

State Geospatial Data Coordination Procedure

Tennessee

FINAL

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FEMA

State Geospatial Data Coordination Procedure

Tennessee

Table of Contents

Table of Contents	1
Purpose of the Procedure.....	2
Default Flood Hazard Base Map for the State.....	2
Geospatial Data Coverage	2
Major State Holdings.....	2
Orthophotos	2
Transportation (roads, railroads, and airports)	3
Hydrography (rivers, streams, lakes, and shorelines).....	3
Political boundaries (county, municipal).....	3
Publicly owned lands (national, State, and local parks, forests, etc).....	4
Cadastral (parcels)	4
Extraterritorial jurisdiction (ETJ) boundaries.....	4
Terrain (elevation)	4
Useful Risk MAP Discovery Data Sources.....	5
Table 1. Discovery Data Resources.....	5
Data Distribution Process for State Data.....	9
Federal Nationwide Geospatial Data Holdings	9
Finding and Accessing Other Existing Geospatial Data.....	9
Clearinghouses and Inventories for the State	10
National Digital Orthophoto Program (NDOP) and National Digital Elevation Program (NDEP)	
Tracking Systems	Error! Bookmark not defined.
TED Query Tool.....	10
Geospatial One-Stop.....	10
Working with People.....	10
Useful State and Federal Contacts.....	10
Involving the State’s Geospatial Coordinator in Flood Studies	10
State Coordination Process for Building Geospatial Partnerships.....	11
Finding Local Geospatial Contacts.....	11
Provide Feedback on This Procedure	11

State Geospatial Data Coordination Procedure

Purpose of the Procedure

Flood Insurance Studies involve searching for geospatial data during Discovery (formerly pre-scoping and scoping) tasks. If needed data are not available, studies might include funds that allow for the collection of new data and, where applicable, encourage cost sharing among existing organizations. 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_V3.pdf, and in *Scoping Guidelines: Pre-scoping and the Scoping Meeting*, which is available through the Regional Service Center (RSC).

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 agencies are interested. Dead-end searches and cold calls can be avoided 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 RSC:

Mary Wise
COMPASS Regional Support Center 4
1360 Peachtree Street, Suite 500
Atlanta, GA 30309
(404) 965-9681
mary.wise@aecom.com

This document will be shared with the appropriate Regional and State geospatial leads for feedback and comments.

Default Flood Hazard Base Map for the State

The default base map for flood hazard maps for the State is a vector base map (street centerlines).

Geospatial Data Coverage

Below, you will find links to statewide (and Federal agencies' national) geospatial datasets and information about them. The list is provided to save time when building a list of candidate geospatial datasets available for the study during Discovery activities; it is not a prescription of datasets that must be used in a flood insurance study.

Major State Holdings

Orthophotos

Dataset name: Digital Ortho
Data currentness: 1997-2007
Accuracy/Scale: 1:1,200; 1:4,800
Ground sample resolution: 6 inch - 2 foot

State Geospatial Data Coordination Procedure

Horizontal datum: NAD 83

Fee associated? Yes

Available for redistribution? No

Dataset source: <http://gis.tn.gov/>

Dataset contact: Dennis Pedersen, Director, dennis.pedersen@tn.gov, Phone: (615) 741-9356; Fax: (615) 532-0471, Department of Finance and Administration, State of Tennessee, 312 Eighth Avenue North, 16th Floor, WRS Tennessee Tower, Nashville, TN 37243-0288

Dataset name: Digital Ortho (Color)

Data currentness: 2007 (East TN), 2008 (West TN), 2009 (Middle TN), 2010 (Cumberland Plateau)

Accuracy/Scale: 1:2,400

Ground sample resolution: 1 foot

Horizontal datum: NAD 83

Fee associated? Yes

Available for redistribution? No

Dataset source: <http://gis.tn.gov/>

Dataset contact: Dennis Pedersen, Director, dennis.pedersen@tn.gov; Phone: (615) 741-9356; Fax: (615) 532-0471, Department of Finance and Administration, State of Tennessee, 312 Eighth Avenue North, 16th Floor, WRS Tennessee Tower, Nashville, TN 37243-0288

