



NCTCOG ORTHOPHOTOGRAPHY PROGRAM

Making the Cooperative Model Work

Agenda

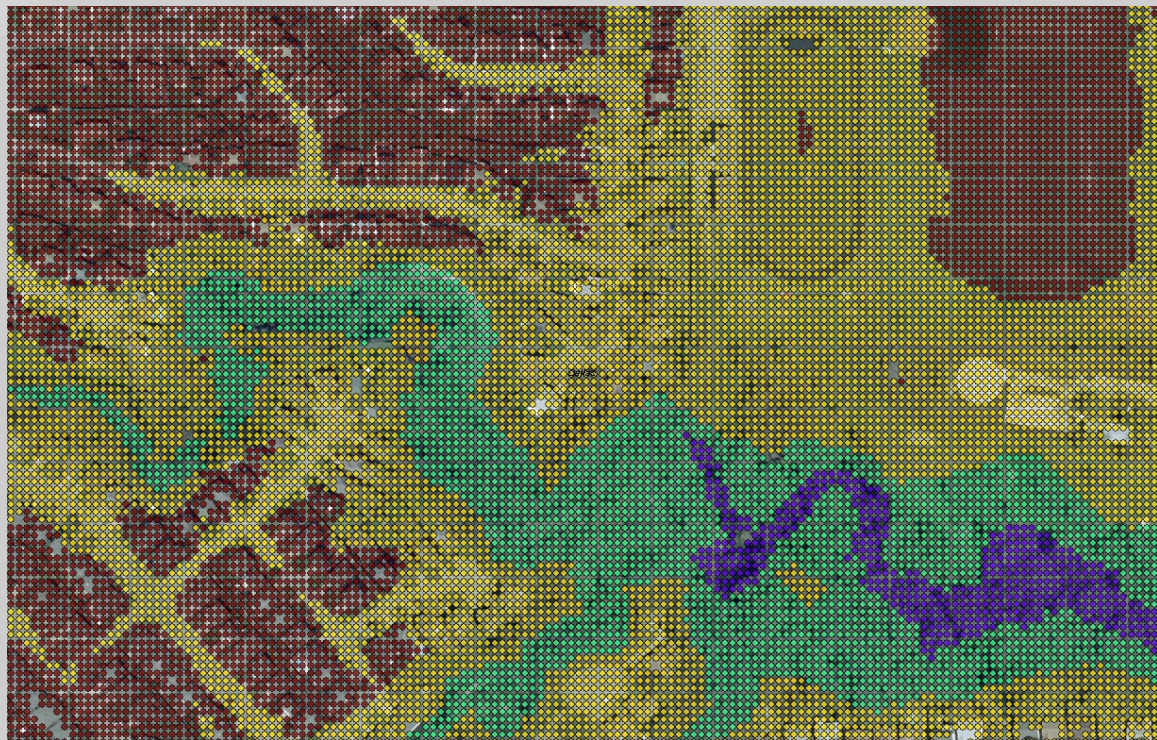
1. History of the NCTCOG ortho project
2. Two Things that Make a Cooperative Model Work
3. The Woolpert Way
4. Moving Forward



