

Montana Imagery Working Group

Montana State Library Grizzly Conference Room

2/8/2018

MSDI Imagery Services

- NAIP
 - Hosted Esri Managed Services Environment
 - 2005 (color and infrared), 2009, 2011, 2013, 2015
 - REST - https://gisservicemt.gov/arcgis/rest/services/MSDI_Framework
 - Currently all datasets being converted to the [.mrf format](#).
 - View NAIP [Montana Air Photo Browser](#)

Esri Imagery Resources

- Training

- Free Esri MOOC (massive open online courses) –

- <https://www.esri.com/training/catalog/57aba196cbc441087e0d2395/earth-imagery-at-work/>

- Esri World Imagery Services

- World Imagery: This layer presents satellite imagery for the world and high-resolution imagery for the United States and other areas around the world.

- <http://www.arcgis.com/home/item.html?id=10df2279f9684e4a9f6a7f08febac2a9>

- Cadastral Application

- World Imagery (Clarity): This tile layer is designed to present imagery from our archive that may be more clear and/or accurate than what is presented in our default World Imagery map. This layer is in beta release.

- <https://www.arcgis.com/home/item.html?id=ab399b847323487dba26809bf11ea91a>

How To: Provide feedback on basemaps in www.ArcGIS.com

Procedure

To provide feedback on these web maps:

1. Open the web map and navigate to the location that has an error.
2. Click the Edit button on the toolbar, or click the Create Features button in ArcGIS Explorer Online.
3. Add a polygon feature on the map to show the location of the issue.
4. After drawing the feature on the map, classify the type of comment and provide a brief description to make sure the feedback is clear.
5. Click the Close button.

Local Government Imagery

Bozeman Imagery

- Have you acquired the imagery?
 - *We are actively reviewing proposals (x8), hoping to have a final decision by early next week (in which case, we typically shoot for acquisition in the middle of April)....currently on a 3-year update cycle.*
- What is (will be) the resolution of the acquired imagery?
 - *6"....with an option for 3" (if we have adequate budget, which looks likely)*
- What company did you use?
 - *Not sure yet, but it's looking good for Sanborn (they flew our last two projects in 2012 & 2015)*
- How much did you spend?
 - *\$45,000 in 2015 (for 77 square miles) – budgeting \$65,000 for 2018 (with an additional \$55,000 for LiDAR)*
- How are you providing that information to the public?
 - *Mostly through cached ArcGIS image services (available through our Open Data portal), also hosted within ESRI's Community Maps program, external hard-drive, FTP, resampled mosaics, etc. (at no charge)*

Lewis & Clark County Imagery

- Have you acquired the imagery?
 - RFP out to collect spring 2018, proposals due Feb 9th. Spring 2012 is most recent, covered 298 sq mile of Helena and Helena Valley
- What is (will be) the resolution of the acquired imagery?
 - 6” resolution planned for 2018. 2012 was 6”
- What company did you use?
 - 2012 imagery project completed by Sanborn Map
- How much did you spend?
 - 2012 project total cost - \$97,348 – this included 298 sq. miles as noted above, LiDAR for entire area, planimetrics, and Limestone Hills training area outside of Townsend. This was a local/state/federal partnership – L&C County / Fort Harrison and UXO / USGS
 - Imagery cost for 298 sq miles was \$33,586
 - L&C total cost for project \$33,103.80
- How are you providing that information to the public?
 - We offer to copy from our hard drive to anyone who brings in own hard drive.
 - We provided full copy to Esri, they meshed it into World Imagery basemap. We will offer this again with 2018 imagery

2017 NAIP UPDATE

2017 NAIP UPDATE

- 2017 will have gaps, similarly to 2015
 - Significant fire year.
 - <http://arcg.is/0ePPfS>
- Currently in inspection
- AFPO is guesstimating NAIP 2017's availability sometime towards the end of March
- NAIP Status Maps
 - <http://usdaonline.maps.arcgis.com/apps/PublicGallery/index.html?appid=158c21bf782f4b5f99b3ec7a8a61e98b&group=d3b3e5c88ee1414a84263de24ed98b6f>

FUTURE OF NAIP

What you should know...

- For planning purposes, FSA is considering a licensed data model for NAIP starting in FY19.
- FSA is currently assessing all public facing applications and program requirements to ensure data rights requirements are documented.
- To date, FSA has not identified any regulatory or statutory requirements that mandate the release of NAIP dataset to the general public.
- Considering going back to a three-year cycle.

Next Steps

- Imagery Working Group
 - Create a plan for response
 - State organized response?
- Create a survey to understand usage across all sectors

Organizing Montana's Imagery

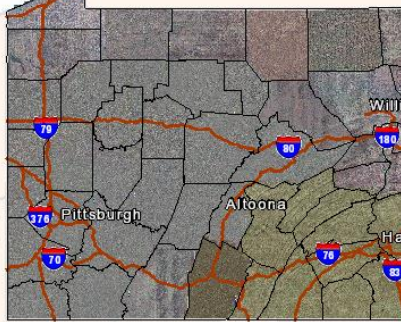
Imagery Viewer Examples: Organizing Imagery to Maximize Findability

PASDA PENNSYLVANIA IMAGERY NAVIGATOR
View and Download Imagery for Pennsylvania

Display Imagery: Statewide Mosaic 03-06
Display Tile Index: None
Display Overlays: Roads, Places, etc

Find a County

Map navigation controls: +, -, Home



PENNSYLVANIA

AGRC Raster Data Discovery 2.0.6

Step 1 - Select Products

Please select the type of product(s) that you are looking for...

