

Wisconsin Regional Orthophotography Consortium 2010

fact sheet 1



Purpose and Benefits

The Wisconsin Regional Orthophotography Consortium (WROC) is a multi-entity group led by seven regional planning commissions (RPCs). The RPCs will assist in coordinating mapping services for participating members of WROC. The goal of the consortium is to build and sustain a multi-participant program to acquire digital orthoimagery and elevation data throughout Wisconsin. WROC is planning for a statewide imagery project in 2010. This consortium provides several benefits to participants, including:

- Cost savings
- Specifications and standards support
- Data sharing between participants
- Procurement support

How Can You Participate?

Any organization can participate in WROC. For information about joining the consortium, contact your RPC or the Ayres Associates/Aero-Metric team. (Contact information is provided on the back.)



What is Digital Orthophotography?

Digital orthophotography combines the characteristics of an aerial photograph with the geometric qualities of a map. This allows GIS and CADD software programs to accurately place all visible ground features in their true map position. Geometric qualities of a map are applied to the digital imagery, allowing you to:

- Make accurate distance measurements anywhere on the digital image.
- Determine the true position or map coordinates of any feature observed in the image without physically visiting the location where the feature exists.

What Is It Used For?

Digital orthophotography is used throughout Wisconsin for vital purposes such as emergency planning and response, government decision-making, and sound land use policy development.

Just a sampling of additional potential applications includes the following: Parcel mapping, zoning enforcement, asset management, property assessment, impervious surface mapping, property transfer tracking, building permit tracking, environmental monitoring and management, building inspection, preliminary engineering design, municipal growth planning, emergency dispatch code enforcement, public meeting displays, and historic preservation.

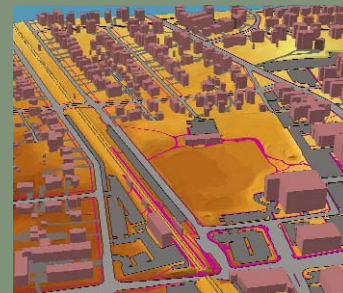
What Are Your Options?

In order to meet the needs of the largest number of potential participants, there are a variety of imagery options available through the WROC program. Aerial imagery will be acquired using a digital camera to provide participants the option to obtain color, color IR, or black-and-white digital orthoimagery at four different pixel resolutions. Options for different pixel resolutions, along with their associated map scales and accuracy standards, are shown in the table below. For additional information on options and specifications, please contact a WROC representative. The table below summarizes preliminary WROC options and specifications.

Pixel Resolution	Map Scale	Accuracy
3" Pixel Resolution	1"=50'	ASPRS Class II
6" Pixel Resolution	1"=100'	ASPRS Class II
12" Pixel Resolution	1"=200'	ASPRS Class II
18" Pixel Resolution	1"=400'	ASPRS Class II

How Much Does It Cost?

Imagery options for WROC have been unit-priced so that potential participants can easily estimate project fees. The unit prices shown in the table below are preliminary in nature. Final project fees for each participant will be determined as the scope of the program and individual projects becomes clearer and additional funding partners are secured.





Pixel Resolution	Minimum Project Area	Cost Per Square Mile	
		With Existing DEM	Without DEM
3"	30 sq. miles	\$1,200	\$1,360
6"	100 sq. miles	\$300	\$340
12"	Countywide	\$75	\$85
18"	Countywide	\$34	\$38

These unit prices apply to your choice of color, color IR, or black-and-white orthoimagery. For information on preliminary fees for projects that do not meet the requirements for the minimal project areas shown in the table above or to learn more about additional options and pricing, please contact a WROC representative.

Additional Services

Because each of these services can vary greatly in scope and specifications, costs for additional services will be provided to participants on a project-by-project basis. If you are interested in any of these mapping products, please refer to the contact information below.

Photogrammetric Mapping



Aerial imagery can be used to produce photogrammetric mapping for WROC participants. Products that

can be produced include digital terrain models; topographic mapping with 1-, 2-, or 4-foot contour intervals; and detailed planimetric mapping of buildings, roads, utility features, hydrography, impervious surfaces, and many other ground features.

LiDAR



LiDAR is a remote-sensing technology that produces surface models from measured laser pulses emitted from a

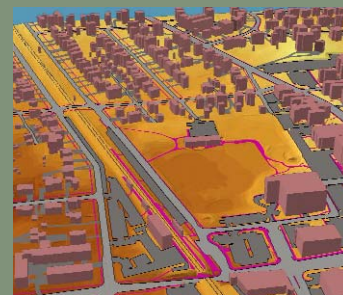
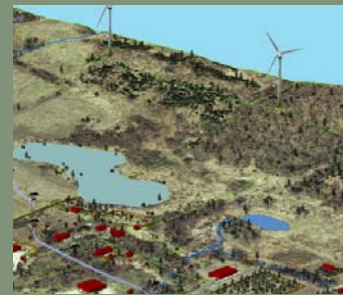
sensor mounted on the underside of an aircraft. LiDAR is the most cost-effective method for producing large areas of topographic mapping. In addition to producing highly accurate digital terrain models and contour mapping, LiDAR can be used to produce other valuable information, such as building footprints and elevations for cityscapes.

Remote Sensing



Consortium participants can also choose a number of other

remote-sensing imagery alternatives, including satellite-derived imagery and acquisition of hyperspectral and multispectral imagery datasets. We can also provide ortho-rectification and advanced classification and analysis of the data.



For additional information on the Wisconsin Regional Orthophotography Consortium, please contact one of these Regional Planning Commissions:

Bay-Lake, East Central Wisconsin, Mississippi River, North Central Wisconsin, Northwest, Southwestern Wisconsin, or West Central Wisconsin

or

Ander M. Jennings
Emergency Management Planner
East Central Wisconsin RPC
920.751.4775
ajennings@eastcentralrpc.org

Kirk M. Contrucci, CP
Vice President
Ayes Associates
608.443.1213
contruccik@ayresassociates.com

Jeffrey B. Stroub, CP, PCS
Vice President
Aero-Metric
920.457.3631
jstroub@aerometric.com