History of the NCTCOG Orthophotography Project

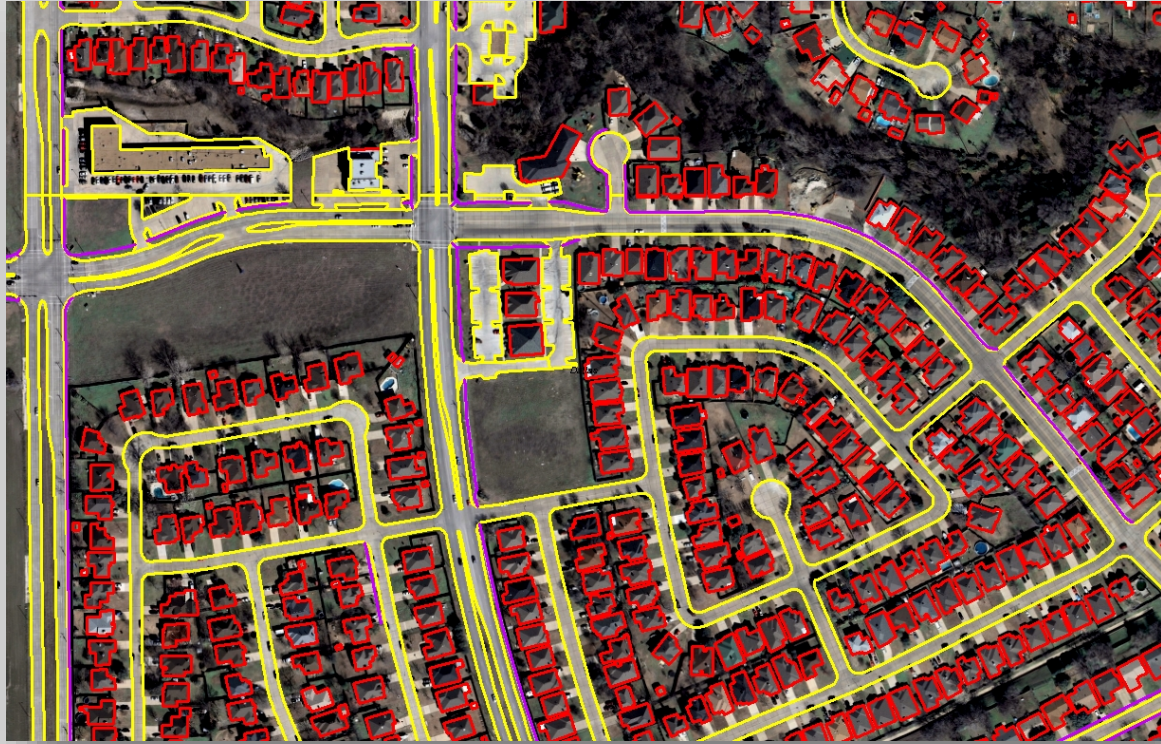
And More...

2001 to 2006



2001 LiDAR

2007 to 2008



2007 Planimetrics

2009 - 2012

Aerial Photography

Feature	Coverage Area (sq mi)	Not-to-Exceed Cost
<input type="checkbox"/> 3-inch Aerial Photography	<input type="text" value="0"/>	<input type="text" value="0"/>
<input type="checkbox"/> 6-inch Aerial Photography	<input type="text" value="0"/>	<input type="text" value="0"/>
Aerials Total		<input type="text" value="0"/>

Airborne LiDAR

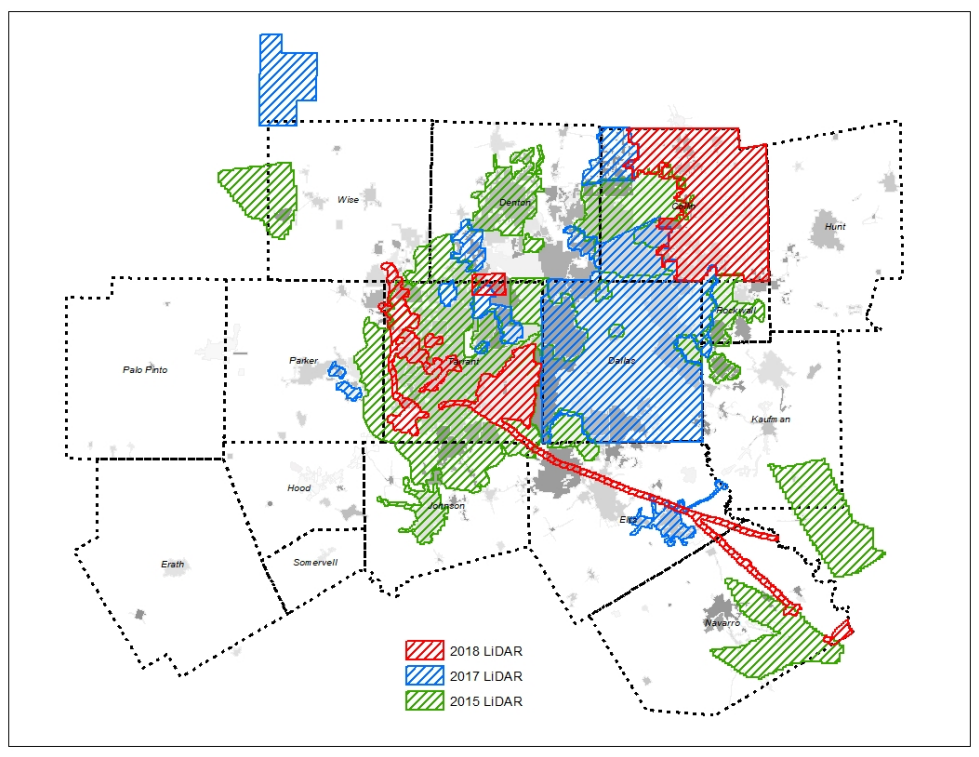
Feature	Coverage Area (sq mi)
<p>Corridor: A corridor is an area of interest that follows a path, road, utility, or any right-of-way. Due to the require specialized flight plans and 20-25% more ground control and are thereby more expensive than</p> <p><input type="checkbox"/> If coverage area is a corridor, check here and leave all other options in this section blank. Corridor</p>	
<input type="radio"/> 0.5-Meter LiDAR	<input type="text" value="0"/>