- Aerial Photography
- Contours
- DEMs
- LIDAR
- USGS Topo Maps

...then proceed to Step 2 below.

Step 2 - Define Area of Interest

Step 3 - Results

Step 4 - Download Data

Help | AGRC Imagery Services Info



UTAH

W University of Washington Aerials Viewer Search by county name or year

Reset Extents Select Region Zoom In Zoom Out Pan Zoom Previous Zoom Next Clear Townships Township Labels

Map showing Washington state with major cities like Seattle, Tacoma, Olympia, and Spokane. Includes a vertical scale bar on the left.

WASHINGTON

Cataloging Examples

- UC Berkeley - <http://www.lib.berkeley.edu/EART/air-catalog.html#form>
 - Over 86,000 aerial photographs are available in the Earth Sciences & Map Library.

Catalog of UCB Aerial Photography

Search Results

Page 1 of 1			
Date	Scale	Flight Coverage	
2002	1:6,000	Portions of the East Bay from Richmond to Hayward, Concord-Walnut Creek area, and San Jose International Airport	View detailed record
1989	1:15,480	San Francisco Bay Area	View detailed record
1987	1:70,000	San Francisco Bay Area & Ukiah	View detailed record
1968	1:185,000	San Francisco Bay Area, photomosaic	View detailed record
1968	1:30,000	San Francisco Bay Area	View detailed record
1965	undetermined	Bodega Bay Area	View detailed record
1965	1:2,400 & 1:4,800	San Francisco Bay Area	View detailed record
1960	1:60,000	San Francisco Bay Area & portion of Santa Cruz Co.	View detailed record
1946	1:8,000	East Bay Area & southern Marin County	View detailed record
1946	1:23,600	San Francisco Bay Area	View detailed record
Page 1 of 1			

[Return to Search](#)

Result of Query from Catalog of UCB Aerial Photography

This record is for the following county or counties: **Alameda Contra Costa Marin San Francisco San Mateo**

Record 2 of 10	
<input checked="" type="checkbox"/> Prev Page	<input checked="" type="checkbox"/> Next Page
FLIGHT DATA	
DATE FLOWN	1989
SCALE	1:15,480
CALL NUMBER	Air Photo WAC-89SFO
AREA COVERED	San Francisco Bay Area Click for Coverage Map
FLOWN BY	WAC Corp.
AGENCY FOR WHOM FLOWN	
FLIGHT ID SYMBOL	WAC-89SFO
TYPE OF IMAGE	
Vertical	<input checked="" type="checkbox"/>
Oblique	<input type="checkbox"/>
Black & White	<input type="checkbox"/>
Natural Color	<input checked="" type="checkbox"/>
Color Infra-Red	<input type="checkbox"/>
Stereo Overlap	<input checked="" type="checkbox"/>
Contact Print	<input checked="" type="checkbox"/>
Transparency	<input type="checkbox"/>
Oversize	<input type="checkbox"/>
Digital / cd-rom	<input type="checkbox"/>

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Next Steps

Response to APFO for licensed model

Montana Imagery Inventory: Acquiring/Cataloging

- Discover Information
 - Create Workflow
 - Choose the data sources
 - Categorize the information
 - Digitization & hosting funding

Montana Imagery Inventory: Acquiring/Cataloging

- State Produced Imagery

- **Known datasets:**

- Dept. of Natural Resources & Conservation
 - Montana State Library
 - Montana Dept. of Transportation
 - Montana Historical Society
 - State Publications Statute:

- MCA 22-1-211. Definitions. As used in this part, the following definitions apply:

- (3) (a) "State publication" means any information originating in or produced by the authority of a state agency or at the total or partial expense of a state agency that the agency intends to distribute outside the agency, regardless of format or medium, source or copyright, license, or trademark.
 - (b) The term does not include information intended only for distribution to contractors or grantees of the agency, persons within the agency, or members of the public under [2-6-1003](#) or information produced by a state agency that is intended strictly for internal administrative or operational purposes.

Montana Imagery Inventory: Acquiring/Cataloging

- Federal Imagery
 - **Known datasets** (list not exhaustive):
 - NAIP Imagery – 2005 (infrared & color), 2009, 2011, 2013, 2015
 - NDOP Imagery National Digital Orthophoto Program
 - NAPP Imagery
 - NHAP Imagery
 - NRCS Imagery
 - FSA Imagery
 - USFS Imagery
 - FEMA Imagery
 - NOAA
 - Further Research:
 - [Data.gov](https://data.gov)
 - [Geoplatform.gov](https://geoplatform.gov)

Montana Imagery Inventory: Acquiring/Cataloging

- Local/Tribal Imagery
 - Catalogue existing local imagery sets
 - Work with local GIS contacts, MACO, MAPP, MLCT
 - Examples of existing recent imagery – Bozeman, Lewis & Clark County
 - Discovery and digitization of local/tribal nondigitized photos
 - Ideas:
 - Create a digitization program
 - Future MLIA grant category priority?
- Public Libraries
- Public Schools

Montana Imagery Inventory: Acquiring/Cataloging

- Other Sources

- Montana University Libraries – existing catalogs/data sources
- Nonprofits
- Border states