

State Geospatial Data Coordination Procedure

Montana

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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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Date Procedure discussed: March 19, 2007

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 depending on the individual county being studied and the best available data at the time of the study.

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: Black and White Digital Orthophoto Quads (DOQ)

Data currentness: Varies: 1993-2004

Accuracy/Scale: 1:12,000 statewide; better for high-resolution coverage in urban areas

Ground sample resolution: 1 meter; finer for high-resolution urban areas

Horizontal datum: NAD83

Fee associated? None

Available for redistribution? Yes

Dataset source: USGS at <http://seamless.usgs.gov/>

Dataset contact: Customer Service, U.S. Geological Survey, Center for Earth Resources

Observation and Science (EROS), 47914 252nd Street, Sioux Falls, SD 54198-0001;

phone: 800-252-4547; custserv@usgs.gov

Notes: Same as National Dataset.

Dataset name: National Agriculture Imagery Program (NAIP) Imagery

Data currentness: 2005

Accuracy/Scale: 1:12,000

Ground sample resolution: 1 meter

Horizontal datum: NAD83

Fee associated? None

Available for redistribution? Yes

Dataset source: USDA at <http://datagateway.nrcs.usda.gov/GatewayHome.html>

Dataset contact: gateway@ftc.usda.gov

Notes: 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).

Dataset name: High resolution imagery over cities

Data currentness: 2004

Accuracy/Scale: no assurance of the positional accuracy

Ground sample resolution: 1 foot

Horizontal datum: NAD83

Fee associated? None

Available for redistribution? Yes

Dataset source: Montana NRIS at <http://nris.mt.gov/nsdi/orthophotos/>

Dataset contact: Montana State Library, (406) 444-5358, nris@mt.gov

Notes:

Transportation (roads, railroads, and airports)

Dataset name: Montana Framework Transportation Database

Data currentness: 2007

Accuracy/Scale: 7.6 meter or better (horizontal) for modernized data

Horizontal datum: NAD83

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Fee associated? No

Available for redistribution? Yes

Are road names part of the dataset? Yes

Dataset source: MT Dept. of Administration/Information Technology Services Division - <http://giscoordination.mt.gov/transportation/data.asp>

Dataset contact: Mark Tripp mtripp@mt.gov

Notes: Currentness and accuracy varies by county. Data to be updated annually.

Individual counties may have accurate up to date transportation file. Contact state/local GIS department.

Dataset name: 2006 First and Second Edition TIGER/Line Files

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

Dataset source: Census Bureau at

<http://www.census.gov/geo/www/tiger/tiger2006fe/tgr2006fe.html>

Dataset contact: tiger@census.gov

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

Hydrography (rivers, streams, lakes, and shorelines)

Dataset name: National Hydrography Datasets (NHD)

Data currentness: 1999

Accuracy/Scale: 1:100,000 and 1:24,000

Horizontal datum: NAD83

Fee associated? No

Available for redistribution? Yes

Are hydrography names part of the dataset? Yes

Dataset source: USGS at <http://nhd.usgs.gov/>

Dataset contact: NHD@usgs.gov

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

Political boundaries (county, municipal)

Dataset name: 2006 First and Second Edition TIGER/Line Files

Data currentness: 2006

Accuracy/Scale: varies; as good as 7.6 meter or better (horizontal) where boundaries follow for modernized road data

Horizontal datum: NAD83

Fee associated? No

Available for redistribution? Yes

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Dataset source: Census Bureau at

<http://www.census.gov/geo/www/tiger/tiger2006fe/tgr2006fe.html>

Dataset contact: tiger@census.gov

Notes: Same as National Dataset. Currentness and accuracy varies by county. TIGER does not use the Geographic Coordinate Database for boundaries that are coincident with the Public Land Survey, therefore these boundaries do not line up with the State's cadastral data. Cadastral coincident county boundaries are contained in the state's cadastral database available at <http://gis.mt.gov/>. The state is currently working on other statewide boundary datasets including school districts and municipal boundaries. For more information contact the State GIS Coordinator at skirkpatrick@mt.gov. 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: 2004

