NATIONAL MAPPING PROGRAMS
BACKGROUND FACT SHEETS

The following Fact Sheets provide summary information on the primary national mapping programs that are tracking, developing, and/or sharing geospatial data. This information is available to support the Regions and the Regional Support Centers (RSCs) as they conduct regular planning and project management activities.

In addition, this coordination supports successful relationships that are needed between the Regions/RSCs and other State and Federal personnel.

Programs identified here are not static. New data is being added to the national inventory every month. Future efforts and planned projects are constantly being updated. Therefore, it is appropriate to review national programs as well as local data sources in order to obtain the most current data available.

The programs detailed here include:

- National Elevation Dataset (NED)
- Center for Light Detection and Ranging (LiDAR) Information Coordination and Knowledge
- National Geospatial-Intelligence Agency (NGA)
- National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center
- National Digital Orthophoto Program (NDOP)
- National Agriculture Imagery Program (NAIP)
- US Census Bureau TIGER Files
- Natural Resources Conservation Service (NRCS) / US Department of Agriculture (USDA) Geospatial Data Gateway

Each of the data development programs listed here focuses on the specific needs of their end users. However, they all contributed in a coordinated way to the development of the national base map.

FEMA's Risk MAP program serves critical roles in both the development of accurate data and the coordination of geospatial activities and progress of those activities. Understanding and participating in these programs will help achieve the goal of the National Spatial Data Infrastructure (NSDI), which is to build a physical, organizational, and virtual network that is designed to enable the development and sharing of this nation's digital geographic information resources.

National Elevation Dataset – Bare Earth Elevation Data

http://ned.usgs.gov/

Program Highlights

Data Product

- 1-arc-second (30-meter) posting Digital Elevation Model (DEM).
- 1/3rd-arc-second (10-meter) posting DEM.
- 1/9th-arc-second (3-meter) posting DEM.

Advantages

- Most edge matching / seam issues from quad-based DEMs have been fixed.
- 1/3rd-arc-second National Elevation Dataset (NED) provides very close fidelity to quad contours. Suitable for non-regulatory flood risk products.
- Avoids many of the problems in original 30-meter DEMs.
- 1/9th-arc-second data are generally good enough for regulatory mapping.
- Newer 1/3rd- and 1/9th-arc-second data increasingly are from Light Detection and Ranging (LiDAR) and other high-resolution data sources.

Disadvantages

- 1-arc-second NED based on many sources with variable quality. Generally not suitable for hydraulics or floodplain mapping.
- 1/9th-arc-second data are not available everywhere.
- 1/3rd-arc-second quality varies based on original quad contour interval and NED production methods.
- Small areas of 1/3rd-arc-second data are resampled 1-arc-second data and are low quality.

Program Overview

The U.S. Geological Survey (USGS) NED has been developed by merging the highest resolution, best quality elevation data available across the United States into a seamless raster format. The NED has a consistent projection (Geographic) and elevation units (meters). Nationwide coverage is available for data at a 1-arc-second (30-meter) post spacing; and 1/3rd-arc-second (10-meter) post spacing (although small areas are resampled 1 arc second). The horizontal datum is North American Datum of 1983 (NAD83), except for Alaska, which uses the North American Datum of 1927 (NAD27). The vertical datum is North American Vertical Datum of 1988 (NAVD88), except for Alaska, which uses National Geodetic Vertical Datum of 1929 (NGVD29). NED is a living dataset that is updated bimonthly to incorporate the "best available" DEM data. As more 1/9th-arc-second (3-meter) post-spacing data covering the United States become available, they will be added to the seamless dataset.

Data Details

NED is designed to provide national elevation data in a seamless form with a consistent datum, elevation unit, and projection. NED has a resolution of 1 arc second (approximately 30 meters) for the

conterminous United States, Hawaii, Puerto Rico and the island territories and a resolution of 2 arc seconds (approximately 60 meters) for Alaska. NED data sources have a variety of elevation units, horizontal datums, and map projections. In the NED assembly process, the elevation values are converted to decimal meters as a consistent unit of measure, NAD83 is consistently used as the horizontal datum, and all the data are recast in a geographic projection. Older DEMs produced by methods that are now obsolete have been filtered during the NED assembly process to minimize artifacts that are commonly found in data produced by these methods. Artifact removal greatly improves the quality of the slope, shaded-relief, and synthetic drainage information that can be derived from the elevation data. NED processing also includes steps to adjust values where adjacent DEMs do not match well, and to fill sliver areas of missing data between DEMs. These processing steps ensure that NED has no void areas and artificial discontinuities have been minimized. The artifact removal filtering process does not eliminate all of the artifacts. In areas where the only available DEM is produced by older methods, then "striping" may still occur.

