



# LAR-IAC 5 Project Recap

Carl Schoenthal

February 25 & 27, 2020





# LAR-IAC 5

## 2017

### **4" / 9" Natural Color Orthogonal Imagery**

4-band Multi-Spectral Imagery (RGBNIR)

### **4" / 9" Natural Color Oblique Imagery**

### **Building Roof Outlines, with Elevation**

## 2019

### **3" Frequent Imagery Capture Program**

Spring & Fall 2019 captures

# LAR-IAC 5

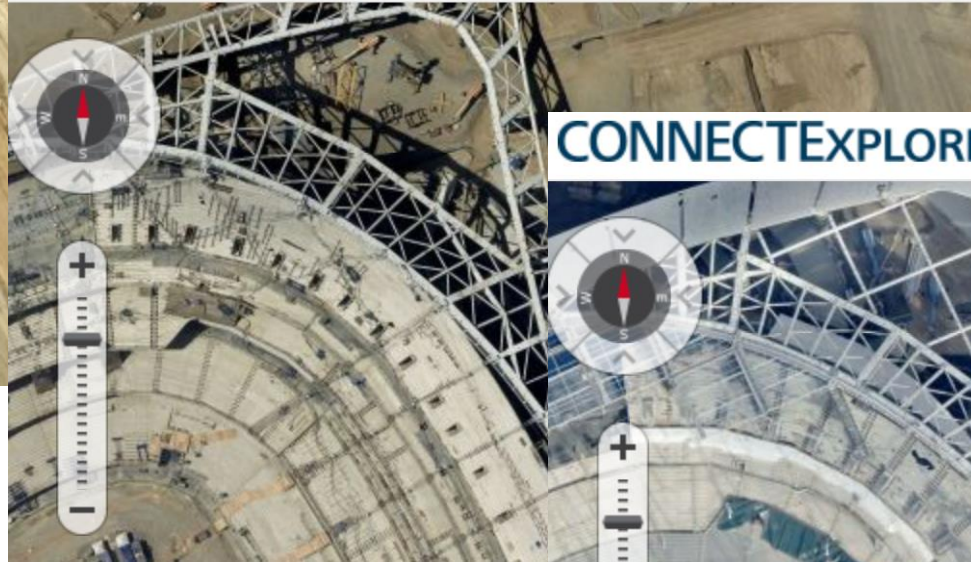
CONNECTEXPLORER™

2017



CONNECTEXPLORER™

Spring 2019



CONNECTEXPLORER™

Fall 2019





# LAR-IAC 6



2/20/19



EARLY ACCESS



Workspaces ▾

© 2020 eagleview



# Accuracy (95% Confidence) 4" 4-Band Imagery – LAR-IAC 5

<b>Criteria for 4-inch GSD Imagery</b>	<b>Acceptance Criteria</b>	<b>Tested</b>
RMSE <sub>x</sub> (acceptance criteria 30)	1.00 ft	0.51 ft
RMSE <sub>y</sub> (acceptance criteria 30)	1.00 ft	0.59 ft
RMSE <sub>r</sub> (acceptance criteria 30)	1.41 ft	0.78 ft
Accuracy <sub>r</sub> (acceptance criteria 31)	2.50 ft	1.35 ft
Number of QA/QC checkpoints used	N/A	187

## LARIAC Accuracy Assessments – Over Time

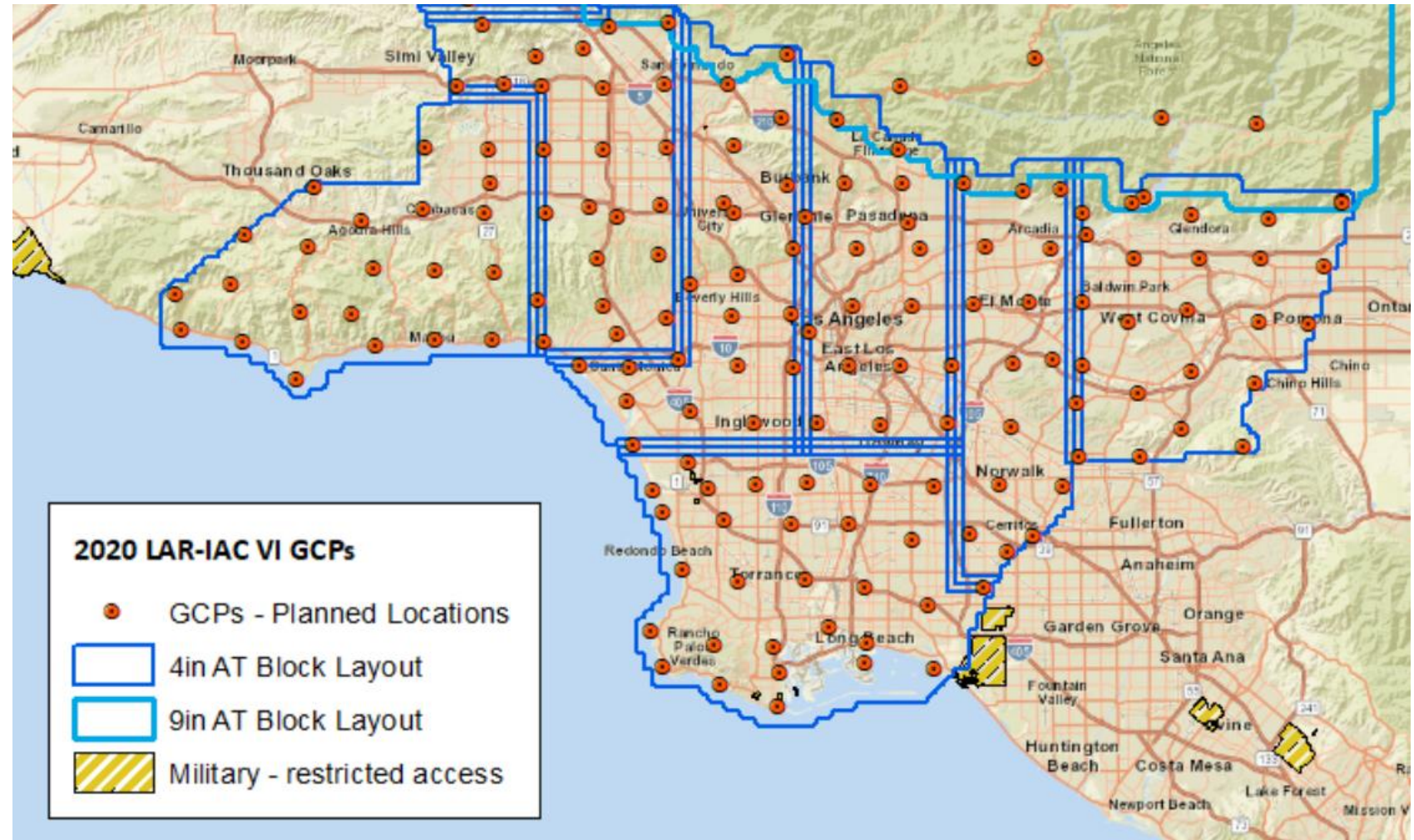
	LARIAC	LARIAC2	LARIAC3	LARIAC4	LARIAC5
Horizontal Accuracy Assessment – 4” Digital Orthophotos	1.50 ft	1.537 ft	.7433 ft	1.25 ft	1.35 ft
Vertical Accuracy Assessment – LiDAR Bare-Earth Dataset	1.19 ft	n/a	n/a	0.627 ft	n/a
Horizontal & Vertical Accuracy Assessment – EagleView Oblique Imagery	5.04 ft (horizontal) 2.47 ft (vertical)	2.16 ft (horizontal) 2.39 ft (vertical)	2.04 ft (horizontal) 1.13 ft (vertical)	3.70 ft (horizontal) 1.45 ft (vertical)	3.63 ft (horizontal) 1.20 ft (vertical)
		<u>2008</u>	<u>2011</u>	<u>2014</u>	<u>2017</u>

