

State Geospatial Data Coordination Procedure

Oklahoma

FINAL

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FEMA

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Oklahoma

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State Geospatial Data Coordination Procedure

Purpose of the Procedure

Flood Insurance Studies search for geospatial data during Discovery 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 portal, which is available at https://riskmapportal.msc.fema.gov/riskmap_usergroups/GeoCoord/default.aspx (password required).

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 flood insurance studies, information for the project Discovery stage, 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 Support Center (RSC):

John Barr, Geospatial Data Coordination Lead Compass Regional Support Center (RSC) 6
(972)829-8966

john.barr@aecom.com

Default Flood Hazard Base Map for the State

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

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: NAIP Orthophotography

Data currentness: 2015 Accuracy/Scale: +/- 5 meters

Ground sample resolution: 1 meter ground sample distance Horizontal datum: NAD83

Fee associated? No

Available for redistribution? Yes

Dataset source: Natural Resource Conservation Service (NRCS) National Aerial Imagery Program (NAIP)

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Dataset contact: Mike Sharp, Office of Geographic Information, (405) 521-4813, mike.sharp@conservation.ok.gov. Oklahoma Geographic Information Council
http://www.okmaps.onenet.net/digital_ortho.htm

Notes: The State of Oklahoma currently has statewide digital orthophotos for the years 2003-2006, 2008, 2010, 2013, and 2015. The 2003, 2008, 2010, 2013, and 2015 orthophotos have a resolution of 1 meter while the 2004-2006 orthophotos are 2-meter. All images have been flown leaf on and are compressed using MrSID into one file per county. The files can be downloaded from the Council's ftp site.

Transportation (roads, railroads, and airports)

Dataset name: ACOG Vector Road Dataset Data currentness: 5/13/2014

Accuracy/Scale: The road centerline file was created by incorporating many different sources. These include atlas books provided by 9-1-1 ACOG, parcel data provided by individual counties, and hard copy and digital resources received from municipalities. Streets were digitized when necessary from spatially accurate (+/- 5 meters) aerial photography. Fieldwork to gather GPS data was utilized where other resource data were not sufficient. Some municipalities within ACOG provided road centerline files that meet the standards necessary for the final dataset.

Horizontal datum: NAD83 Fee associated? No

Available for redistribution? Data shall not be shared without written permission of the 9-1-1 ACOG.

Are road names part of the dataset? Yes Are road names in TIGER format? Yes

Dataset source: Geo-Comm, 601 W Saint Germain St, St Cloud MN 56301. Available for download from Center for Spatial Analysis at: <http://www.csa.ou.edu/>

Dataset contact: ACOG, Alice Nicely (405) 234-2264 abucekt@acogok.org

Dataset name: Oklahoma Railroads Data currentness: 4/15/2016 Accuracy/Scale: Unknown

Horizontal datum: NAD83

Fee associated? No

Available for redistribution? Yes

Are road names part of the dataset? N/A Dataset source: Unknown

Dataset contact: Center for Spatial Analysis

<http://geo.ou.edu/DataFrame.htm>

Hydrography (rivers, streams, lakes, and shorelines)

Dataset name: Oklahoma Lakes and Streams Data currentness: 2003

Accuracy/Scale: Stream networks of Oklahoma derived from the USGS. The file has been clipped to only include streams inside Oklahoma.

Horizontal datum: NAD83 Fee associated? No

Available for redistribution? Yes

Are hydrography names part of the dataset? Yes Dataset source: USGS

Dataset contact: Oklahoma Geographic Information Council

http://okmaps.onenet.net/GIS_data.htm/

Political boundaries (county, municipal)

Dataset name: Municipal Boundaries Data currentness: 5/2016

Accuracy/Scale: The municipal boundaries were originally derived from TIGER/Line 1998 files of the Bureau of the Census. TIGER/Line files were originally digitized at a scale of 1:100,000 to an accuracy of 160 ft. Municipal boundaries were verified against maps or digital files provided

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by the Oklahoma Tax Commission or other concerned authorities. Updates and corrections to those boundaries are continually made as necessary.

Horizontal datum: NAD83 Fee associated? No

Available for redistribution? Yes

Are boundary names part of the dataset? Yes

Dataset source: Center for Spatial Analysis (University of Oklahoma) at: <http://www.csa.ou.edu/>

Dataset contact: Center for Spatial Analysis, Azhar Mahmood, 3100 Monitor Suite 180, Norman, OK 73072, (405) 325-0301 Fax (405) 579-5985, azmahmood@ou.edu

Notes: This is an ArcView shapefile of statewide municipal boundaries for Oklahoma State. Boundaries are based on information provided by the Oklahoma Tax Commission. This statewide shape file is created by merging the individual municipal boundary coverages for all the seventy-seven counties in the State.

