IndianaMap Resources

Phil Worrall, Executive Director Indiana Geographic Information Council (IGIC) and

Lorraine Wright, Indiana Department of Environmental Management (IDEM)

www.igic.org & www.indianamap.org
IndianaMap Resources

The IndianaMap is...

Indiana’s largest publicly available collection of Geographic Information System (GIS) Data.
Questions for the Audience?

• How many folks here have used the IndianaMap (Viewer, Metadata, Vector data downloads, and/or Web Services)?

• How many folks here have used the Indiana Spatial Data Portal (Raster data downloads and imagery Web Services)?

• How many folks here have used Indiana’s OpenTopography LiDAR Server?

• How many folks here use other GIS web sites like…
  – Local Government web map sites (City/Town or County)?
  – State Government web map sites (IDNR, IDEM, INDOT)?
  – Federal Government web map sites (USGS – TNM / NHD, FEMA, NRCS, FEMA)?

• How many use web map sites like (Google, Bing, ArcGIS.com)?

• How many have Desktop GIS software? (ArcGIS, WTH ThinkMap, etc…)?
1. Introduction to IGIC, the IndianaMap and how it works.

2. Selected IndianaMap GIS Initiatives
   - IGIC - Boundaries, Cadastral, PLSS Workgroup (Lorraine Wright, IDEM)
   - IndianaMap County Data Sharing initiative
   - Statewide Orthophotography-LiDAR data
   - Local-Resolution National Hydrography Data Development
   - ISDP & IndianaMap resources & ArcGIS.com
   - Indiana OpenTopography Server

3. What’s Next?
What is IGIC?

- IGIC is a nonprofit 501(c)(3)
- IGIC is a membership organization
- IGIC is administered by an elected board of directors
- IGIC is the statewide coordinating body for Indiana geographic information

Our Mission:

To lead the effective application of geographic information in Indiana
Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships.

**IndianaMap Framework Data Workgroups**
- IndianaMap “Steering” Committee
- Data Sharing Committee
- Data Integration Workgroup
- Streets and Addresses Workgroup
- CAD/GIS Integration Workgroup
- Orthophotography Workgroup
- Boundaries-Cadastre-PLSS Workgroup
- IGIC / ISPLS Geodetic Control Workgroup
- Waters Workgroup
- Elevation Workgroup
- Utilities Workgroup

**IGIC Organization Committees**
- Executive Committee
- Finance Committee
- Elections Committee
- Communication Committee
- Recognition Committee
- Membership Committee
- Conference Committee
- Education Committee
- Legislative Committee
- Indiana GIS Response Corps
How GIS in Indiana Works?
(The BIG Picture)
The IndianaMap is a portfolio of projects that involve the collaborative efforts of federal, state, and local partners. The purpose of these efforts is to acquire, improve, and deliver a wide variety of Geographic Information Systems (GIS) data for Indiana.

The IndianaMap provides a viewing tool that can be used to view and query more than 220 layers of GIS data through the web. The available data include aerial photographs, land cover, reference layers, and layers related to infrastructure, demography, environment, hydrology, and geology.
Selected IndianaMap GIS Initiatives

- IGIC – Cadastral, Boundaries PLSS Workgroup Initiatives…
- IndianaMap County Data Sharing Initiative………
- 2011 – 2013 & 2014 Ortho & LiDAR Program
- Local-Resolution National Hydrography Data Dev……
- IndianaMap and the Indiana Spatial Data Portal
- Indiana’s OpenTopography LiDAR Server……
- What’s Next

Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships
Selected IndianaMap GIS Initiatives

IGIC – Cadastral, Boundaries PLSS Workgroup Initiatives...