# Ground Control

358 new GCPs were planned and collected over the entire County

A new set of GCPs will improve DEM data (Ortho-rectification, and ultimately the ortho-mosaic accuracy/final product)

Streamlines the analysis and processing steps, expediting completion









# Project Constraints

Ground Control & Flight planning coordination underway, specifically over Edwards Air Force Base

## 2020 LAR-IAC VI GCPs

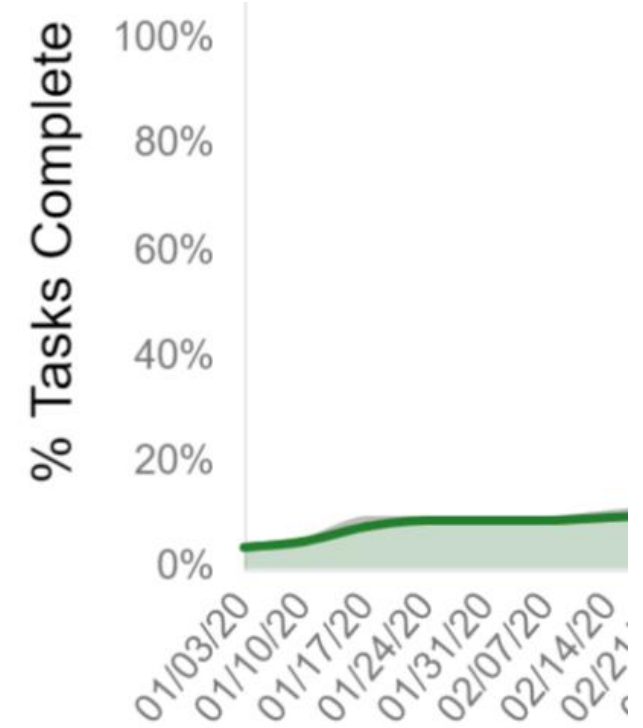
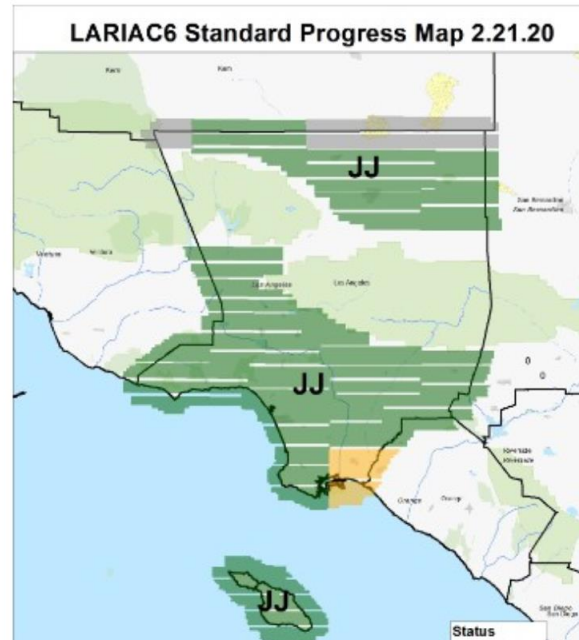
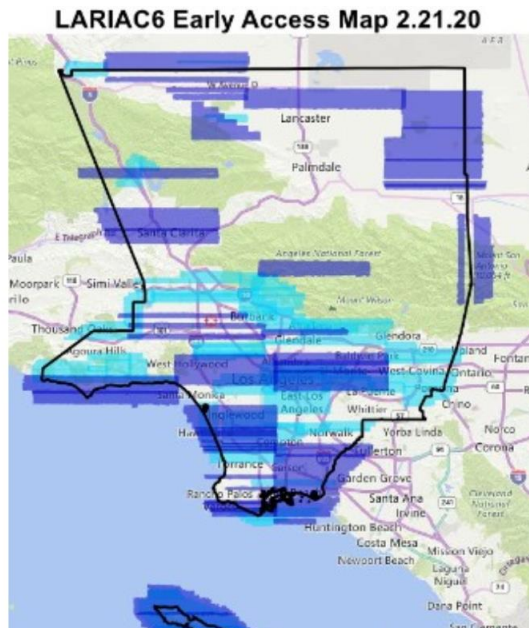
-  GCPs - Planned Locations
-  4in AT Block Layout
-  9in AT Block Layout
-  Military - restricted access





# New PM Dashboard

Capture	STD Processing	STD Delivery	AT	Building Rep	IM
<b>29%</b> Actual	<b>0%</b> Actual	<b>0%</b> Actual	<b>0%</b> Actual	<b>0%</b> Actual	
<b>23%</b> Baseline	<b>8%</b> Baseline	<b>8%</b> Baseline	<b>3%</b> Baseline	<b>0%</b> Baseline	
<b>05/25/20</b> Baseline Finish	<b>06/23/20</b> Baseline Finish	<b>06/26/20</b> Baseline Finish	<b>08/17/20</b> Baseline Finish	<b>09/07/20</b> Baseline Finish	