[2D Planimetrics](#) (Aerial Photography required)

Feature <small>[Hover over product name for specifications]</small>	Coverage Area (sq mi)	Type	Not-to-Exceed Cost
<input type="checkbox"/> Discounted Bundle - Building footprints, road edges, parking lots, bridges, sidewalk <i>centerlines</i>	<input type="text" value="0"/>	<input type="radio"/> New <input type="radio"/> Updates	<input type="text" value="0"/>
<input type="checkbox"/> Discounted Bundle - Building footprints, road edges, parking lots, bridges, sidewalk <i>edges</i>	<input type="text" value="0"/>	<input type="radio"/> New <input type="radio"/> Updates	<input type="text" value="0"/>
<input type="checkbox"/> Building Footprints	<input type="text" value="0"/>	<input type="radio"/> New <input type="radio"/> Updates	<input type="text" value="0"/>
<input type="checkbox"/> Bridges	<input type="text" value="0"/>	<input type="radio"/> New <input type="radio"/> Updates	<input type="text" value="0"/>
<input type="checkbox"/> Driveways	<input type="text" value="0"/>	<input type="radio"/> New <input type="radio"/> Updates	<input type="text" value="0"/>
<input type="checkbox"/> Fences	<input type="text" value="0"/>	<input type="radio"/> New <input type="radio"/> Updates	<input type="text" value="0"/>
<input type="checkbox"/> Lake Edges	<input type="text" value="0"/>	<input type="radio"/> New <input type="radio"/> Updates	<input type="text" value="0"/>
<input type="checkbox"/> Parking Lots	<input type="text" value="0"/>	<input type="radio"/> New <input type="radio"/> Updates	<input type="text" value="0"/>