Transportation (roads, railroads, and airports)

Dataset name: Street Centerline (Tennessee Information for Public Safety – TIPS)

Data currentness: 2000-2007, maintenance 2007 - 2011

Accuracy/Scale: 1:1,200; 1:4,800

Horizontal datum: NAD 83

Fee associated? Yes

Available for redistribution? No

Dataset source: <http://gis.tn.gov/tips.asp>

Dataset contact: Dennis Pedersen, Director, dennis.pedersen@tn.gov; Phone: (615) 741-9356; Fax: (615) 532-0471, Department of Finance and Administration, State of Tennessee, 312 Eighth Avenue North, 16th Floor, WRS Tennessee Tower, Nashville, TN 37243-0288

Hydrography (rivers, streams, lakes, and shorelines)

Dataset name: Hydrography

Data currentness: 2000-2007

Accuracy/Scale: 1:1,200; 1:4,800

Horizontal datum: NAD 83

Fee associated? Yes

Available for redistribution? No

Dataset source: <http://gis.tn.gov>

Dataset contact: Dennis Pedersen, Director, dennis.pedersen@tn.gov; Phone: (615) 741-9356; Fax: (615) 532-0471, Department of Finance and Administration, State of Tennessee, 312 Eighth Avenue North, 16th Floor, WRS Tennessee Tower, Nashville, TN 37243-0288

Political boundaries (county, municipal)

Dataset name: County Boundary Features

Data currentness: 2000

State Geospatial Data Coordination Procedure

Accuracy/Scale: 1:24,000

Horizontal datum: NAD 83

Fee associated? No

Available for redistribution? Yes

Dataset source: <http://www.tngis.org/data.html>

Dataset contact: Tennessee Department of Transportation, Planning Division, Mapping Division, Suite 1000, James K. Polk Building, Nashville, TN 37243-0344

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

Dataset name: TN State Parks, Natural Areas, and Historical Commission boundaries

Data currentness: 2007

Accuracy/Scale: 1:24,000

Horizontal datum: NAD 83

Fee associated? No

Available for redistribution? Yes

Dataset source: <http://www.tngis.org/land-useland-cover.htm>

Dataset contact: Tennessee State Parks Office of GIS, Division of Recreation Education Services, 401 Church Street, L&C Tower, 10th Floor, Nashville, TN, 37243

Cadastral (parcels)

Dataset name: Cadastral Mapping

Data currentness: 2000 - 2006

Accuracy/Scale: 1:1,200; 1:4,800

Horizontal datum: NAD 83

Fee associated? Yes

Available for redistribution? No

Dataset source: <http://gis.tn.gov/TNBMP.shtml>

Dataset contact: Dennis Pedersen, Director, dennis.pedersen@tn.gov, Phone: (615) 741-9356; Fax: (615) 532-0471, Department of Finance and Administration, State of Tennessee, 312 Eighth Avenue North, 16th Floor, WRS Tennessee Tower, Nashville, TN 37243-0288

Extraterritorial jurisdiction (ETJ) boundaries

No coverage available.

Terrain (elevation)

Dataset name: Digital Terrain Model

Data currentness: 2000-2007

Accuracy/Scale: 1:1,200; 1:4,800

Vertical datum: NAVD 88

Fee associated? Yes

Available for redistribution? No

Dataset source: <http://www.tngis.org/elevation>

Dataset contact: Dennis Pedersen, Director, dennis.pedersen@tn.gov, Phone: (615) 741-9356; Fax: (615) 532-0471, Department of Finance and Administration, State of Tennessee, 312 Eighth Avenue North, 16th Floor, WRS Tennessee Tower, Nashville, TN 37243-0288

*Note: For information pertaining to the latest status on LidAR collection in TN please go to the following website: <http://gis.tn.gov/>.

State Geospatial Data Coordination Procedure

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 Geospatial 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 for accessing the Discovery Data Repository are provided in the National Geospatial 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 Preferred Base Map Sources section of this document for geospatial data that meets FIRM production requirements).

