

# National Digital Orthoimagery Program FGDC Subcommittee 2017 Report

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# National Digital Orthoimagery Program

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- Established in the mid 1990s and annexed as a FGDC Subcommittee in 2008.
  - Develop, promote, and execute a national strategy for acquisition and development of orthoimagery data for Federal agencies
  - Create and utilize partnerships with State, local, tribal, and private organizations.
- Members represent 14 Federal Agencies and the National States Geographic Information Council.
- NDOP holds 2 face-to-face steering committee meetings each year and various working group conference calls/webinars throughout the year

# NDOP 2017 Leadership

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- Steering Committee Chair – Erik Hund, NOAA
- Program Sub-Committee Chair – Shirley Hall, FSA
- Technical Sub-Committee Chair – David Davis, FSA

# Current Status and Activities

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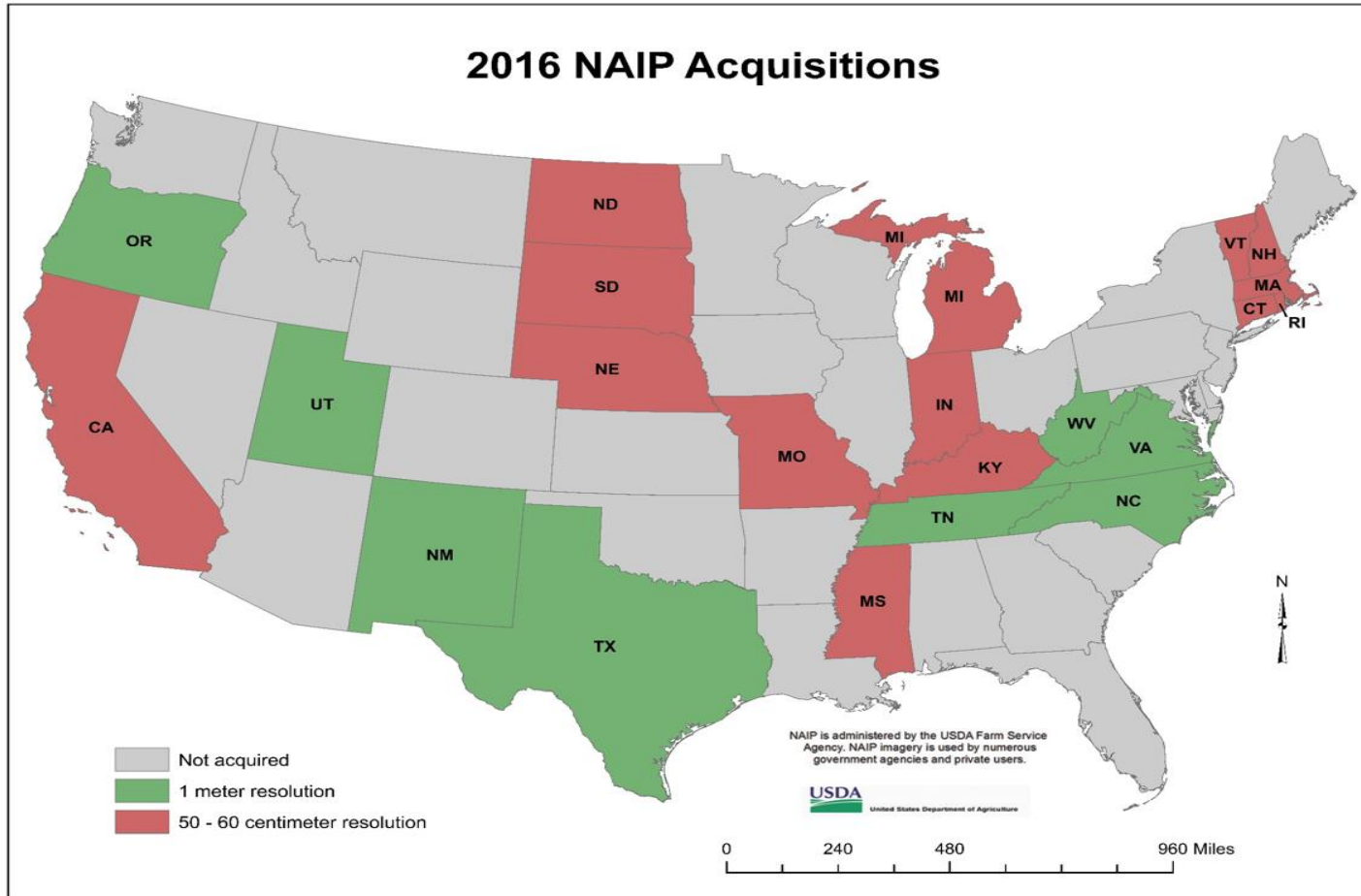
- Steering Committee Meeting – November 15-17 2016, Salt Lake City, UT
  - NGA-GSA Commercial Initiative to Buy Operationally Responsive GEOINT (CIBORG) BPA
  - Federal Imagery Program Updates
  - Local and Regional Updates
  - Data Storage and Distribution
  - Scanning of Historical Film