Lorraine Wright, IDEM

{LINK}
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Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships
The IndianaMap County Data Sharing Initiative

• Began with an a letter of invitation sent to all County Commissioners in summer of 2008

• Letter requested that counties participate in the IndianaMap (www.indianaMap.org) by sharing 4 GIS data layers (parcels, point addresses, street centerlines and jurisdictional boundaries)

• Transfer technology = Use Open Geospatial Consortium (OGC) Web Feature Services (WFS)
Indianamap Integration & Distribution

FME Translator to IndianaMap Schema - State SDE-Raw

Collaborators:
- United States Geological Survey (USGS)
- State GIS Center of Excellence (CoE)
- Indiana Department of Transportation (INDOT)
- Department of Local Government Finance (DLGF)
- Indiana Geological Survey (IGS)
- State Data Center, State Library
- Indiana Business Research Center (IBRC)
- IndianaView Consortium
- University Information Technology Services, Indiana University
- Coalition of Universities for Spatial Information Sciences (CUSIS)
- Indiana Department of Homeland Security (DHS)
- Indiana Geographic Information Council (IGIC)
- Geographic Information Office (GIO), Indiana Office of Technology

State SDE Library - State Work Areas - State Image Library

Direct Connect Users - State Apps - IDHS Apps

Indiana Map Cache - WMS Services - Indiana Map Viewer - Public Download - Direct Connect Users

Assessor File Upload & Verification System - IBRC - IndianaMap IFI Public Access Point - State Data Center
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Current

90*

*Except: Marshall, & Boone
Example of Parcel Data

http://bit.ly/1bcATBw

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Data Sharing Initiative Status

- 5,039 Jurisdictional Boundaries
- 584,953 Street Centerlines Segments
- 2,639,597 Point Addresses
- 3,058,314 Land Parcels

These data can be viewed and copies obtained from IndianaMap
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• Indiana’s OpenTopography LiDAR Server.............
• What’s Next........................................
3-year cycle, administered through Indiana Office of Technology, State Geographic Information Officer

**Base Products ($4.6 million)**

- 1’ Pixel Resolution – 4-Band Imagery
- USGS-compliant, 1.5 meter post-spacing LiDAR
- Digital Elevation Model

**Available Buy-up Options**

- 6”-inch Resolution Ortho
- 3”-inch Resolution Ortho
- 1-meter post spacing LiDAR
Orthoimagery: Base Resolution 12-inch
Orthoimagery: Optional Resolution 6-inch
Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships.
LiDAR Deliverables

- Filtered raw LiDAR data (point clouds) in LAS v1.2 format
- LiDAR bare earth data, first, last return data, intensity in LAS v1.2 format
- Hydro Breaklines in ESRI format
- Hydro Flattened DEM data delivered in ERDAS Imagine .IMG
- 5,000 X 5,000 tiles
LiDAR Hillshade from 2011 -2013 Program

http://bit.ly/1gokPKH

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LiDAR Improvements in resolution:
- 30 m DEM
- 10 m DEM
- 1.5 m DEM

SW of Martinsville, Indiana

Slide Courtesy of Todd Thompson @ Indiana Geological Survey
Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships.

Celebrating 175 years of Indiana geology in 2012.
Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships.

3,200 versus 8 pts

Slide Courtesy of Todd Thompson @ Indiana Geological Survey
LiDAR in Karst Areas

Celebrating 175 years of Indiana geology in 2012
Delaware County, near SR 3 and SR 35/28, Drive-in-Theatre

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Hamilton County, SR 27 and 216th Street, Purgatory Golf Club

Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships.
The primary image on the Indiana Geological Survey's 2013 calendar displays both relict and modern-day stream channels of the East Fork of the White River just south of the confluence of the Driftwood and Flatwood Rivers near Columbus, Indiana.

Cartographers at the Indiana Geological Survey created this image using the new statewide LiDAR elevation and intensity data with Esri ArcGIS software. A 21 by 33 inch full-color calendar printed on heavy poster paper is available for $5 from the Indiana Geological Survey Bookstore.

http://markup.woolpert.com/ [video]
Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships.