(The following information about the accuracy of the NED is from Maune, D., (ed.), 2007, Digital elevation model technologies and applications: the DEM user's manual (2nd edition), Chapter 4. Courtesy of Dean Gesch, USGS.)

The accuracy of the NED varies spatially because of the variable quality of the source DEMs. As such, the NED inherits the accuracy of the source DEMs. In an effort to provide more information to users on the vertical accuracy of the NED, the dataset has been tested by comparing it with an independent reference source of very high accuracy. The reference data are the geodetic control points that the National Geodetic Survey uses for gravity and geoid modeling. The overall absolute vertical accuracy expressed as the root mean square error is 2.44 meters. As better sources of data are incorporated, the accuracy improves.

For some applications of elevation data, the relative, or point-to-point, vertical accuracy is more important than the absolute vertical accuracy. Whereas absolute accuracy accounts for the combined effects of systematic and random errors, relative accuracy is a measure of just random errors. Averaged over all 9,187 point pairs, the relative vertical accuracy is 1.64 meters.

One caveat to note about the accuracy assessment presented here is that even though the reference control point dataset is large, the number of quadrangle-based USGS DEMs on which the points are located is relatively small. Thus, if users have a need for very specific accuracy information for the NED for a local area, a separate assessment should be done with suitable reference data just for that area.

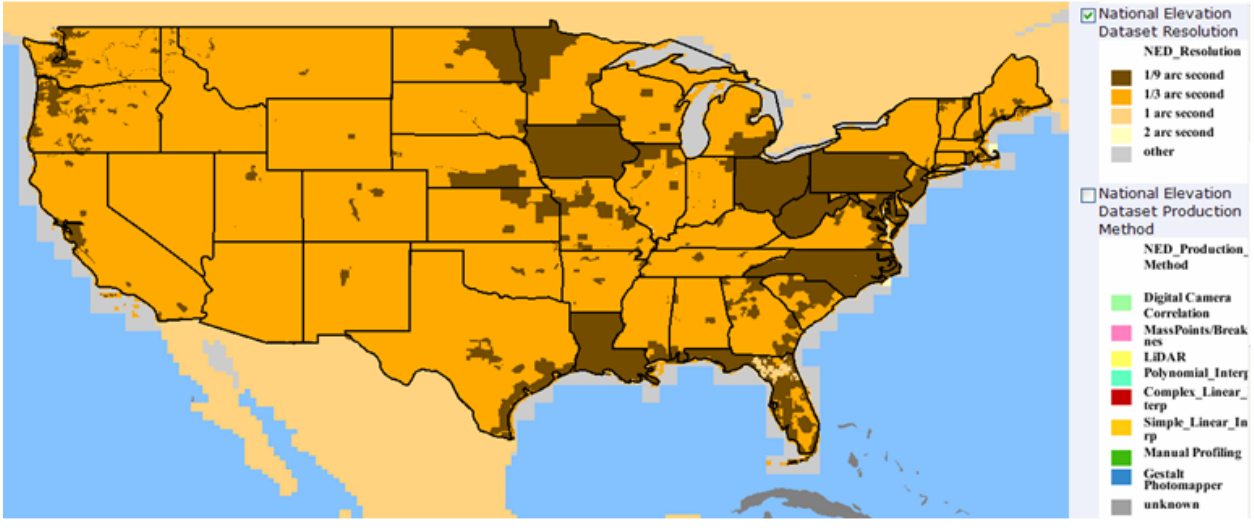
Data Applicability to Flood Mapping Program

- 1/3rd-arc-second data provide very close fidelity to quad contours and may be acceptable for flood risk products.
- 1/9th-arc-second data are generally good enough for most regulatory flood map updates.

Data Availability

The data dictionary, release notes, and update information can be found at http://ned.usgs.gov/Ned/downloads.asp.

Information about the best resolution available and methods of production are available through the USGS GISDATA Map Studio Interactive Viewer at http://gisdata.usgs.net/website/usgs_gn_ned_dsi/viewer.htm. The following figure illustrates the resolution of data available on September 12, 2012:



Data Ordering

In the Seamless Data Distribution System at http://viewer.nationalmap.gov/viewer/, users specify the footprint of the data they require. Large downloads may be broken into chunks.

A separate system allows 1x1-degree tiles of NED to be downloaded. Many users find this to be easier than using the seamless server: http://cumulus.cr.usgs.gov/webappcontent/neddownloadtool/NEDDownloadToolDMS.html.

