Basemap (NAIP) Imagery

A basemap is the foundational layer on your map and is usually an orthophoto, a mathematically corrected aerial image. Some counties have a third-party contractor that supplies the imagery. For counties that are unable to pay for this service, there are free options online, such as the National Agriculture Imagery Program (NAIP).

NAIP is a program ran by the U.S. Department of Agriculture (USDA) that "acquires aerial imagery during the agricultural growing seasons" (usually June – August). You can find more information about this program here: https://naip-usdaonline.hub.arcgis.com/. Here are a couple characteristics of NAIP:

- Imagery for the entire US is collected over a 2 – 3 year period (therefore Idaho gets new imagery every 2 – 3 years and was last updated for 2025)
- Resolution is at 30 – 60 cm (Idaho 2025 is at 30cm)
- Imagery is "leaf-on"; NAIP imagery is taken at peak vegetation growth, so there are leaves on trees and it may be hard to see parcels with dense tree vegetation

There are a few ways to obtain NAIP Imagery:

- County Level Download
    - You can download county wide data from NRCS Geospatial Data Gateway: https://nrcs.app.box.com/v/gateway
- Idaho Wide REST Service
    - Keith Weber from ISU downloaded all the county level data mentioned above and merged them. The REST Service link for 2025 imagery can be found here: https://giscenter.rdc.isu.edu/server/rest/services/NAIP/NAIP/ImageServer
- Nationwide REST Service
    - The USDA produces a nationwide imagery REST Service that you can find here: https://gis.apfo.usda.gov/arcgis/rest/services/NAIP/USDA_CONUS_PRIME/ImageServer

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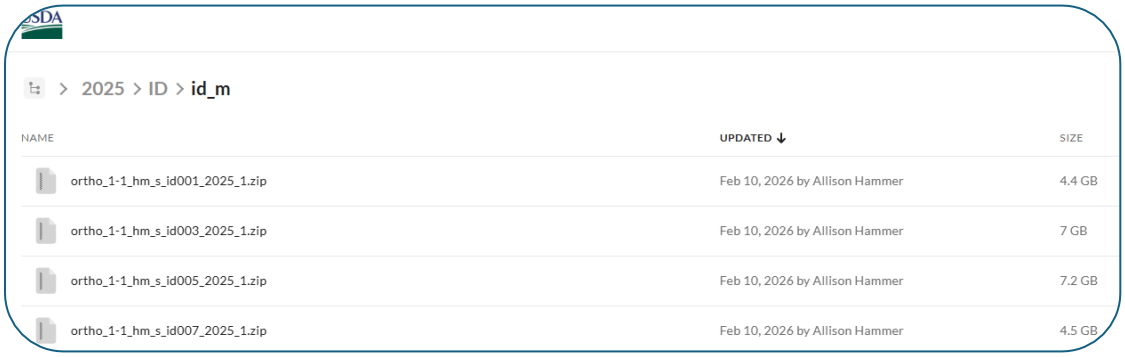
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If you need additional help, please contact the GIS team (gis@tax.idaho.gov)!

County Level Download

The National Resource Conservation Service (NRCS) publishes NAIP imagery every year for the subset of states with new imagery, and you can download county level data through the Geospatial Data Gateway (GDG). Please Note: GDG has been discontinued as of March 31, 2026 (https://gdg.sc.egov.usda.gov/index.html), as USDA is transitioning to cloud-based resources and GDG is not cloud-based. You can still download 2025 (and previous years) data, but I am unsure of future data.

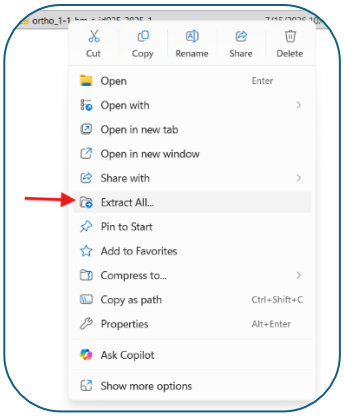
1) The data can be found at this website: https://nrcs.app.box.com/v/gateway/folder/13527468681
2) Navigate through the folders as the following: NAIP -> 2025 -> ID -> id_m



3) You should now be on a page with 44 zip files (one for each county). The title for all zip files is the same except for the three middle digits (e.g., ortho_1-1_hm_s_id**001**_2025). Those three digits relate to the Census FIPS county code. The code is assigned alphabetically:

