

National Agriculture Imagery Program (NAIP)

www.apfo.usda.gov

Program Highlights

Data Product

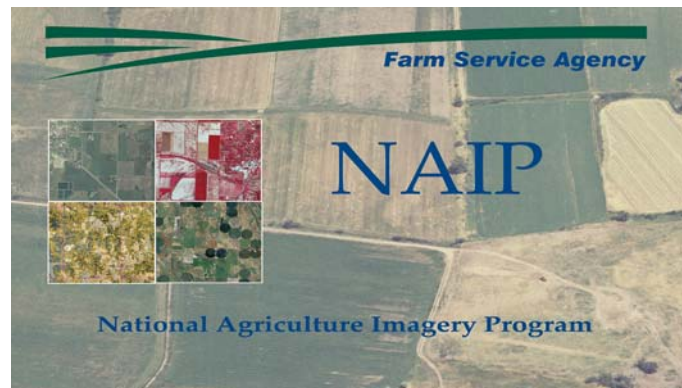
- County level and Quarter Quad orthophotography
- 1 meter or 2 meter available (more detail below)
- Many areas captured using digital sensor

Advantages

- Often more recent than NDOP DOQs
- Compression for 2005 and 2006 NAIP has been reduced which may increase usability for FEMA base map

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 FEMA base map
- 2002-2004 County Mosaics compression degrades visual quality substantially
- Occasional clouds in images



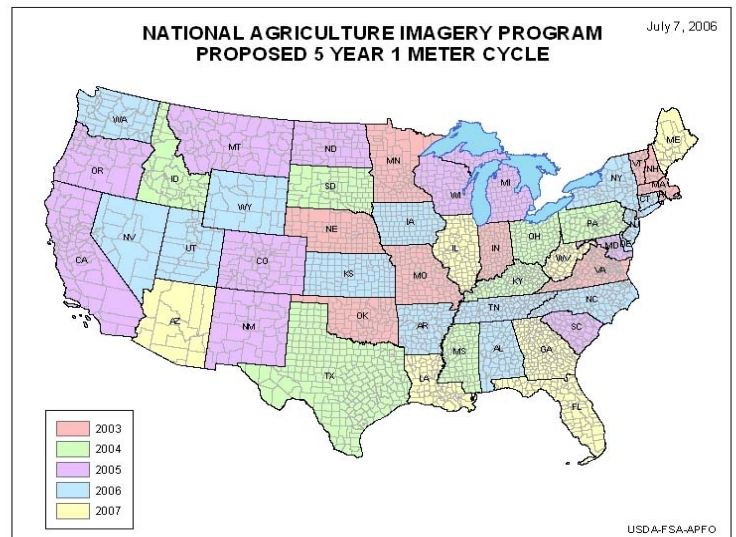
Program Overview

In 2002, the USDA started the NAIP to support the continued development of their own 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 imagery annually over large parts of the contiguous 48 states, and deliver it to users within a few months time frame. In order to support agriculture analysis, imagery is captured during the peak growing seasons (June-August).

Data Details

There are two primary data products that are developed and available through NAIP. These include the Compressed County Mosaic (CCM) and the Full Resolution Quarter Quad Tiles (QQ). Both the CCM and QQ are available in 1 or 2 meter resolution, depending on the priority of the project area and availability of contributing partner funds.

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 should be an issue to consider based on the



geography of the region under consideration. All data comes with a full suite of FGDC compliant metadata for documentation.

Compressed County Mosaic (CCM)

The CCMs are developed for the convenience of full county coverage. In many contexts, it is easier to manipulate a single, full county file than multiple, smaller DOQQs. This can reduce the costs for management of data and increase production efficiency. These are useful when larger geographic coverage is required. Compression for 2005 and 2006 NAIP is MrSID MG3 at a ratios of 15:1 which may increase usability for FEMA base maps. 2004 and earlier NAIP remain at higher compression ratios in MrSID MG2 and therefore have limited use for FEMA base maps.

Full Resolution Quarter Quad Tiles (QQs)

The QQ is the full resolution standard delivery product. The QQ can be a better format when smaller geographic areas are concerned as they 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 GeoTIFF.

Digital Sensors

In some cases, vendors use digital cameras for an entire state. In a fully digital workflow it can be very efficient for vendors to retrieve the raw imagery for other uses. It may be possible to negotiate with the vendors to produce high quality elevation for targeted areas using these data. Because the data is already acquired, this may be a practical way to obtain small areas of quality elevation for high risk areas.

Data Applicability to Flood Mapping Program

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

Data Availability

The following states have 1 meter imagery acquired in 2006 available:

- Alabama (Digital)
- Arkansas
- Connecticut (Digital)
- Delaware (Delaware)
- Iowa
- Kansas (Digital)
- North Carolina
- New Jersey (Digital)
- Nevada (Digital)
- New York
- Tennessee (Digital)
- Utah (Digital)
- Washington
- Wyoming (Digital)

The following states have 1 meter imagery acquired in 2005:

- California (Digital)
- Colorado
- Maryland
- Michigan (Digital)
- Montana (Digital)
- North Dakota (Digital)
- Oregon
- South Carolina(Digital)
- Wisconsin

The following states have 1 meter digital imagery acquired in 2004:

- Idaho (Digital)
- Kentucky
- Louisiana (partial)
- Mississippi (partial)

- Ohio
- Pennsylvania
- South Dakota
- Texas (Digital)
- Utah (Partial)

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 NAIP imagery, visit

- <http://www.fsa.usda.gov/FSA/apfoapp?area=forms&subject=landing&topic=landing>