

# Los Angeles Region Imagery Acquisition Consortium (LARIAC)

**Christine Lam**

---

Principal GIS Analyst  
LARIAC Project Manager  
Enterprise GIS, Internal Services Department  
County of Los Angeles

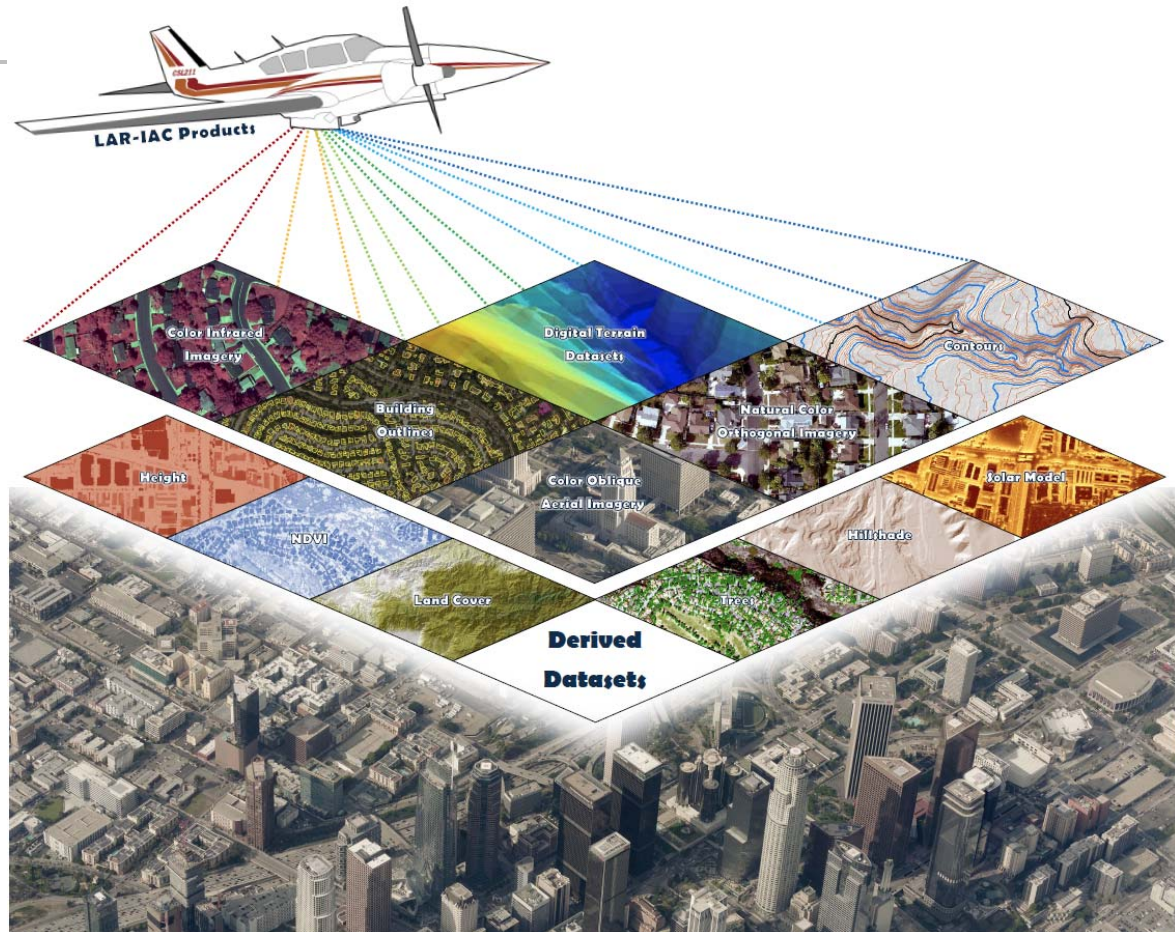


# What is LARIAC?




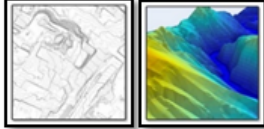
## ➤ Los Angeles Region Imagery Acquisition Consortium (LARIAC)

“LAR-IAC is multi-jurisdictional purchasing arrangement that enables participating local governments and agencies to benefit from combined economies of scale to efficiently and cost-effectively acquire high definition aerial data.”

## ➤ Participants have included 52 cities, 27 County departments, 16 agencies, and 7 educational institutions



# LARIAC Core Product List

Data	2006 (L1)	2008 (L2)	2011 (L3)	2014 (L4)	2017 (L5)	2020 (L6)
Orthogonal Imagery (4-inch) 	X (including Infrared)	X	X	X (including 2012 and 2103 1-foot imagery)	X (including Infrared imagery and multiple acquisitions per year)	X (including Infrared imagery and multiple acquisitions per year)
Oblique Imagery 	X	X	X	X	X	X
Building Outlines 		X (400 sq ft)		X (400 sq ft)	X (300 sq ft)	X (300 sq ft)
Elevation Data 	X			X		
Derived Data (tree canopy, solar insolation, slop, hillshade, height model, land cover, etc.)	X			X	X	