Lake County, Kankakee River Slope Map derived from DEM
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- What’s Next
National Hydrography Dataset

• Surface water component of the National Map
National Hydrography Dataset

• Vector data for mapping and modeling
  • watersheds
  • streams, rivers, canals, ditches
  • lakes, ponds, reservoirs, marshes
  • streamgages
  • other features

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National Hydrography Dataset

• Can be used in GIS for general mapping and analysis of surface-water systems

• Can be used in CAD as planimetric basemap data
National Hydrography Dataset

• Enables the modeling of water flow in GIS applications
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National Hydrography Dataset

- Indiana data stewardship is responsibility of State GIO
- partnership with IGIC

NHD Stewardship
- Home
- NHD Data Check-out
- Download NHD Software
- Data Load & Post Status
- Stewardship Process
- Training Schedule
- Request Maintenance
- Report Bugs
- Announcements
- Glossary
- FAQ
- User Guide


MOU
Draft

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Correct & Upgrade NHD to Local Resolution

- Use 2005 and newer Orthophotography and LiDAR to correct the existence and the locations of physical features
- Data would be at scale of 1:2,400 or 1:1,200 and aligned to 2005 IndianaMap Orthophotography or better
- Inconsistencies between USGS quadrangles will be removed
- Naming of features will be improved
- Network connectivity and flow direction will be improved
- Result in statewide water flow model of 2005 or later water features, ensuring connectivity and modeling across community boundaries
- Statewide stream addressing system with linear referencing
Improving Indiana’s NHD

Strategy to Correct Errors and Upgrade the NHD

1. Correct GNIS name errors in High-Resolution NHD (2011)

2. Create local-resolution NHD

3. Load local resolution data into the national database, includes network topology for modeling

4. Load flowlines and waterbodies datasets into the IndianaMap for use and download
NHD Upgrade Project Status

Phase 1 - 16 Subbasins (green)
- Currently underway
- Funded by Indiana Office of Community and Rural Affairs, Disaster Recovery Funds
- Complete 2014

Phase 2 – 9 Subbasins (pink)
- Begin late fall 2013
- Funded by GLI funds & USGS

Phase 3 – 15 Subbasins (red)
- Funding by USGS & OCRA
NHD – Before

Number of 24K NHD Features:
- Flowline – 2,177
- Waterbody – 2,571
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NHD – After

Number of Local Resolution Features:
- Flowline – 47,821
- Waterbody – 3,350
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Results: Increase in the Number, Alignment, Accuracy and Currency of Water Features

High-Res in RED
Local Res in BLUE

49% increase in acres of waterbodies

134% increase in acres of areas

409% increase in miles of flowlines
Improving Indiana’s NHD

Example of improved alignment

Existing High Res NHD in **RED**

Improved NHD

[Live]  [Video]
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Improving Indiana’s NHD.
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• What’s Next
Our Cornerstone Initiative is the IndianaMAP.

One Map for Indiana
It’s Statewide
It’s Regional
It’s Local
It’s Yours!

Enable improved government service to citizens, and an enhanced ability for citizens to stay informed and to engage in the democratic process.

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**IndianaMap Principle**

**Build Once, Use Many Times**

Framework Data

- Parcels & Ownership
- Streets & Addresses
- PLSS
- Water
- Boundaries
- Elevation
- Orthophotography
- Geodetic Control

Your Data / Other Thematic Data

- Zoning
- Wetlands
- Landcover
- Infrastructure
- Water Lines
- Soils

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The IndianaMap Spatial Data Portal

http://gis.iu.edu

Hosted by Indiana University - UITS

Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships
Welcome to IndianaMap

IndianaMap is the largest publicly available collection of Indiana geographic information system (GIS) map data. It is made possible by an alliance of partners from federal, state, local organizations and agencies, and universities. You can:

- Explore the Map
- DATA and Resources
- INITIATIVES
- PARTNERS

CURRENT NEWS AND UPDATES

NEW & Updated Layers
- Updates for Five Layers added to the Map
- Four IndianaMap Data Sharing Initiative Layers Updated
- Four IDNR Layers Updated
- Four IndianaMap Data Sharing Initiative Layers Updated

IndianaMap News
- Three Layers Removed from IndianaMap
- Institutional Control Sites (IDEM) Layer Updated
- Explore the New IndianaMap Layer Gallery
- Custom Printing Added to the Map
Over 260 Layers on the IndianaMap from over 25 Data Contributors