# Imagery Programs and Projects

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- USDA Farm Service Agency – National Agriculture Imagery Program
  - Acquired 1.7 million square miles in 2016
  - 22 states total
    - 8 at 1.0 meter
    - 14 at 0.6 meter through a buy-up option
  - Early Access Web Services available for internal use within 7 days after acquisition
  - New IDIQ planned for 2018
  - Currently planning for 2017 collections
  - Awaiting partnership funding

# 2016 NAIP Acquisition



# Washington NAIP Imagery



# Imagery Programs and Projects

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- Completion of High Resolution Orthoimagery (HRO) 133 Cities Initiative – USGS, NGA, DHS, USACE
  - Homeland Security Infrastructure Program (HSIP) 133 Urban Areas (UA)
  - Partnership with state and local agencies
  - 2003 - 2016
  - Sub meter resolution, leaf-off imagery
  - Urban areas acquired on 2-3 year cycles
  - Available through USGS Earth Explorer



# Imagery Programs and Projects

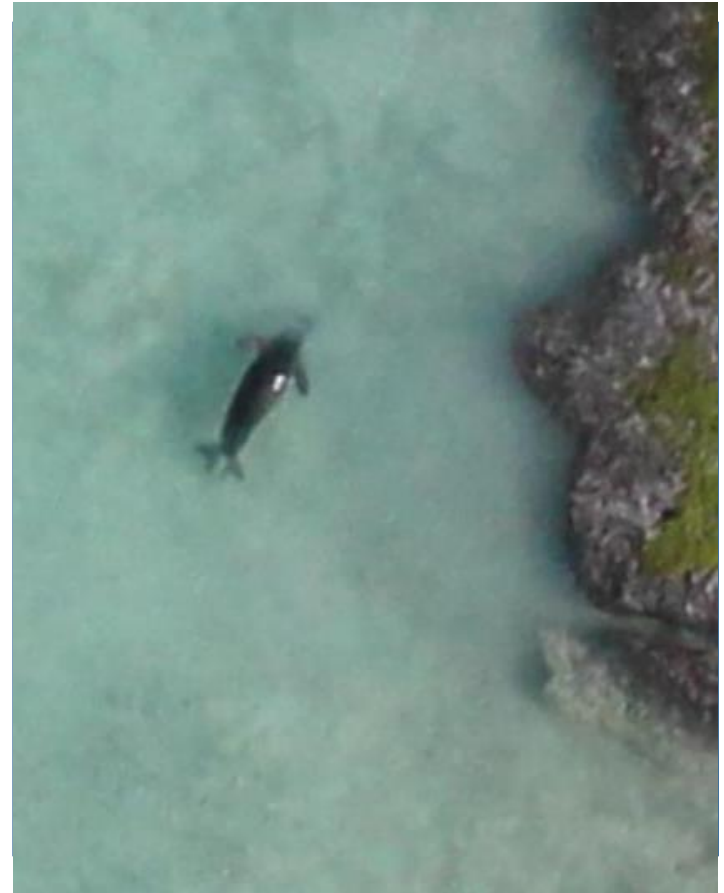
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- Coastal Shoreline Mapping and Emergency Response Imagery – NOAA
- Hawaii and US Pacific Basin Satellite Acquisition – NRCS
- Lots of UAS Imagery Projects – USGS, BLM, USFS, FWS, NOAA

# UAS Imagery, Northwest Hawaiian Islands

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One inch resolution UAS imagery acquired for marine mammal and vegetation monitoring by NOAA Fisheries Service. Image of Hawaiian Monk Seal collected near Southeast Island, Pearl and Hermes Reef, NWHI.

