

Your resource for mapping and geographic information in the state of Wisconsin

January 2016

Wisconsin Orthophotography

Thanks to the <u>Wisconsin Regional Orthophotography Consortium (WROC)</u>¹ significant aerial imagery was acquired over the majority of the state in 2015. The North Central Wisconsin Regional Planning Commission (NCWRPC) once again took on a lead coordination role for the consortium, working in close cooperation with the other Regional Planning Commissions (RPCs) in the state.

The 2015 projects were funded primarily by local government budgets and Wisconsin Land Information Program (WLIP) funds. Unit pricing for WROC imagery products was uniform across the consortium, as described in a <u>WROC InfoSheet</u>.² As of January 2016, all 2015 projects have been delivered. There are a small number of projects with 2016 delivery dates that are wrapping up over the next two months.

An effort was made during the late winter and early spring of 2015 to identify state and federal partnership funding to help offset local government costs. That effort was moderately successful, with the Wisconsin Department of Natural Resources (DNR) and Wisconsin state office of the Natural Resources Conservation Service (NRCS) each making financial contributions to WROC, along with other federal agencies that contracted for imagery in portions of the state.

With funding that became available to the state office of the NRCS, Ayres Associates (the lead WROC contractor) will generate a public-domain 18" resolution product that will be available on the <u>WisconsinView Data Portal</u>³ in the early summer of 2016. Unlike the 18" product delivered in 2010, the 2015 version will not be statewide. Only the 46 counties that acquired imagery through WROC will be included in the 2015 18" product.

Some key observations can be made regarding 2013-2015 aerial imagery acquisitions in Wisconsin:

- The majority of counties in Wisconsin have shifted to a 6" spatial resolution product. (see graphic on page two) Two counties (Milwaukee and Kenosha) acquired 3-inch resolution imagery in 2015.
- Approximately 85% of the state is covered by high-resolution imagery flown in 2014 and 2015.
- Significantly less partnership funding was available from state and federal agencies in 2013-2015 compared to 2010.

Check out our online, interactive status map of Wisconsin Aerial Imagery Projects : http://tinyurl.com/wi-imagery

Several LiDAR flights were "piggybacked" onto WROC contracts, resulting in an additional infusion of high-quality LiDAR into the state in 2015. Several LiDAR acquisitions were aided by grants from the federal "3DEP" program.



Source: County LIOs, Ayres Associates. Updated January 29, 2016. Please send corrections to sco@wisc.edu.



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Summer 2015 NAIP imagery now available from NRCS, WisconsinView coming soon

Wisconsin was flown during the summer of 2015 as part of the U.S. Department of Agriculture Farm Service Agency (FSA) National Agriculture Imagery Program (NAIP). The state was last flown by FSA during the summer of 2013. Moving forward, they plan to acquire new NAIP imagery every two years over the conterminous U.S. assuming funding for the program remains stable.

All 2015 NAIP imagery has a 1-meter ground resolution, and is designed to meet

a 6-meter horizontal accuracy specification at a 95% confidence interval. A fourth nearinfrared band, which is useful for vegetation and wetlands analyses, is now a standard part of the product.

Due to a variety of weather and other logistical considerations, some NAIP flights in Wisconsin were pushed back into late September and early October. As a result, fall colors are clearly visible, and shadows tend to be longer than has been present in past NAIP imagery.

NAIP data are available as a free download from the <u>USDA Natural Resources Con-</u>

Web References

1. Wisconsin Regional Orthophoto Consortium <u>www.ncwrpc.org/WROC2015/</u>

2. WROC InfoSheet tinyurl.com/wroc-2015v1-3

3. WisconsinView Data Portal www.wisconsinview.org 4. NRCS Geospatial Data Gateway datagateway.nrcs.usda.gov/GDGOrder.aspx

5. WI Historic Aerial Image Finder maps.sco.wisc.edu/WHAIFinder/

6. SCO Catalog of Aerial Photography www.sco.wisc.edu/ap-catalog.html servation Service Geospatial Data Gateway.⁴ However, imagery from the Data Gateway is available only as a three-band compressed MrSID county mosaic projected to UTM zone 15 or 16.

The original 4-band GeoTIFF-format images will soon be available on the WisconsinView Data Portal, in both the original UTM projection, and also re-projected to Wisconsin Transverse Mercator (WTM). Compressed county mosaics projected to WTM are expected to be available in the spring, either in MrSID or JPEG2000 format.

1930's aerial photography online

The University of Wisconsin-Madison maintains an online tool designed to help users find and download historic aerial photography. The <u>Wisconsin Historic Aerial</u> <u>Image Finder⁵</u> currently includes a statewide set of 38,000 U.S. Department of Agriculture aerial photographs acquired from 1937 to 1941. Using a simple interface, users can locate and then download public domain images in JPEG or TIFF format.

To find additional Wisconsin historic aerial photography, visit the <u>SCO Catalog of</u> <u>Aerial Photography</u>.⁶



Wisconsin State Cartographer's Office

The Wisconsin State Cartographer's Office provides a wide range of services to the state's geospatial community, including educational workshops and presentations, technical consulting, print and online publications, webbased mapping applications, and information about events, jobs and emerging trends. We collaborate with state and national associations to promote effective utilization of geospatial technology, and serve as a liaison between geospatial data producers and consumers in Wisconsin to help coordinate the needs of these groups. The office also assists the public with map-related inquiries. The State Cartographer's Office has operated from the University of Wisconsin-Madison since 1974.

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