#### Iowa

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## Purpose of the Procedure

Flood insurance studies search for geospatial data during pre-scoping and scoping tasks. If needed data are not available, studies 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 <a href="https://hazards.fema.gov/femaportal/docs/GeoDataImplem.pdf">https://hazards.fema.gov/femaportal/docs/GeoDataImplem.pdf</a>>, and in *Scoping 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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We appreciate the help of those who reviewed this document, in particular

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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.

## **Major State Holdings**

### **Orthophotos**

Dataset name: Digital Ortho Quads

Data currentness: 1990's

Accuracy/Scale: 1:12,000-scale based on the US NMAS (National Map Accuracy

Standard)

Ground sample resolution: 1 meter

Horizontal datum: NAD 83

Fee associated? No

Available for redistribution? Yes

Dataset source: <a href="http://www.igsb.uiowa.edu/nrgislibx/">http://www.igsb.uiowa.edu/nrgislibx/</a>, follow the link "Data Available by

Individual USGS 7.5' Quadrangles"

Dataset contact: Iowa Geological Survey, 109 Trowbridge Hall, Iowa City, Iowa 52242-

1319, (319) 335-1575, gis\_library@igsb.uiowa.edu

Note: 2002 color infrared imagery also is available; inquire about the suitability of using these data before incorporating them as a base map for flood map modernization projects.

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

Dataset name: (1) Roads of Iowa – 2002 TIGER, (2) Highways of Iowa

Data currentness: (1) 2002, (2) 1997

Accuracy/Scale: (1) The positional accuracy varies with the source materials used, but generally the information is no better than the established national map Accuracy standards for 1:100,000-scale maps from the U.S. Geological Survey (USGS). (2) The positional accuracy of the coverage coordinates is a deductive estimate based on possible errors that may have occurred during each production step. These errors include source of data, digitization, and processing. The accuracy is estimated to be 52 meters using a root-sum-square error calculation.

Horizontal datum: NAD 83

Fee associated? No

Available for redistribution? Yes

Are road names part of the dataset? Yes

Dataset source: <a href="http://www.igsb.uiowa.edu/nrgislibx/">http://www.igsb.uiowa.edu/nrgislibx/</a>, follow the link "Infrastructure" Dataset contact: Iowa Geological Survey, 109 Trowbridge Hall, Iowa City, Iowa 52242-

1319, (319) 335-1575, gis\_library@igsb.uiowa.edu

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

Dataset name: IA Aquatic Gap Watersheds – Modeling Coverage (NHD)

Data currentness: 2004

Accuracy/Scale: Original hydrologic data were compiled to meet National Map Accuracy standards. These standards have been maintained in the process of creating the NHD. At 1:100,000 scale, ninety percent of the well-defined features are within 167 feet (0.02 inches at map scale) of their true position.

Horizontal datum: NAD 83

Fee associated? No

Available for redistribution? Yes

Are hydrography names part of the dataset? Yes

Dataset source: <a href="http://www.igsb.uiowa.edu/nrgislibx/">http://www.igsb.uiowa.edu/nrgislibx/</a>, follow the link "Hydrologic

Surface"

Dataset contact: Iowa Geological Survey, 109 Trowbridge Hall, Iowa City, Iowa 52242-1319, (319) 335-1575, gis library@igsb.uiowa.edu

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

#### Political boundaries (county, municipal)

Dataset name: State and County Boundaries of The State of Iowa

Data currentness: 1990

Accuracy/Scale: Based on NMAS accuracy standards for USGS 1:24,000 scale maps, digitizer resolution, ARC/INFO fuzzy tolerances, and estimated operator error, the positional accuracy of this coverage is estimated to be around 22 meters. Positional error was estimated using a root-sum-squared error calculation.

Horizontal datum: NAD 83

Fee associated? No

Available for redistribution? Yes

Dataset source: <a href="http://www.igsb.uiowa.edu/nrgislibx/">http://www.igsb.uiowa.edu/nrgislibx/</a>; follow the link "Administrative

and Political Boundaries"

Dataset contact: Iowa Geological Survey, 109 Trowbridge Hall, Iowa City, Iowa 52242-

1319, (319) 335-1575, gis library@igsb.uiowa.edu

Notes: Boundary data for other political units are available from the site, but the quality

of the data is not clear from the metadata.

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

Dataset name: Conservation and Recreation Lands in the State of Iowa

Data currentness: 2006

Accuracy/Scale: The estimated accuracy of this coverage is +/- 50 meters.

Horizontal datum: NAD 83

Fee associated? No

Available for redistribution? Yes

Dataset source: http://www.igsb.uiowa.edu/nrgislibx/; follow the link "Administrative and

Political Boundaries"

Dataset contact: Iowa Geological Survey, 109 Trowbridge Hall, Iowa City, Iowa 52242-

1319, (319) 335-1575, gis library@igsb.uiowa.edu

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

Dataset name: Public Land Survey System of Iowa

Data currentness: 1998

Accuracy/Scale: Based on NMAS accuracy standards for USGS 1:24,000 scale maps, digitizer resolution, ARC/INFO fuzzy tolerances, and estimated operator error, the positional accuracy of this coverage is estimated to be around 22 meters. Positional error was estimated using a root-sum-squared error calculation.