Indiana Department of Transportation (INDOT) – 14 layers
Indiana Department of Natural Resources (IDNR) – 9 layers
Indiana Department of Environmental Management (IDEM) – 22 layers
Indiana Office of Technology (IOT) – Geographic Information Office (GIO) – 5 layers
Indiana Geological Survey (IGS) – 63 layers
Indiana Department of Commerce – 4 layers
Indianapolis Mapping and Geographic Infrastructure System (IMAGIS) – 1 layer
Indiana Geographic Information Council (IGIC) – 3 layers
Indiana Business Research Center (IBRC) – 2 layers
Indiana Election Division – 2 layers
Indiana Utility Regulatory Commission (IURC) – 1 layer
Federal Emergency Management Agency (FEMA) – 4 layers
National Oceanic and Atmospheric Administration (NOAA) – 2 layers
National Park Service (NPS) – 2 layers
National Resource Commission (NRC) – 1 layer
U.S. Census Bureau (USCB) – 23 layers
U.S. Environmental Protection Agency (EPA) – 5 layers
U.S. Geological Survey (USGS) – 23 layers
U.S. Department of Agriculture (USDA) – 15 layers
Bureau of Transportation Statistics (BTS) – 6 layers
U.S. Fish and Wildlife Service (USFWS) – 4 layers
U.S. Forest Service (USFS) – 2 layers
Federal Communications Commission (FCC) – 1 layer
Bernardin, Lochmueller, and Associates, Inc. – 4 layers
Environmental Systems Research Incorporated (ESRI) – 1 layer
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Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships.
Over 230 layers of statewide data with metadata available for viewing, downloading and streaming

Hosted by the Indiana Geological Survey (IGS)

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IndianaMap Viewer (R3) – Map Gallery

Thematic Map Gallery

IndianaMap is the public source for Indiana map data. The Thematic Map Gallery helps people find commonly used maps for a better understanding of Indiana issues and trends.

- **House Districts** (118th Gen. Assembly)
  - Shows the legislative district boundaries for the House of Representatives, 118th General Assembly of Indiana.
  - The boundaries were redefined and adopted in 2011 (current until 2021) and were provided by the Indiana General Assembly.

- **Senate Districts** (118th Gen. Assembly)
  - Shows the legislative district boundaries for the Senate, 118th General Assembly of Indiana.
  - The boundaries were redefined and adopted in 2011 (current until 2021) and were provided by the Indiana General Assembly.

- **Congressional Districts** (113th Congress)
  - Shows the legislative district boundaries in Indiana for the 113th U.S. Congress.
  - The boundaries were redefined and adopted in 2011 (current until 2021) and were provided by the US Census Bureau.

- **Wind Speed and Elevation Contours**
  - Provides access to resource of Indiana suitable sites for wind projects. Includes: wind data, wind assessment, wind energy, meteorology.

- **Oil and Gas Wells**
  - Provides access to petroleum well data created from data in the Indiana Geological Survey (IGS) Petroleum Well Database, which is a component of the IGS Petroleum Database Management System (PDMS). The petroleum well data was created by comparing digital lines from Indiana Geological Survey (IGS) data sets.

- **Industrial Mineral Sites**
  - The distribution of stratigraphic data for various industrial minerals and industrial mineral sites in Indiana. Data were derived from core, measured samples, outcrops, quarries, and wells. The abandoned quarries, 1998 shows abandoned quarry locations that have locational information that is related to abandoned mines.

- **Korstein Features**
  - Shows sinkhole areas (GIS stream basins (GDB) with rocks of Silurian, Devonian, and Triassic age in southern Indiana. Shows sinkhole areas.

