NCTCOG ORTHOPHOTOGRAPHY PROGRAM

Making the Cooperative Model Work

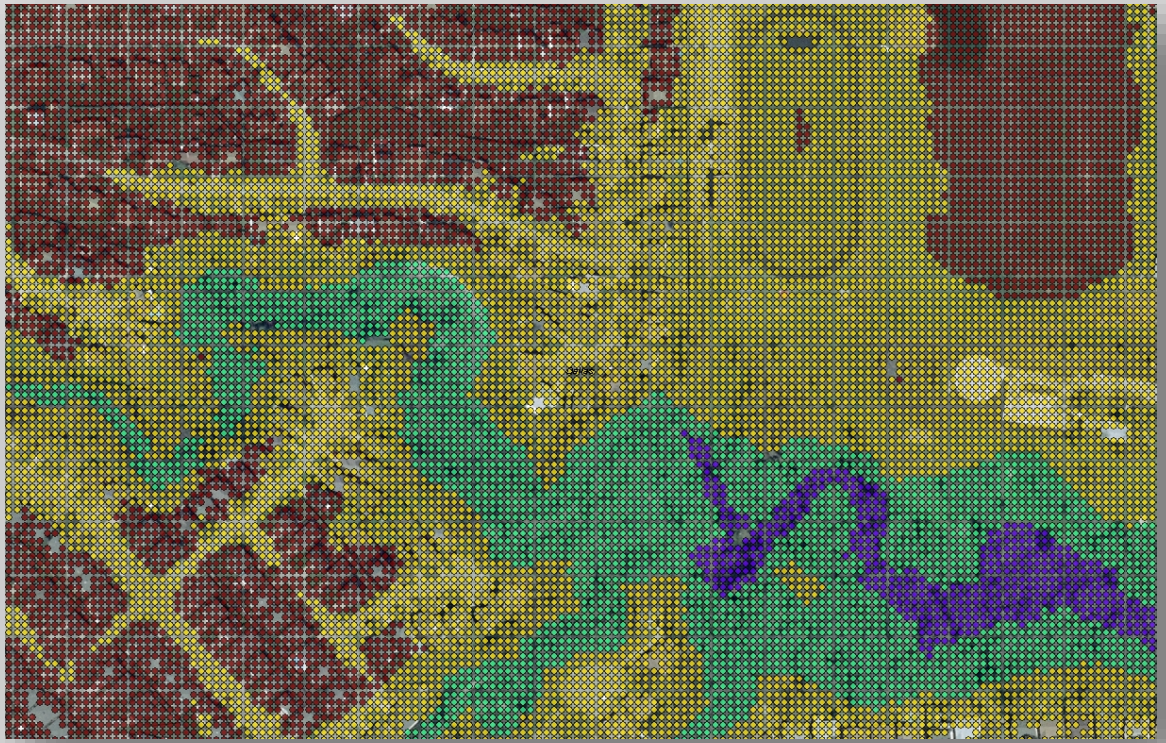
Agenda

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

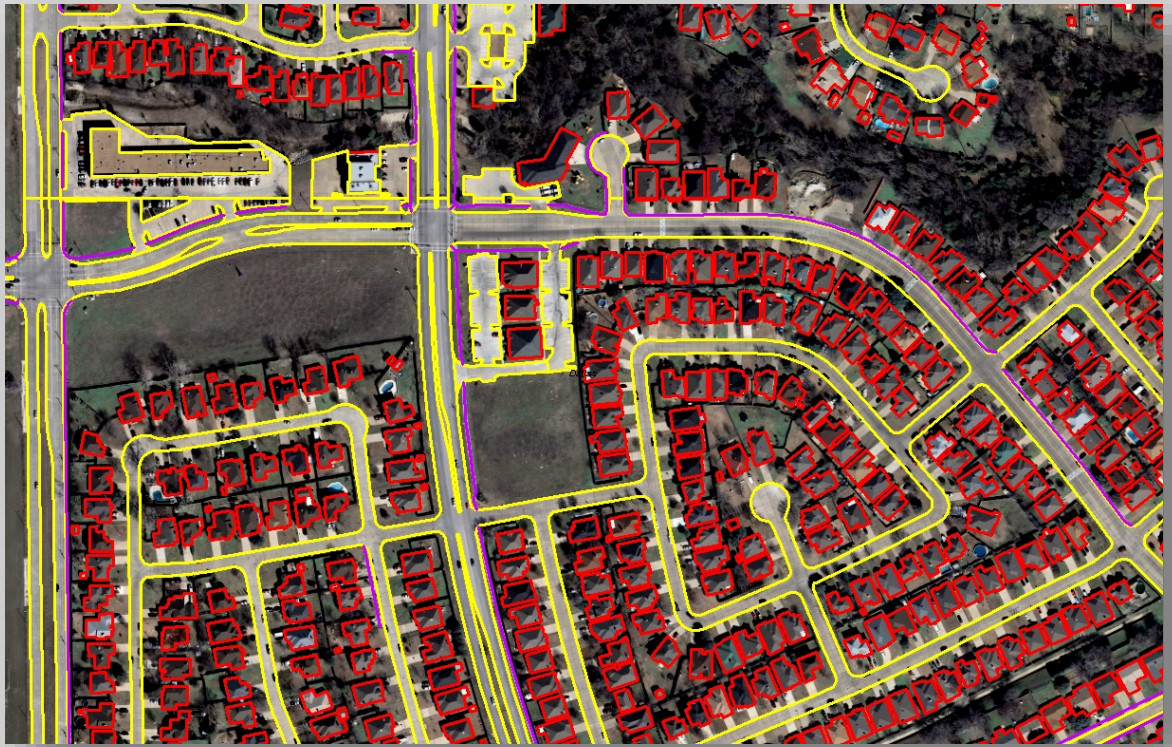
And More…

2001 to 2006



2001 LiDAR

2007 to 2008



2007 Planimetrics

2009 - 2012

Aerial Photography

Feature	Coverage Area (sq mi)	Not-to-Exceed Cost
☐ 3-inch Aerial Photography	0	0
☐ 6-inch Aerial Photography	0	0
Aerials Total		0

Airborne LiDAR

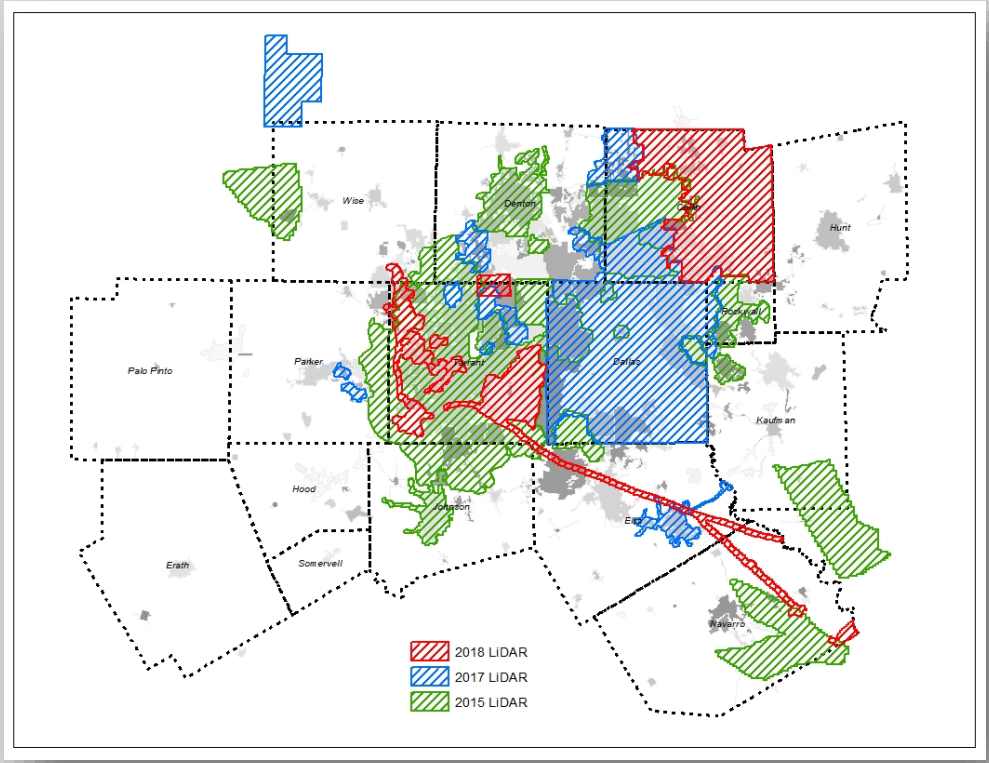
Feature	Coverage Area (sq mi)
Corridor: A corridor is an area of interest that follows a path, road, utility, or any right-of-way. Due to th require specialized flight plans and 20-25% more ground control and are thereby more expensive than ☐ If coverage area is a corridor, check here and leave all other options in this section blank. Corrid	
○ 0.5-Meter LiDAR	0

2D Planimetrics (Aerial Photography required)

Feature [Hover over product name for specifications]	Coverage Area (sq mi)	Type	Not-to-Exceed Cost
☐ Discounted Bundle - Building footprints, road edges, parking lots, bridges, sidewalk ***centerlines***	0	○ New ○ Updates	0
☐ Discounted Bundle - Building footprints, road edges, parking lots, bridges, sidewalk ***edges***	0	○ New ○ Updates	0
☐ Building Footprints	0	○ New ○ Updates	0
☐ Bridges	0	○ New ○ Updates	0
☐ Driveways	0	○ New ○ Updates	0
☐ Fences	0	○ New ○ Updates	0
☐ Lake Edges	0	○ New ○ Updates	0
☐ Parking Lots	0	○ New ○ Updates	0

