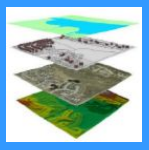


Pictometry

Using the Pictometry ArcGIS Extension

Trainer: Jon Fiskness, GISP
GIS Coordinator
City of Superior

DOUGLAS COUNTY WISCONSIN 1854

ESRI

SUPERIOR WISCONSIN
Living up to our name.

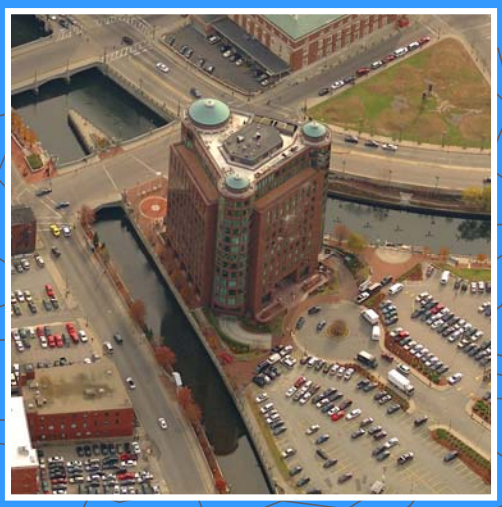
What is Pictometry?

Pictometry - has been described as “geometry on images” but that description only captures one aspect of Pictometry.

Pictometry technologies are widely used by county GIS, planning and assessing professionals around the country and a growing number of commercial businesses including those in insurance, utilities, real estate, construction, and more.

Unlike traditional geospatial information systems that rely on only an **orthogonal**, or top-down view of an area, Pictometry captures images **obliquely**, or from an angle, and create a more natural three-dimensional view so that users can see land features and structures clearly and in their entirety.