For very large datasets, users may provide the Earth Resources Observation and Science (EROS) data center a hard drive to ship the data. Requests for bulk data may take several weeks to process (http://seamless.usgs.gov/bulk.php).

Center for LiDAR Information Coordination and Knowledge – LiDAR Point Cloud Data

http://lidar.cr.usgs.gov/index.php

Program Highlights

Data Highlights

- Provides information about discrete-return Light Detection and Ranging (LiDAR), including information and download capability for publicly available LiDAR and the ability to look for articles and other Web sites about LiDAR.

Advantages

- LiDAR data available from CLICK are in native format.
- Point cloud data maintain the most detail and precision

Disadvantages

- Datasets are large.
- Not as easy to work with as gridded data available through the NED.

Program Overview

The goal of the Center for LiDAR Information Coordination and Knowledge (CLICK) is to facilitate data access, user coordination, and education of LiDAR remote sensing for scientific needs. The program responds to the increasing demand for research utilizing all information generated from LiDAR remote sensing data and not just bare earth Digital Elevation Models (DEMs).

CLICK focuses on managing point cloud data, not necessarily bare earth data. However, many of the point clouds may be classified to indicate bare earth points.

Data Details

LiDAR point cloud data available through the site are provided "As Is," with varying processing and accuracy. The U.S. Geological Survey (USGS) is not responsible for bare earth processing, populating fields other than xyz, or validating reported vertical and horizontal accuracies.

Data Applicability to Flood Mapping Program

Federal Emergency Management Agency Procedure Memorandum (PM) 61, *Standards for Lidar and Other High Quality Digital Topography*, provides the specifications for elevation data for Risk Mapping Assessment, and Planning (Risk MAP) projects. Most LiDAR data will satisfy the data standards in PM 61, and thus can be used on most Risk MAP projects. Some older datasets were provided without, or with very limited, metadata. These may or may not provide reliable accuracy statements. Most newer and current datasets include documentation of the tested accuracy of the dataset.

Data Availability

See viewer at http://lidar.cr.usgs.gov/LIDAR_Viewer//viewer.php.

Data Ordering

See viewer at http://lidar.cr.usgs.gov/LIDAR_Viewer//viewer.php.

National Geospatial-Intelligence Agency – LiDAR Data over Core Areas of Major Cities

www1.nga.mil

Program Highlights

Data Product

- High resolution Light Detection and Ranging (LiDAR) of select urban areas.

Advantages

- Very high accuracy, density.

Disadvantages

- Coverage is generally small areas in urban cores.
- Some processing is required to ensure proper bare earth model for flood study.

Program Overview

The National Geospatial-Intelligence Agency (NGA) has a goal to collect LiDAR over major urban areas in the United States. Funding is not consistent, so future collections are unpredictable.

Data Details and Availability

There are limitations for the use of the data. NGA will make the data available to the Federal Emergency Management Agency (FEMA) and FEMA contractors working on a flood study. However, the data can be used for flood studies only and not distributed to anyone else or used for other purposes.

Data Applicability to Flood Mapping Program

These data meet FEMA's terrain mapping requirements for all risk classes.

Data Ordering

Contact Paul Rooney for information on availability at (617) 832-4719 or paul.rooney@fema.dhs.gov.

NOAA Coastal Services Center – Coastal LiDAR, bathymetry, shoreline data, and inventories of terrestrial elevation data and bathymetry

http://www.csc.noaa.gov/

Program Highlights

Data Product

- Light Detection and Ranging (LiDAR) data collected by the National Oceanic and Atmospheric Administration (NOAA) and other agencies, such as the U.S. Army Corps of Engineers (USACE) Joint Airborne LiDAR Bathymetry Technical Center of Expertise (JALBTCX) over the U.S. coast, is available at http://www.csc.noaa.gov/digitalcoast/data/coastallidar/index.html.
- Historical shoreline data with the average accuracy of measured benchmarks at 3.06 meters (10 feet), which meets the NOAA guidelines for fixed aids to navigation and objects charted as landmarks, is available at http://shoreline.noaa.gov/.
- Inventories of coastal LiDAR and bathymetric data are available at http://www.csc.noaa.gov/topobathy/.

Advantages

- LiDAR data covering most of the coast generally have sub-meter vertical and horizontal root mean square error.
- Data can be downloaded for free in user's choice of vertical datum and projection.
- Variety of shoreline data.
- Topography and bathymetry inventories survey a wide variety of sources to identify the best available information.

Disadvantages

- USACE JALBTCX elevation data in narrow strip along coast only.
- Not all of the U.S. coastline has been mapped.
- Shoreline data are dated with no update schedule provided.

