Table (Access) provided with software
 - Automatically created when using Renaming Software
 - Database should include Tie Card hyperlink
 - Click on map hyperlink and see scanned Tie Card pop-up
 - Training materials on website along with a video step by step instructions
 - OR (next page)





Tie Card Pilot Project

- **County**
 - Already has database with County Tie Card hyperlinks
 - Add the State-wide file naming convention to County data
 - Then share on County's Data Sharing website and your data can be included on IndianaMap on the Tie Card Layer



Building New Authoritative GIS County Boundary Layer for Indiana Based on County Data and County Participation

Developed a Disclaimer for layer

Location of the points in this GIS County Boundary Layer are approximate and should not be used for surveying and are NOT APPROVED by a COUNTY SURVEYOR for surveying purposes. Contact the County Surveyor's Office when conducting research for surveying.



New GIS County Boundary - Why?

- Need to match GIS data across counties by using a common boundary
 - Federal GIS data mandates (use standards)
 - State GIS data efforts are to have seamless data across county boundaries
 - County 911 calls – across adjacent counties
 - Match Boundaries – across adjacent counties
 - Civil Township
 - County Boundary
 - Parcel Boundary (adjoining counties)
 - PLSS Boundaries
 - Street/Centerlines
 - Other



New GIS County Boundary

- **Designed Template**
 - With disclaimer not to be used for surveying purposes
 - Attributes and Structure
- **Developed Pilot**
 - Allen, Gibson, Marion, Noble, and Wayne
 - Tested Gibson and Noble via Data Sharing WFS
- **Maintenance** - Developing process for new GIS County Boundary layer for the IndianaMap



New GIS County Boundary

Design/Process

- **County Boundary With Point Features Developed First**
 - Counties can use their best available data to create boundary points or use the Grid Points - County decides
 - Use GIS County Boundary Template (available to counties)
 - For documenting data collection process or
 - Provide list of County attributes that can be mapped to Template
 - Acquire County Boundary legal descriptions (Surveyor)
 - Identify PLSS corners and section lines that define boundary
 - Associate the legal information to the boundary points
 - Best available OR Grid Points
 - Develop line and polygon layers from point layer
- **New GIS County Boundary**
 - Share County best available data (points, lines, & polygon) through County Data Sharing WMF/WFS
 - County Layers would be accessible on IndianaMap as County Boundaries become available



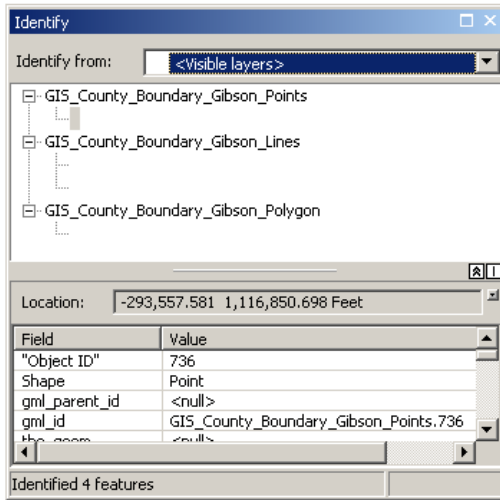
New GIS County Boundary Design/Process

- **Common Boundary Lines**
 - Both adjacent County's to determine best common boundary line
- **Communication**

between the County Surveyor, GIS staff and others County Offices important part of this process