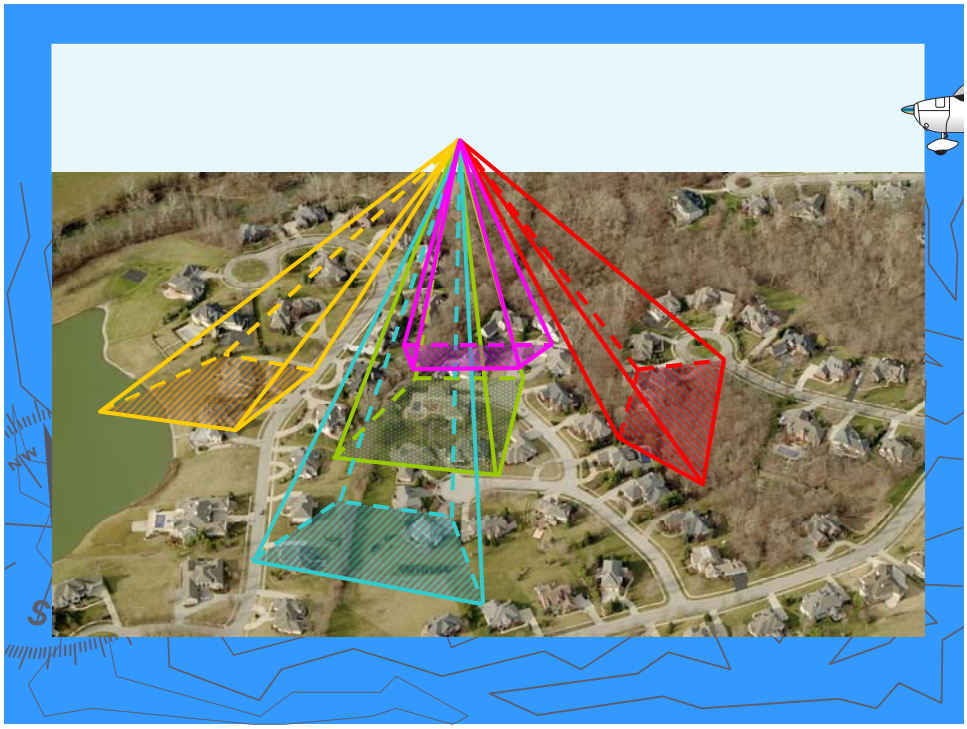
Traditional Oblique Image

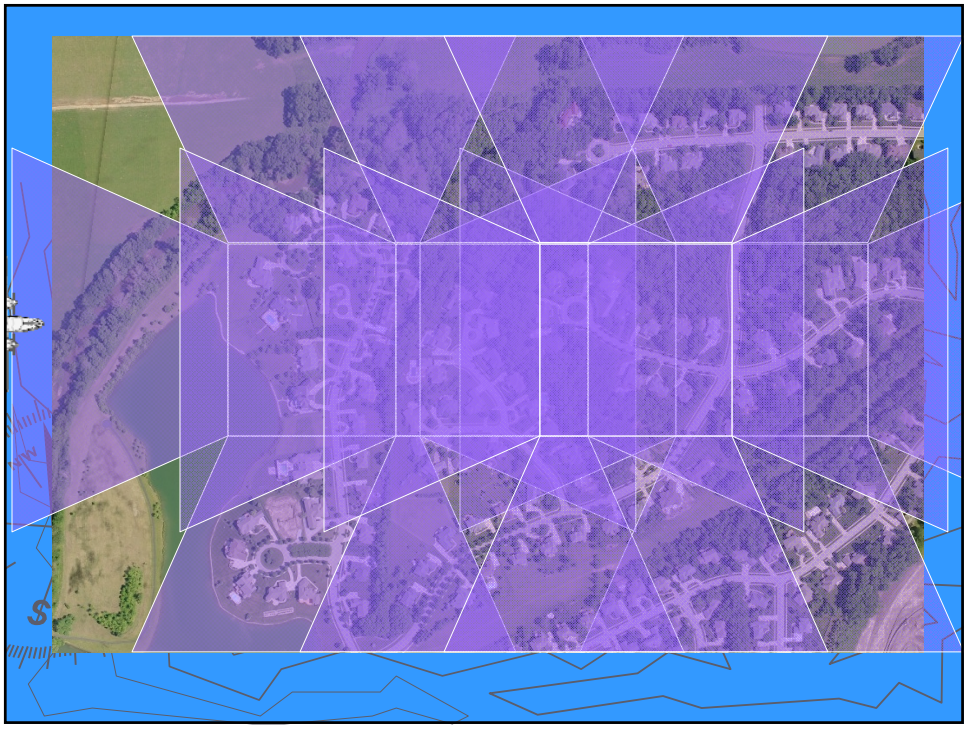


Providence, Rhode Island

So In Addition to This...

Providence, Rhode Island





Pictometry

Methodology

- Produces Color, Digital Imagery
- Natural Perspective in Height & Scale
- Accurate Measurements can be Obtained
- Overlay GIS Data on Imagery
- Obliques and Orthos in One Flight!

Key Applications

- **Public Safety (Police, Fire, EMS)**
- **911 Call Taking and Dispatch**
- **Property Appraisal and Assessment**
- **Public Works, Utilities, Transportation**
- **GIS, Addressing, Census**
- **Planning, Zoning, Code Enforcement**
- **Emergency Management**
- **Judicial, Prosecutor**
- **Economic Development**

Using the Pictometry ArcGIS Extension

- Using the Pictometry Toolbar
- Printing & Exporting images
- Changing Settings
- Troubleshooting

Using the Pictometry Toolbar

Image Tool – Is used in the data window to find the Pictometry data

Zoom – Is used to create a zoom area by dragging from a point

Zoom Out – Clicking on this will zoom out a a set rate

South View –Viewing the Pictometry data from theSouth

West View –Viewing the Pictometry data from the West

North View –Viewing the Pictometry data from the North

East View – Viewing the Pictometry data from the East

Ortho View –Viewing the Pictometry data from above

Using Pictometry Tools

FIELD STUDY TOOLS

DISTANCE TOOL – Measures straight lines ***[Click & Drag]***, free-form lines ***[Click+ALT & Drag]***, and perimeters (lines with angled turns) ***[Click & Drag (don't unclick) and tap the V key at turns]***. Parallelograms can also be *created* ***[Click on corner 1 & Drag to corner 2, then depress and hold CTRL key & drag to corner 3]***.

HEIGHT TOOL – Measures the "ground up" height of any building/object seen in an oblique image (see *Image Types*). *Note: Always be sure to start at the* ***ground*** *and measure from the ground,* ***up****. Otherwise you will end up with an incorrect negative value.*

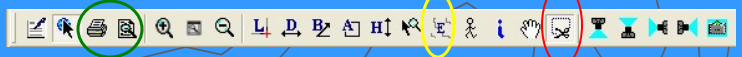
OFFSET GROUNDPLANE – To establish the offset, make the HEIGHT tool the active tool. Then press the **'O'** key on your keyboard. Click at the base of the object and drag up to the desired height for the groundplane offset (you will see a visual indicator). To remove the offset, hit the **'G'** key on your keyboard.

AREA TOOL – Measures area in polygon and freeform fashion. To measure a polygon, ***[Click on corner 1 & Drag to corner 2, then depress and hold CTRL key & drag to corner 3]*** *Note: See Distance Tool for free-form, perimeter, and parallelogram functionality.*

ELEVATION TOOL – Reports the elevation above sea level of a point in the image. Also measures change in elevation ***[Click+CTRL & Drag]***.

BEARING/ANGLE TOOL – Reports the bearing from North of a given line. To measure an angle, identify the vertex of your angle, ***[Click & Drag]*** from that point along the first ray of the angle (don't unclick) then depress the ***CTRL key*** and then drag through the angle's arc to the opposite ray location and release.

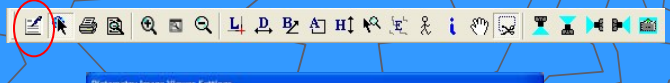
Pictometry Tools Cont.



- **Photo Export Tool** – Can be used to export images to 4 file formats: **jpg, jpeg2000, bmp, TIFF**
- **Elevation Tool –** Can be used to find the elevation at any point on the Pictometry data
- **Printing Tools** – These tools print the Pictometry images.