- **Demographics**
  - The Indiana Demographic Map uses various IndianaMap services including:
    - Census Blocks, 2000 (1:500,000)

- **Indiana Bedrock Geology**
  - The Indiana Bedrock Map uses services from IndianaMap including:
    - Geologic Faults, 2002 - Shows...
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IndianaMap Viewer (R3) – Layer Gallery

Hydrology » Karst

- Sinkhole Density (2011)
- Sinkhole Inventory (2011)
- Cave Density
- Dye Lines
- Dye Points
- Sinkhole Areas and Sinking-Stream Basins
- Karst Springs

Indianna Geographic Information Council
777 Indiana Ave., Suite 200, Indianapolis, IN 46202
phone: 317.254.3650 | email: info@indianamap.com
Designed by Michael Elliott and the Indiana Geological Survey
Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships.
IndianaMap Viewer (R3) – Layer Gallery

KARST_DYE_LINES_IN: Inferred Connections for Selected Subsurface Dye Traces in Southern Indiana (Indiana Geological Survey, 1:24,000, Line Shapefile)

Metadata also available as - [Parseable text]

Metadata:

- Identification_Information
- Data_Quality_Information
- Spatial_Data_Organization_Information
- Spatial_Reference_Information
- Entity_and_Attribute_Information
- Distribution_Information
- Metadata_Reference_Information

Identification_Information:

Citation:

Originator: Indiana Geological Survey
Publication_Date: 20020717
Title: KARST_DYE_LINES_IN: Inferred Connections for Selected Subsurface Dye Traces in Southern Indiana (Indiana Geological Survey, 1:24,000, Line Shapefile)
Geospatial_Data_Presentation_Format: Vector digital data
Publication_Information:

PublicationPlace: Bloomington, Indiana
Publisher: Indiana Geological Survey

Online Linkage: <http://igs.indiana.edu/area/statewide/download.html>
Other_Citation_Details:
A predecessor of this shapefile (a coverage named DYE_LINE) was used in the publication of the following map: Frushour, S.S., Harper, D., and Dintaman, C., 2000, Selected subsurface dye traces in south-central Indiana, Indiana Geological Survey, Miscellaneous Map 66.

Description:

Abstract:
KARST_DYE_LINES_IN is a line shapefile that shows inferred subsurface connections between input and detection points of various dye-trace investigations in southern Indiana. This shapefile should be used in conjunction with an associated shapefile named KARST_DYE_PTS_IN, which shows input, output, and intermediate dye-trace points.

Purpose:
KARST_DYE_LINES_IN was derived from a coverage named DYE_LINE. The purpose of DYE_LINE was to compile unpublished work maps of Samuel S. Frushour (Indiana Geological Survey) and to bring Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships.
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IndianaMap Services on ArcGIS.com

Use Story Maps to Inform and Inspire Your Audience

Story maps combine interactive maps and multimedia content into elegant user experiences. They make it easy for you to harness the power of maps to tell your stories.

Featured Story Maps

Get ideas for your own story maps from these examples created by a growing community of authors. View more story maps in our Gallery.

Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships
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- IndianaMap and the Indiana Spatial Data Portal
- Indiana’s OpenTopography LiDAR Server
- What’s Next

Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships...
The Indiana OpenTopography Server

**data and resources**

**DATA – Download GIS data for Indiana**
- IndianaMap Layer Gallery
- Indiana Map Metadata (HTML, TXT, XML)
- IndianaMap Open Topography (Indiana LiDAR data)
- Indiana Spatial Data Portal
- IndianaView

**GIS RESOURCES – Access GIS data for Indiana**
- IndianaMap Viewer (desktop, tablet, mobile)
- IndianaMap Map Gallery
- IndianaMap Layer Gallery
- IndianaMap Webster Map Services (WMS)
- IndianaMap Web Map Services Generate KML
- IndianaView
- Indiana Geographic Information Council
- Indiana Coal Mine Information System Map Services
- Indiana State Government GIS Services
- Indiana State Government Imagery Services

**INVENTORY – Find who has what Indiana GIS data.**
- Data Inventory (framework layers): Use the Ramona GIS Inventory website to see who has what
- Local Mapping Websites: Search for local GIS contacts by county, organization, or application area

Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships.
The Indiana OpenTopography Server

