

# State Geospatial Data Coordination Procedure

## Indiana

### Table of Contents

Table of Contents .....	1
Purpose of the Procedure.....	1
Default Flood Hazard Base Map for the State.....	2
Geospatial Data Coverage .....	2
Major State Holdings .....	3
Orthophotos .....	3
Transportation (roads, railroads, and airports) .....	3
Hydrography (rivers, streams, lakes, and shorelines).....	3
Political boundaries (county, municipal).....	4
Publicly owned lands (national, state, and local parks, forests, etc).....	4
Public land survey system (PLSS) (township and section lines).....	5
Cadastral (parcels).....	5
Terrain (elevation).....	5
Data Distribution Process for State Data.....	6
Federal Nationwide Geospatial Data Holdings .....	6
Finding and Accessing Other Existing Geospatial Data .....	6
Clearinghouses and Inventories for the State.....	6
National Digital Orthophoto Program (NDOP) and National Digital Elevation Program (NDEP) Tracking Systems .....	6
TED Query Tool .....	7
Geospatial One-Stop .....	7
Working with People.....	7
Useful State and Federal Contacts .....	7
Involving the State’s Geospatial Coordinator in Flood Studies.....	7
State Coordination Process for Building Geospatial Partnerships.....	7
Finding Local Geospatial Contacts .....	7
Provide Feedback on This Procedure .....	8

### Purpose of the Procedure

Flood insurance search for geospatial data during pre-scoping and scoping tasks. If needed data are not available, might fund the collection of new data and would like to know about other organizations that might share in these costs. Detailed information about the role geospatial data coordination plays in studies is in the *Geospatial Data Coordination Implementation Guide*, which is available at <https://hazards.fema.gov/femaportal/docs/GeoDataImplem.pdf>, and in *Scoping*

# State Geospatial Data Coordination Procedure

*Guidelines: Pre-scoping and the Scoping Meeting*, which is available through the Regional Management Center (RMC).

Resources developed through FEMA's geospatial data coordination activities provide information about data and contacts for organizations that have geospatial data that cover large areas (like states) in which many studies are interested. Studies can avoid wasting time with dead-end searches and cold calls by starting with these proven sources of information.

One resource is this Geospatial Data Coordination Procedure. It outlines sources of geospatial data and contact information, preferences for base map data and state geospatial participation in studies, and other useful information for the State.

If you have questions about this procedure or other geospatial data coordination resources, contact the geospatial data coordination lead in your Regional Management Center:

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## Default Flood Hazard Base Map for the State

The default base map for flood hazard maps for the State is an image base map (orthophoto).

## Geospatial Data Coverage

Find below information about and links to statewide (and Federal agencies' national) geospatial datasets. The list is provided to save time during pre-scoping and scoping activities when building a list of candidate geospatial datasets available for the study; it is not a prescription of datasets that must be used in a flood insurance study.

# State Geospatial Data Coordination Procedure

## Major State Holdings

### *Orthophotos*

Dataset name: 2005 Statewide Orthophotography Project

Data currentness: 2005 (and limited 2006 data)

Accuracy/Scale: The high-resolution orthophotos were compiled to meet 2.5 feet horizontal accuracy at 95% confidence level. The low-resolution orthophotos were compiled to meet 5.0 feet horizontal accuracy at 95% confidence level.

Ground sample resolution: minimum 1-foot (13 counties at 6-inch)

Horizontal datum: NAD 83

Fee associated? No; but DVDs in Multi Resolution Seamless Image Database (MrSID) format is priced.

Available for redistribution? Yes

Dataset source: Indiana Geographic Information Council at <http://www.indiana.edu/~gisdata/orthos.html>

Dataset contact: Indiana Geographic Information Council, Indiana State Library, GIS; (317) 234-2924, [info@igic.org](mailto:info@igic.org)

Notes: The datasets available are Natural Color and 1-meter Color Infrared Orthophotography.

### *Transportation (roads, railroads, and airports)*

Dataset name: Roads 2005 INDOT (Indiana Department of Transportation); Railroad Network 2003; Public-use Airports.

Data currentness: Roads --1998-2003; Railroads – 2003; Airports – 1998.