Program Overview

The Coastal Services Center (CSC) is an office within NOAA devoted to serving the Nation's State and local coastal resource management programs. The CSC, with its partnerships, is acquiring high-resolution topographic data in the coastal zone and distributing it to users. The primary goal is to work with the coastal resource management community and help practitioners by supplying information or data on topographic issues.

Data Details and Availability

These data are generated through both private sector contracts and government-owned systems. The USACE-collected LiDAR data are typically targeted at a narrow strip of coastline and are usually a kilometer or less in width. Wide-area topographic LiDAR are also available for coastal areas. The

vectorized shoreline data were created from scanned historical shoreline maps in raster format and are in decimal degrees, referenced to the NAD83 datum. The accuracy of the shoreline datasets is stricter than national standards and four times the accuracy of current U.S. Geological Survey 1:24,000 scale topographic maps. This means that the original topographic sheets can be assumed to also meet NOAA guidelines and to be very accurate in their depiction of the shoreline that existed at the time of the surveys. The topographic and bathymetric inventories are compiled regionally and are not updated on a regular schedule. They integrate inventory information from a wide variety of sources to provide a reasonably comprehensive summary of what bathymetric data and topographic data are available for a particular area.

The NOAA Digital Coast site at http://www.csc.noaa.gov/digitalcoast/ also provides access to a wide variety of other data sets for coastal resource managers.

Data Applicability to Flood Mapping Program

Federal Emergency Management Agency (FEMA) Procedure Memorandum (PM) 61, *Standards for Lidar and Other High Quality Digital Topography*, provides the specifications for elevation data for regulatory flood mapping projects. Most LiDAR data will satisfy the data standards in PM 61, and thus can be used on most Risk Mapping, Assessment, and Planning (Risk MAP) projects. The metadata records for each LiDAR data set should be reviewed prior to use on a FEMA project to ensure sufficient accuracy for the project. Some LiDAR data sets also include precise near shore bathymetry. Because of the historical nature of the shoreline data, each dataset should be examined for its potential use for FEMA projects.

Data Ordering

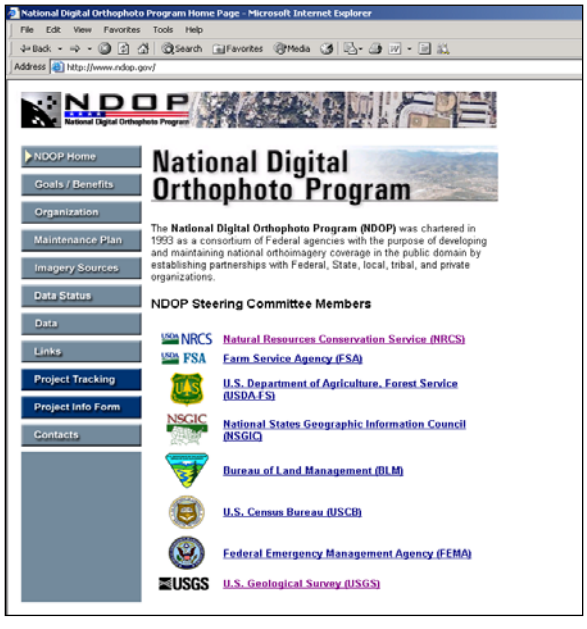
These data are available for download directly through the CSC Web site.

National Digital Orthophoto Program – Leaf-Off Orthophotography Base Maps

www.ndop.gov

Program Highlights

Data Product



- 1-meter-resolution, black and white (B/W) orthophotography nationwide.
- High-resolution (usually 1-foot) natural color (some B/W) orthophotography in selected urban areas.
- High-resolution (finer than 1-meter) orthophotography for some States.

Advantages

- 1-meter-resolution data are available nationally.
- All these data meet Federal Emergency Management (FEMA) accuracy specifications.
- Uncompressed imagery provides the maximum visual quality.
- Source of orthophotographs if local or State data are not available.
- Urban area orthophotographs are very recent.
- Accessible through the Seamless Data Distribution System at http://viewer.nationalmap.gov/viewer/.

Disadvantages

- High-resolution data in urban areas are more difficult to manipulate because of file size.
- Much of the 1-meter-resolution data are several years old.
- Full-resolution quarter quad tiles are difficult to manage compared to compressed mosaics of same imagery available from the U.S. Department of Agriculture.
- Limited areas are fairly poor quality or Color-Infrared (CIR) photography, which is not as visually pleasing.

Program Overview

The National Digital Orthophoto Program (NDOP) was chartered in 1993 as a consortium of Federal agencies with the purpose of developing and maintaining national orthoimagery coverage in the public domain by establishing partnerships with Federal, State, local, tribal, and private organizations.

