

State Geospatial Data Coordination Procedure

North Dakota

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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 <https://hazards.fema.gov/femaportal/docs/GeoDataImplem.pdf>, and in *Scoping*

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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 either an image (orthophoto) or vector (road centerline) base map. The State does not have an up-to-date road centerline base map on the state level. The State does have recent 1 and 2 meter resolution color orthophotography. The default base map used depends on the individual county being studied, as some counties may have a sufficient road centerline file.

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.

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Major State Holdings

Orthophotos

Dataset name: DOQQ
Data currentness: Varies: 1995-1998
Accuracy/Scale: 1:12,000
Ground sample resolution: 1 meter
Horizontal datum: NAD83
Fee associated? None
Available for redistribution? Yes
Dataset source: USGS
Dataset contact: <http://seamless.usgs.gov/>
Notes: Same as National Dataset.

Dataset name: NAIP Imagery
Data currentness: 2003, 2005
Accuracy/Scale:
Ground sample resolution: 1 meter
Horizontal datum: NAD83
Fee associated? None
Available for redistribution? Yes
Dataset source: USDA
Dataset contact: <http://datagateway.nrcs.usda.gov/GatewayHome.html> and
<http://www.nd.gov/gis/mapsdata/download/>

Notes: (1) Same as National Dataset.

(2) NAIP imagery has many uses, and many states participate in NAIP. NAIP is leaf-on imagery and is not cloud-free, and so the ground might be obscured. So, while NAIP (and other such imagery) can be used as a base maps, the imagery must be checked to ensure that it provides a clear view of important features on the ground for areas of significance for flooding (see Appendix C of the Geospatial Data Coordination Implementation Guide for more discussion).

(3) There also is coverage for the State at 2 meter resolution. Note that these data are not suitable for use as a base map for the FEMA Flood Map Modernization program.

Transportation (roads, railroads, and airports)

Dataset name: 2006 TIGER Line Files, 1st Edition
Data currentness: 2006
Accuracy/Scale: 7.6 meter or better (horizontal) for modernized data
Horizontal datum: NAD83
Fee associated? No
Available for redistribution? Yes
Are road names part of the dataset? Yes (most)
Dataset source: Census Bureau
Dataset contact: <http://www.census.gov/geo/www/tiger/tiger2006fe/tgr2006fe.html> and
<http://www.nd.gov/gis/mapsdata/data/extractdata/>

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Notes: Same as National Dataset. Currentness and accuracy varies by county. Individual counties and the state have accurate up to date transportation file. Contact state/local GIS department.

Hydrography (rivers, streams, lakes, and shorelines)

Dataset name: NHD Datasets

Data currentness: 1999

Accuracy/Scale: 1:100,000 or better

Horizontal datum: NAD83

Fee associated? No

Available for redistribution? Yes

Are hydrography names part of the dataset? Yes

Dataset source: USGS

Dataset contact: <http://nhd.usgs.gov/> and

<http://www.nd.gov/gis/mapsdata/data/extractdata/>

Notes: Same as National Dataset. Currentness and accuracy varies. Individual counties may have accurate up to date hydrography file. Contact state/local GIS department.

Political boundaries (county, municipal)

Dataset name: ND GIS Hub County and Corporate

Data currentness: 2006

Accuracy/Scale: County better than 1:100,000; Corporate 1:24,000

Horizontal datum: NAD83

Fee associated? No

Available for redistribution? Yes

Dataset source: Census Bureau, NDDOT, ND State Water Commission

Dataset contact: <http://www.nd.gov/gis/mapsdata/data/extractdata/>

Notes: Individual counties may have accurate up to date political boundary file. Contact state/local GIS department.