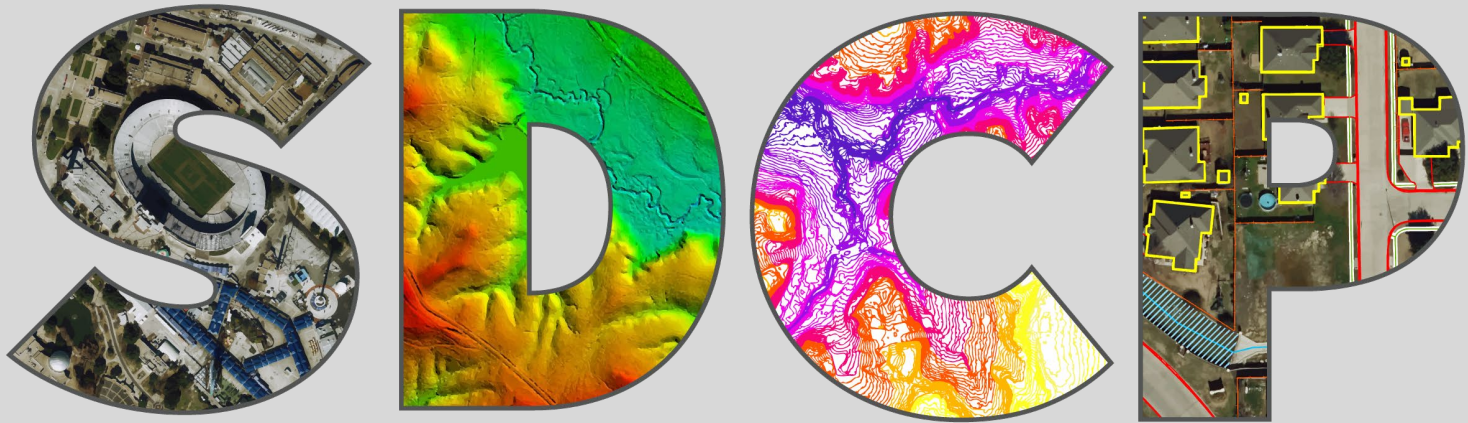
Online Ordering Form

2013 to 2018



Multi-year LiDAR

Rebranding the program:

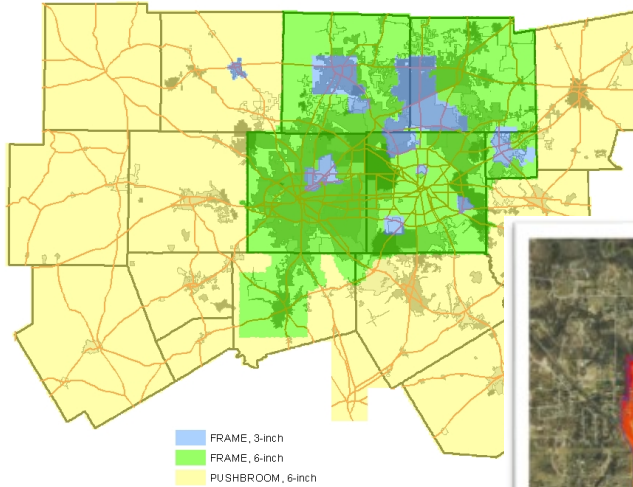


Spatial Data Cooperative Program

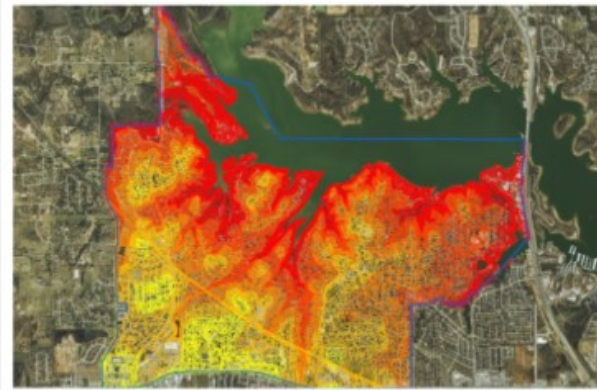
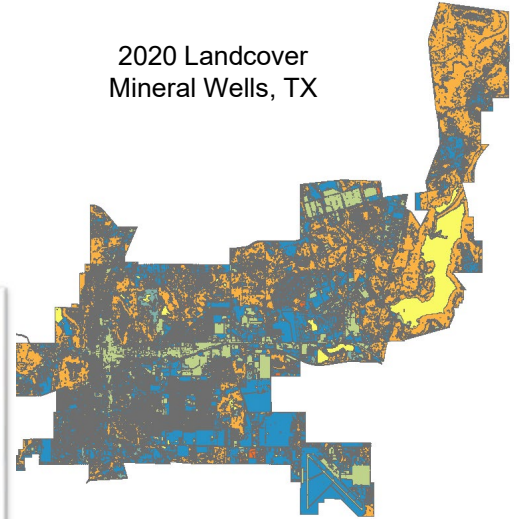
Program website: [https://www.nctcog.org/regional-data/spatial-data-cooperative-program-\(sdcp\)](https://www.nctcog.org/regional-data/spatial-data-cooperative-program-(sdcp))