Data Details

Nationwide Digital Orthophoto Quadrangles (DOQs) are B/W, natural color, or CIR images with 1-meter ground resolution.

High-resolution (usually 1-foot) imagery is available for the Nation's largest urban areas and State capitals. The imagery usually is natural color.

The U.S. Geological Survey (USGS) also has agreements in which it distributes statewide high-resolution imagery for some States.

Data Applicability to Flood Mapping Program

All these data meet FEMA's accuracy specifications and could be used as base maps for Flood Insurance Rate Maps if the image quality is acceptable.

Data Availability

Data status for high-resolution imagery can be found at http://viewer.nationalmap.gov/viewer/. USGS is developing a new capability to display the status of 1-meter-resolution DOQs.

Data Ordering

In the Seamless Data Distribution System at http://viewer.nationalmap.gov/viewer/, users specify the footprint of the data they require. The data are then made available for download. The data are in Georeferenced TIFF (GeoTIFF) format, Universal Transverse Mercator (UTM) coordinate system, North American Datum of 1983 (NAD83). Large requests may be broken into smaller sections. For very large datasets, users may provide the Earth Resources Observation and Science (EROS) data center a hard drive to ship the data. Requests for bulk data may take several weeks to process at http://seamless.usgs.gov/bulk.php.

In the past, USGS produced three types of tiled DOQs, which may also be used:

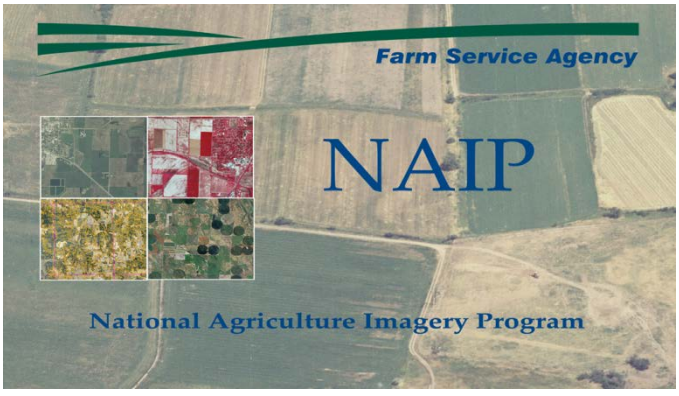
1. **3.75-minute (quarter-quad) DOQs** are available in both Native and GeoTIFF formats. DOQs in native format are cast to the UTM projection and referenced to either North American Datum of 1927 (NAD27) or NAD83. DOQs in GeoTIFF format are cast to the UTM projection and referenced to NAD83. The average file size of a B/W quarter quad is 40–45 megabytes, and a color file is generally 140–150 megabytes. Quarter-quad DOQs are distributed on CD-ROM, DVD, and File Transfer Protocol (FTP) as uncompressed files. Software is available that will convert a DOQ image from native to GeoTIFF format in either NAD27 or NAD83 (download from http://rmmcweb.cr.usgs.gov/software/).
2. **7.5-minute (full-quad) DOQs** cover an area measuring 7.5-minutes longitude by 7.5-minutes latitude. Full-quad DOQs are mostly available for Oregon, Washington, and Alaska. Limited coverage may also be available for other States.
3. **County DOQs** consist of collections of individual DOQs that have been compiled on a county-by-county basis. Coverage for counties in Kansas, Georgia, Minnesota, North Carolina, and Pennsylvania is fairly good. Other States may have limited counties available. The files are cast to the UTM projection and referenced to either NAD27 or NAD83. County DOQs are packaged as individual JPEG-compressed 8-bit binary files on CD-ROM.

National Agriculture Imagery Program – Leaf-On Orthophotography Base Maps

http://www.fsa.usda.gov/FSA/apfoapp?area=apfohome&subject=landing&topic=landing

Program Highlights

Data Product



- County-level and quarter-quad orthophotography.
- 1-meter or 2-meter resolution available (more detail below).
- Many areas captured using digital sensor.

