

# NAIP & HxIP

## OKLAHOMA

**Tim Bohn, C.P. P.M.P.**  
**VP, Business Development**



# Topics

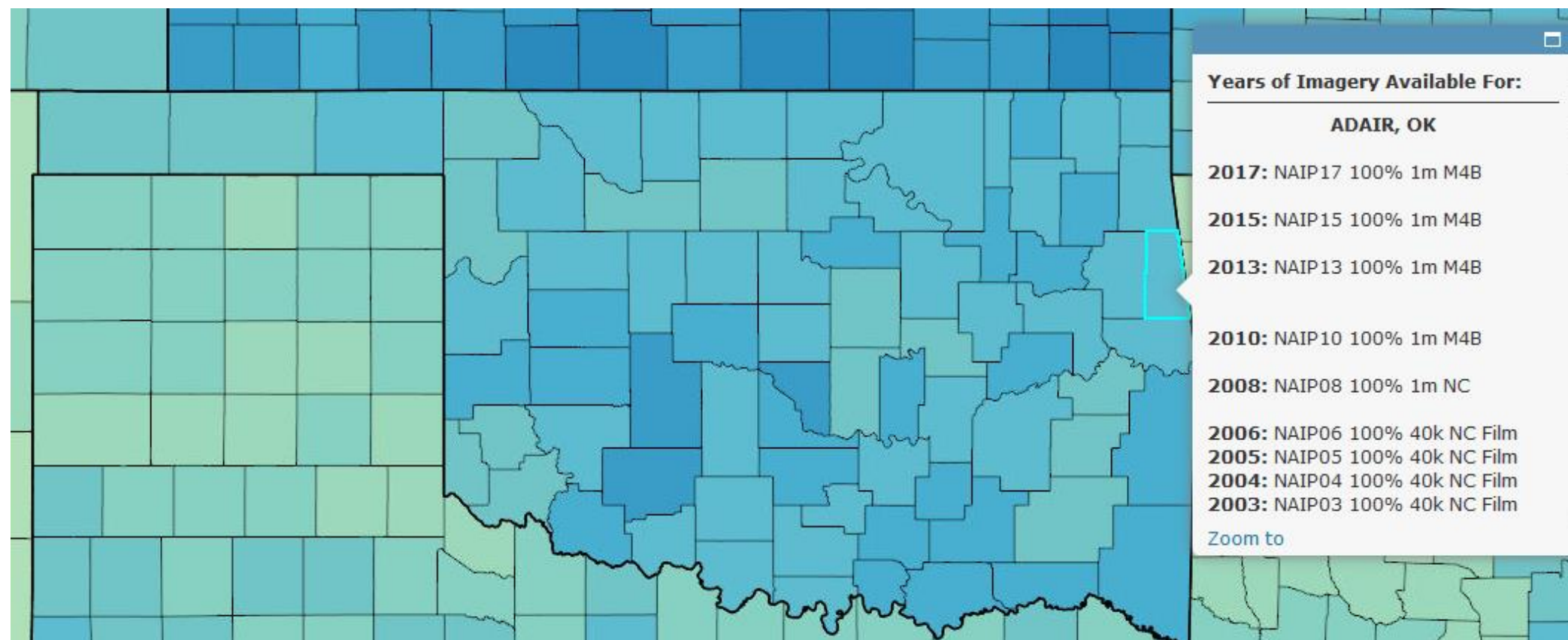
- **Surdex – NAIP Prime Contractor --16 yrs**
- **10 aircraft, HQ in St. Louis, family owned**
- **OK History**
- **2017 Info**
- **HxIP**