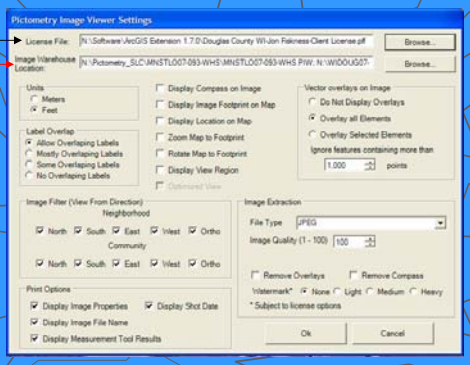
Pictometry Settings and Troubleshooting

- Check the settings to make sure the license file and warehouse exist



License File

Image warehouse

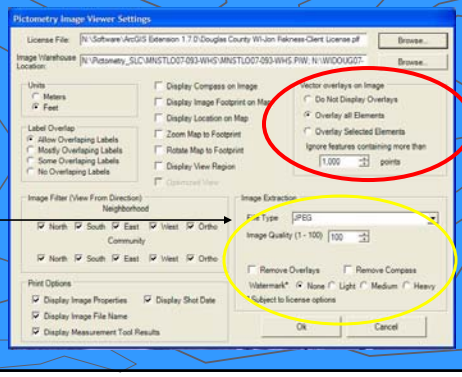


Pictometry Settings and Troubleshooting

- Check the settings for the **Vector Overlays on Image**
  - Sometimes this can slow down or crash the extension if it is set to show a large data set, like contours

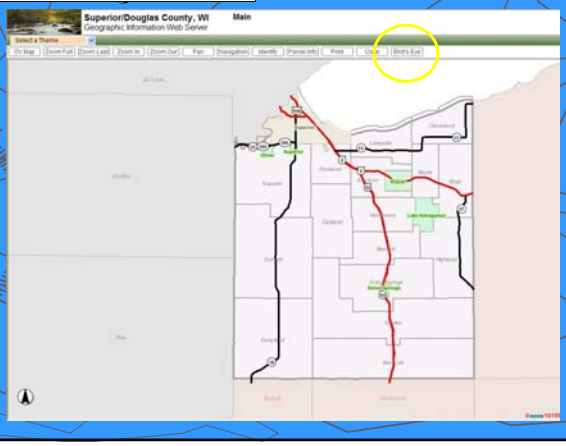
Image Extract Settings

File type options: JPG, jpeg2000, TIFF, BMP



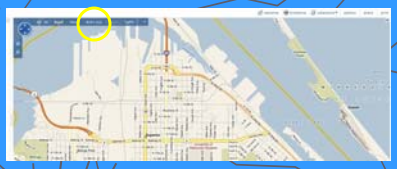
Pictometry Online Options at the City of Superior & Douglas County

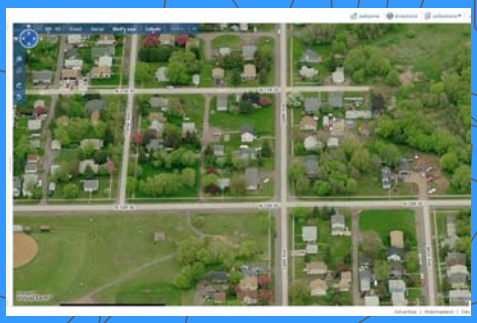
Pictometry can be viewed on the Bird's Eye viewer of the Douglas County Mapping Site, http://douglasco.mapping-online.com/DouglasCoWi/



Pictometry Online Continued

Pictometry can be viewed on Virtual Earth at www.maps.live.com





Pictometry Online Continued

Pictometry can be viewed on Pictometry Online with a subscription at https://pol.pictometry.com/r1/login.htm

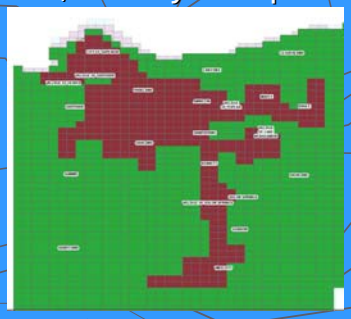
GIS projects that have used Pictometry

- City of Superior Parcel Based Existing Land Use
- City of Superior Parks & Rec - Tree Inventory
- City of Superior Police Department for crime scene maps
- City of Superior Parks & Rec – Public building/equipment inventory
- City of Superior – Nemadji Golf Course Features Inventory
- Douglas County – Medical Examiner
- Various City projects that have required high resolution images

Extent of the Pictometry Area/Data

- As of April 30, 2009 the following data is available at COS/DC
  - City of Superior south to 58th St, flown in May 2007
  - City of Duluth, Hermantown, Proctor and the Iron Rangein St. Louis County, flown in May 2007
- Coming in July 2009, the City of Superior and all of Douglas County

In addition to Douglas County; Bayfield, Burnett & Washburn Counties data will be available Also in 2009



Red = 4" Resolution & 5 views (4 Directions & 6" Ortho)

Green = 12" Resolution & 3 views (2 Directions & 12" Ortho)

Pictometry References and Help

- \\gisserver\pictometry\additional materials\
- www.pictometry.com
- Questions and Support
  - GIShelp@ci.superior.wi.us