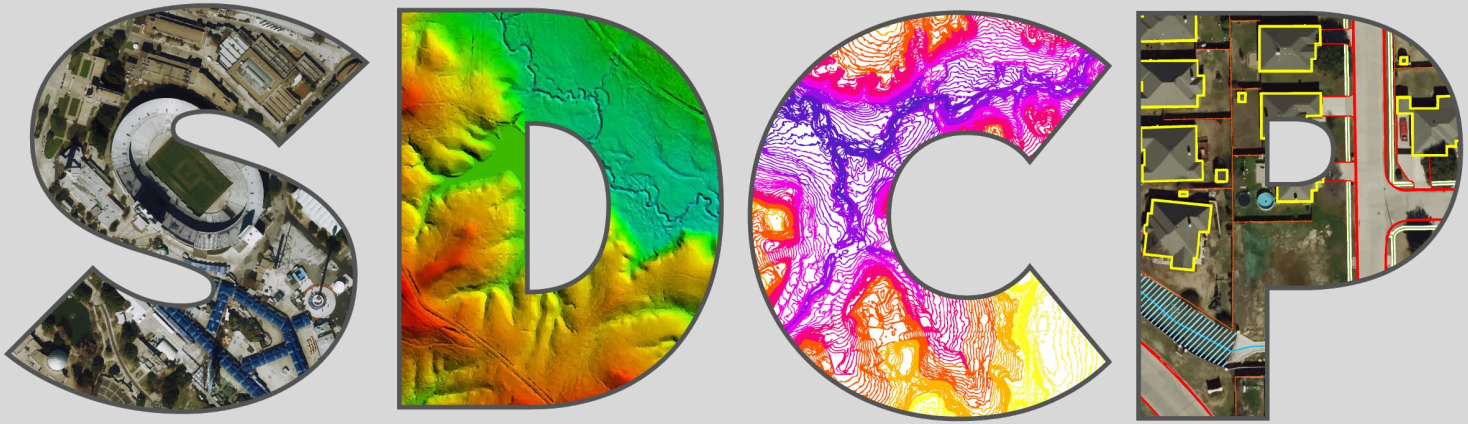
Online Ordering Form

2013 to 2018



Multi-year LiDAR

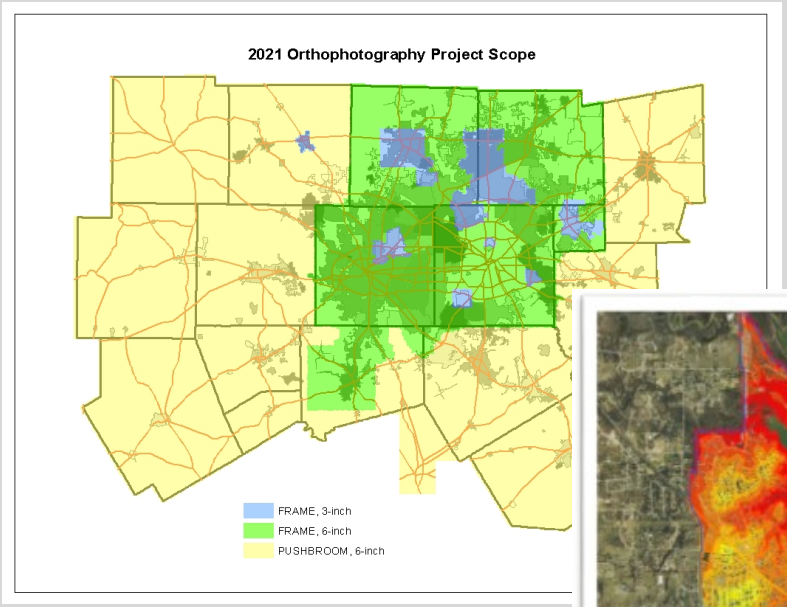
Rebranding the program:

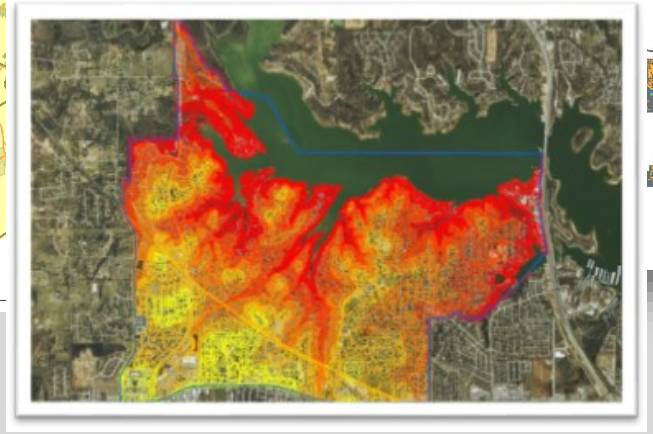


Spatial Data Cooperative Program

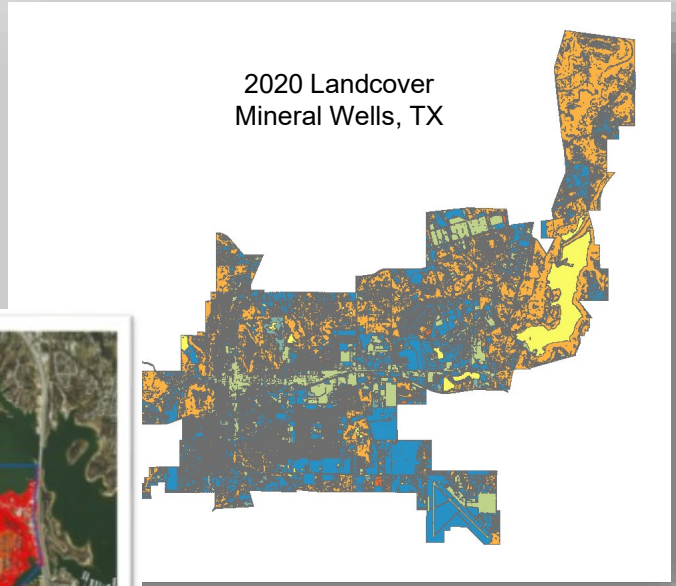
Program website: https://www.nctcog.org/regional-data/spatial-data-cooperative-program-(sdcp)