Table 1. Discovery Data Resources

Data	Data Source	Location
Watershed boundaries	National	See National Operating Procedure
Jurisdictional boundaries	State SOP	http://gis.tn.gov/
Tribal land boundaries	National	See National Operating Procedure
State lands	N/A	
Federal lands	National	See National Operating Procedure
Major roads	National; State SOP	See National Operating Procedure http://gis.tn.gov/
Streams	State SOP	http://gis.tn.gov/
Coastal Barrier Resource Areas	N/A	Not applicable in the State of Tennessee

State Geospatial Data Coordination Procedure

Data	Data Source	Location
Coordinated Needs Management Strategy	National	CNMS data is available by request from each of FEMA's Regional Service Centers (RSC). Contact information for each RSC is available at the following website: https://hazards.fema.gov/femaportal/wps/portal/usercare_guidesAndDocs#ContactList
Topographic/ bathymetric data	National; State SOP	See National Operating Procedure http://gis.tn.gov/
AAL data from HAZUS	National; FEMA Regional Office	See National Operating Procedure R4 Contact: eugene.longenecker@fema.dhs.gov
Coverage areas for known community and Tribal risk assessment data	FEMA Regional Office	eugene.longenecker@fema.dhs.gov henrietta.williams@fema.dhs.gov (Tribal)
Status of Hazard Mitigation Plans	FEMA Regional Office	darlene.booker@fema.dhs.gov
Flood control structure data	National; FEMA Regional Office	See National Operating Procedure RSC4 contact for MLI Data – Mary.Wise@aecom.com
Locations of stream gages	National – USGS	See National Operating Procedure
Locations of past flood claims and repetitive loss properties	National	See National Operating Procedure
Locations of clusters of Letters of Map Change	National – FEMA	See National Operating Procedure
Known flooding issues not represented on effective FIRMs or listed in Coordinated Needs Management Strategy database	Local	No statewide coverage
Areas of planned development	Local	No statewide coverage

State Geospatial Data Coordination Procedure

Data	Data Source	Location
Areas of land use change datasets	National – USGS	The USGS Land Cover Institute (LCI) provides access to a wide variety of land use change and land cover data sets including the National Land Cover Dataset (NLCD). Data sets can be downloaded from the USGS at http://landcover.usgs.gov/
Locations of ongoing projects or updated stream studies (e.g. highway improvements)	Local	No statewide coverage
Locations of wave and tide gauges	N/A	Not applicable in the State of Tennessee
Locations of wind gauges	N/A	Not applicable in the State of Tennessee
Proposed inland limit of the Primary Frontal Dune, if present	N/A	Not applicable in the State of Tennessee
Locations of any beach nourishment or dune restoration projects	N/A	Not applicable in the State of Tennessee
Comparison of preliminary stillwater elevations with effective stillwater elevations	Local	No statewide coverage
Available effective study data	National	See National Operating Procedure
Orthophotography	State SOP	http://gis.tn.gov/
Proposed discussion areas, problem areas, areas of proposed mitigation projects	Local	No statewide coverage
Land use and soil information	National – NRCS	The USDA Natural Resources Conservation Service (NRCS) maintains national soil data in a GIS format. Data can be downloaded from their Data Mart at this address http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm or from the NRCS Data Gateway listed in the Other Resources section of this document.
Reference points to locate areas with flooding issues	Local	No statewide coverage
Hydraulic structures	National	See National Operating Procedure