2018 to Present

2021 Orthophotography Project Scope



2020 Landcover
Mineral Wells, TX



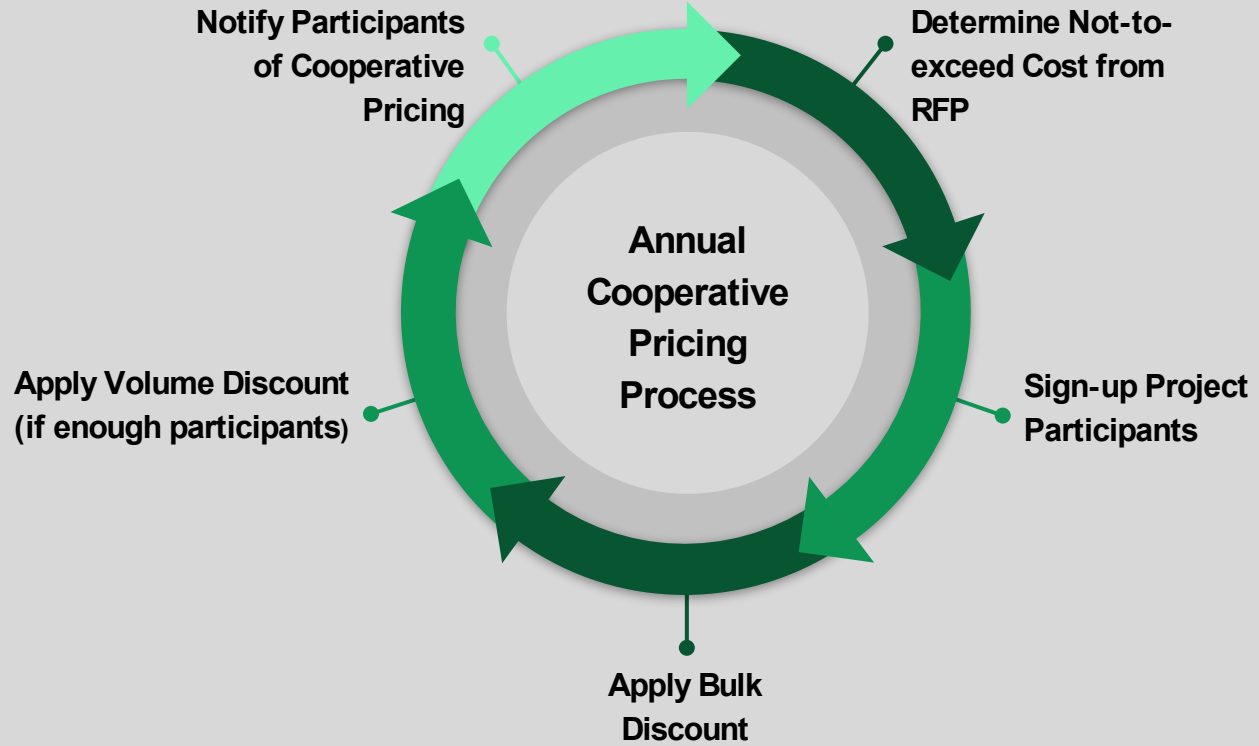
2020 LiDAR



Two Things That Make a Cooperative Model Work

Competitive Pricing and Strong Vendor Relationship

How the NCTCOG cooperative pricing model works:



Who We've Partnered With!