2018 to Present





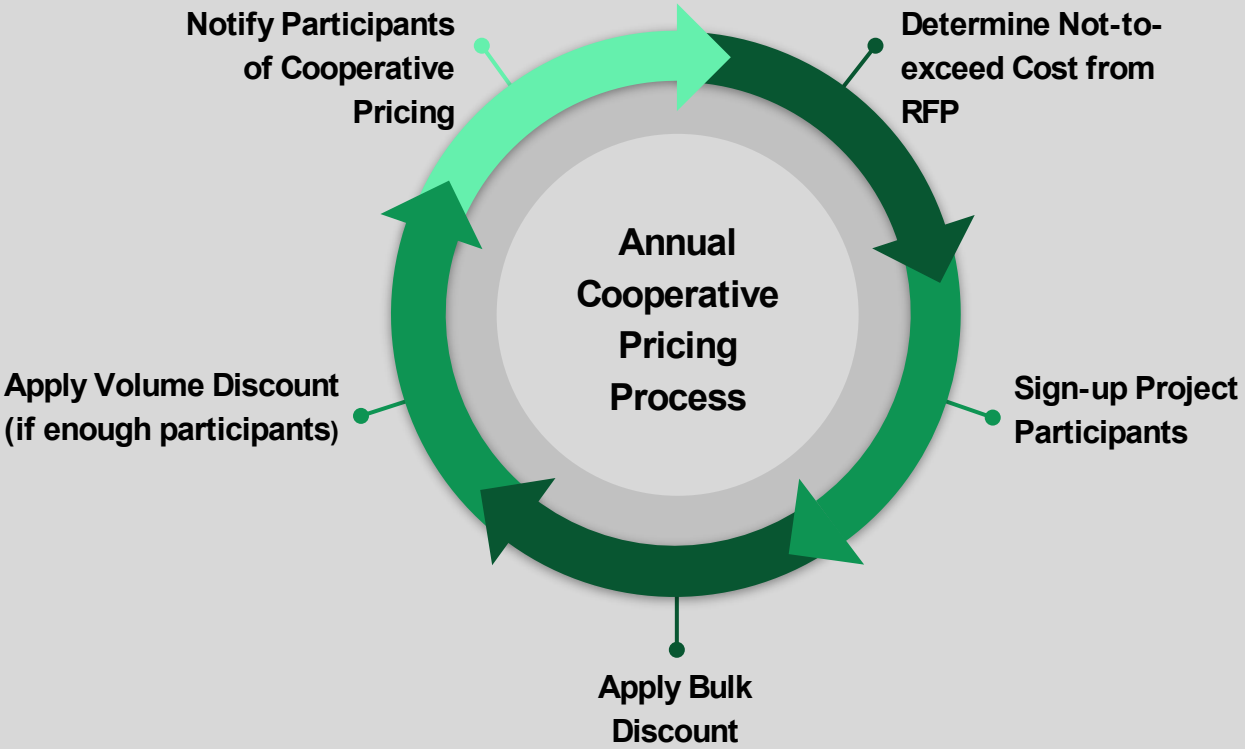
2020 LiDAR



Two Things That Make a Cooperative Model Work

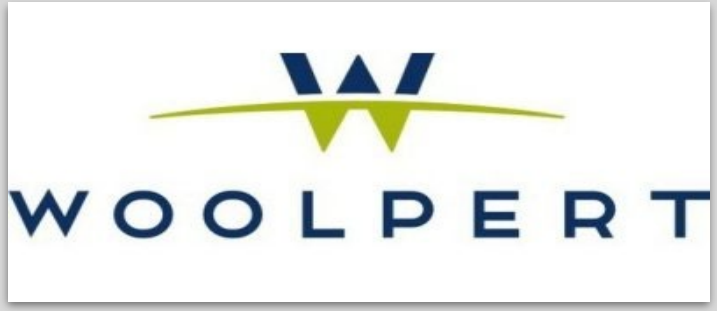
Competitive Pricing and Strong Vendor Relationship

How the NCTCOG cooperative pricing model works:



Who We've Partnered With!