# Extensive Coverage of OK

9 Statewide Collections back to 2003 (SDX = 6)





# Georeferenced Color Pos Film - 2003





# Digital Camera - 2008





# Absolute Accuracy - 2010





# Frame - 2013



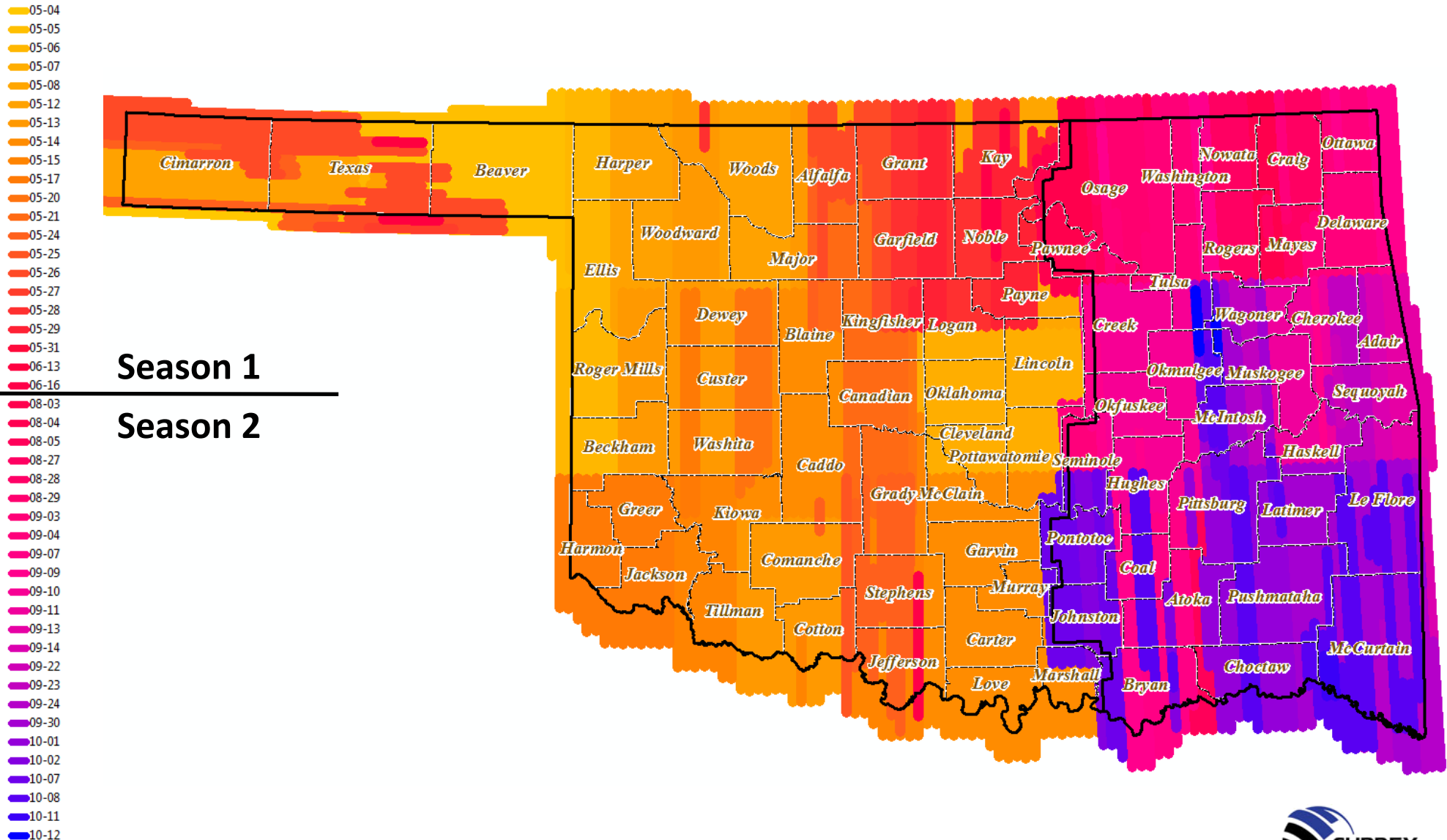


# Pushbroom - 2017





# Acquisition Dates - 2017





# 1m Data - 2017

[ftp://okmaps.org/imagery/naip/county\\_ccm/2017/](ftp://okmaps.org/imagery/naip/county_ccm/2017/)

Index of [ftp://okmaps.org/imagery/naip/county\\_ccm/2017/](ftp://okmaps.org/imagery/naip/county_ccm/2017/)