Bohannon  **Huston**

PIXXURES, INC

nearmap 

DAS
GEOSPATIAL

 **sanborn**

FUGRO


VARGIS
An Infotech Enterprises Company


WOOLPERT



The Woolpert Way

Changing the Vendor/Client Relationship

About Woolpert



ARCHITECTURE



ENGINEERING



GEOSPATIAL

Woolpert at a Glance



1911

Founded in
Dayton, Ohio



60+

Offices Worldwide



1 600+

Global
Employees





Woolpert Global Offices

Updated 12.08.21

North America

Athens, AL	Chicago, IL	Dayton, OH	Fort Worth, TX	Jefferson City, MO	Orlando, FL
Atlanta, GA	Cincinnati, OH	Denver, CO	Greenville, SC	Kansas City, MO	Pensacola, FL
Austin, TX	Cleveland, OH	Egg Harbor Township, NJ	Houston, TX	Lexington, KY	Pittsburgh, PA
Bay St. Louis, MS	Columbia, SC	Fairfax, VA	Indianapolis, IN	Miami, FL	Portland, OR
Charlotte, NC	Columbus, OH	Fairview Heights, IL	Jackson Hole, WY	N. Charleston, SC	Provo, UT
Chesapeake, VA	Cypress, TX	Jacksonville, FL	Oklahoma City, OK	Richmond, VA	St. Louis, MO

Salt Lake City, UT	Tampa, FL
San Antonio, TX	Toledo, OH
San Jose, CA	Virginia Beach, VA
Springfield, OH	Calgary, Canada
St. George, UT	
St. Louis, MO	

Africa and Middle East

Abu Dhabi, UAE
Cape Town, RSA
Johannesburg, RSA

Asia

Kuala Lumpur, Malaysia
Singapore

Australia and New Zealand

Macquarie Park, NSW
Napier, NZ
Perth, WA
Richmond, VIC
Spring Hill, QLD
Sydney, NSW
Wollongong, NSW



WOOLPERT GEOSPATIAL CAPABILITIES



A photograph of three men walking in a tropical setting. The man on the left is wearing a plaid shirt and glasses. The man in the center is wearing a white short-sleeved shirt and sunglasses. The man on the right is wearing a yellow shirt, a large straw hat, and sunglasses. The text "The Wolfpack" is overlaid in large, white, bold letters across the middle of the image.

The Wolfpack

Thoughts on Partnership with Woolpert

- The last 10 years have seen enormous growth. Lots of ideas for expanding the program. Added many new derivative products as regular offerings.

NCTCOG

Buy-up Products

3D (or 2D) Planimetrics

- Buildings **
- Paved Roads
- Parking Lots
- Driveways
- Pavement Pads
- Sidewalks
- Unpaved Roads,
- Groups of Vegetation
- Hydrology

Orthoimagery

- 3-inch
- 6-inch
- **Solar Mapping Potential**
- **Impervious Surface Mapping**
- **Change Detection**
- **Land Cover / Land Use**

Thoughts on Partnership with Woolpert

- Biggest additions - WMS QA/QC, Cloud Delivery

Smartview Connect – Online QA

Kenton - Planimetrics - Final

Delhi
Florence
Washington

LINKGIS Tile Index
Keep Layers
Filter

ID #	Status	Time	User	Comment
70	Fixed	Feb 3, 2021 13:45	jmeyer	Reshaped
71	Fixed	May 11, 2021 15:00	system	
72	Fixed	Feb 3, 2021 13:55	jmeyer	Reshaped
73	Not Fixed	Mar 16, 2021 09:00	kkeller	Not fixed per direction
74	Fixed	May 11, 2021 15:00	system	
75	Fixed	May 11, 2021 15:00	system	
76	Fixed	Feb 3, 2021 15:12	jmeyer	Fixed
77	Fixed	Feb 3, 2021 15:14	jmeyer	Fixed
78	Not Fixed	Mar 16, 2021 09:00	kkeller	Not fixed per direction
79	Fixed	Feb 3, 2021 15:14	jmeyer	Fixed
80	Fixed	Feb 3, 2021 15:15	jmeyer	Fixed
81	Fixed	Feb 3, 2021 15:16	jmeyer	Fixed
82	Fixed	May 11, 2021 15:00	system	
83	Fixed	Feb 3, 2021 15:17	jmeyer	Reshaped
84	Not Fixed	Mar 16, 2021 09:00	kkeller	Not fixed per direction

Recreational Open Area

- Athletics Field
- Ball Field
- Cemetery
- Golf Course
- Playground
- Tennis/Basketball Court