PIXXURES, INC



The Woolpert Way

Changing the Vendor/Client Relationship

About Woolpert

ARCHITECTURE

Click to add text

ENGINEERING

GEOSPATIAL

Woolpert at a Glance

1911
Founded in
Dayton, Ohio

60+
Offices Worldwide

1600+
Global
Employees

Woolpert Global Offices

Updated 12.08.21

North America

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

Africa and Middle East

Abu Dhabi, UAE
Cape Town, RSA
Johannesburg, RSA

Asia

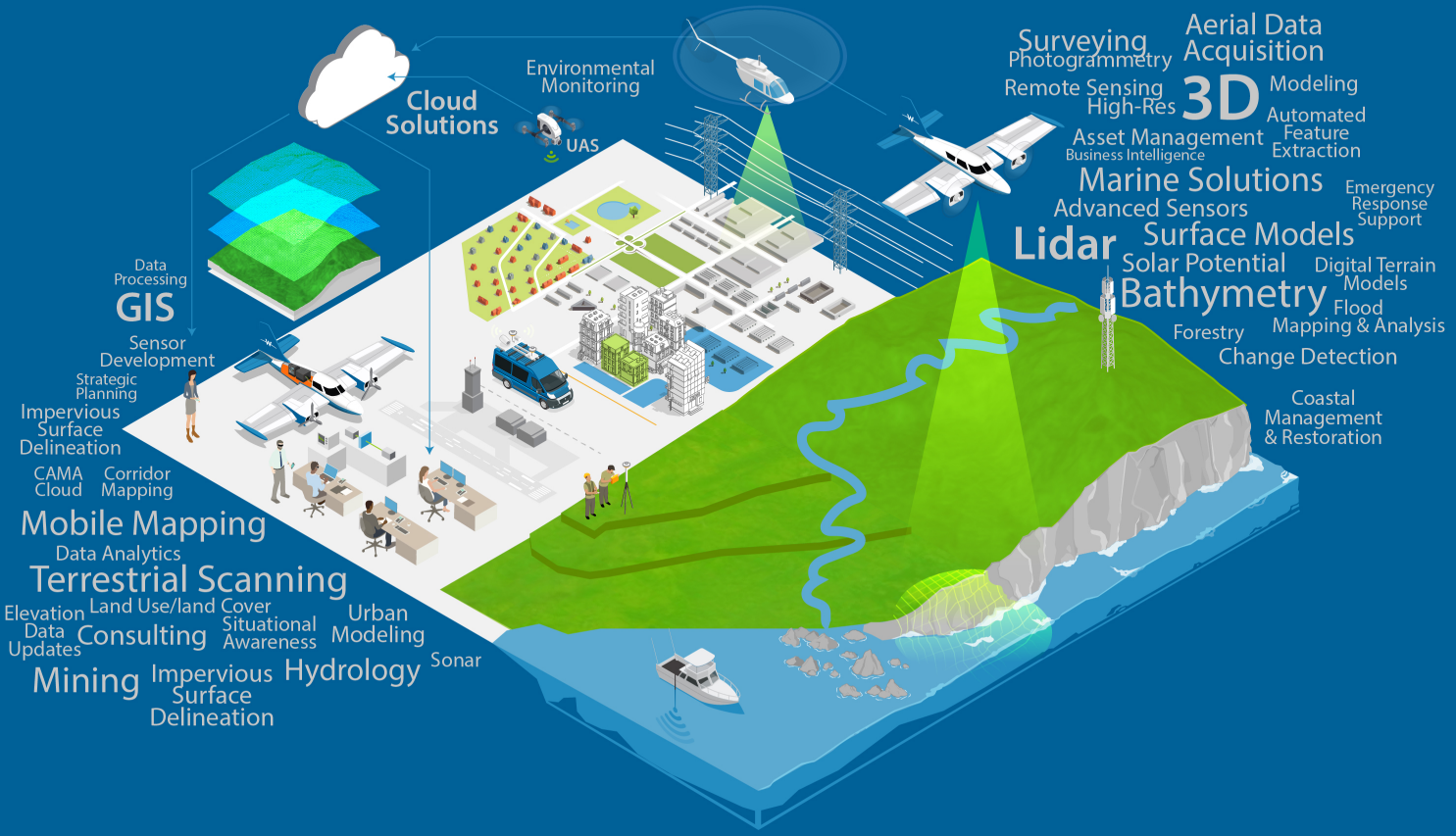
Kuala Lumpur, Malaysia
Singapore

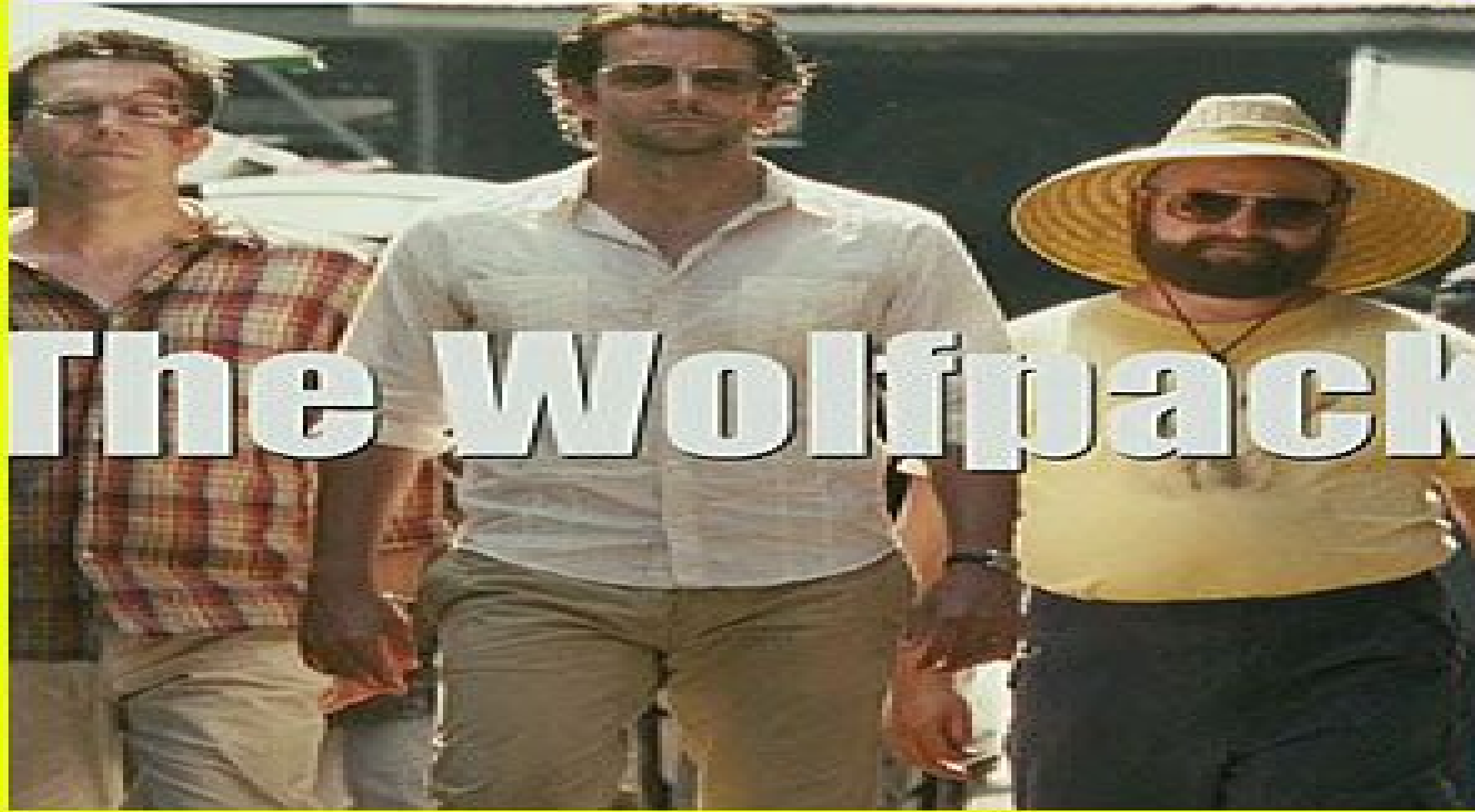
Australia and New Zealand

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

Map data provided for informational and communication purposes only.