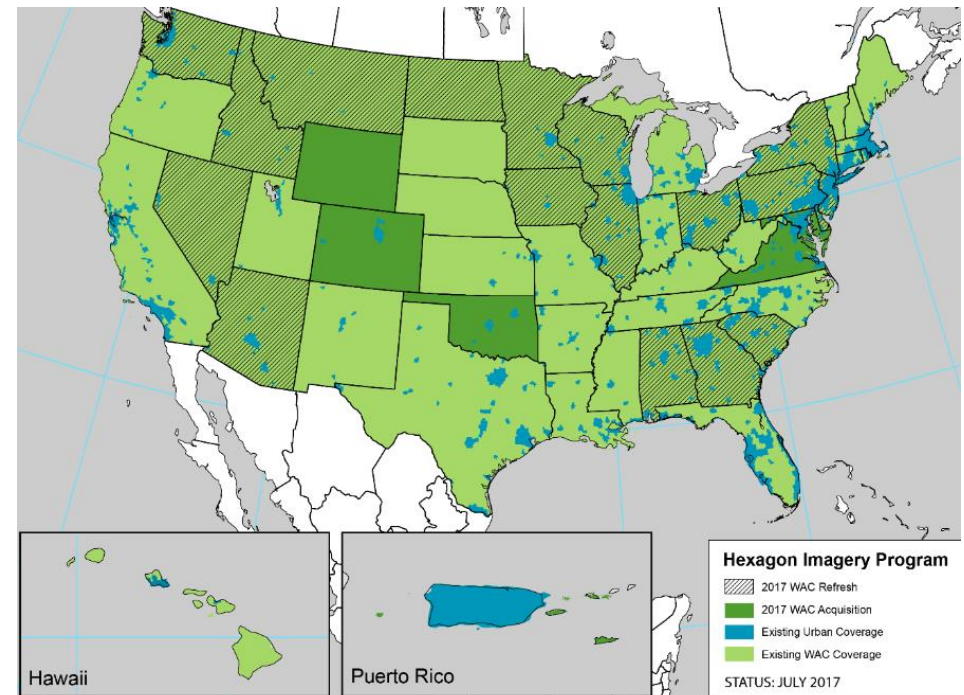
 Up to higher level directory

Name	Size	Last Modified
 <a href="#">Adair_2017</a>		1/4/2018 9:27:00 AM
 <a href="#">Alfalfa_2017</a>		1/4/2018 9:28:00 AM
 <a href="#">Atoka_2017</a>		1/4/2018 9:30:00 AM
 <a href="#">Beaver_2017</a>		1/4/2018 9:31:00 AM
 <a href="#">Beckham_2017</a>		1/4/2018 9:31:00 AM
 <a href="#">Blaine_2017</a>		1/4/2018 9:31:00 AM
 <a href="#">Bryan_2017</a>		1/4/2018 9:34:00 AM
 <a href="#">Caddo_2017</a>		1/4/2018 9:35:00 AM
 <a href="#">Canadian_2017</a>		1/4/2018 9:36:00 AM
 <a href="#">Carter_2017</a>		1/4/2018 9:39:00 AM
 <a href="#">Cherokee_2017</a>		1/4/2018 10:43:00 AM
 <a href="#">Choctaw_2017</a>		1/4/2018 10:44:00 AM
 <a href="#">Cimarron_2017</a>		1/4/2018 10:45:00 AM
 <a href="#">Cleveland_2017</a>		1/4/2018 10:44:00 AM
 <a href="#">Coal_2017</a>		1/4/2018 10:45:00 AM
 <a href="#">Comanche_2017</a>		1/4/2018 10:47:00 AM
 <a href="#">Cotton_2017</a>		1/4/2018 10:47:00 AM
 <a href="#">Craig_2017</a>		1/4/2018 10:48:00 AM
 <a href="#">Creek_2017</a>		1/4/2018 10:49:00 AM
 <a href="#">Custer_2017</a>		1/4/2018 10:49:00 AM
 <a href="#">Delaware_2017</a>		1/4/2018 10:49:00 AM