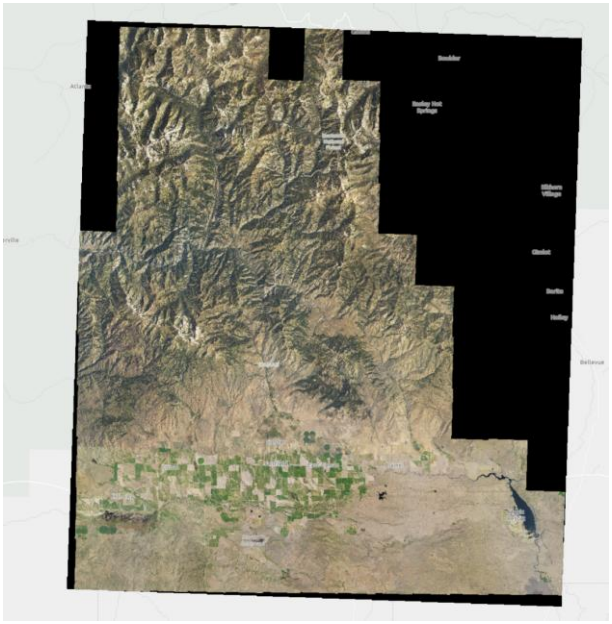
Ada	001	Adams	003	Bannock	005	Bear Lake	007
Benewah	009	Bingham	011	Blaine	013	Boise	015
Bonner	017	Bonneville	019	Boundary	021	Butte	023
Camas	025	Canyon	027	Caribou	029	Cassia	031
Clark	033	Clearwater	035	Custer	037	Elmore	039
Franklin	041	Fremont	043	Gem	045	Gooding	047
Idaho	049	Jefferson	051	Jerome	053	Kootenai	055
Latah	057	Lemhi	059	Lewis	061	Lincoln	063
Madison	065	Minidoka	067	Nez Perce	069	Oneida	071
Owyhee	073	Payette	075	Power	077	Shoshone	079
Teton	081	Twin Falls	083	Valley	085	Washington	087

4) Download the county zip file that is desired and take note of the GB size.
5) Move the zip file into the desired folder and extract all contents: Right click -> Extract All…
6) From the extracted folder, drag and drop the SID file (.sid) into your ArcGIS Pro project. The imagery should appear.

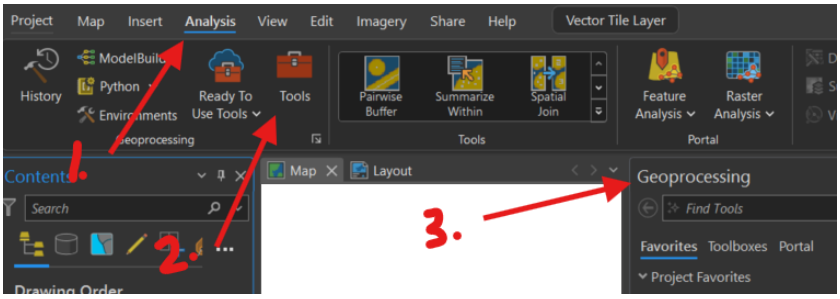


ortho_1-1_hm_s_id025_2025_1	Text Document	1 KB	No	1 KB	44%
ortho_1-1_hm_s_id025_2025_1	Microsoft Edge HTML Do...	8 KB	No	44 KB	83%
ortho_1-1_hm_s_id025_2025_1.aux	AUX File	4 KB	No	17 KB	82%
ortho_1-1_hm_s_id025_2025_1.sdw	SDW File	1 KB	No	1 KB	53%
ortho_1-1_hm_s_id025_2025_1.sid	SID File	5,627,985 KB	No	5,635,069 KB	1%
ortho_1-1_hm_s_id025_2025_1.sid.a...	Microsoft Edge HTML Do...	2 KB	No	8 KB	87%

7) The imagery does not fit the county lines perfectly and, depending on the county, you may notice a few black squares surrounding the county. Camas County for example:

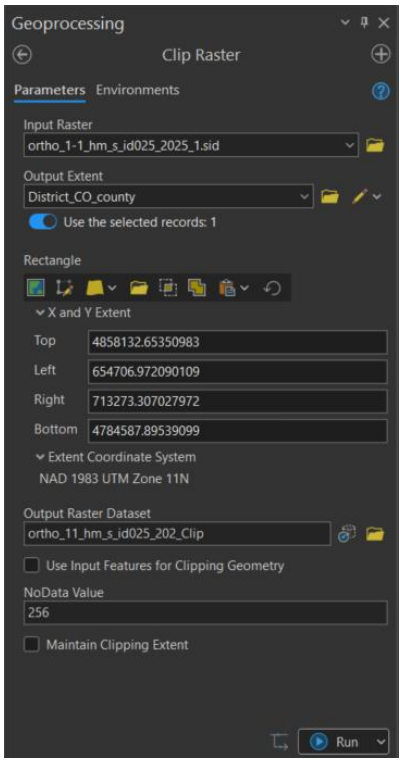


8) To remove the black squares, you need to clip the raster using a county polygon layer. Go to Analysis (top ribbon) -> Tools -> the geoprocessing pane should open on the right