2011 - 2013 Indiana Statewide LiDAR

Overview: Indiana's Statewide LiDAR data is produced at 1.5-meter average point spacing for all 92 Indiana Counties covering more than 36,420 square miles. New LiDAR data was captured except where previously captured LiDAR data exists, or the participating County bought-up to a higher resolution of 1.0-meter average point spacing LiDAR data. Existing LiDAR data exists for: Porter, Steuben, Noble, DeKalb, Allen, Madison, Delaware, Hendricks, Marion, Hancock, Morgan, Johnson, Shelby, Monroe, and portions of Vermillion, Parke, Vigo, Clay, Sullivan, Knox, Gibson, and Posey. These existing LiDAR datasets were seamlessly integrated into this new statewide dataset. From this seamless LiDAR product a statewide 5-foot point spacing hydro-gradient DEM product was created and is also available. See the FGDC Metadata provided for more details.

This statewide project is divided into three geographic areas captured over a 3-year period (2011-2013):


Platform: Airborne LiDAR  Survey Date: 03/13/2011 - 04/30/2012  Survey Area: 96,034.70 km²  Point Density: 1.58 pts/m²  

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The Indiana OpenTopography Server

Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships.
The Open Topography Server for Indiana

Select Data Product: Point Cloud Download & Processing | Raster [West] | Raster [East] | Point Cloud Bulk Download (Requires log-in)

1a. Select area of data to download or process:

Horizontal Coordinates: WGS84 (EPSG: 4326) - Vertical Coordinates: North American Vertical Datum 1988 (NAVD88)
Data Selection Coordinates: ✗ Manually enter selection coordinates in the horizontal coordinate system listed above

X_min = -86.319
Y_min = 30.85
X_max = -86.309
Y_max = 30.856

The selection area contains approximately 808,600 points

1b. Choose Return Classification: ✗ Ground ✗ Unclassified ✗ All

1c. Choose an Output Coordinate System: ✗ NAD83 Indiana East (NAD) [EPSG: 2274] ✗ NAD83 Indiana East (US) [EPSG: 2250] ✗ NAD83 Indiana West (NAD) [EPSG: 2275] ✗ NAD83 Indiana West (US) [EPSG: 2251] ✗ NAD83 UTM Zone 18N (Meter) [EPSG: 32618]

2. Point Cloud Data Download:

- ✔ Point cloud data in LAS format
- ✔ Point cloud data in LAZ format
- ✔ Point cloud data in ASCII format

** Note **
The Open Topography Server for Indiana

3. Point Cloud Data Download:
   - Point cloud data in LAS format
   - Point cloud data in LAZ format
   - Point cloud data in ASCII format

3a. DEM Generation (Local Gridding):
   - Grid Method
     - Calculate Zmin grid
     - Calculate Zmax grid
     - Calculate Zmean grid
     - Calculate Zlow grid
     - Calculate point count grid
   - Grid Parameters
     - Grid Resolution (Default = 6 ft)
     - Radius value (Default = 6 ft)
   - Grid Format
     - All formats
   - Null Filling
     - 7

3b. DEM Generation (TIN):
   - Grid Method
     - Calculate TIN
   - Grid Parameters
     - Grid Resolution (Default = 6 ft)
     - Max triangle size (Default 50 units):
   - Grid Format
     - Arc ASCII Grid

4. Derivative Products:
   - Generate hillshade and slope grids in grid format

5. Visualization:
   - Generate hillshade images and Google Earth files from DEMs
   - Altitude of the light, (in degrees): 45
   - Azimuth of the light, (in degrees): 315
   - Generate additional color-relief and colored hillshades

Job Description:
These options allow users to describe and keep track of their jobs. Information entered below is recorded along with other job parameters in your personal LIDAR Job archive accessed via myOpenTopo (available only to registered OpenTopography users).

Job title (up to 100 characters): My Indiana Project
Job description: (up to 500 characters)
The Open Topography Server for Indiana

Job Description
These options allow users to describe and keep track of their jobs. Information entered below is recorded along with other job parameters in your personal LiDAR Job archive accessible via myOpenTopo (available only to registered OpenTopography users).