# Hexagon Imagery Program (HxIP)

- Authoritative imagery
  - Flown, produced and QC by Photogrammetrists
  - Utilizes thousands of RLS surveyed control points
  - Includes metadata
- Available now - No RFP or technical spec writing required
- Licensed data
- Four-band (RGB+NIR)
- Improved accuracy
- Improved radiometry
- Fewer clouds
- Customized seamlines
- Stable program
  - 4th year of collection for lower 48
  - 18 states refreshed in 2017
  - All states now covered plus Puerto Rico, Europe





# Hexagon Imagery Program (HxIP)

## Streaming Service

- ESRI Desktop/Pro
- AutoCAD Map/Civil 3D
- uDig
- Mapinfo
- Global Mapper
- ERDAS
- ....anything WMS/WMTS

## Pixel Delivery

- Download/hard drive
- Stored on your server
- Geotiff
- UTM native zone, NAD83 (2011)
- Other formats / projections available upon request

**Licensed data is limited distribution within your organization.**



# Hexagon Imagery Program (HxIP)

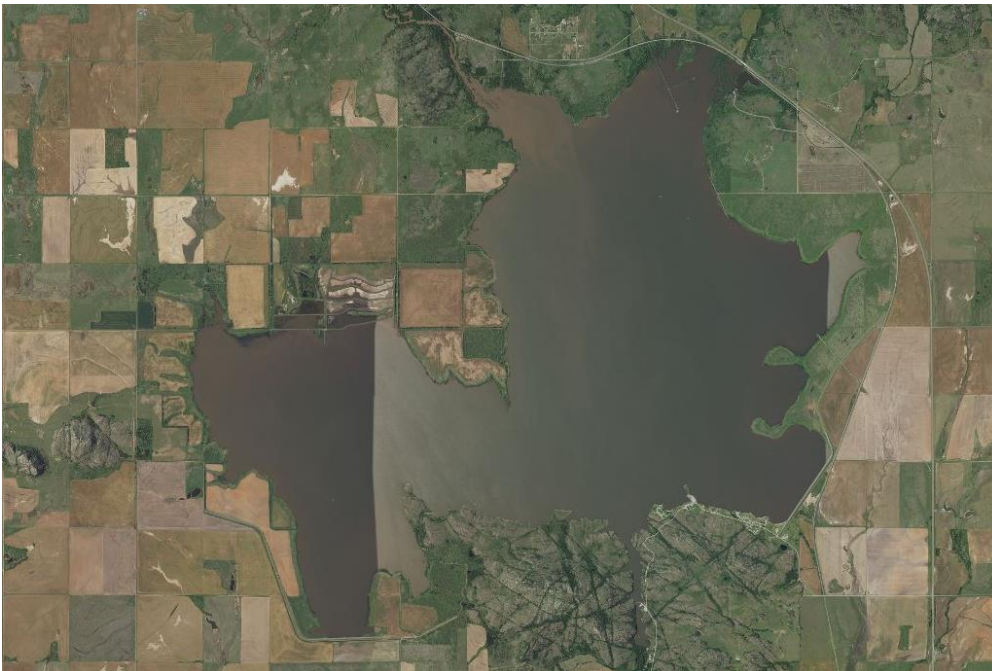
## License Options & Considerations

- Single stream license available w/ discounts for >20 users
  - Streaming – annual renewal, no long term contract
- Pixel delivery + Streaming – Data sharing w/ muni
  - Public facing websites – no download restriction
  - Internal plotting