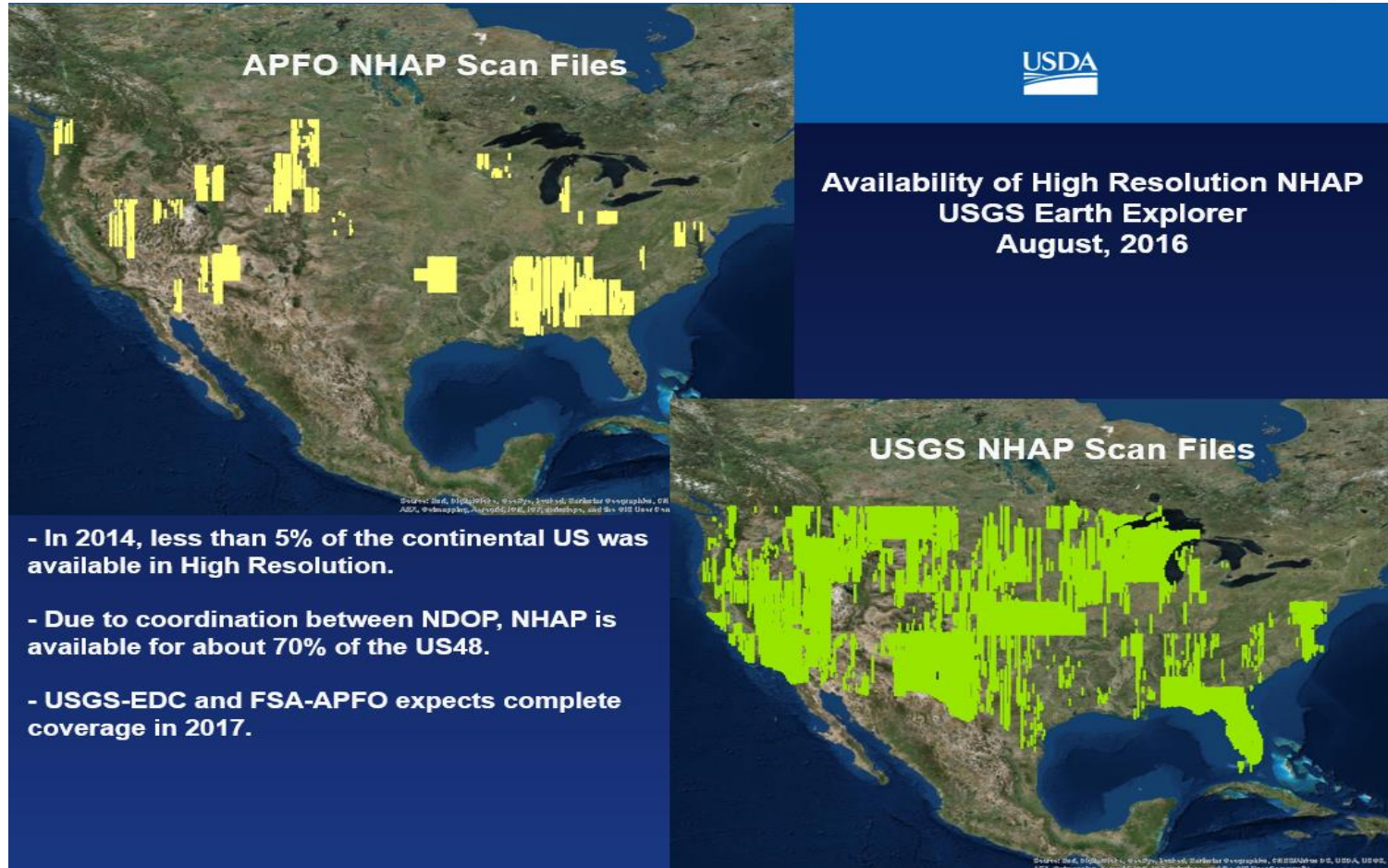


# Technical Sub-Committee

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- Evaluation of Wyoming Stereo NAIP 0.5 meter Imagery – BLM
- Landsat 8 Status, Satellite and Aerial Data Storage and Distribution– USGS
- Scanning of Historical Film from the 1950s and from the NHAP (1980s) Program– USGS EROS, USDA APFO

# APFO and USGS Film Scanning



# Aerial and Satellite Imagery Data Distribution

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- NDOP agencies have provided millions of FREE aerial and satellite downloads to the public
- USGS Earth Explorer
  - Distributed over 17 million Landsat scenes in 2016
  - Google, Amazon, China
- NRCS Geospatial Data Gateway
  - NAIP Compressed County Mosaics and other aerial imagery
- NOAA Digital Coast
  - Engineering firms, academia and government

# USGS Earth Explorer

The screenshot shows the USGS Earth Explorer web application. At the top left is the USGS logo with the tagline "science for a changing world". To the right are links for "USGS Home", "Contact USGS", and "Search USGS". Below the logo is the "EarthExplorer" title and a "Page Expires In 1:59:46" indicator. A navigation bar includes "Home", "Login", "Register", "RSS", "Feedback", and "Help".