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

Dataset name: Oklahoma Indian Tribes Data currentness: 4/2010 Accuracy/Scale: Unknown

Horizontal datum: NAD83 Fee associated? No

Available for redistribution? Yes

Dataset source: Oklahoma Office of Geographic Information

Dataset contact: Mike Sharp, (405) 521-4813, mike.sharp@conservation.ok.gov. Download from Oklahoma Office of Geographic Information <http://ogi.state.ok.us/ogi/>

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

Dataset name: Section Lines/Polygons for Oklahoma, Township Lines/Polygons for Oklahoma
Data currentness: 2006 Accuracy/Scale: Unknown Horizontal datum: NAD83 Fee associated? No

Available for redistribution? Yes

Dataset source: Dataset from the Oklahoma Department of Commerce Dataset contact: Oklahoma Geographic Information Council http://okmaps.onenet.net/GIS_data.htm

Cadastral (parcels)

No statewide data available – possibly available locally.

Terrain (elevation)

Dataset name: USGS Digital Elevation Models Data currentness: Unknown

Accuracy/Scale: Vertical accuracy of 1/3rd arc-second (approximately 10 meters) Vertical datum: NAVD88

Fee associated? No

Available for redistribution? Yes Dataset source: USGS

Dataset contact: Available for download from <http://nationalmap.gov/viewer.html>

Dataset Name: NRCS Digital Elevation Models and LAS Data Currentness: 2009-2010

Accuracy/Scale: 2 meter Vertical datum: NAVD88 Fee associated? No

Available for redistribution? Yes Dataset Source: NRCS

Dataset contact: Available for download from http://okmaps.onenet.net/digital_data.htm

Data Distribution Process for State Data

University of Oklahoma Center for Spatial Analysis: <http://csa.ou.edu> Oklahoma Office of

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Geographic Information: <http://ogi.state.ok.us/ogi/> Oklahoma Geographic Information Council: <http://www.okmaps.onenet.net/>

Useful Risk MAP Discovery Data Sources

Preliminary information on Discovery data sources is provided in this document to reduce the level of effort needed on each subsequent Discovery data collection effort.

Coordination with local community sponsors for additional local data still remains an integral part of Discovery and local data should be used where appropriate.

The *National Discovery Data Coordination Procedure* document contains information on data resources available from other Federal agencies (OFAs), including those that FEMA maintains at the national level, and should be used in conjunction with this *State Geospatial Data Coordination Procedure* document. In addition, FEMA and its contractors have created a geospatial Discovery Data Repository to host data that are not readily accessible through direct sources such as Web sites or subscription services and/or are not updated on a frequent basis. Instructions on accessing the Discovery Data Repository are given in the *National Discovery Data Coordination Procedure* document.

Table 1 identifies data resources that are available at the regional and State levels, and also if there are no data available other than the national datasets. Resources in this table have been identified as appropriate for Discovery projects and may not represent the best data sources for FIRM production (please see the Major State Holdings section of this document for geospatial data that meet FIRM production requirements).

Table 1. Discovery Data Sources

Data	Data Source	Location
Watershed boundaries	National	See <i>National Discovery Data Coordination Procedure</i>
Jurisdictional boundaries	Center for Spatial Analysis- University of Oklahoma National	http://geo.ou.edu/DataFrame.htm Center for Spatial Analysis Leah Nash (405) 325-3131 ldnash@ou.edu See <i>National Discovery Data Coordination Procedure</i>
Tribal land boundaries	National	See <i>National Discovery Data Coordination Procedure</i>

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Data	Data Source	Location
State lands	Center for Spatial Analysis- University of Oklahoma	http://www.csa.ou.edu/ Center for Spatial Analysis Leah Nash (405) 325-3131 ldnash@ou.edu
	Oklahoma Office of Geographic Information	http://ogi.state.ok.us/ogi/ Department of Geography Oklahoma State University Stillwater, Oklahoma 74078 E-Mail: mike.sharp@conservation.ok.gov
Status of Hazard Mitigation Plans	National	See <i>National Discovery Data Coordination Procedure</i>
Flood control structure data	Oklahoma Office of Geographic Information	http://ogi.state.ok.us/ogi/ Mike Sharp Acting State Geographic Information Coordinator (405) 521-4813
	Oklahoma Water Resources Board	http://www.owrb.ok.gov/maps/data/owrbdata.php
	National	Michael Sughru GIS Coordinator (405) 742-1249 See <i>National Discovery Data Coordination Procedure</i>
Locations of stream gages	Oklahoma Water Resources Board	http://www.owrb.ok.gov/maps/data/owrbdata.php Michael Sughru GIS Coordinator (405) 742-1249
	National	See <i>National Discovery Data Coordination Procedure</i>
Locations of past flood claims and repetitive loss properties	Region	Available through coordination with Region 6 RSC. Jessica Baker 1001 Cross Timbers Road Suite 2020 Flower Mound, TX 75028
	National	See <i>National Discovery Data Coordination Procedure</i>
Locations of clusters of Letters of Map Change	National	See <i>National Discovery Data Coordination Procedure</i>
Known flooding issues not represented on effective FIRMs or listed in Coordinated Needs Management Strategy database	Local	Local