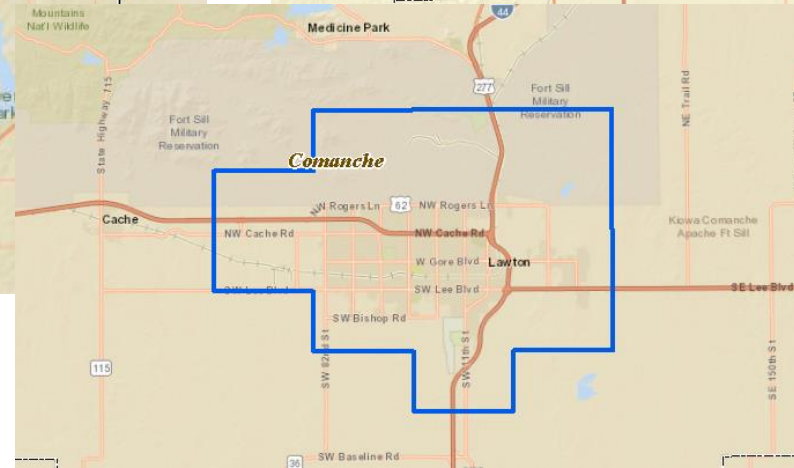
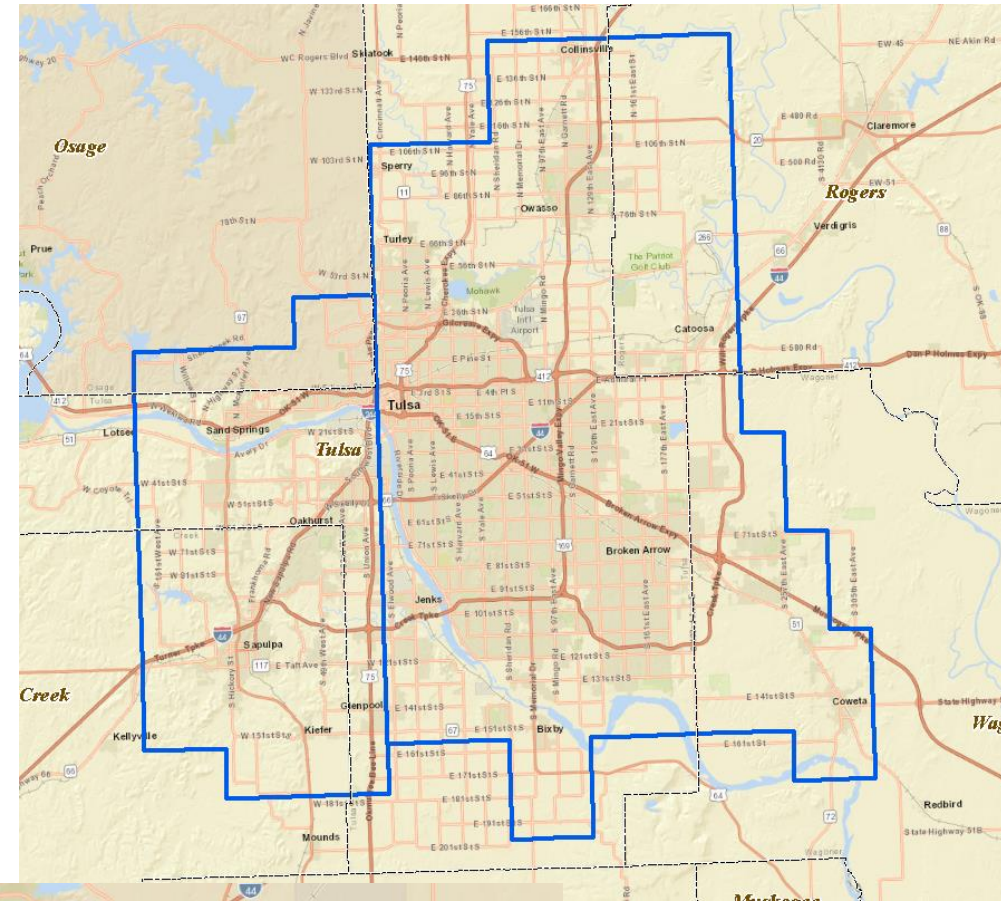