Advantages

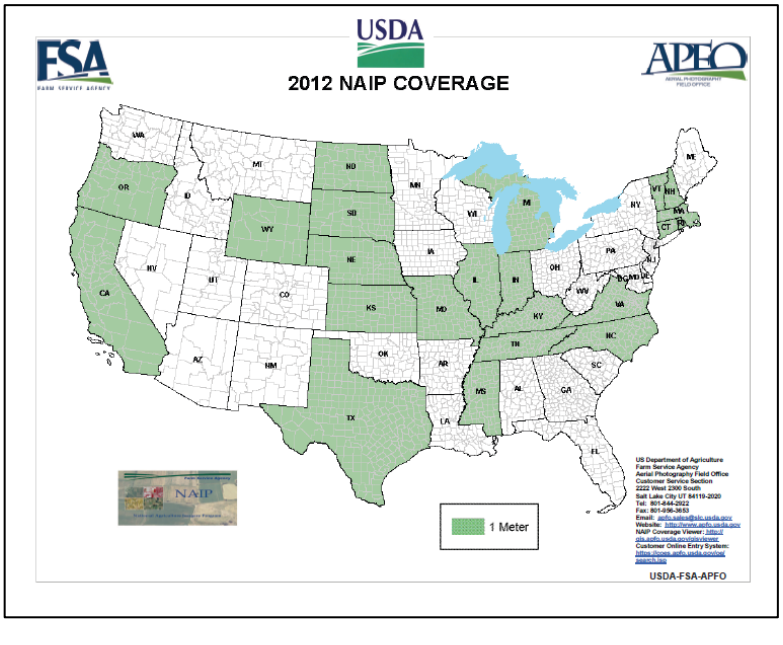
- Generally more recent than National Digital Orthophoto Program (NDOP) Digital Orthophoto Quadrangles (DOQs).
- Natural color.

Disadvantages

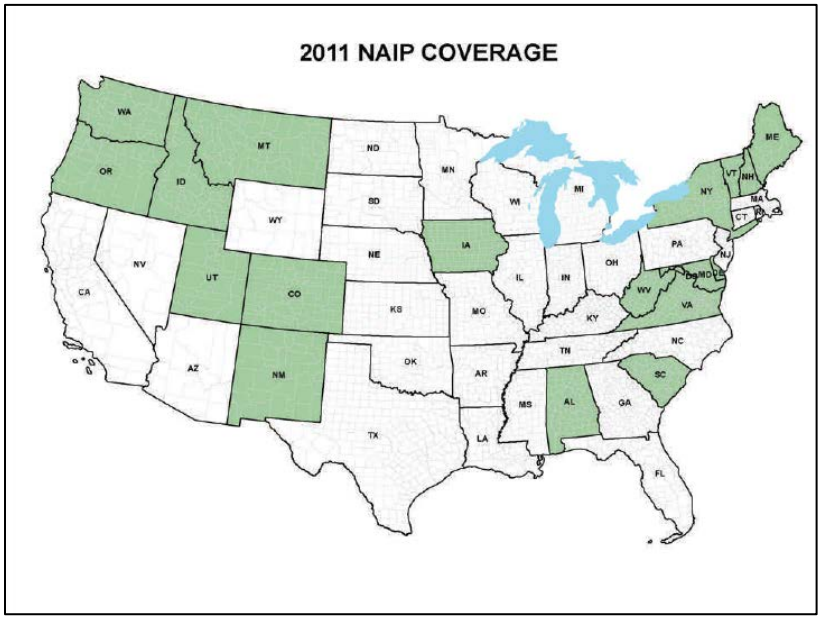
- Imagery is acquired during peak growing season; may not be suitable for areas with heavy "leaf on" conditions.
- 2-meter data not acceptable for Flood Insurance Rate Map (FIRM) base map.
- County mosaics use varying degrees of compression. Some may degrade visual quality substantially.
- Occasional clouds in images.