Accuracy/Scale: 1:100,000 for roads and railroads; airports source scale unknown.

Horizontal datum: Roads --NAD 83

Fee associated? No

Available for redistribution? Yes for Distribution, but redistribution policy not available

Are road names part of the dataset? Yes

Dataset source: Roads—at Indiana Department of Transportation

[http://129.79.145.7/arcims/statewide\\_mxd/dload\\_page/infrastructure.html](http://129.79.145.7/arcims/statewide_mxd/dload_page/infrastructure.html) ; Railroads, airports – National Transportation Atlas Database (NTAD), Bureau of Transportation Statistics.

Dataset contact: Indiana Department of Transportation, Joel Bump 317-234-3106; Indiana Geographic Information Council, Indiana State Library, GIS; (317) 234-2924, [info@igic.org](mailto:info@igic.org)

Notes: Data for roads were derived from pre-existing INDOT basemaps and databases as well as other external data sources such as Topologically Integrated Geographic Encoding and Referencing system (TIGER) files, county and/or city source data. Data were aligned to digital orthoquarterquads (DOQQ's) of the U.S. Geological Survey. Some roads data were also derived from color orthophotography of the U.S. Department of Agriculture.

### *Hydrography (rivers, streams, lakes, and shorelines)*

Dataset name: Stream Features, 2002

Data currentness: various years.

Accuracy/Scale: 1:100,000 (with some 1:24,000)

Horizontal datum: NAD 83

## State Geospatial Data Coordination Procedure

Fee associated? No

Available for redistribution? Yes for Distribution, but redistribution policy not available.

Are hydrography names part of the dataset? Yes

Dataset source: Multiple hydrography datasets available for download from the Indiana Geological Survey Atlas of Indiana

[http://129.79.145.7/arcims/statewide\\_mxd/dload\\_page/hydrology.html](http://129.79.145.7/arcims/statewide_mxd/dload_page/hydrology.html)

Dataset contact: Indiana Geographic Information Council, Indiana State Library, GIS; (317) 234-2924, [info@igic.org](mailto:info@igic.org)

Notes: Hydrography lines – Streams, rivers, canals, and ditches, 2000 (1:100,000). This layer is derived from the National Hydrography Dataset (NHD). The NHD interconnects and uniquely identifies the stream segments or reaches that comprise the nation's surface-water drainage system. It is based initially on the content of the U.S. Geological Survey 1:100,000-scale Digital Line Graph (DLG) hydrography data, integrated with reach-related information from the U.S. Environmental Protection Agency Reach File Version 3.0 (RF3). For portions of the southwestern 26 counties, some features were added from 1:24,000 quadrangles by Bernardin, Lochmueller and Associates, Inc.

Notes: The National Hydrography Dataset at “high” (1:24,000-scale) resolution also is available for much of the State; see <http://nhd.usgs.gov>.

### *Political boundaries (county, municipal)*

Dataset name: County Census Data 2005 (TIGER files); Indiana county boundary lines shapefile and Indiana county boundary polygons shapefile derived from the Indiana Geological Survey PLSS dataset

[http://129.79.145.7/arcims/statewide\\_mxd/dload\\_page/reference.html](http://129.79.145.7/arcims/statewide_mxd/dload_page/reference.html) are “Indiana Map Official Framework Data” and should be used for Indiana statewide county boundaries

Data currentness: 5-10 years cycle; irregular for PLSS

Accuracy/Scale: 1:24,000

Horizontal datum: NAD 83

Fee associated? No; but CDs of Indiana county boundary lines/polygons digital data sets are priced and can be purchased from the Indiana Geological Survey website shown below.

Available for redistribution? Yes for Distribution, but redistribution policy not available.

Dataset source: Indiana Geographic Information Council at

<http://www.indiana.edu/~gisdata/orthos.html> ; Indiana Geological Survey at

<http://igs.indiana.edu/Geology/maps/datadownloading/plss/index.cfm>

Dataset contact: Indiana Geographic Information Council, Indiana State Library, GIS; (317) 234-2924, [info@igic.org](mailto:info@igic.org); Indiana Geological Survey, A research institute of Indiana University; (812) 855-7636, [IGSInfo@indiana.edu](mailto:IGSInfo@indiana.edu)

### *Publicly owned lands (national, state, and local parks, forests, etc)*

Dataset name: IDNR Outdoor Recreational Facilities

Data currentness: Updated June 28, 2006

Accuracy/Scale: 1:24,000

Horizontal datum: NAD 83

Fee associated? No

Available for redistribution? Yes for Distribution, but redistribution policy not available.