The main interface is divided into two columns. The left column contains search filters:


- Search Criteria Summary (Show)** and **Clear Criteria** buttons.
- 1. Enter Search Criteria** section with instructions: "To narrow your search area: type in an address or place name, enter coordinates or click the map to define your search area (for advanced map tools, view the [help documentation](#)), and/or choose a date range."
- Address/Place** tab with a text input field and "Show" and "Clear" buttons.
- Coordinates** tab with sub-tabs for "Predefined Area", "Shapefile", and "KML". It includes "Degree/Minute/Second" and "Decimal" options, a message "No coordinates selected.", and "Use Map", "Add Coordinate", and "Clear Coordinates" buttons.
- Date Range** and **Result Options** tabs. The "Date Range" section has "Search from:" and "to:" fields (both with "mm/dd/yyyy" format and calendar icons) and a "Search months:" dropdown menu set to "(all)".
- Buttons for "Data Sets »", "Additional Criteria »", and "Results »".

The right column features a map of North America in satellite view. A white box on the map displays coordinates:  $(73^{\circ} 37' 40'' \text{ N}, 160^{\circ} 29' 17'' \text{ W})$ . Above the map are "Map" and "Satellite" toggle buttons, and "Options" and "Overlays" buttons. A small user icon is visible in the bottom right corner of the map area.

# NRCS Geospatial Data Gateway



Natural Resources Conservation Service  
United States Department of Agriculture



Home
Status Maps
Help
FAQ
Contact Us
A<sup>+</sup>
A<sup>-</sup>
AA =

**1-WHERE**

**2-WHAT**

The list in the middle pane indicates the available map layers for your area of interest. The number of maps and total size of the map layers are listed next to the description. Clicking on the **i** icon will provide a pop-up window with that map layer's description. Use the **+** icon to get a list of individual maps for that map layer. Within the list of maps, use the **m** icon to get metadata for the specific map and the **g** icon for an individual map preview. You may collapse this map list with the **-** icon. Your selections will be added to the YOUR ORDER Panel on the far right.

You may change your map layers after this step but all of the subsequent choices made for your order will be removed.

Maps in layers that are "...by State" cover an entire state.

**3-HOW**

**4-WHO**

**5-REVIEW**

**WHAT**

Here are the available map layers for your selected area of interest.

**Cadastral**

- Public Land Survey System (PLSS) Townships, 1 map 0.049 MB **i** **+**
- Public Land Survey System (PLSS) Sections, 1 map 0.93 MB **i** **+**

**Census**

- TIGER 2015 Census Blocks, 1 map 3.55 MB **i** **+**
- TIGER 2015 Census Block Groups, 1 map 0.286 MB **i** **+**
- TIGER 2015 Census Tracts, 1 map 0.187 MB **i** **+**
- TIGER 2015 State and County Demographic Statistics by State, 1 map 0.776 MB **i** **+**
- TIGER 2010-2014 County Social, Econ, Housing Stats by State, 1 map 2.673 MB **i** **+**

**Climate Precipitation**

- 1961-1990 Monthly Average Precipitation by State, 12 maps 1.968 MB **i** **+**
- 1961-1990 Annual Average Precipitation by State, 1 map 0.146 MB **i** **+**
- 1971-2000 Monthly Average Precipitation by State, 12 maps 7.765 MB **i** **+**
- 1971-2000 Annual Average Precipitation by State, 1 map 0.945 MB **i** **+**
- 1981-2010 Monthly Average Precipitation by State, 12 maps 4.392 MB **i** **+**
- 1981-2010 Annual Average Precipitation by State, 1 map 1.893 MB **i** **+**

**Climate PrismRaster**

- 1961-1990 Annual Average Raster Precipitation by State, 1 map 0.483 MB **i** **+**
- 1971-2000 Annual Average Raster Precip and Temp by State, 1 map 13.952 MB **i** **+**
- 1981-2010 Annual Average Raster Precip and Temp by State, 1 map 8.484 MB **i** **+**

**Climate Temperature**

- 1971-2000 Annual Average Minimum Temperature by State, 1 map 2.568 MB **i** **+**
- 1971-2000 Annual Average Maximum Temperature by State, 1 map 3.226 MB **i** **+**