State Geospatial Data Coordination Procedure

Data	Data Source	Location
Coastal structures, including flood protection structures, shoreline structures, manmade embankments, surge conveyance pathways, and shoreline change data	N/A	Not applicable in the State of Tennessee
Local structure and topographic data from the existing hazard mitigation plans	State Hazard Mitigation Officer (SHMO) Local Community Mitigation Planning Lead	Douglas Worden (SHMO) dworden@tnema.org
Historic inundation areas and high water marks	FEMA Regional Office	eugene.longenecker@fema.dhs.gov
Clusters or locations of Individual Assistance/Public Assistance grants and locations of grant projects completed, planned, or underway	National; FEMA Regional Office	See National Operating Procedure R4 Contact: cathy.strickland@fema.dhs.gov
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; FEMA Regional Office	See National Operating Procedure R4 Contact: linda.byers@fema.dhs.gov
Other information on FEMA grants, as described in G&S Appendix I	National	See National Operating Procedure
Any data deficiencies identified in hazard mitigation plans	FEMA Regional Office	darlene.booker@fema.dhs.gov
Information from FloodSmart on market penetration	National	See National Operating Procedure
Community Assistance Visits / Community Assistance Contacts	National; FEMA Regional Office	See National Operating Procedure R4 Contact: roy.mcClure@fema.dhs.gov Lynne.Keating@fema.dhs.gov janice.mitchell@fema.dhs.gov

State Geospatial Data Coordination Procedure

Data	Data Source	Location
Community Rating System class information	National; FEMA Regional Office	See National Operating Procedure R4 Contact: Janice.Mitchell@fema.dhs.gov
Information from other Federal agencies	National	See National Operating Procedure
Information from State agencies, non-profit organizations, universities, etc.	Local	No statewide coverage
Current community plans, ordinances, or programs to alleviate flooding or manage stormwater	Local	No statewide coverage
Other known hazards with geographical boundaries (e.g. earthquake faults)	Local	No statewide coverage
Information on active disasters	FEMA Regional Office	harlie.clark@fema.dhs.gov
Campgrounds, recreational areas, emergency access routes, etc.	National	See National Operating Procedure
Any other data that might be appropriate	Local	No statewide coverage

Data Distribution Process for State Data

Data is not available for redistribution. There is a data sharing agreement between the State and FEMA.

Federal Nationwide Geospatial Data Holdings

Information on nationwide holdings and Federal agencies' programs is available on the Mapping Information Platform website at <https://hazards.fema.gov/femaportal/docs/ProgFacts.pdf>.

Finding and Accessing Other Existing Geospatial Data

Listed below is 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

State Geospatial Data Coordination Procedure

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

- TNGIC (Tennessee Geographic Information Council): <http://www.tngic.org>
- Tennessee Spatial Data Server: <http://www.tngis.org>
- Tennessee Base Mapping Program: <http://gis.tn.gov/TNBMP.asp>

and <http://tnmap.tn.gov/portal/metadata.asp>

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.

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 RSC.

Geospatial One-Stop

Geospatial One-Stop, available at <http://geo.data.gov/geoportal/>, 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-progress, 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=TN> Additional useful contacts for the State can be found at <http://gis.tn.gov> and <http://www.tngis.org/contacts-and-links.htm>

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

State Geospatial Data Coordination Procedure

all of the following ways:

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

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.

Contact:

Dennis Pedersen, Division Director

Office for Information Resources, GIS Services

Suite 1600, Tennessee Tower, 312 8th Avenue North, Nashville TN 37243

Phone: (615) 741-9356

Fax: (615) 532-0471

Email: dennis.pedersen@tn.gov

State Coordination Process for Building Geospatial Partnerships

The GIS Services Division of the Tennessee Office of Information Resources continues to develop partnerships with local governments to fund the development of the Tennessee Base Mapping Program.

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 government link portals such as <http://www.statelocalgov.net>.

The State also maintains information about local geospatial contacts. It maintains a statewide GIS contacts list in the following formats:

- a. Hardcopy
- b. Database
- c. Spreadsheet

The levels of government in the list are:

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

The Tennessee Geographic Information Council at <http://www.tngic.org/> also provides a number of means to communicate with Tennessee's geographic information community.

Provide Feedback on This Procedure

If you find information in this Procedure or in other FEMA or State resources that is outdated, please

State Geospatial Data Coordination Procedure

tell the geospatial data coordination lead in the RSC. When contacting the lead, describe what was wrong and include information on how it can be corrected, if that information is available. Use the contact information for the lead listed in the section entitled *Purpose of the Procedure*. The lead will use your feedback to update this Procedure.