## State Geospatial Data Coordination Procedure

Dataset source: Indiana Department of Natural Resources – dataset downloadable through the Indiana Geological Survey Atlas of Indiana

[http://129.79.145.7/arcims/statewide\\_mxd/downloads/RECREATIONAL\\_FACILITIES\\_I\\_DNR\\_IN.zip](http://129.79.145.7/arcims/statewide_mxd/downloads/RECREATIONAL_FACILITIES_I_DNR_IN.zip)

Dataset contact: Michael P. Martin, GIS Coordinator, Indiana Department of Natural Resources, Division of Outdoor Recreation

Notes: Shows outdoor recreation facilities, including facilities managed by federal, state, and local governments, as well as non-government organizations, private and commercial entities, and schools. It does not include sites that are private and not open to the public. Provided by personnel of the Indiana Department of Natural Resources, Division of Outdoor Recreation.

### *Public land survey system (PLSS) (township and section lines)*

Dataset name: Indiana land survey lines shapefile; Indiana land survey polygons shapefile; Indiana township and range lines shapefile; Indiana township and range polygons shapefile; and Indiana complete land survey coverage.

Data currentness: 5-10 years.

Accuracy/Scale: 1:24,000

Horizontal datum: NAD 83

Fee associated? No; but CDs of Indiana land survey lines/polygons digital data sets are priced and can be purchased from the Indiana Geological Survey website shown below.

Available for redistribution? Yes for Distribution, but redistribution policy not available.

Dataset source: Indiana Geological Survey at

<http://igs.indiana.edu/Geology/maps/datadownloading/plss/index.cfm>

Dataset contact: Indiana Geological Survey, A research institute of Indiana University; (812) 855-7636, [IGSInfo@indiana.edu](mailto:IGSInfo@indiana.edu)

### *Cadastral (parcels)*

No statewide cadastral coverage is currently available.

Notes: Information on local cadastral coverage can be obtained through the Indiana Ramona GIS Inventory [www.in.gisinventory.net](http://www.in.gisinventory.net).

### *Terrain (elevation)*

Dataset name: 2005 Digital Elevation Model (DEM)

Data currentness: 2005

Accuracy/Scale: Minimum resolution of 1-foot statewide since the DEM was created from the 2005 Orthophotography (color 1-ft and 6-in resolution) imagery. Consistent with procedures in the NSSDA, the DEMs for each Indiana county were compiled to meet 6-foot vertical accuracy at 95% confidence level. This is suitable for rectification of digital orthophotos and for automated compilation of 10-foot contours. Higher accuracy contours can be produced but only with additional ground control points, re-triangulation of the datasets, and stereo-compilation of breaklines as required.

Vertical datum: NAVD 88, CONTUS, GEOID99

Fee associated? No

Available for redistribution? Yes

Dataset source: Indiana Geographic Information Council at

<http://www.indiana.edu/~gisdata/orthos.html>

# State Geospatial Data Coordination Procedure

Dataset contact: Indiana Geographic Information Council, Indiana State Library, GIS; (317) 234-2924, [info@igic.org](mailto:info@igic.org)

Notes: Digital surface model is also available; USGS in working to incorporate the IndianaMap DEM into the NED coverage.

## *Data Distribution Process for State Data*

The state of Indiana does not have a formal data distribution policy in place; however, several state datasets are provided for public access and download through the Indiana Geological Survey “Atlas of Indiana”. For additional information regarding digital data availability and distribution, please refer to

<http://www.in.gov/igic/projects/indianamap/data.html> or contact the Indiana Geographic Information Council, Indiana State Library, GIS; (317) 234-2924, [info@igic.org](mailto:info@igic.org).