[CONTINUE](#)

**YOUR ORDER**

**Order Area (Where):** Autauga County, Alabama

**Order Map Layers (What):**

**Order Format (How):** None

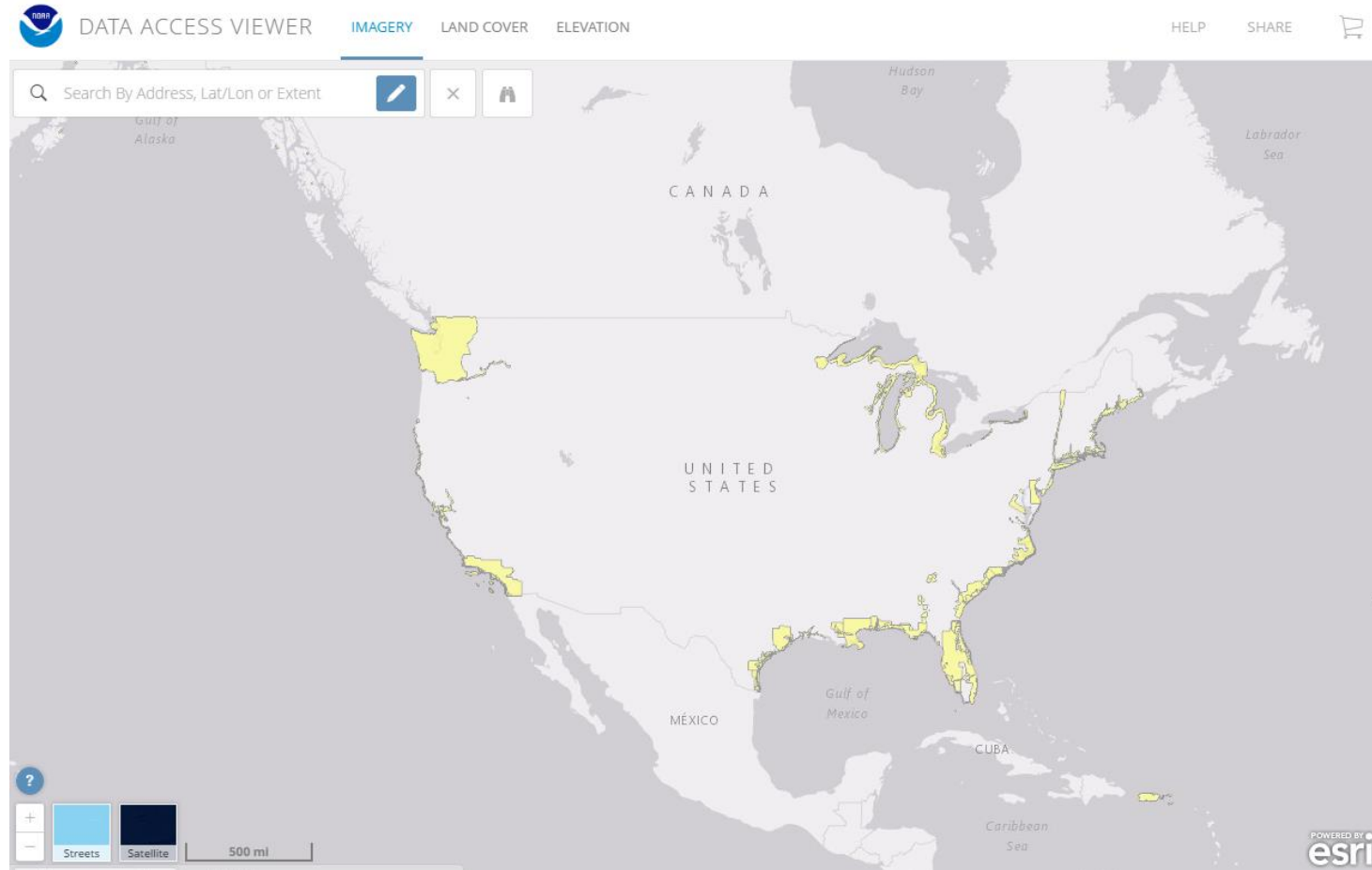
**Order Projection (How):** None

**Order Inclusion (How):** None

**Order Delivery Method (How):** None

**Order Recipient (Who):**

# NOAA Digital Coast and Data Access Viewer





# NDOP Spring 2017 Steering Committee Meeting

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- Planned for May 2-4 In Reston, VA