# Frequent Capture Program

Blaese Baker

February 25 & 27, 2020

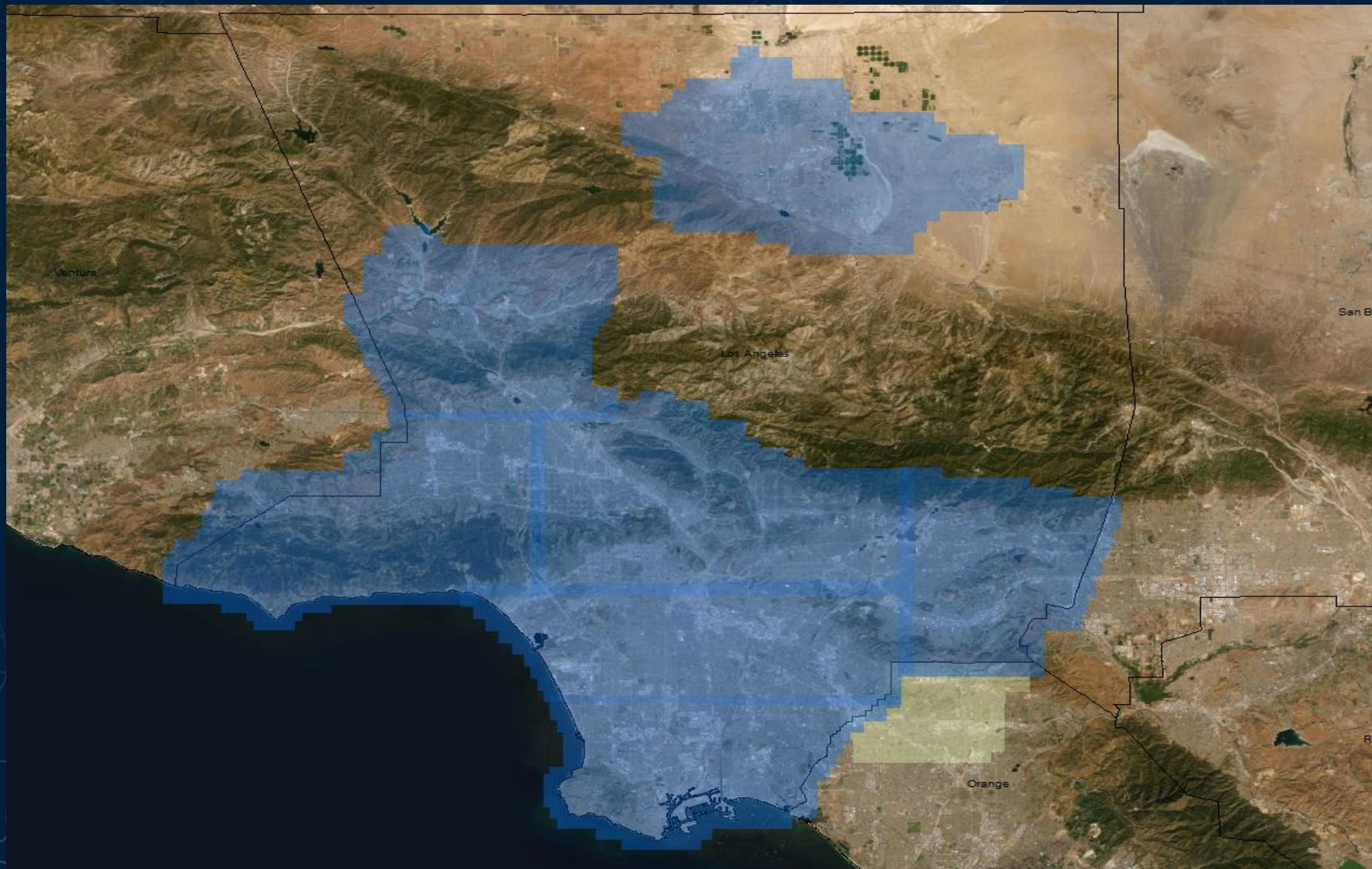




Solano Avenue



# 3 Inch Ortho Only Frequent Capture Area



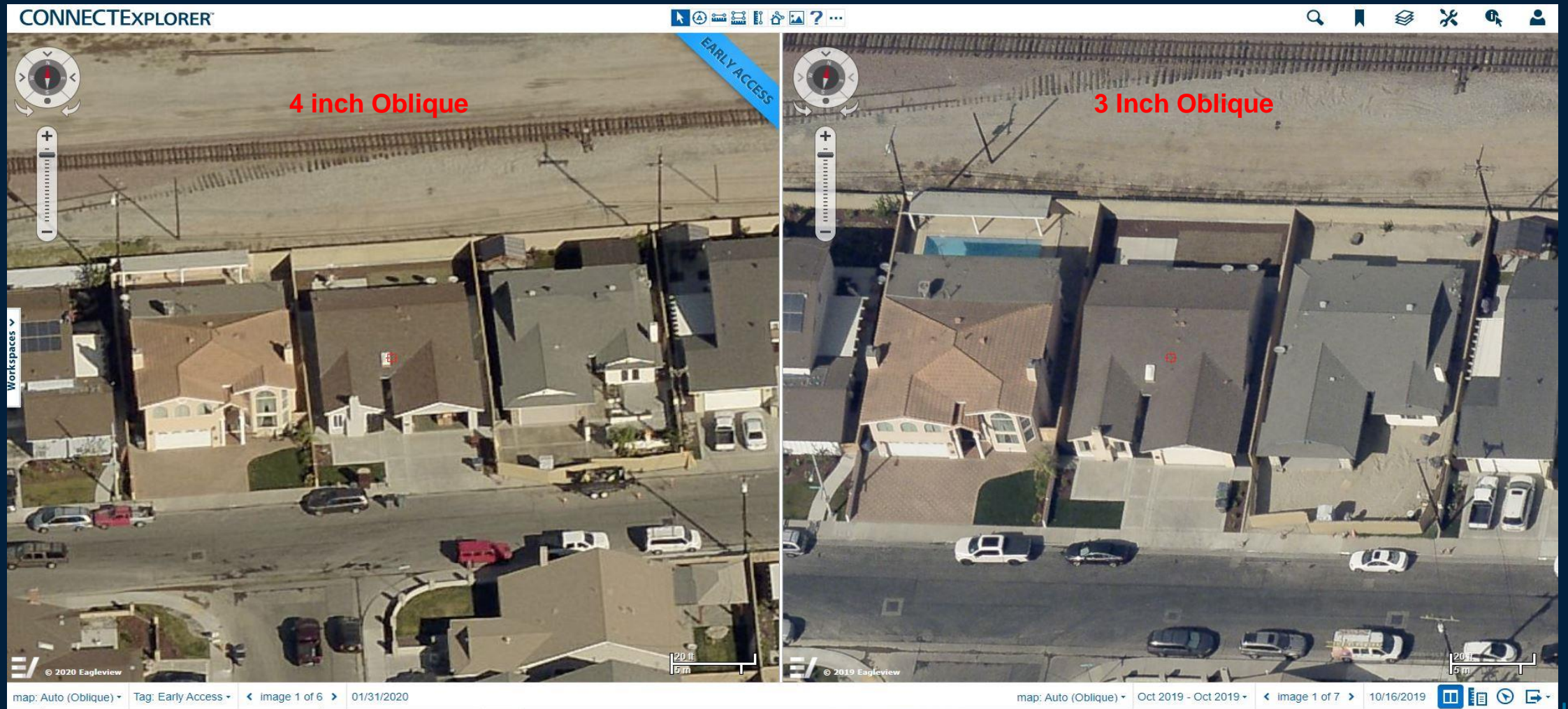


# Value of Frequent Imagery Capture

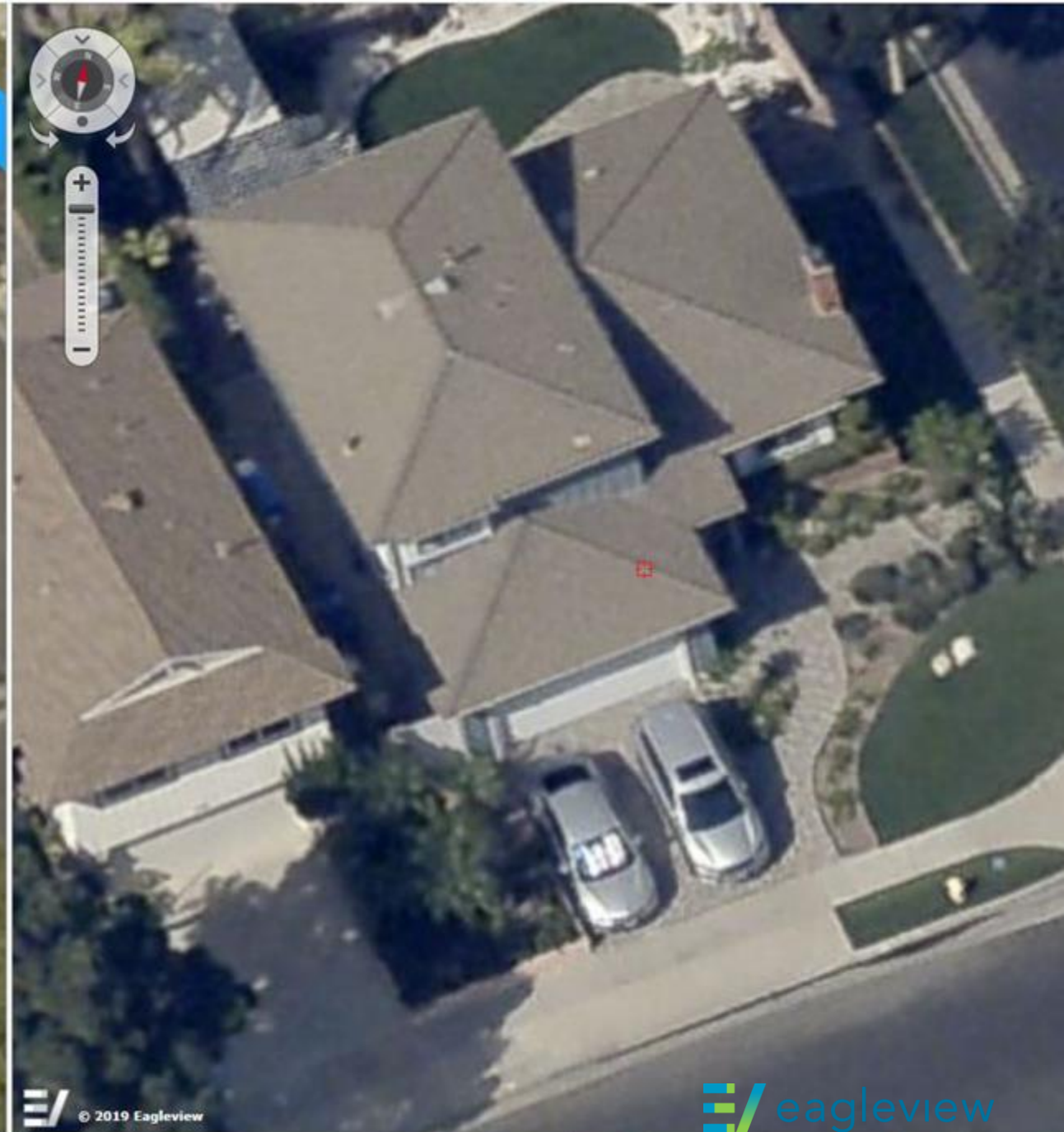
- Emergency Response
- Natural Disasters
- Property Changes from Year to Year
- Historical Review