WOOLPERT GEOSPATIAL CAPABILITIES




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

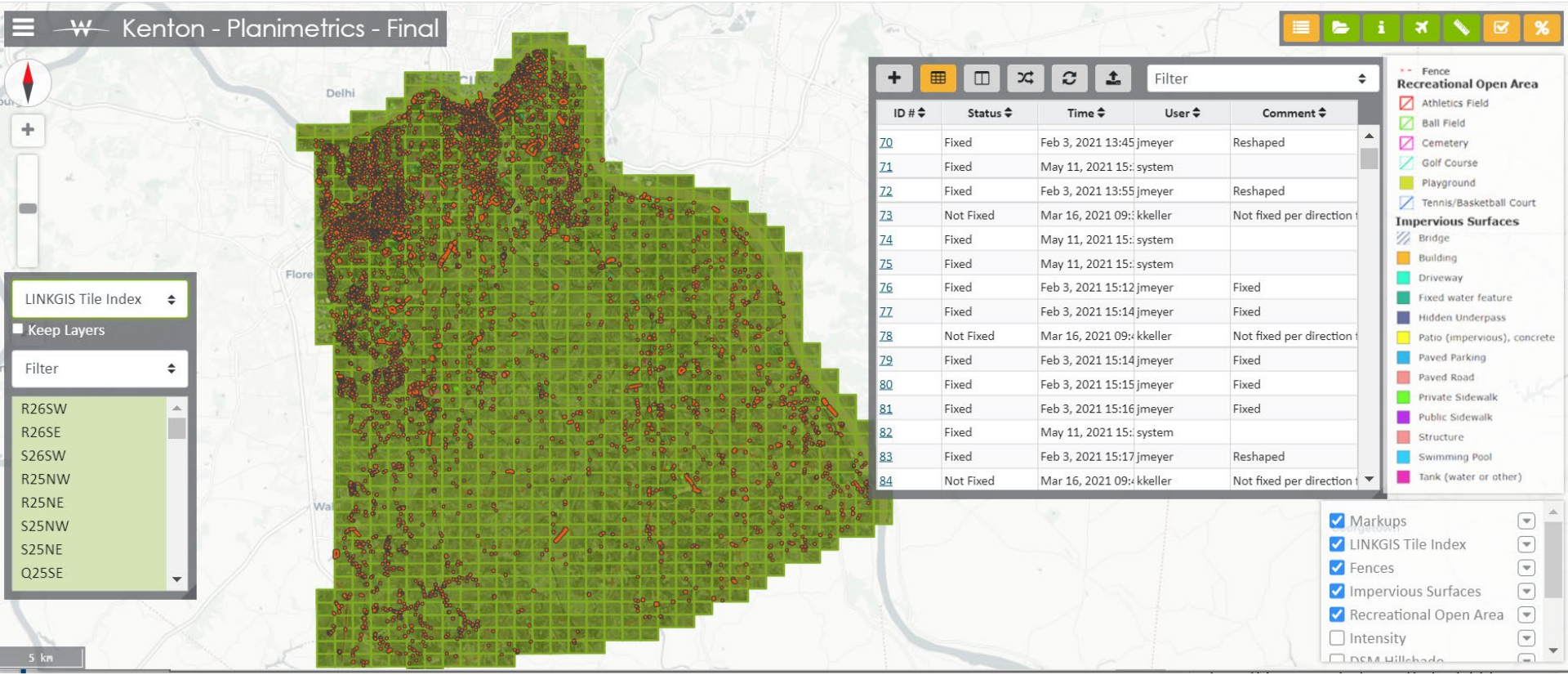
- 3-inch
- 6-inch

- **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



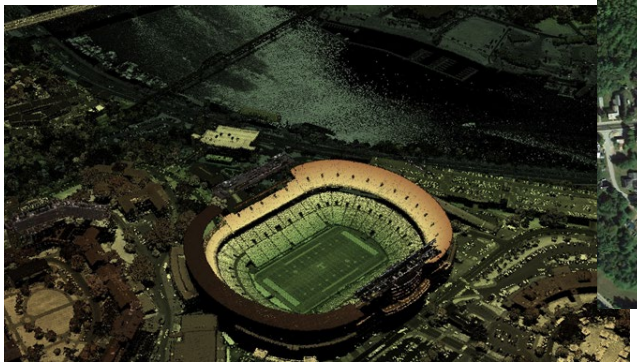
Smartview Connect – Online QA

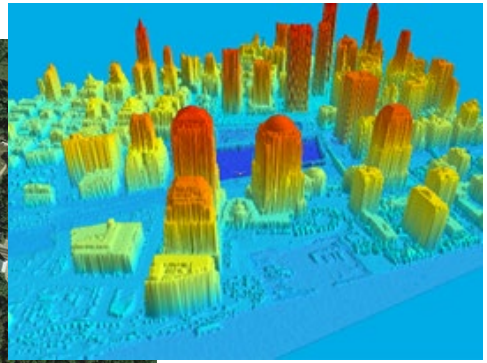
Fence
Recreational Open Area
Athletics Field
Ball Field
Cemetery
Golf Course
Playground
Tennis/Basketball Court
Impervious Surfaces
Bridge
Building
Driveway
Fixed water feature
Hidden Underpass
Patio (impervious), concrete
Paved Parking
Paved Road
Private Sidewalk
Public Sidewalk
Structure
Swimming Pool
Tank (water or other)