Horizontal datum: NAD 83

Fee associated? No

Available for redistribution? Yes

Dataset source: <a href="http://www.igsb.uiowa.edu/nrgislibx/">http://www.igsb.uiowa.edu/nrgislibx/</a>; follow the link "Geographic" Dataset contact: Iowa Geological Survey, 109 Trowbridge Hall, Iowa City, Iowa 52242-

1319, (319) 335-1575, gis\_library@igsb.uiowa.edu

### Terrain (elevation)

Dataset name: National Elevation Data (feet)

Data currentness: 1999

Accuracy/Scale: +/- 7 meters (varies)

Vertical datum: NAD 83 Fee associated? No

Available for redistribution? Yes

Dataset source: <a href="http://www.igsb.uiowa.edu/nrgislibx/">http://www.igsb.uiowa.edu/nrgislibx/</a>; follow the link "Elevation" Dataset contact: Iowa Geological Survey, 109 Trowbridge Hall, Iowa City, Iowa 52242-

1319, (319) 335-1575, gis\_library@igsb.uiowa.edu

Notes: The National Elevation Dataset at a finer resolution also is available for the State;

see <a href="http://ned.usgs.gov">http://ned.usgs.gov</a>.

#### Data Distribution Process for State Data

Policy for data distribution is determined by individual agencies, and state information access laws.

#### Federal Nationwide Geospatial Data Holdings

Information about nationwide holdings and programs of Federal agencies is available from the Mapping Information Platform web site at <a href="https://hazards.fema.gov/femaportal/docs/ProgFacts.pdf">https://hazards.fema.gov/femaportal/docs/ProgFacts.pdf</a>.

### 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

*Natural Resources Geographic Information Systems Library:* 

http://www.igsb.uiowa.edu/nrgislibx/: The Natural Resources Geographic Information System (NRGIS) Library is a Geographic Information System (GIS) repository developed and maintained by the GIS Section of the Iowa Department of Natural Resources (DNR). It is a collection of more than 15,000 geographically referenced databases. The purpose of the NRGIS Library is to improve the availability, integration, and analysis of natural resource information and improve decisions to carry out agency responsibilities related to the management, protection and development of Iowa's natural resources. The NRGIS Library is seen as a one-stop repository for all of Iowa's natural resource, geographic information.

*Iowa Geospatial Data Clearinghouse*: <a href="http://www.iowagis.org/">http://www.iowagis.org/</a>: The Iowa Geospatial Data Clearinghouse (IGDC) allows GIS users looking for Iowa data to explore metadata published by Iowa data providers. Users can search by keyword, subject, data type and spatial extent to return documents describing live mapping services, mapping applications,

downloadable data, offline data and other clearinghouses with Iowa data. Data publishers have the opportunity to create an account on the IGDC and publish your content using a form based entry system. Published metadata is automatically harvested by geodata.gov so you get the benefit of automatically publishing your content to two locations. For more information contact Patrick Brown (patrickb@iastate.edu) or visit the Iowa Geospatial Data Clearinghouse.

# 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 <a href="http://www.ndop.gov">http://www.ndop.gov</a> and follow the link "Project Tracking." For the NDEP system, go to the NDEP web site at <a href="http://www.ndep.gov">http://www.ndep.gov</a> and follow the link "Project Tracking."

#### **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 <a href="http://www.geodata.gov">http://www.geodata.gov</a>>, 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 <a href="https://hazards.fema.gov/contacts/statecontacts/contacts.asp?page=IA">https://hazards.fema.gov/contacts/statecontacts/contacts.asp?page=IA</a>

Additional useful contacts for the State can be found at <a href="http://www.iowagic.org/">http://www.iowagic.org/</a>.

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

In order to participate in the FEMA flood hazard mapping effort, this office prefers to be contacted in all of the following ways:

a. Send project list at the start of each year

This state already has a working relationship with the office in the state that is responsible for updating the multi-hazard maps, and they have access to their state's flood map modernization business plan.

#### State Coordination Process for Building Geospatial Partnerships

Iowa Geographic Information Council: <a href="http://www.iowagic.org/">http://www.iowagic.org/</a>: The mission of the Iowa Geographic Information Council (IGIC) is to foster an efficient GIS environment through cooperation and coordination with public and private entities that access, collect, provide, and share data, metadata, applications and educational opportunities. The Council consists of representatives from federal, state, county, regional and local governments, colleges and universities, and the private sector. The IGIC consists of twenty-five Board Members that represent each of the functional sectors. As a member driven organization, IGIC relies heavily on the support of its membership in accomplishing its mission and objectives.

#### **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 from the FEMA archive and web searches at government link portals such as <a href="http://www.statelocalgov.net">http://www.statelocalgov.net</a>.

The state maintains a statewide GIS contacts list in the following formats:

a. Web Accessible: <a href="http://igic.gis.iastate.edu/">http://igic.gis.iastate.edu/</a>

The levels of government in the list are:

- a. Municipal
- b. County
- c. State

#### 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.