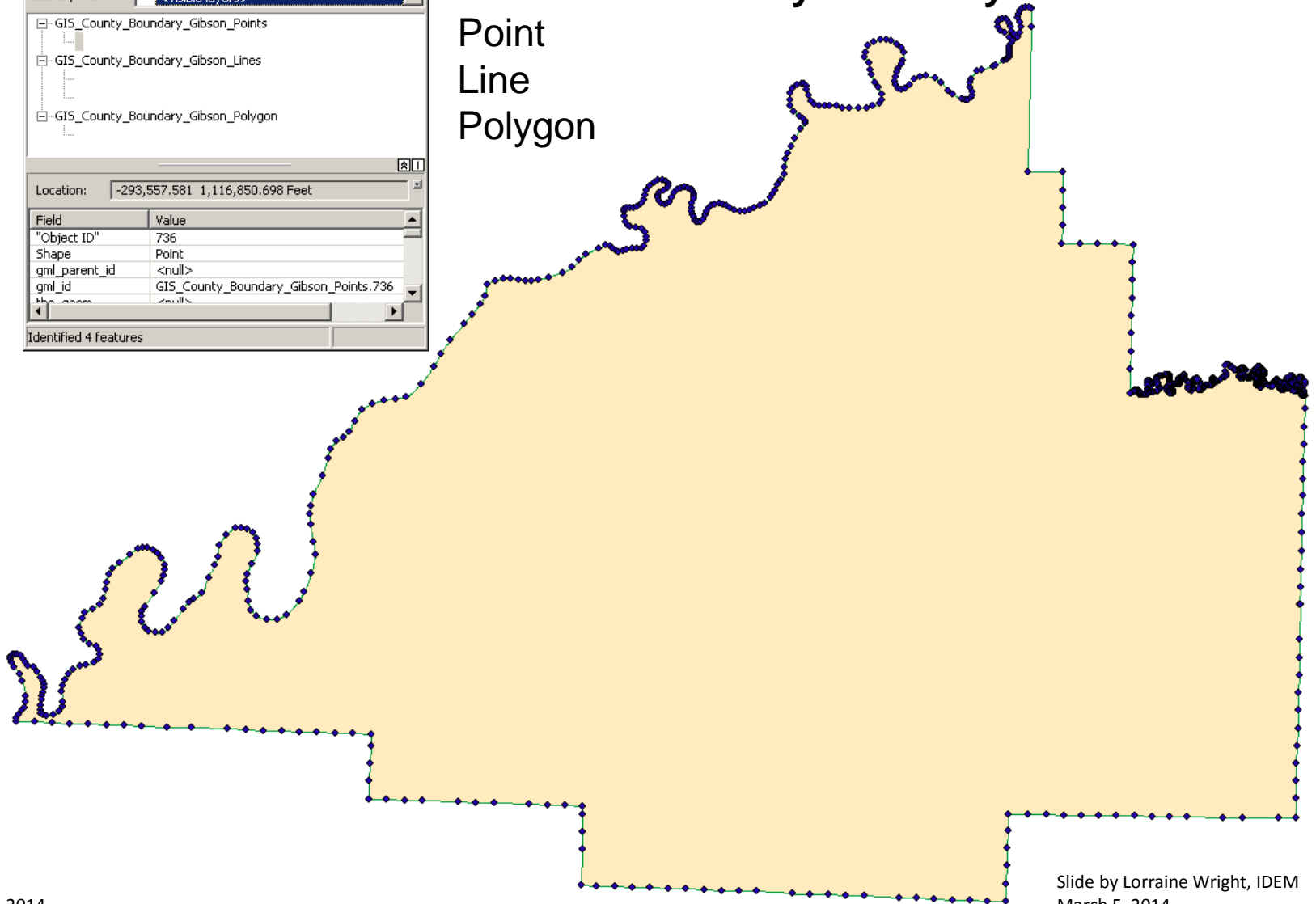


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Gibson GIS County Boundary

Point
Line
Polygon





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Noble GIS County Boundary Points Line Polygon