Accuracy/Scale: 1:100,000 or better

Horizontal datum: NAD83

Fee associated? No

Available for redistribution? Yes

Dataset source: Bureau of Land Management (BLM) at

<http://www.geocommunicator.gov/GeoComm/fedland/home/index.html>

Dataset contact: Office of Public Affairs, 1849 C Street, Room 406-LS Washington, DC 20240; Phone: (202) 452-5125

Notes: Also see the Cadastral (parcels) section below. The currentness of the cadastral data for public lands should be assumed to be better than the Federal Surface Management Agency Boundaries

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

Dataset name: Montana/Dakotas Geographic Coordinate Database (GCDB)

Data currentness: 1998-present

Accuracy/Scale: Except where a corner monument has been used as a first or second order control point and the results are of public record, the coordinate values used by GCDB are established with varying reliability based on the source material and method of data input.

Horizontal datum: NAD83

Fee associated? No

Available for redistribution? Yes

Dataset source: BLM Montana State Office at

<http://www.mt.blm.gov/cadastral/gcdb/index.html>

Dataset contact: Montana State Office at (406) 896-5009

Notes: The BLM site only provides GCDB in their raw township form. The most current GCDB will always be contained within the cadastral geodatabases at

<http://giscoordination.mt.gov/cadastral/data.asp>

Cadastral (parcels)

Dataset name: Montana Cadastral Framework Database

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Data currentness: updated monthly

Accuracy/Scale: As accurate as the underlying Geographic Coordinate Database (GCDB) database

Horizontal datum: NAD83

Fee associated? No

Available for redistribution? Yes

Dataset source: Montana Dept. of Administration, Information Services Division at <http://giscoordination.mt.gov/cadastral/data.asp>

Dataset contact: Stewart Kirkpatrick, 406-444-9013, skirkpatrick@state.mt.us

Notes: This dataset is an integrated source of parcel, PLSS, publicly owned lands, and boundaries of political jurisdictions.

Extraterritorial jurisdiction (ETJ) boundaries

No statewide 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: 2.44 meter(vertical)

Vertical datum: NAVD88

Fee associated? No

Available for redistribution? Yes

Dataset source: USGS at <http://seamless.usgs.gov/>

Dataset contact: Customer Service, U.S. Geological Survey, Center for Earth Resources Observation and Science (EROS), 47914 252nd Street, Sioux Falls, SD 54198-0001; phone: 800-252-4547; custserv@usgs.gov

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

Data Distribution Process for State Data

The centralized data distribution process for the State of Montana is through the Natural Resource Information System website which includes an inventory of geospatial data and metadata that can be downloaded free of charge. See <http://nris.mt.gov/gis/>. Information on the Montana Spatial Data Infrastructure Framework Databases is available at <http://giscoordination.mt.gov/frameworkdata.asp>.

In addition GIS data can also be obtained from some city and county government websites also free of charge without redistribution issues if the data is to be used by FEMA for the map modernization program.

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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

The state does maintain an inventory of existing geospatial data. The listing is web assessable and is located at <http://nris.mt.gov/gi.asp>. The inventory includes federal, state and some local datasets. The data is available to FEMA at no charge and with no access restrictions for use in state maps. The state also maintains a list server that can be used to forward FEMA program information and production notices to state and county GIS contacts. The state GIS coordinator may be contacted for information on using this list server.

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=MT>

Involving the State's Geospatial Coordinator in Flood Studies

In order to participate in the FEMA flood hazard mapping effort, the state GIS coordinator's office prefers to be contacted in all of the following ways:

- a. Send project list at the start of each year
- b. Conference call at the start of data discovery for each individual project
- c. Attend each kickoff/scooping meeting

This state does not have a working relationship with the office in the state that is responsible for updating the multi-hazard maps, and they do not have access to their state's flood map modernization business plan.

State Coordination Process for Building Geospatial Partnerships

The Montana Land Information Advisory Council advises the Department of Administration on the planning and grant process established by statute, as well as providing policy level direction in the advancement of Geographic Information Technology. See <http://itsd.mt.gov/policy/councils/mliac/mliac.asp>.

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 Montana Association of Geographic Information Professionals maintains a list of local GIS contacts. The information can be found at <http://www.magip.org/>. Their contact list includes GIS personnel on the city, county, and state levels of government as well as private industry. In addition, the state GIS coordinator may be contacted to get local GIS contact information.

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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.