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Data	Data Source	Location
Areas of planned development	Local	Local
Map of land use change datasets	Local	Local
Locations of ongoing projects or updated stream studies (e.g., highway improvements)	Local	Local
Locations of wave and tide gauges	N/A	N/A
Locations of wind gauges	N/A	N/A
Proposed inland limit of the Primary Frontal Dune, if present	N/A	N/A
Locations of any beach nourishment or dune restoration projects	N/A	N/A
Comparison of preliminary stillwater elevations with effective stillwater elevations	N/A	N/A
Effective study data	National	See <i>National Discovery Data Coordination Procedure</i>
Orthophotography	Center for Spatial Analysis- University of Oklahoma Oklahoma Geographic Information Council National	http://csa.ou.edu/ Center for Spatial Analysis Azhar Mahmood (405) 325-0301 azmahmood@ou.edu http://www.okmaps.onenet.net/digital_ortho.htm See <i>National Discovery Data Coordination Procedure</i>
Proposed discussion areas, problem areas, areas of proposed mitigation projects	Local	Local
Land use and soil information	National	See <i>National Discovery Data Coordination Procedure</i>
Reference points to locate areas with flooding issues	Local	Local
Hydraulic structures	Oklahoma Department of Transportation National	http://www.okladot.state.ok.us/ See <i>National Discovery Data Coordination Procedure</i>

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Data	Data Source	Location
Coastal structures, including flood protection structures, shoreline structures, manmade embankments, surge conveyance pathways, and shoreline change data	N/A	N/A
Local structure and topographic data from the existing hazard mitigation plans	Local	Local
Historic inundation areas and high water marks	Regional	Discovery Data Repository
Clusters or locations of Individual Assistance/Public Assistance grants and locations of grant projects completed, planned, or underway	National	<i>See National Discovery Data Coordination Procedure</i>
Locations of projects and structures completed or planned for FEMA Hazard Mitigation Assistance grant programs or mitigation funds from other agencies or entities, such as the Small Business Administration	National	<i>See National Discovery Data Coordination Procedure</i>
Other information on FEMA grants	Local	Local
Any data deficiencies identified in hazard mitigation plans	Local	Local
Information from FloodSmart on market penetration	National	<i>See National Discovery Data Coordination Procedure</i>
Community Assistance Visits / Community Assistance Contacts	National	<i>See National Discovery Data Coordination Procedure</i>
Community Rating System class information	National	<i>See National Discovery Data Coordination Procedure</i>
Information from other Federal agencies	National	<i>See National Discovery Data Coordination Procedure</i>
Information from State agencies, non-profit organizations, universities, etc.	Department of Environmental Quality	http://www.deq.state.ok.us/ David Pruitt Water Quality Division
Current community plans, ordinances, or programs to alleviate flooding or manage stormwater	National	<i>See National Discovery Data Coordination Procedure</i>

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Data	Data Source	Location
Other known hazards with geographical boundaries (e.g., earthquake faults)	National	See <i>National Discovery Data Coordination Procedure</i>
Information on active disasters	National	See <i>National Discovery Data Coordination Procedure</i>
Campgrounds, recreational areas, emergency access routes, etc.	Center for Spatial Analysis - University of Oklahoma	http://csa.ou.edu/ Center for Spatial Analysis Azhar Mahmood (405) 325-0301 azmahmood@ou.edu
	National	See <i>National Discovery Data Coordination Procedure</i>
other data that might be appropriate	Local	Local

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/ProgFacts1.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

Oklahoma Office of Geographic Information: <http://ogi.state.ok.us/ogi/> Center for Spatial Analysis: <http://csa.ou.edu/>

3D Elevation Program

The U.S. Geological Survey (USGS) National Geospatial Program is developing the [3D Elevation Program \(3DEP\)](#) to respond to growing needs for high-quality topographic data and for a wide range of other three-dimensional (3D) representations of the Nation's natural and constructed features. The primary goal of 3DEP is to systematically collect 3D elevation data in the form of light detection and ranging (lidar) data over the conterminous United States, Hawaii, and the U.S. territories, with data acquired over an 8-year period. Interferometric synthetic aperture radar (IfSAR) data will be acquired for Alaska, where cloud cover and remote locations preclude the use of lidar in much of the State. The 3DEP initiative is based on the results of the National Enhanced Elevation Assessment that documented more than 600 business uses across 34 Federal agencies, all 50 States, selected local government and Tribal offices, and private and nonprofit organizations.

Geospatial One-Stop

Geospatial One-Stop, available at <http://www.data.gov>, provides access to geospatial data from many sources. Two parts of the site that should be investigated are the “data categories” for

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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 the State are available on the Mapping Information Platform web site at <https://hazards.fema.gov/contacts/statecontacts/contacts.asp?page=OK>

Involving the State’s Geospatial Coordinator in Flood Studies

The state has strong involvement with FEMA on Discovery efforts related to identifying base map and terrain data suitable for flood mapping purposes.

State Coordination Process for Building Geospatial Partnerships

Oklahoma has two geospatial data centers to promote data sharing, listed above in Clearinghouses and Inventories for the State.

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 Oklahoma Department of Environmental Quality (DEQ) houses an online GIS Data Viewer at <http://www.deq.state.ok.us/>. The State has a strong Flood Plain Managers Association that coordinates on many issues concerning FEMA. The State has regional planning commissions/councils of government. Tribal Governments and lands have generally not been mapped.

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 RSC 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.