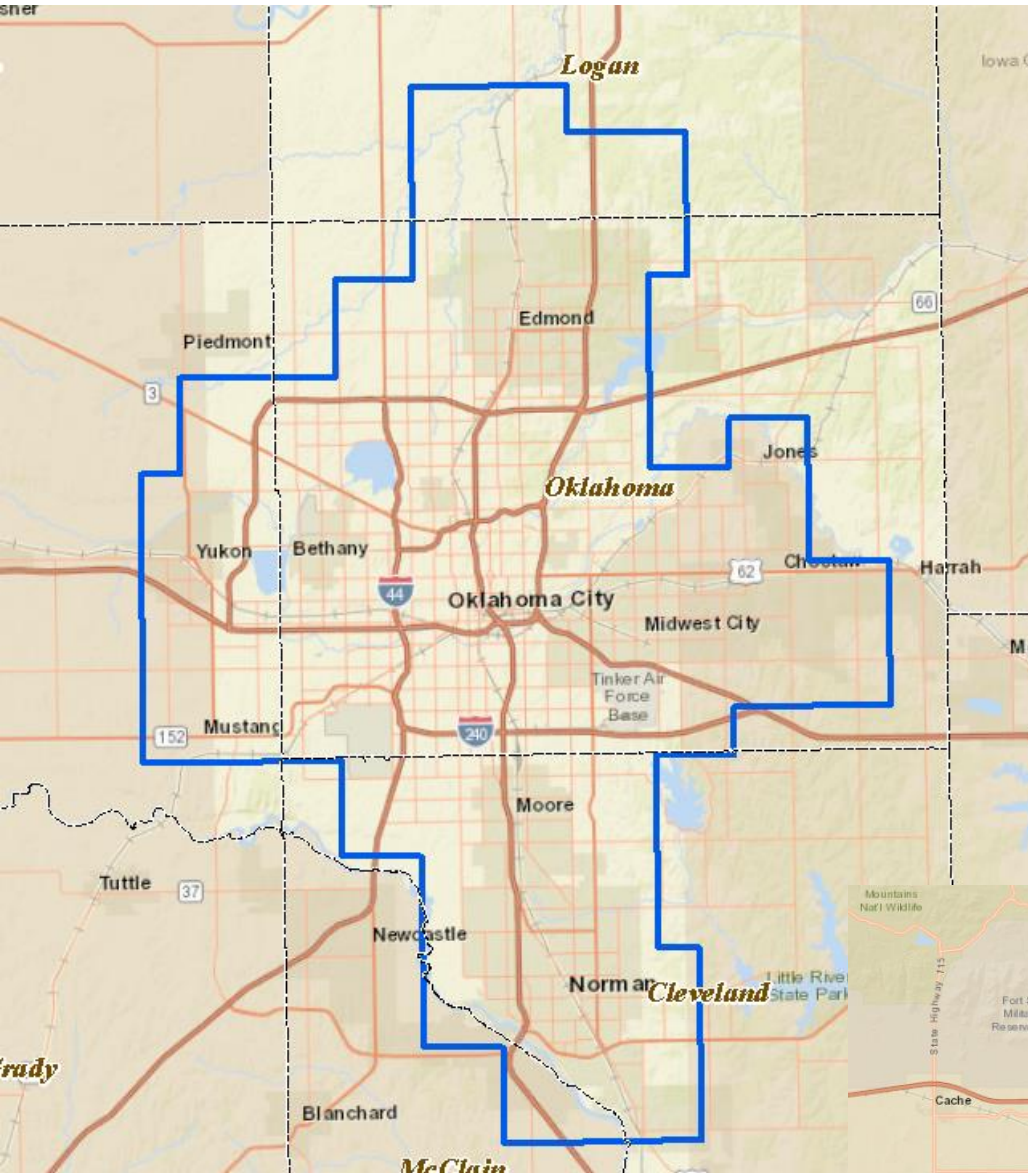
# Product Specifications