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



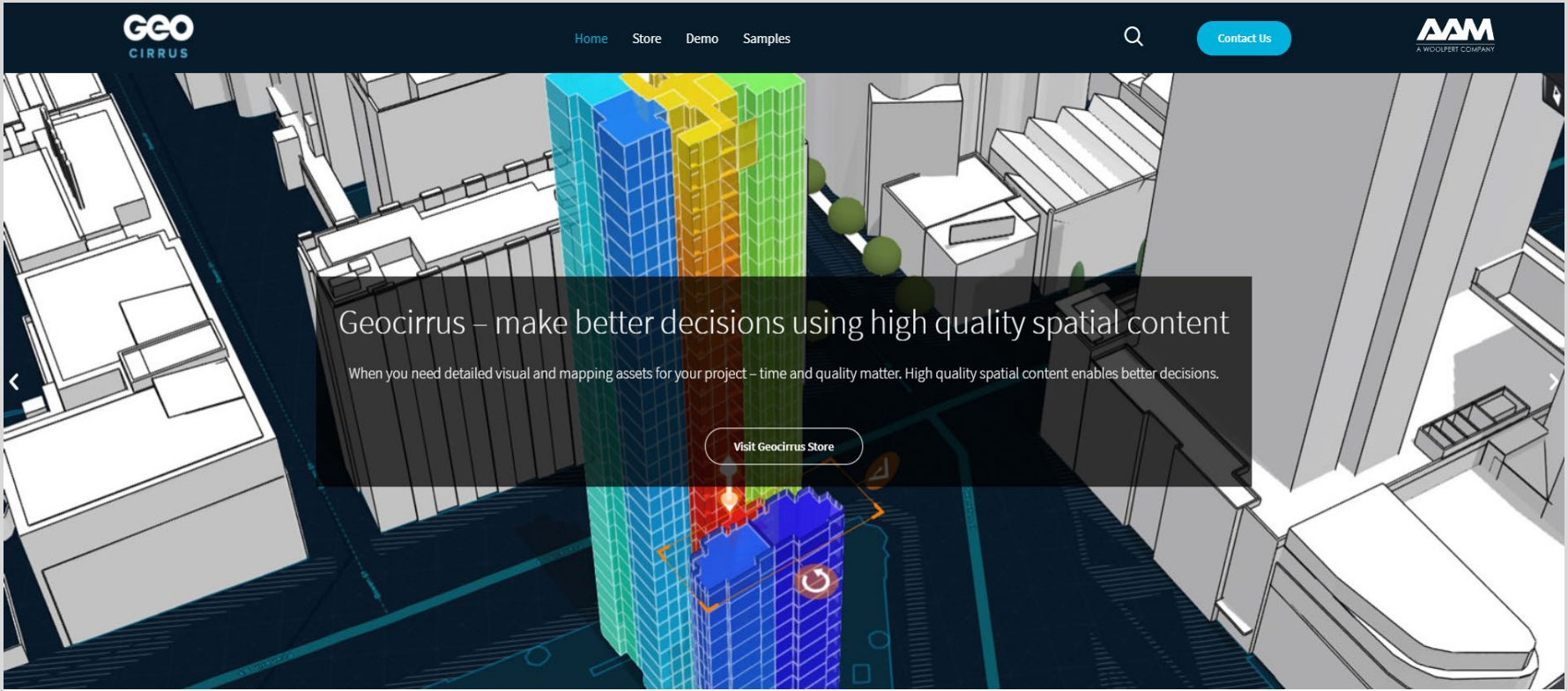


Moving Forward

For both Woolpert & NCTCOG

Geocirrus

3D Mapping Platform



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

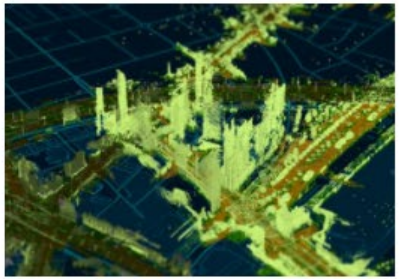
Explore the current status of the built environment in fine detail to enhance future design, construction and ongoing management.

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



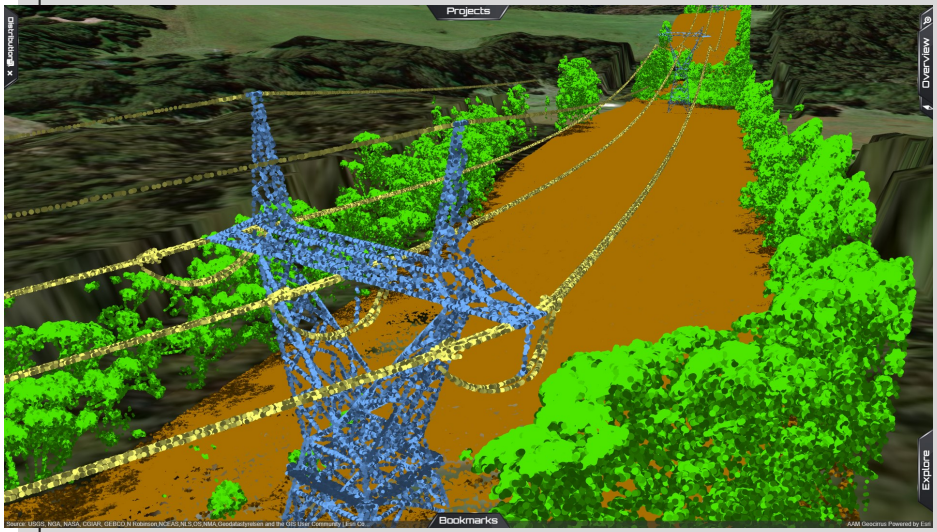
LiDAR captures

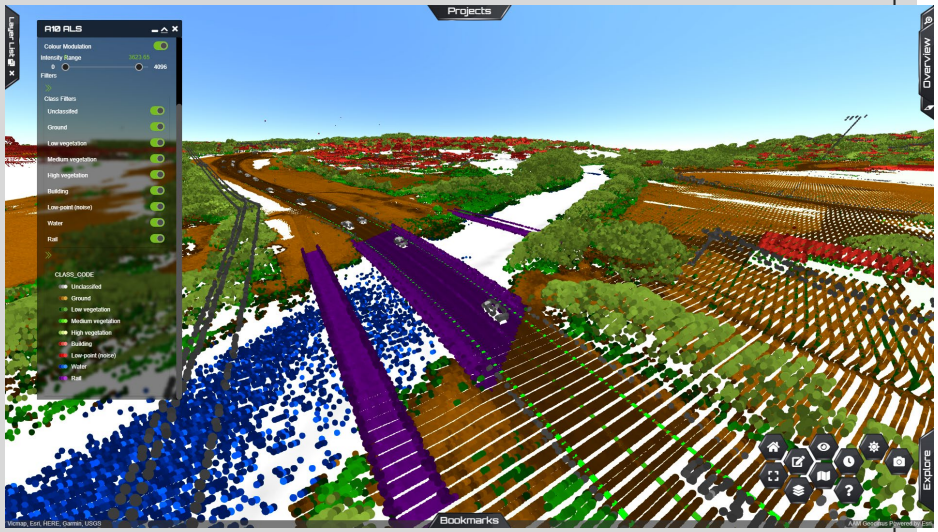
Detailed models of the earth's surface and buildings captured via LiDAR that provide you with high levels of height accuracy.

Find out more

Geocirrus Platform

Display LiDAR data by classification, elevation, intensity . . .





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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