

The 2007 OSIP digital color infrared orthophotography was collected during the months of March and April (leaf-off conditions) at a minimum resolution of 3-foot statewide. The orthoimagery covers the entire land area of the southern tier of Ohio (approximately 19,029 square miles). The orthos are delivered in tiled format, consisting of 15,000' x 15,000' uncompressed 24-bit color infrared geotiff files. Horizontal accuracy is based upon NMAS Standards, with the 1"=1,000' scale (3-foot imagery) based upon an accuracy of +/- 25.0-feet. Where the State borders other states (land only), the entire border of the State is buffered by at least 1,000-feet. Along the Lake Erie Shoreline ortho coverage is buffered beyond the shoreline a minimum distance of 2,500-feet. Imagery was collected with Leica ADS40 digital cameras and rectified using LiDAR data. The file naming convention is as follows: CNxxxxyyy = 1"=1,000' scale imagery (3.0-foot resolution) located in the Ohio State Plane Coordinate System (North Zone). CSxxxxyyy = 1"=1,000' scale imagery (3.0-foot resolution) located in the Ohio State Plane Coordinate System (South Zone). Each geotiff ortho file is approximately 75MBs in size. Ownership of the data products resides with the State of Ohio and counties that elected to "buy-up". Orthophotography and ancillary data products produced through this contract are public domain data. LiDAR was acquired Statewide to provide a solid and very accurate base to use during the image rectification process. This same LiDAR can be supplemented with 3D breaklines to generate 2-foot and/or 4/5-foot contours. The average post spacing between LiDAR points is 7-feet. The flying altitude was 7,300-feet AMT, with the targeted flying speed at 170 knots.

The State of Ohio has a goal to develop and maintain a seamless statewide base map, referred to as OSIP (Ohio Statewide Imagery Program). OSIP is an initiative partnered through several State Agencies (i.e. ODOT, ODNR) through OGRIP. Data from this project forms the foundation of the Statewide base map, and was developed primarily to support multi-use applications, including homeland security, emergency management, economic development, and the business of government.

The delivery of the LiDAR DEM will be based upon the 5,000' x 5,000' ortho tile layout, with the same naming convention used

for both the imagery and LiDAR. Each LiDAR tile will be delivered in ArcGRID (ASCII), Raster and LAS Formats

This data set was acquired for the State of Ohio by Woolpert Inc. Subcontractors for data acquisition include NorthWest Geomatics and Horizons.

State of Ohio, through the Office of Information Technology, Investment and Governance Division, for the Office of Information Technology, Services Delivery Division and the Ohio Geographically Referenced Information Program (OGRIP)
Jeff Smith

These metadata were produced prior to full state delivery and assume acceptance during QA/QC. All project sets are to be delivered under contract by February 2008. Completion status is contingent upon passing QA/QC checks and acceptance of all products by the State of Ohio. Delivery to counties occurs after acceptance. If you are accessing this metadata prior to full project acceptance and delivery, users can view project status at <http://ohioortho.woolpert.com/>

Compliance with the accuracy standard was validated by the collection of photo identifiable GPS ground control points during the acquisition of aerial imagery. The following checks were performed. - The ground control and airborne GPS data were validated through a fully analytical bundle aerotriangulation adjustment. - The LiDAR DEM data was checked against the project ground control. The technical staff confirmed the accuracy of the points during initial processing - Digital orthophotography was validated through an inspection of edge matching and visual inspection for image quality

The following methods are used to assure imagery accuracy. - Use of IMU and ground control network utilizing GPS techniques. - Use of airborne GPS in conjunction with the imagery and LiDAR acquisition. - The following software is used for validation of the imagery and surface modeling - Aerotriangulation - Leica - LiDAR DEM Data - Terrascan, TerraModeler, Leica - Digital Orthophotography - Microstation, IRASC, OrthoPro, OrthoVista, ArcGIS, Leica GPro - MicroStation - ESRI - ArcInfo - ERDAS Imagine - Woolpert Proprietary software - Adobe – Photoshop

The LiDAR DEM was acquired to meet +/- 1-foot vertical accuracy. This is suitable for rectification of digital orthophotography and for the creation of 2- and 5-foot contours (with the addition of 3D compiled breaklines)

The aerial color infrared imagery acquisition for the State of Ohio was flown to support the creation of digital orthophotography with a 3.0-foot pixel resolution. The 3-foot pixel ortho imagery was flown at approximately 28,000-foot AMT and there were approximately 3,500 line miles of imagery flown. All imagery was collected using the Leica ADS40 digital camera system.

The 1"=1,000' scale orthophotos were created to meet +/- 25.0-foot horizontal accuracy, meeting NMAS.

Woolpert Inc. acquired ~250 photo identifiable ground control points during and after the acquisition of aerial imagery. The ground control points were established using GPS for horizontal and vertical coordinate values. NAD83 (2005) - horizontal NAVD88 - vertical Geoid03 Grid US survey Feet State Plane Ohio South