Identify

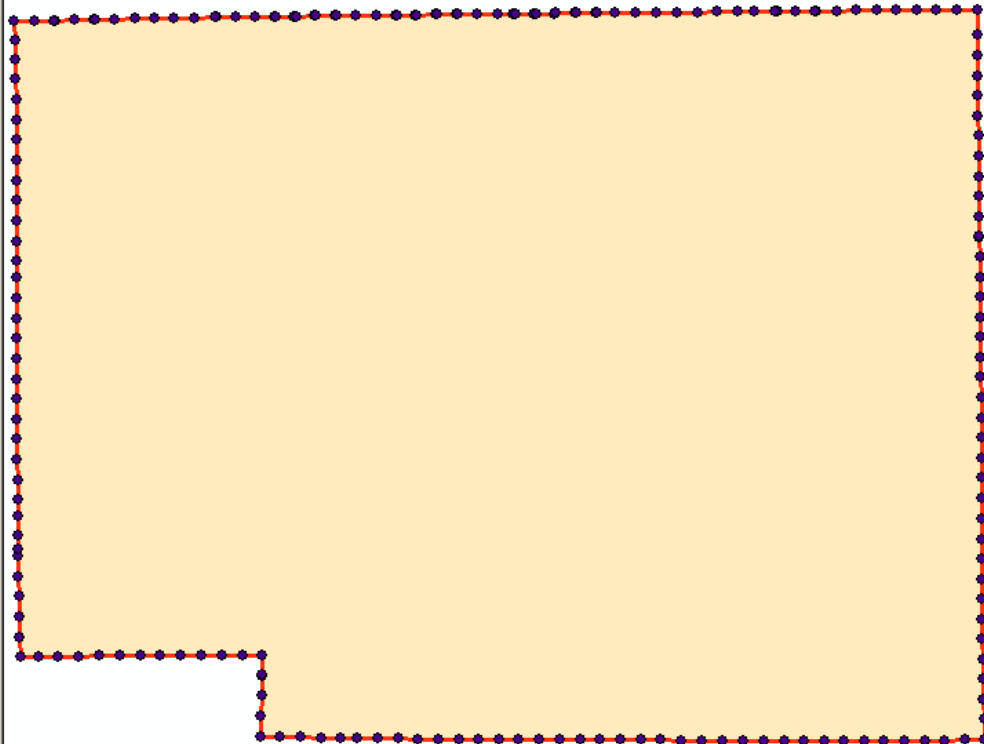
Identify from: <Visible layers>

- NC_Bndry_Corners_CoBndryProject
 - 0001
- NC_Bndry_Polylines_CoBndryProject
- NC_Bndry_Polygon_CoBndryProject

Location: 331,136.461 2,285,887.427 Feet

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gml_id	F539_1
OBJECTID	1
Shape	<null>
FID_	78
Elevation_	879.54841
Type_	HM
Corner	NW
SectionNum	6
Township	PERRY
AccLevel	GPS
Target	TARGET
Date_Recei	12/17/2012
Scan_Ref	0001.pdf
TieCardPDF	\\gisservr\G\Section_Corner_PDF_
CurPntNum	1
ColPTNum	1
Northing	2285686.5311
Easting	331346.477
MonumentTy	hm
Datum	NAD 1983 (US Feet)
CoordSys	SPE
CoordType	HORZ
Units	DECIMAL DEGREES
PrincipalM	PM02
CtyBdryRul	<null>
Disclaimer	Location of the points in this GIS Co
PointType	TOWNSHIP CORNER
CornerName	0001
PntQuality	High Quality Field Location
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AerialScal	<null>
AerialDesc	<null>
DigitizedS	<null>
SpatChgTyp	<null>
SpatChgDat	<null>
SpatRelLis	<null>
DetermType	<null>
GovernType	COUNTY
LegalPtDes	Northwest Corner of Section 6, Tow
LegalDesSo	IndActs_1852_Noble_County
LegalDesCo	2ND POINT
GridPtName	IN02_T35NR08E06_00
FieldWrkCr	MARK MIDDLETON

Identified 4 features





Land Records

Origin of Indiana's Land System

Documents are the basis for Indiana's land system:

- Original Field Notes*
- Federal Transcribed Field Notes
- State Transcribed Field Notes*
- County Transcribed Field Notes
- Plat Maps

Each set was transcribed by different people at different times and may have differences in the information.



IGIC & State Archives – State Government Land Office Records Pilot Project

Project Goal

- Scan the State Archive documents (State Original and Transcribed Field Notes and Plat maps)
- Name the digital files to be consist with the original index naming convention, and then
- Link the scanned images to the PLSS section line layer or other non-PLSS units (ex: Land Grants) as layers on IndianaMap.