9) Search "Clip Raster" in the geoprocessing pane and click on the tool. The following values are needed:

   a. Input Raster = imagery .sid file (needs to be currently in the project)
   b. Output Extent = county polygon (in the following example I have a layer with polygon outlines for all the counties and have a selection for only Camas)
   c. Rectangle = this will automatically populate based on the Input Raster
   d. Output Raster Dataset = rename file and path as appropriate
   e. Click Run



NOTE: If you have the Spatial Analyst license extension, you may use the tool Extract by Mask using the same input values, which will most likely be much faster than Clip Raster.

10) Depending on the counties size, the clip may take up to several hours, but it can run in the background while you do other things. After that, you should have downloaded imagery of your county!

Additional data downloads can be found on the Inside Idaho imagery explorer page: INSIDE Idaho | Imagery Explorer. There are full state downloads as well as site-specific high-resolution downloads.

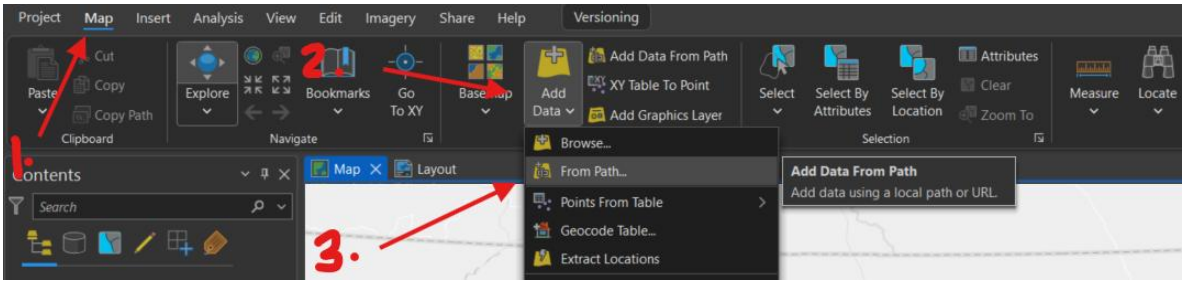
Idaho REST Service

Idaho has a geospatial working group called Imagery Technical Working Group (TWG). Their vision is to provide free imagery to any GIS professionals working in Idaho (https://gis.idaho.gov/imagery-technical-working-group), primarily utilizing NAIP.

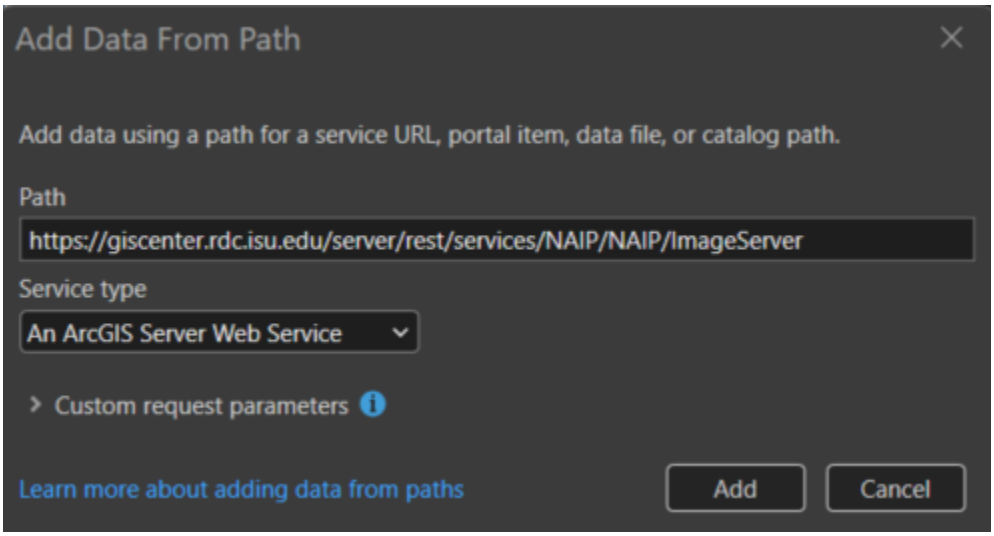
The image server is usually hosted on ISU's website (however ITS's website usually has a copy of the link as well): https://giscenter.rdc.isu.edu/server/rest/services/NAIP/NAIP/ImageServer. The image server will prevent you from having to download any data, which is handy but can take up quite a bit of computer space. If the image server is updated, the data in your map will also be updated (though it should not be updated unless a new year of data is released).