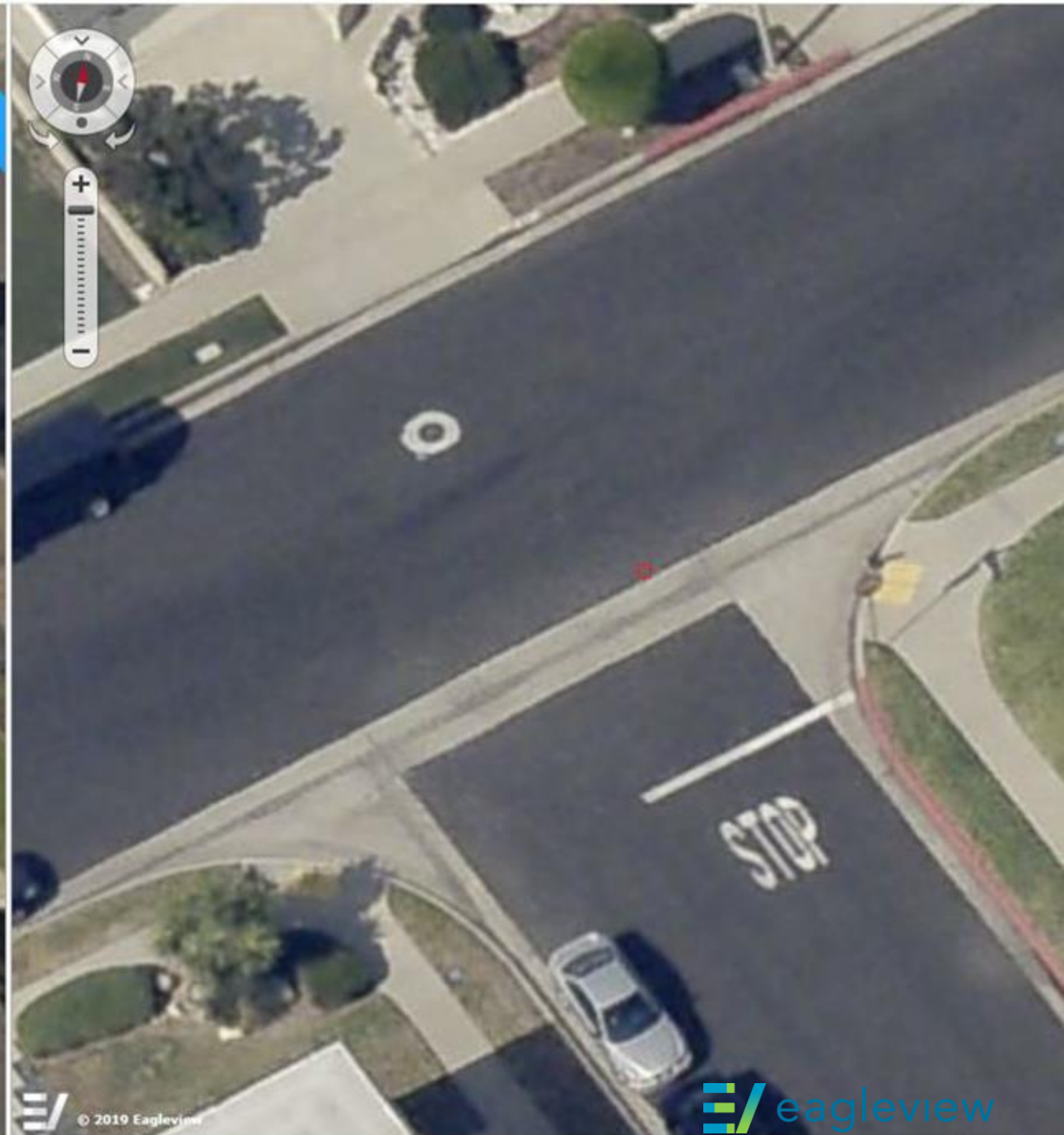
# 3 Inch vs 4 Inch Oblique



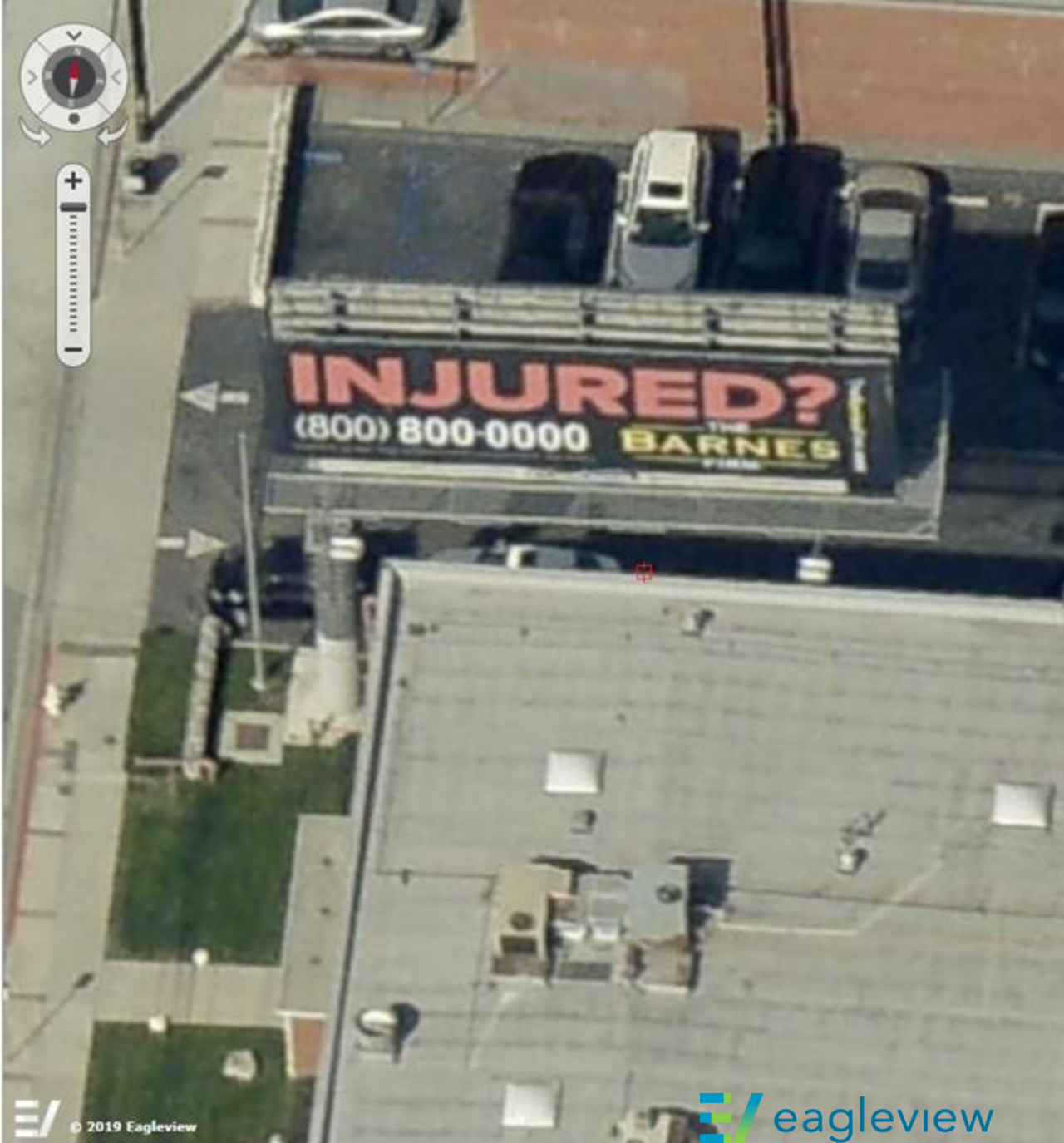
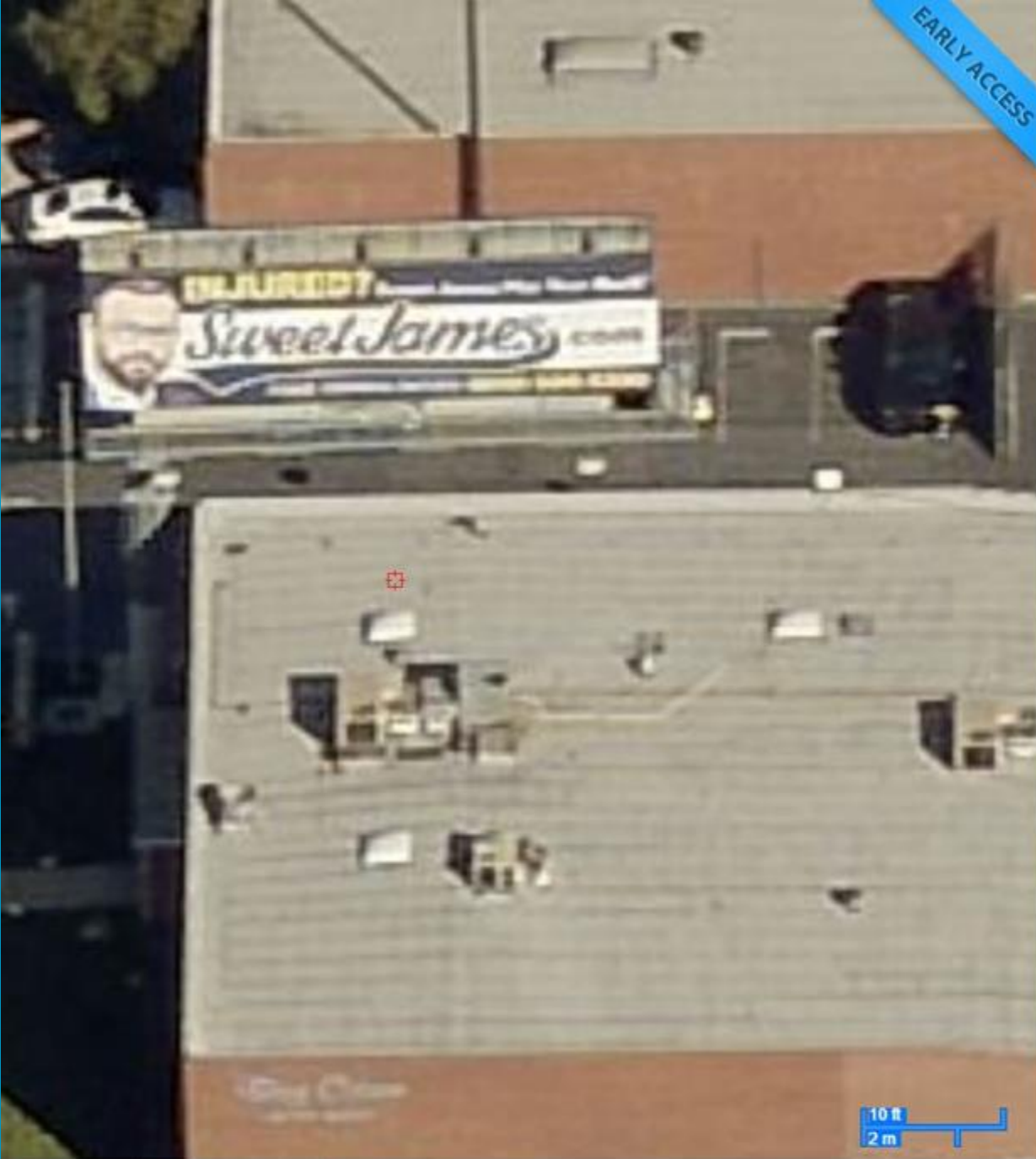














# Big Eye Efficiency

- 3 inch or better imagery
- Capture upwards of 65 sectors per hour
- Flight time cut in half
- Easier to fly in difficult airspace