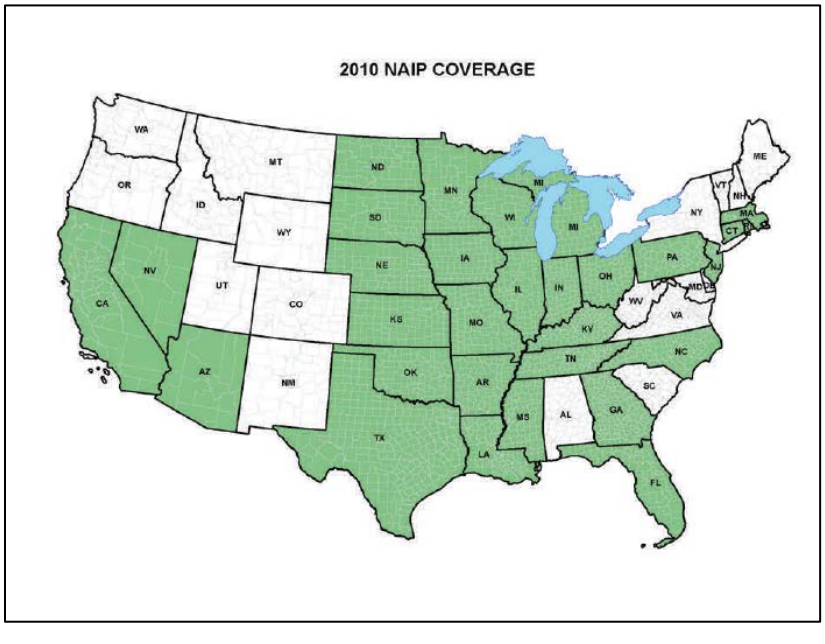
Program Overview

In 2002, the U.S. Department of Agriculture (USDA) started the National Agriculture Imagery Program (NAIP) to support the continued development of their own geographic information system (GIS) program through the acquisition of digital orthophotography. This imagery, when used in conjunction with other land and customer information already available, provides the ability to effectively administer farm programs, and georeference natural disasters and animal or plant disease outbreaks to support better decision-making.



The program's goal is to acquire 1-meter-resolution imagery on a 3-year cycle over the contiguous 48 States, and deliver it to users within a few months. In order to support agriculture analysis, imagery is captured during the peak growing seasons (June–August).





Data Details

Two primary data products are developed and available through NAIP. These include the Compressed County Mosaic (CCM) and the Full-Resolution Quarter-Quad Tiles (QQ). Historically some States were acquired at 2-meter resolution, but more recently all data are acquired at 1-meter resolution. The data are natural color (red/green/blue bands) and many recent datasets include a near infrared band that is often used for vegetation identification and other image analysis techniques.

Because the imagery is captured during peak growing season, this "leaf on" status is likely to obscure some ground level features, especially in heavily treed areas. This issue should be considered based on the geography of the region under consideration. All data come with a full suite of Federal Geographic Data Committee compliant metadata for documentation.

Compressed County Mosaic

The CCMs are developed for the convenience of full county coverage. In many contexts, manipulating a single, full county file is easier than multiple, smaller Digital Orthophoto Quarter Quadrangles (DOQQs). It can reduce the costs for management of data and increase production efficiency. CCMs are useful when larger geographic coverage is required. CCMs use varying degrees of compression. Some may degrade visual quality substantially.

Full-Resolution Quarter-Quad Tiles

The QQ is the full-resolution standard delivery product. The QQ can be a better format when smaller geographic areas are concerned as the tiles cover an area measuring 3.75-minutes longitude by 3.75-minutes latitude, or approximately 2.5 miles on each side. The DOQQ format is Georeferenced TIFF (GeoTIFF).

Digital Sensors

In some cases, vendors use digital cameras for an entire State. In a fully digital workflow retrieving the raw imagery for other uses can be very efficient for vendors. Negotiating with the vendors to produce high-quality elevation data for targeted areas may be possible using these data. Because the data are already acquired, this procedure may be a practical way to obtain small areas of quality elevation data for high-risk areas.

Data Applicability to Flood Mapping Program

The 1-meter-resolution data are acceptable for FIRM base maps provided vegetation does not obscure roads or other important ground features. This imagery is more recent than NDOP DOQs, but 2-meter-resolution data and highly compressed county mosaics are not acceptable for FIRM base maps.

Data Availability

The program has been meeting or exceeding a 3-year refresh cycle, so all States have new 1-meter-resolution data within the past 3 years.

See http://www.fsa.usda.gov/FSA/apfoapp?area=home&subject=maps&topic=landing for more information.

Data Ordering

For more information call (801) 975-3500. To order full-resolution NAIP imagery, visit

- Customer Order Entry System

For compressed county mosaics, visit http://datagateway.nrcs.usda.gov.

U.S. Census Bureau TIGER Files – Accurate Detailed Vector Street Base Maps

http://www.census.gov/geo/www/tiger/index.html

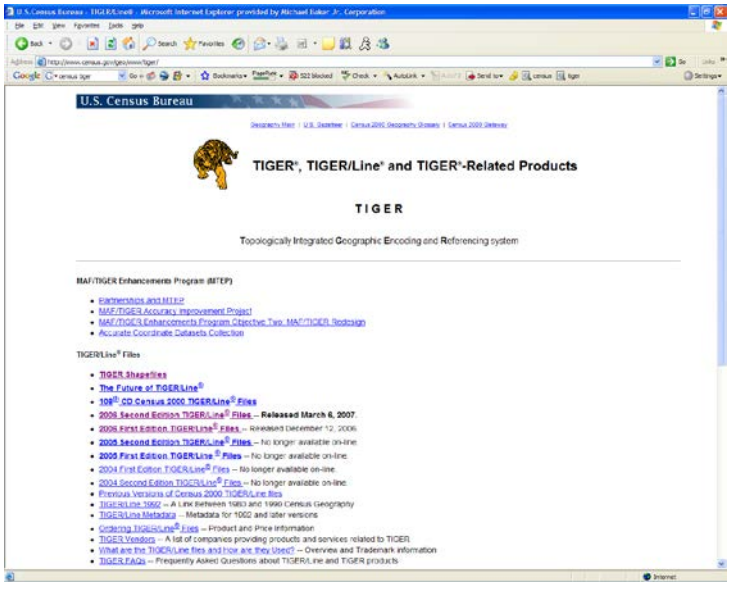
Program Highlights

Data Product

- Street centerline files with road names and address ranges for geocoding.