To add this image server to ArcGIS Pro:

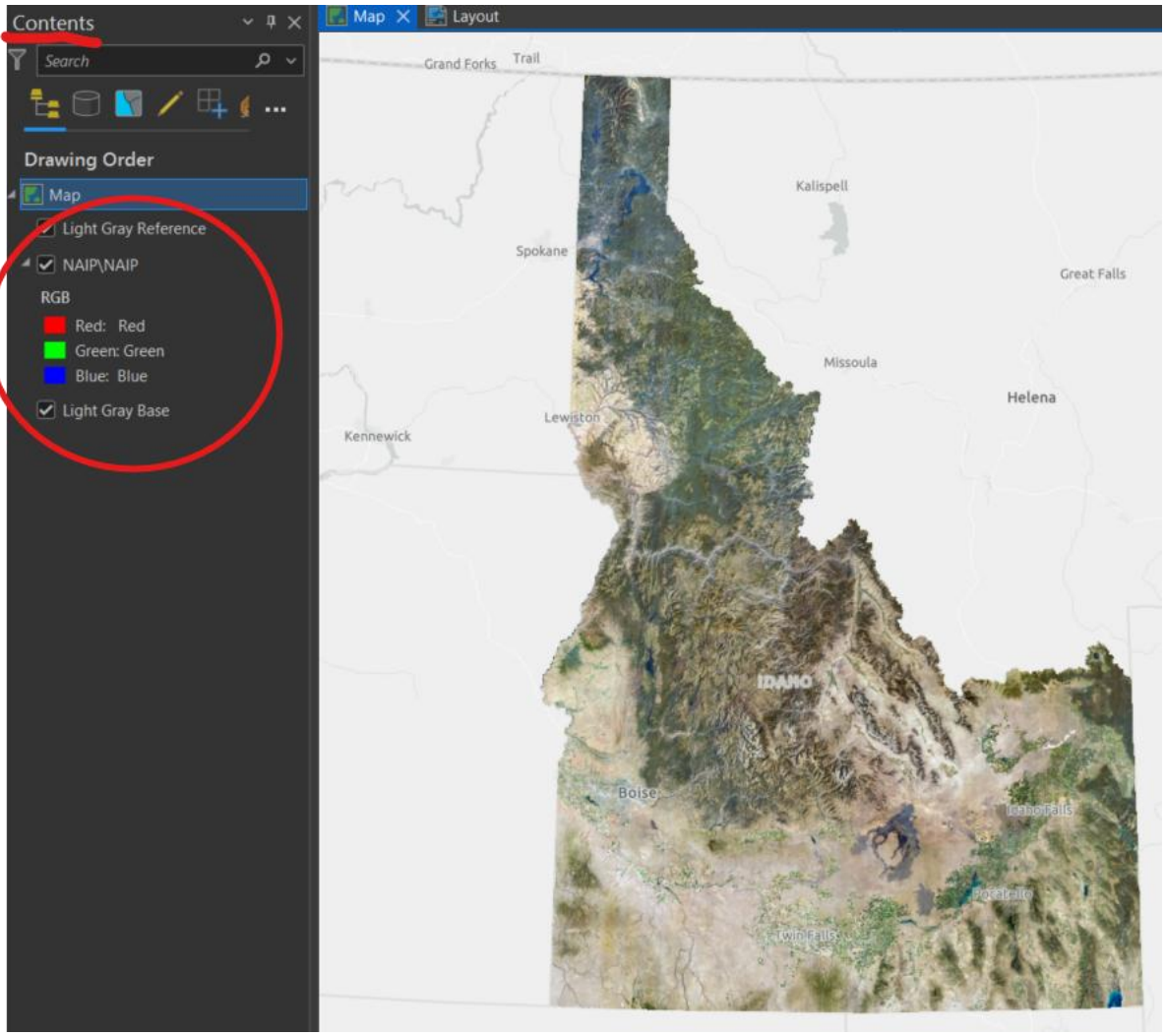
1) Go to Map -> Add Data -> From Path



2) Copy and paste the Image Server URL into "Path"



3) Click Add
4) The layer should appear in your Contents pane (left side)



Nationwide REST Service

The USDA provides CONUS (continental U.S.) NAIP imagery. Follow the steps for the Idaho REST Service but copy and paste the following link: https://gis.apfo.usda.gov/arcgis/rest/services/NAIP/USDA_CONUS_PRIME/ImageServer.