# LAR-IAC 6 Project Update

Maggie Myers

February 25 & 27, 2020





# Agenda

Project Timeline

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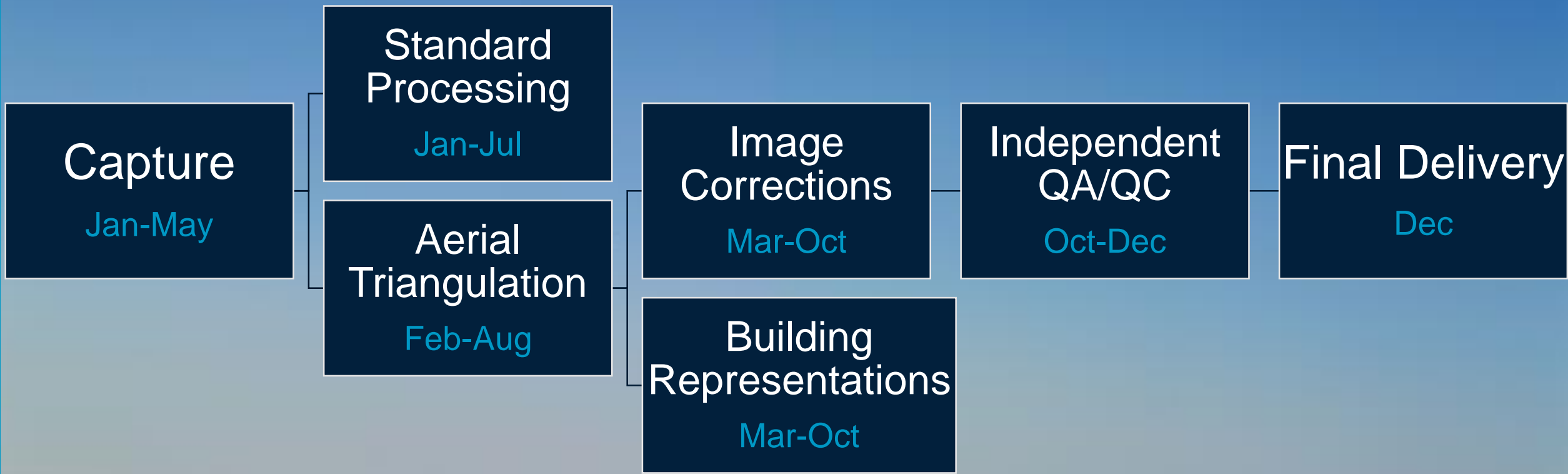
Current Progress

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Looking Ahead

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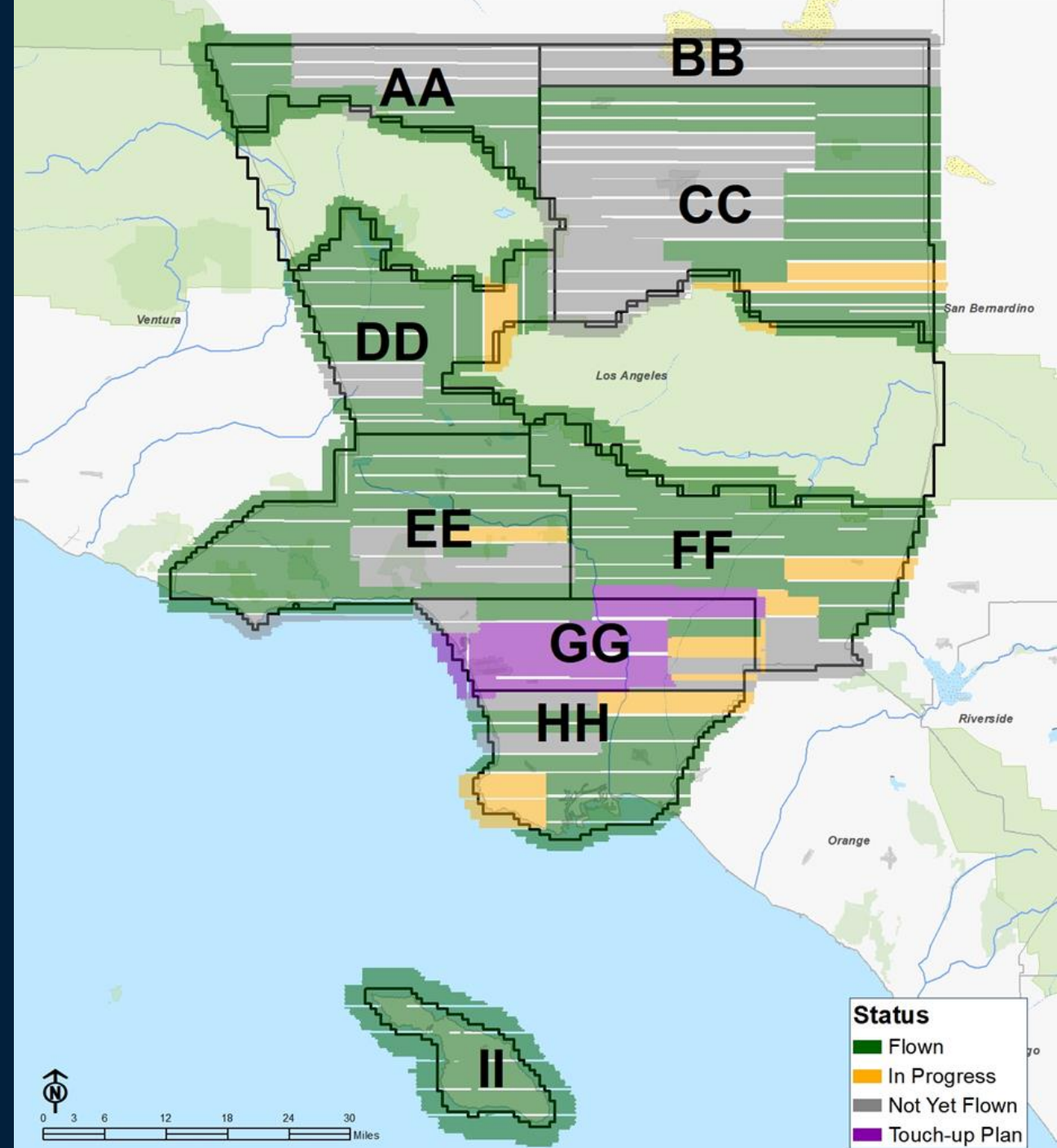