## *Federal Nationwide Geospatial Data Holdings*

Information about nationwide holdings and programs of Federal agencies is available from the Mapping Information Platform web site at

<<https://hazards.fema.gov/femaportal/docs/ProgFacts.pdf>>.

## Finding and Accessing Other Existing Geospatial Data

Find below information about and links to ways of searching for additional geospatial data available for the State. These capabilities can be useful for finding geospatial data other than the statewide and Federal data listed above, including those of special governments, counties and parishes, municipalities, tribes, universities, and other organizations.

## Clearinghouses and Inventories for the State

Indiana participates in a nation-wide, self-reporting, on-line GIS data inventory, Ramona GIS Inventory version 2.0, for inventory of people, policies, systems, and data at <http://in.gisinventory.net>. It is designed to work with Geospatial One-Stop (GOS), National Digital Orthophoto Program (NDOP), National Digital Elevation Program (NDEP) Tracking Systems, and state metadata clearinghouses. Any inventory efforts should be coordinated with the Indiana Geographic Information Council and leverage the Ramona GIS Inventory.

## National Digital Orthophoto Program (NDOP) and National Digital Elevation Program (NDEP) Tracking Systems

These systems allow the search of orthophoto and elevation project information entered by federal and other organizations. To access the NDOP system, go to the NDOP web site at <<http://www.ndop.gov>> and follow the link “Project Tracking.” For the NDEP system, go to the NDEP web site at <<http://www.ndep.gov>> and follow the link “Project Tracking.”

# State Geospatial Data Coordination Procedure

## TED Query Tool

This tool provides access to information about Federal, state, and local government agency and private sector data holdings gathered by the Census Bureau. It is available through the geospatial data coordination lead at the Regional Management Center.

## Geospatial One-Stop

Geospatial One-Stop, available at <<http://www.geodata.gov>>, provides access to geospatial data from many sources. Two parts of the site that should be investigated are the “data categories” for existing data and the “marketplace” for data that are planned or in-work and for potential partners for new data collection activities.

## Working with People

### Useful State and Federal Contacts

The main contacts for the State’s geospatial activities and Federal agencies’ representatives in State are available on the Mapping Information Platform web site at <<https://hazards.fema.gov/contacts/statecontacts/contacts.asp?page=IN>>

Additional useful contacts for the State can be found at [www.in.gisinventory.net/directory.html](http://www.in.gisinventory.net/directory.html), and <http://www.in.gov/igic/igic/board.html>.

### Involving the State’s Geospatial Coordinator in Flood Studies

Indiana has a consortium of State agency GIS personnel operating under agreement for a State “GIS Center of Excellence” under the Chief Information Officer in the Indiana Office of Information Technology, 100 North Senate, Room N551, Indianapolis, IN 46204; Phone: (317) 234-3843, <http://www.in.gov/iot/directors/services-gis.html>

### State Coordination Process for Building Geospatial Partnerships

The Indiana Geographic Information Council (see <<http://www.in.gov/igic/>>) builds geospatial partnerships through a framework data planning process (I-Team Process). IGIC should be consulted and included in correspondence regarding building geospatial partnerships to ensure new efforts are leveraged with existing plans.

### Finding Local Geospatial Contacts

Local contacts, including those from special government districts (for example, a regional planning commission); counties, parishes, or equivalent governments; tribes, municipal governments; and other organizations (for example, local universities) also have geospatial data that can help a flood insurance study. Contact information is available

# State Geospatial Data Coordination Procedure

from the FEMA archive and web searches at government link portals such as <http://www.statelocalgov.net>.

The State also maintains information about local geospatial contacts: IGIC maintains a statewide GIS Contacts List through the Indiana Ramona GIS Inventory Directory found at [www.in.gisinventory.net/directory.html](http://www.in.gisinventory.net/directory.html).

## Provide Feedback on This Procedure

When you find information in this Procedure or in other FEMA or State resources that are outdated, please tell the geospatial data coordination lead in the Regional Management Center what was wrong and the correct information (if you know it). Use the contact information for the lead listed in the section Purpose of the Procedure.

The lead will use your feedback to update this Procedure and will contact the Indiana Geographic Information Council for verification and update of the Ramona GIS Inventory for contacts and datasets.