Advantages

- Realigned files accurate enough to use as Flood Insurance Rate Map (FIRM) base map and are now considered the default source for FIRM Database transportation features.
- Smaller, often easier to work with than orthophotographs.
- Vector-based maps can be easier to read.
- Topologically Integrated Geographic Encoding and Referencing (TIGER) spatial data are available in shapefile format.



Disadvantages

- Some communities may prefer orthophotographs.
- Local planimetric data could be more current or contain better attributes (i.e., local road names).
- TIGER/Line files may still contain features that have not been realigned to more accurate source data.

Program Overview

The U.S. Census Bureau realigned the street features for all counties in the United States in preparation for the 2010 Census.

Data Details and Availability

The U.S. Census Bureau has continued to release updated TIGER/Line files on a regular basis. The newest files incorporate updates discovered during the field activities for the 2010 Census and information reported by cooperators.

Data Applicability to Flood Mapping Program

Realigned files are accurate enough to use as FIRM base maps and are now considered the default source for FIRM Database transportation features.

Data Ordering

Files containing nationwide primary roads and State-by-State primary and secondary roads are available directly from the U.S. Census Web site at ftp://ftp2.census.gov/geo/tiger/TIGER2012/. Files containing all roads by county are available at ftp://ftp2.census.gov/geo/tiger/TIGER2012/ROADS/.

In addition, you can purchase the files on CD-ROM or DVD from the Customer Services Center at 1-800-923-8282 or (301) 763-INFO (4636).

NRCS/USDA Geospatial Data Gateway – Distribution of a Variety of Base Maps and Other GIS Data

http://datagateway.nrcs.usda.gov/

Program Highlights

Data Product

- The Geospatial Data Gateway provides one-stop shopping for natural resources or environmental data.
- Source for Natural Resources Conservation Service (NRCS) U.S. Department of Agriculture (USDA) Countywide Compressed Orthophoto Mosaics.

Advantages

- Data downloads are free and near-real time.
- Compressed, mosaicked counties are easier to work with, color/tone balanced, and potentially more accurate than individual quarter quad National Digital Orthophoto Program (NDOP) Digital Orthophoto Quadrangles (DOQs).

Disadvantages

- Compression of imagery may degrade visual quality.
- County mosaics generally use first generation NDOP imagery so they are fairly old.
- USDA is not the authoritative source for all data on the site, so some data may be out of date.

Program Overview

The Geospatial Data Gateway is intended to provide a single access point for resource data. It provides a way to easily locate data that exist for selected geographic areas, find the types of data for that area, and deliver the data packaged in formats compatible with commercial and USDA Service Center application formats.

One major purpose of the Gateway is to support the development, presentation, and dissemination of information by Service Center field staff working in the field with customers away from the office. However, the public has access to the Gateway to find and retrieve resource data.

Data Details

The data sets served by the Gateway are primarily determined by the USDA Service Center Geographic Information System (GIS) Strategy. The data themes are listed on the Gateway Data Management page at http://datagateway.nrcs.usda.gov/GDGHome_StatusMaps.aspx. This page also identifies non-geospatial data that may be available through the Gateway.

The Gateway provides metadata that comply with the Federal Geographic Data Committee metadata standards for all data available through the Gateway. Metadata enable users to assess the applicability of a dataset to their needs before downloading or ordering it.

Data Applicability to Flood Mapping Program

County orthophotograph mosaics can be used as Flood Insurance Rate Map base maps provided the compression does not reduce the usability of the image. These mosaics are much easier to work with, have more consistent image brightness, contrast, and sometimes improved positional accuracy compared to the first-generation tiled DOQs.

Data Availability

The Geospatial Data Gateway provides access to many different data layers, which may be updated as frequently as once per week. The most critical themes are generally available nationwide.

Critical Themes

- Orthoimagery
- Soils
- Common Land Unit

Data Ordering

Users can download the data from the Web site directly, retrieve it from a File Transfer Protocol (FTP) site, or order it on CD or DVD.