# 4-inch Capture Progress

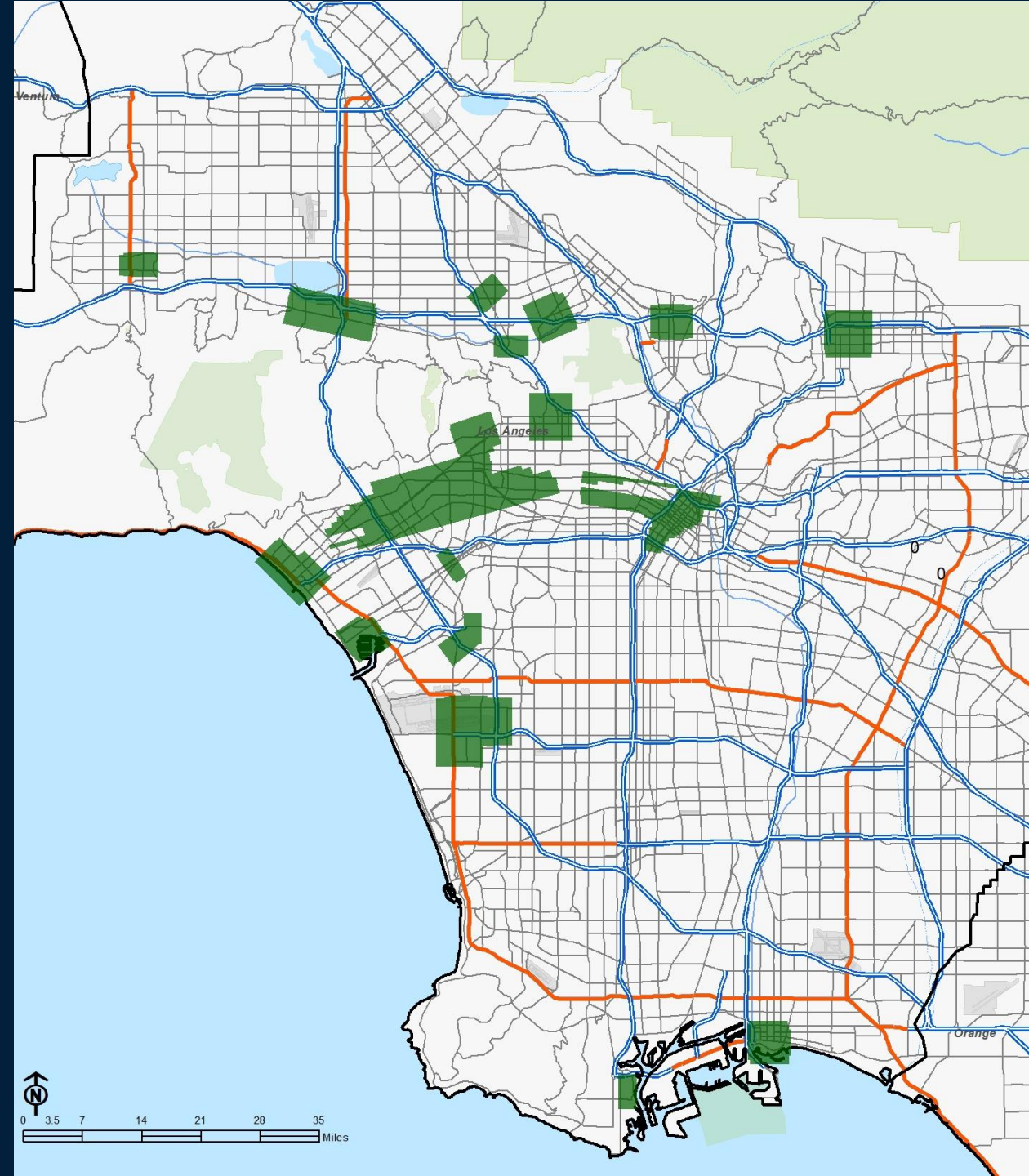
- 64% complete
- II (Catalina Island) is Done Flying
- All areas include NIR





# Downtown areas

- Flight plans designed to mitigate building lean
- Captured in four days, now Done Flying