Job title: (up to 100 characters)  
My Indiana Project

Job description: (up to 500 characters)  

Email Address:  
Enter your e-mail address for notification upon completion of processing  
pworrall@iupui.org

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The Open Topography Server for Indiana

LiDAR Job Report

Modify and resubmit this job↑
Full job metadata report↑

<table>
<thead>
<tr>
<th>Job Id</th>
<th>Dataset</th>
<th>Title</th>
<th>Submission</th>
<th>Completion</th>
<th>Duration</th>
<th>Num points</th>
<th>Status</th>
</tr>
</thead>
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<td>2014-03-11</td>
<td>37 sec</td>
<td>1,031,414</td>
<td>Done</td>
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</table>

Download Job Metadata: 

- Download point cloud data: points.las

Point Cloud Results:

DEM Results:

- Download compressed DEM results: dems.tar.gz (Local Gridding)
- Download compressed DEM results: outputin.tar.gz (TIN)

Derivative Product Results:

- Download compressed Hillshade & Slope Products: viz.tar.gz (Local Gridding)
- Download compressed Hillshade & Slope Products: viz.tar.gz (TIN)

Visualization Products:

- Download KMZ file: vilidw.ha.kmz
  View with Google Earth browser plug-in
- Download KMZ file: vilidw.cha.kmz
  View with Google Earth browser plug-in
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Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships

Selected IndianaMap GIS Initiatives

- IGIC – Cadastral, Boundaries PLSS Workgroup Initiatives
- IndianaMap County Data Sharing Initiative
- 2011 – 2013 & 2014 Ortho & LiDAR Program
- Local-Resolution National Hydrography Data Dev
- IndianaMap and the Indiana Spatial Data Portal
- Indiana’s OpenTopography LiDAR Server
- What’s Next

Coordination of Indiana GIS through dissemination of data and data products, education and outreach, adoption of standards, and building partnerships.
• Adding Value to County Data Sharing Initiative
  – Adding attributes to harvested centerline, point address, and parcel layers to support statewide geoprocessing, geocoding and routing applications [INDOT, NG9-1-1, ISP, US Census & more]
  – Quality Reporting of harvested data back to the Counties [with attribute additions and changes].
  – Creating seamless statewide datasets matching at the new GIS County Boundary Layer.
WHAT’S NEXT?

• Ortho-LiDAR Program
  – 2014 – 2016 RFP Developed by IGIC for GIO
  – Existing Contract Modification with Woolpert for 2014 [Center Tier]
  – 2014 updated product specifications and pricing for Ortho, LiDAR, and derivative products (Impervious Surfaces, Land Use Cover, Contours, and more)

• 2014 Participants
  – As of today, State has not been able to find 1-foot pixel base level funding for Center Tier, so Counties are participating on their own.
  – 2014 County Participants
    • Harrison Co (6-inch + land use cover)
    • Wabash Co (1-foot)
    • Vanderburgh Co (6-inch)
    • Monroe Co (6-inch)
    • Pike Co (6-inch)
WHAT’S NEXT?

• Local-Resolution NHD Stewardship
  – Adding Names to the new Local-Resolution streams, ditches and ponds
  – Web-based NHD Feature Updates
  – Conflating IDEM Permits & Events to Local-Resolution NHD?

Proposing Names for Un-Named Features

All names in NHD must first be in the national Geographic Names Information System, GNIS

协调印第安纳GIS通过数据和数据产品的传播、教育和宣传、采用标准和建立合作伙伴关系。
• Remembering the [GIS] Past!
  – Indiana Historic Imagery preservation and applications [INDOT]
  – Historic Sanborn Maps preservation and applications
  – Archiving of other historic GIS layers [e.g. Elevation / Contours, etc… - creating our own GIS Way-Back Machine]
• Moving the IndianaMap to the Cloud
  – ArcGIS.com IndianaMap Portal
  – Indiana Cloud-based GIS Pilot [GIO / Polis / UITS / IGIC]
  – Indiana GIS Data on any mobile device
    [Smartphone, Tablet, Google Glasses, Wrist Watch, or inside your brain!@#$%^&*()_+!]
  – IndianaMap Data Distribution / Sharing to support 3rd Party GIS - DAAS, and SAAS initiatives.

WHAT’S NEXT?
Questions?