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

Dataset name: Federal Surface Management Agency Boundaries

Data currentness: 2003-2006

Accuracy/Scale: generally 1:24,000, some at 1:100,000

Horizontal datum: NAD83

Fee associated? No

Available for redistribution? Yes

Dataset source: BLM, BOR, ACOE, FS, FWS, NDDOT, ND Game and Fish

Dataset contact: <http://www.geocommunicator.gov/GeoComm/fedland/home/index.html>
and <http://www.nd.gov/gis/mapsdata/data/extractdata/>

Notes:

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

Dataset name: National Integrated Land System – Land Survey Information System

Data currentness: 2003

Accuracy/Scale: 1:100,000 or better

Horizontal datum: NAD83

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Fee associated? No

Available for redistribution? Yes

Dataset source: National Integrated Land System, ND Public Service Commission, ND State Water Commission, ND Geological Survey

Dataset contact:

http://www.geocommunicator.gov/GeoComm/Isis_home/home/index.html and
<http://www.nd.gov/gis/mapsdata/data/extractdata/>

Notes: Same as National Dataset. Complete coverage may vary for individual counties. Some counties may have accurate PLSS file. Contact state/local GIS department. Note that Government Land Office surveys and notes can be found at

<http://www.swc.state.nd.us/4dlink9/4dcgi/GetSubCategoryRecord/Map%20and%20Data%20Resources/Government%20Surveys>

Cadastral (parcels)

Notes: No coverage available. Individual counties may have accurate up to date property ownership file. Contact local GIS department.

Extraterritorial jurisdiction (ETJ) boundaries

Notes: No coverage available. Individual counties may have accurate up to date ETJ file, if applicable. Contact local GIS department.

Terrain (elevation)

Dataset name: National Elevation Dataset

Data currentness: 2000-2006

Accuracy/Scale: varies from 1 to 30 meter

Vertical datum: NAVD88, NGVD29

Fee associated? No

Available for redistribution? Yes

Dataset source: USGS

Dataset contact: <http://seamless.usgs.gov/>

Notes: Same as National Dataset. Currentness and accuracy varies by county. Individual counties may have accurate up to date elevation datasets. Contact state/local GIS department.

Data Distribution Process for State Data

The centralized distribution process for GIS data in North Dakota is through their Metadata and Hub Explorer applications online. Data is free of charge and is available for redistribution. See <http://www.nd.gov/gis/mapsdata/data/extractdata/>.

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>>.

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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

North Dakota maintains a comprehensive GIS data inventory through the state website. There are two ways to search and download data from the state website. The first way is through the Metadata Explorer. This application allows users to search metadata for available GIS data throughout the state. The site also includes map images and data sets that can be directly downloaded from the site. In addition to the metadata explorer, North Dakota also maintains the ND GIS Hub Explorer. This application is an interactive map that allows users to view and download various GIS data layers throughout the state. Both applications contain local and state-level data sets that can be extracted in a variety of formats and map projects, and include its associate metadata. All data is available at no charge and with no access restrictions for use in state maps.

- Metadata Explorer: <http://web.apps.state.nd.us/metadataexplorer/>
- ND GIS Hub Explorer: <http://web.apps.state.nd.us/hubexplorer/generalinfo/viewer.html>
- North Dakota's GIS Homepage: <http://www.nd.gov/gis/>

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."

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.

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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=ND>>

Involving the State's Geospatial Coordinator in Flood Studies

In order to participate in the FEMA flood hazard mapping effort, the state GIS Coordinator prefers to be contacted in the following way:

- a. Attendance to each kickoff and/or scoping meeting
- b. Notification of upcoming GIS data projects and DFIRM project status
- c. Receive any data discovered or produced through DFIRM projects

The coordinator would like the opportunity to review this document annually.

State Coordination Process for Building Geospatial Partnerships

The North Dakota GIS Technical Committee (GISTC; see <http://www.nd.gov/gis/about/committees/>) is an example partnerships built through state agencies working together. The GISTC is made up of eleven agencies outlined by executive orders. The committee coordinates and provides an overview of GIS activities, reviews proposed GIS projects, and acts as clearinghouse for GIS data within the state. The main goals of the GISTC are to look for GIS cost saving opportunities by coordination of software and hardware purchases, data acquisition, training, and support, and to identify what other State agencies are doing with GIS, to help eliminate redundancies while promoting partnerships and collaboration with other levels of government statewide.

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 <<http://www.statelocalgov.net>>.

The North Dakota Association of Counties (NDAC) maintains a website that provides contact information at the county level. General contact information for each county or links to individual county websites can be accessed at the following website: <http://www.ndaco.org/>.

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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 and redistribute this Procedure.