Impervious Surfaces

- Bridge
- Building
- Driveway
- Fixed water feature
- Hidden Underpass
- Patio (impervious), concrete
- Paved Parking
- Paved Road
- Private Sidewalk
- Public Sidewalk
- Structure
- Swimming Pool
- Tank (water or other)

Markups
 LINKGIS Tile Index
 Fences
 Impervious Surfaces
 Recreational Open Area
 Intensity
 DCM Hillshade

5 km



Smartview Connect – Online QA

Kenton - Planimetrics - Final

LINKGIS Tile Index

Keep Layers

Filter

R26SW
R26SE
S26SW
R25NW
R25NE
S25NW
S25NE
Q25SE

38.855453° N
84.574798° W
5 m

#81

Fixed
Jeff Meyer - Feb 3, 2021 15:16
Comment: Fixed

Created
Louis Hill - Nov 20, 2020 08:44
Label: Structure
Category: Inaccurate
Comment: building geometry not square

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Markups

LINKGIS Tile Index

Fences

Impervious Surfaces

Recreational Open Area

Intensity

DSM Hillshade



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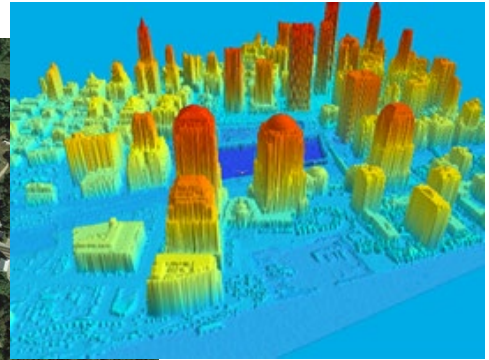


Delivery



Cloud Take-Aways

- No Login Required
- Use Existing FTP Software?
- More User Friendly and Familiar to ALL Users
- Can transfer any type of data to any number of clients - Orthos, Lidar, Planimetrics, Contours





Moving Forward

For both Woolpert & NCTCOG

Geocirrus

3D Mapping Platform

GEO
CIRRUS

[Home](#) [Store](#) [Demo](#) [Samples](#)



[Contact Us](#)

AAM
A WOOLPERT COMPANY



Geocirrus – make better decisions using high quality spatial content

When you need detailed visual and mapping assets for your project – time and quality matter. High quality spatial content enables better decisions.

[Visit Geocirrus Store](#)

Geocirrus Platform



High resolution 3D Photomesh

Use Geocirrus to analyse, measure and plan using a realistic and spatially accurate representation of the real world.

[Find out more](#)



Realistic 3D city modelling

Explore the current status of the built environment in fine detail to enhance future design, construction and ongoing management.

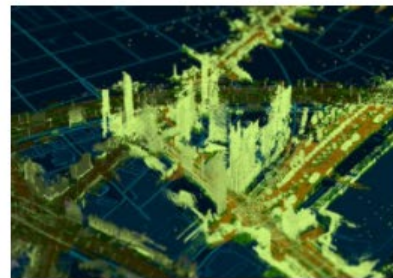
[Find out more](#)



Aerial Imagery

View comprehensive imagery of locations and assets that you can use to perform measurements of environmental and built features.

[Find out more](#)



LiDAR captures

Detailed models of the earth's surface and buildings captured via LiDAR that provide you with high levels of height accuracy.

[Find out more](#)

Summary

- 1 Geocirrus - Open, flexible, configurable platform
- 2 Handles all common lidar data and derivatives, including multiple collections for an area
- 3 Storage/analysis/visualization/dissemination for other raster and vector data
- 4 Use existing Esri licensing (or not). Manage in-house or use Woolpert-managed service.
- 5 Customize basemaps, overlays, tools. Brandable and accessible.

Thoughts on Partnership with Woolpert

- Changed the vendor/vendee relationship. Much more communication & involvement throughout the year. More through communications between vendor and participants regarding existing products and potential new products.

The future of the program



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Woolpert - Program Director |

Government Solutions

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