	NAIP – 1m	HXIP – 30cm	HXIP – 15cm
<b>Pos. Accuracy</b>	4.0m CE95	3.0m CE95	1.2m CE95
<b>Cloud/Shadows</b>	<10% DOQQ	<10% & not cover roads	<3% on 5x5km block <5% per sq km
<b>Seamlines</b>	Automatic	Custom placement	
<b>Capture</b>	Leaf-on	Leaf-on	Mostly leaf-off





# 15cm coverage



15cm (6") in over  
350 US cities  
OK=2016



# HxIP 1ft vs NAIP 1m



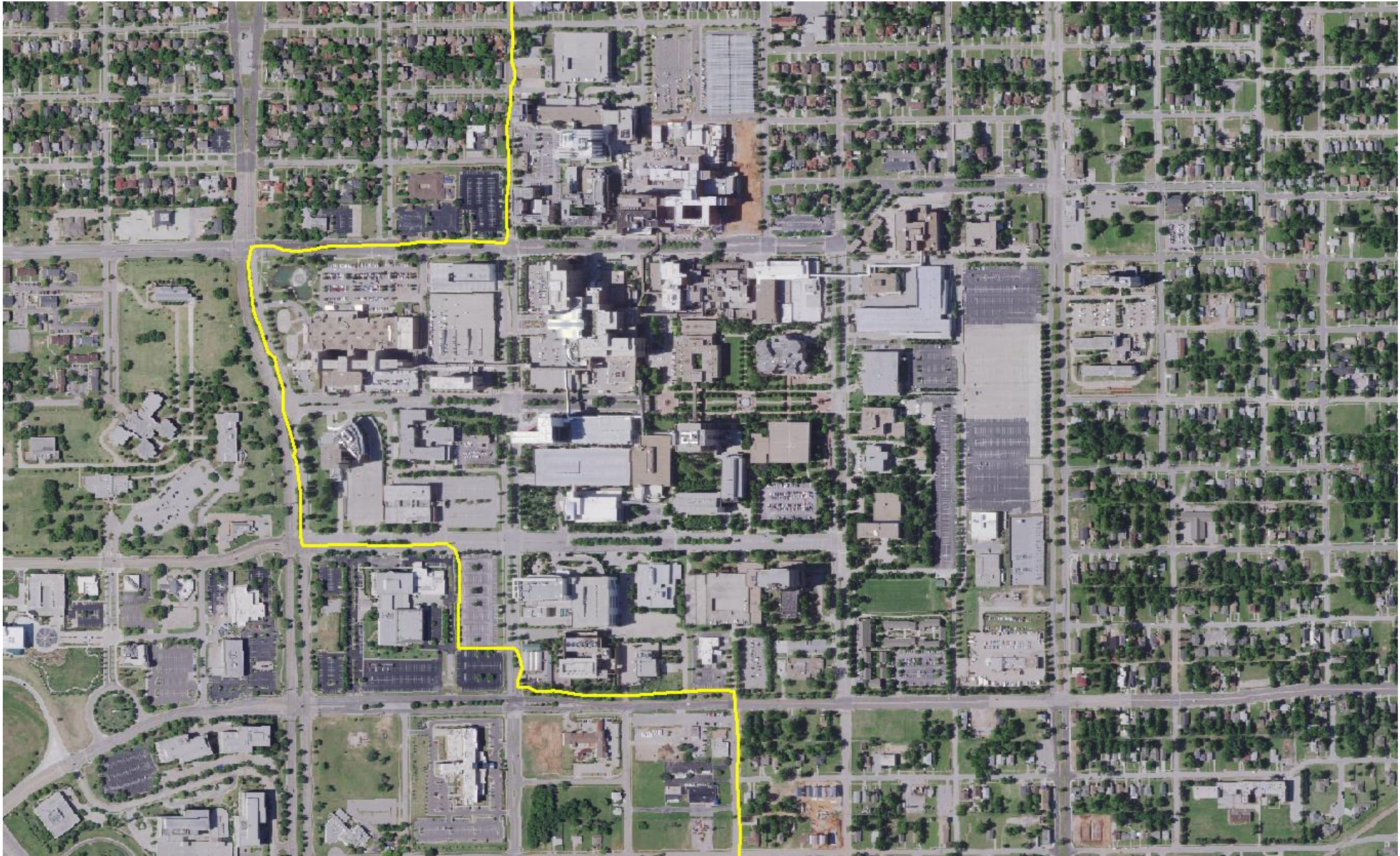


# NAIP Seamlines





# HxIP Seamlines



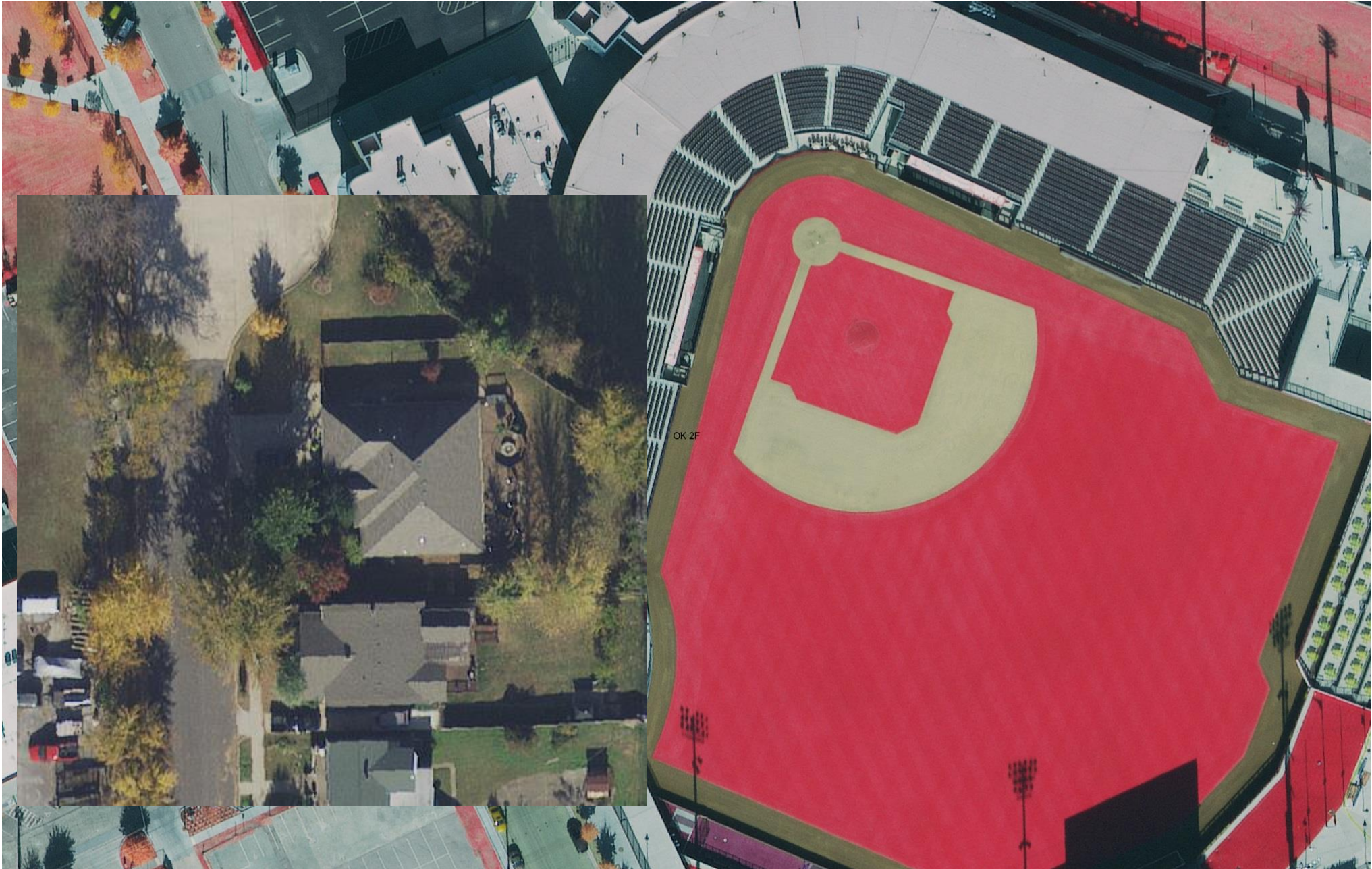


# 15cm OKC (RGB)





# 15cm Oneok Field (IR)



# Questions?



## **Tim Bohn, VP Business Development**

- [timb@surdex.com](mailto:timb@surdex.com)
- Direct Office: (636) 368-4456
- [www.surdex.com](http://www.surdex.com)