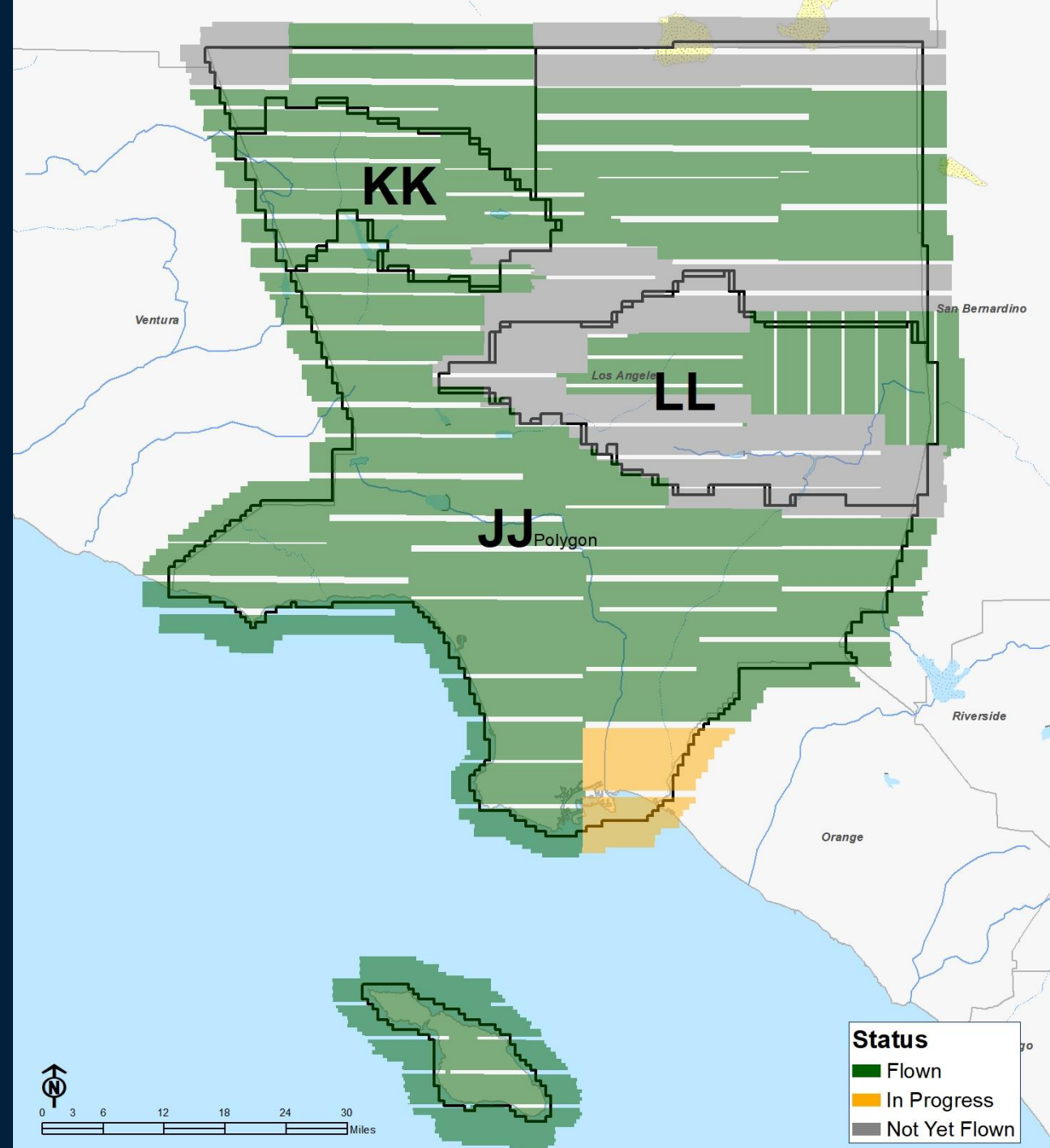






# 9-inch Capture Progress

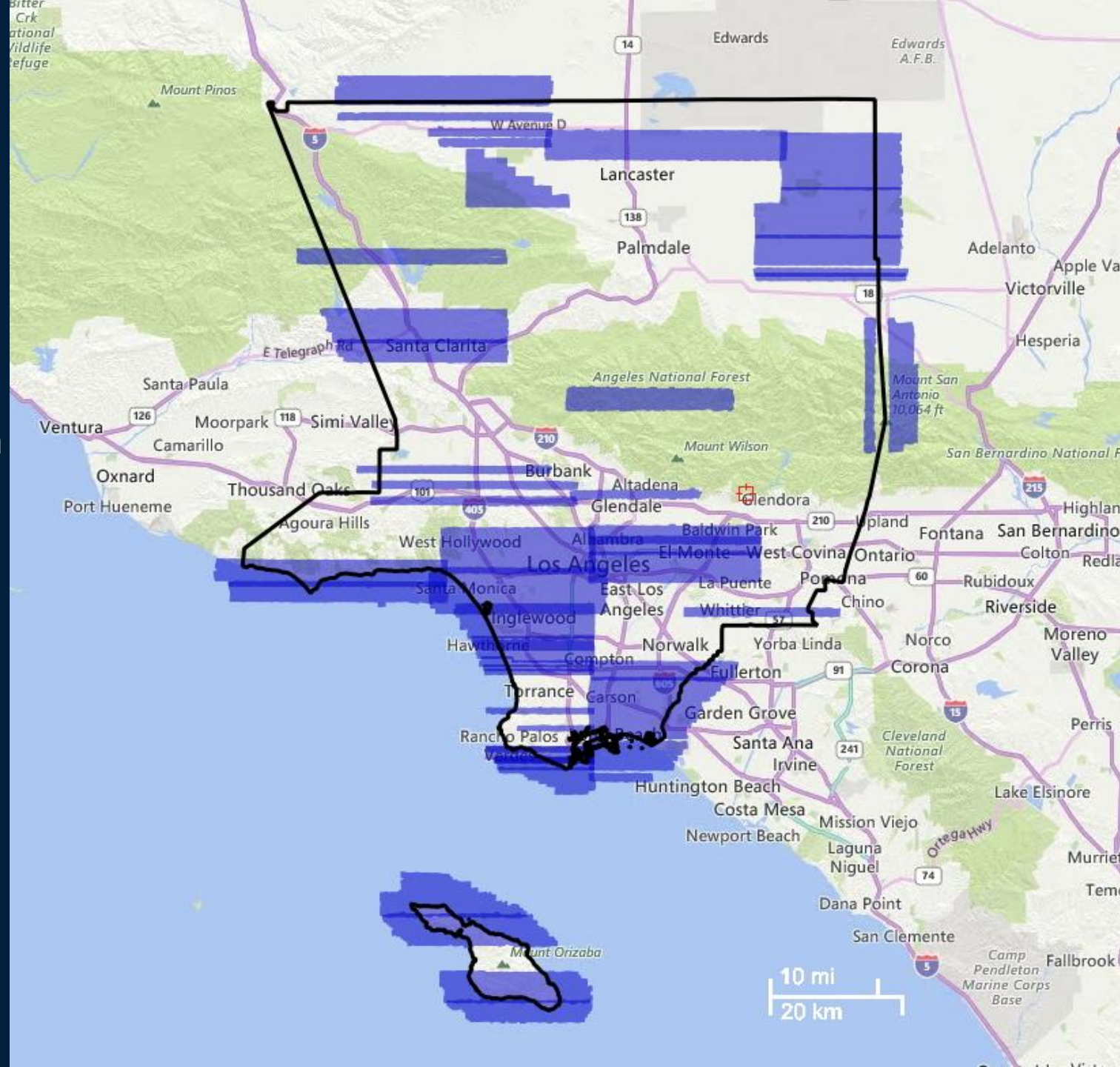
- 76% complete overall
- KK: All initially scheduled flight plans complete
- KK and LL include NIR





# 9-inch Early Access

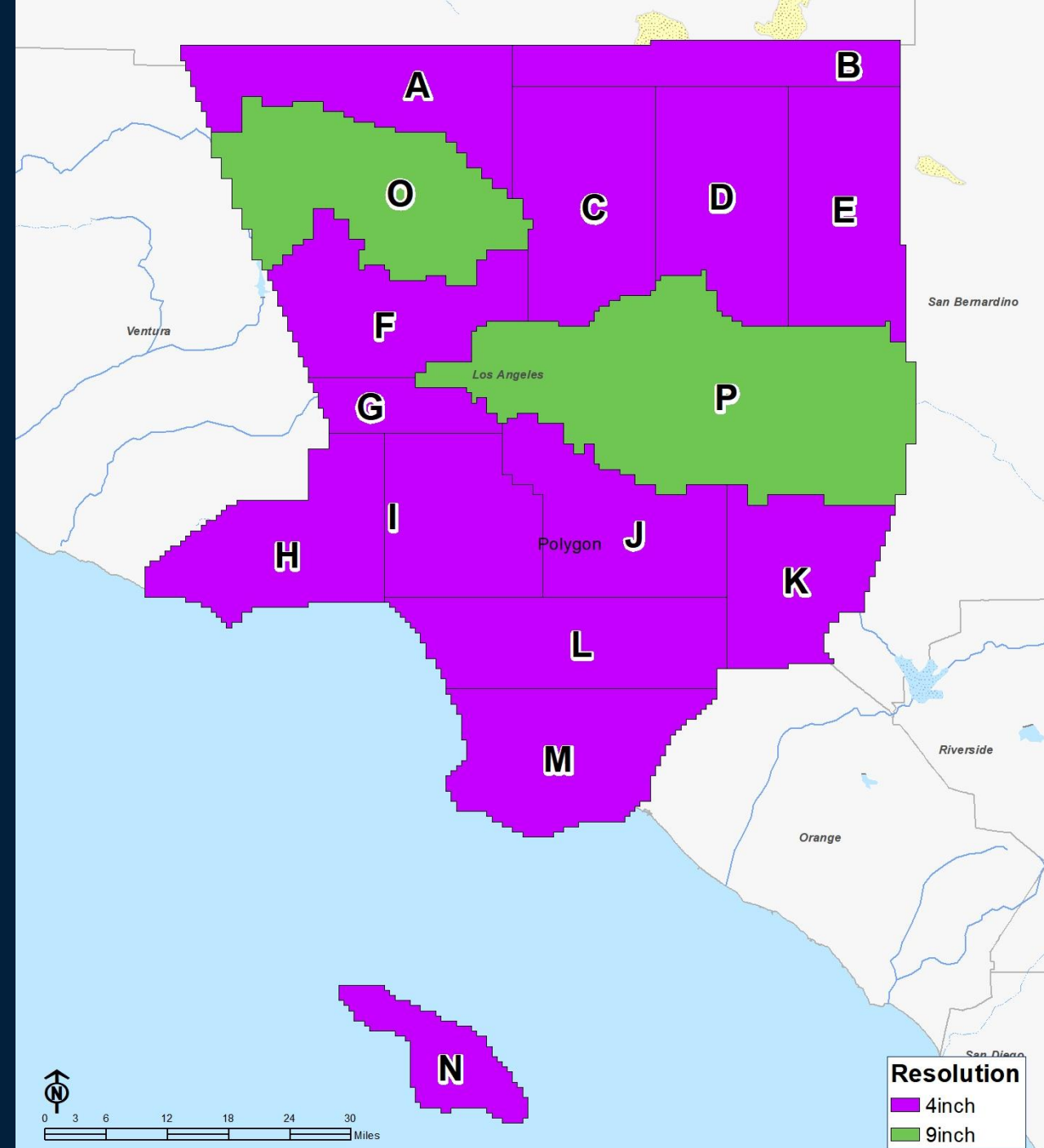
- Rolling addition of imagery
- Frames will remain available through final delivery





# AT Blocks

- Smaller than capture blocks for processing efficiency





# Building Representations

- Building outlines drawn
- Attributes
  - Dimensions
  - Elevation
  - Type
  - Status

2014



2017





An aerial photograph of a coastal development project. The image shows a large marina with numerous boat slips, a sandy beach, and several large buildings, including a prominent circular structure. The water is a deep blue-green color. The text 'Final Steps' is overlaid in the upper right quadrant.

# Final Steps

- Independent QA/QC
- Ship to Dewberry on rolling basis
- Correct any deficiencies discovered
- Build and deliver final AccuPlus mosaic





Thank you