# Access to CONNECTExplorer

- Each entity receives a sub-organization account

Select	Status	User Name	First Name	Last Name	Type	POL Interface
<input type="checkbox"/>	IDLE	<a href="mailto:aruiz@isd.lacounty.gov">aruiz@isd.lacounty.gov</a>	Alexander	Ruiz	USER	FULL
<input type="checkbox"/>	IDLE	<a href="mailto:asalyard@isd.lacounty.gov">asalyard@isd.lacounty.gov</a>	Arista	Salyard	USER	FULL
<input type="checkbox"/>	IDLE	<a href="mailto:asantana@isd.lacounty.gov">asantana@isd.lacounty.gov</a>	Aracell	Santana	USER	FULL

- Upload & configure GIS datasets

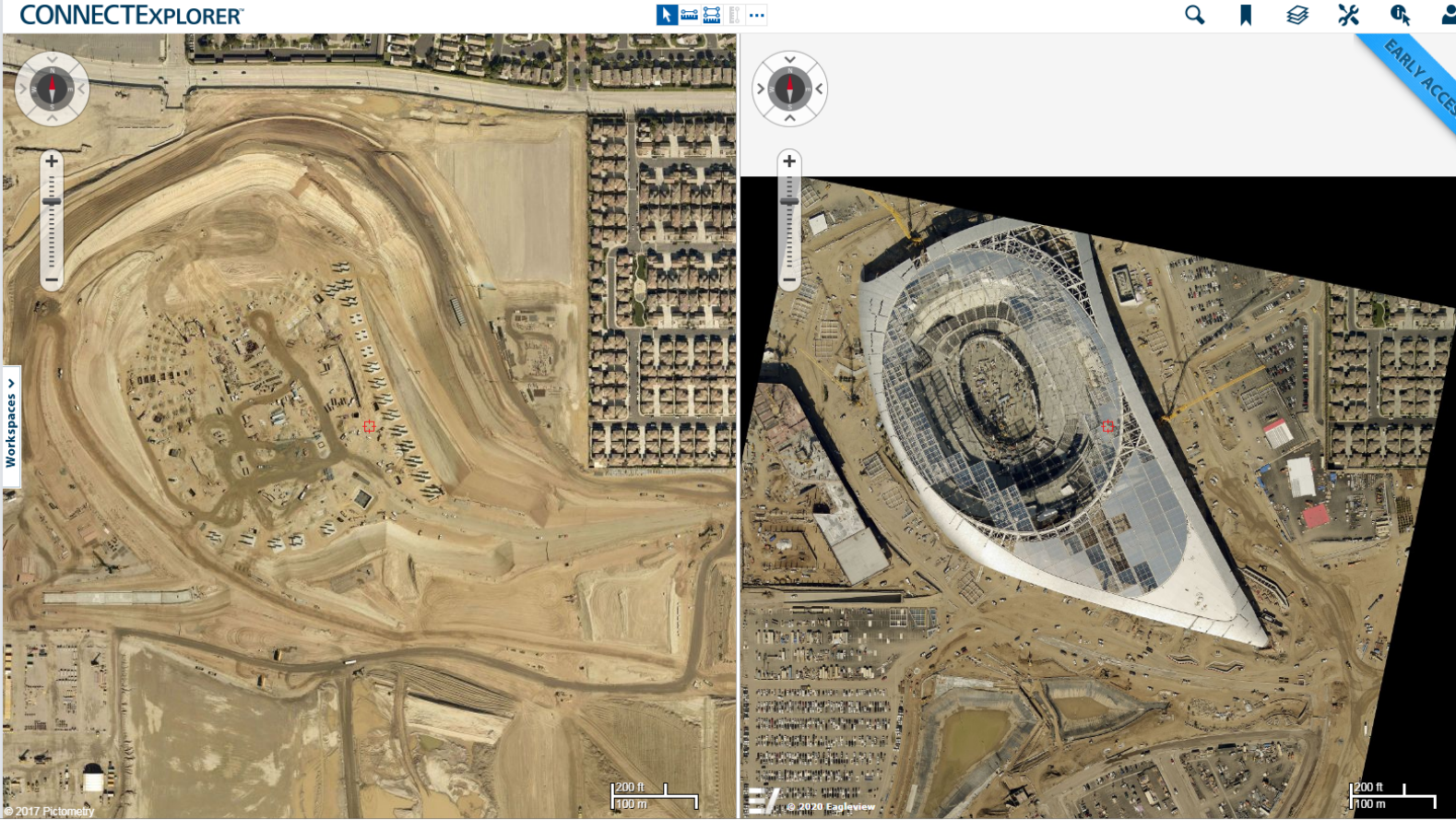
**Online**  
Upload your GIS data files through the web interface. Both Shapefiles and KML/KMZ files are supported.  
[Launch Online GIS Uploader](#)

**ArcMap**  
Upload your GIS data files, along with their display configurations, through ESRI ArcGIS Desktop.  
[Download Uploader for ArcMap](#)

**Desktop**  
Perform automated updates of your uploaded GIS data files using the Desktop Uploader and Windows Task Scheduler.  
[Details...](#)  
[Download Desktop GIS Uploader](#)



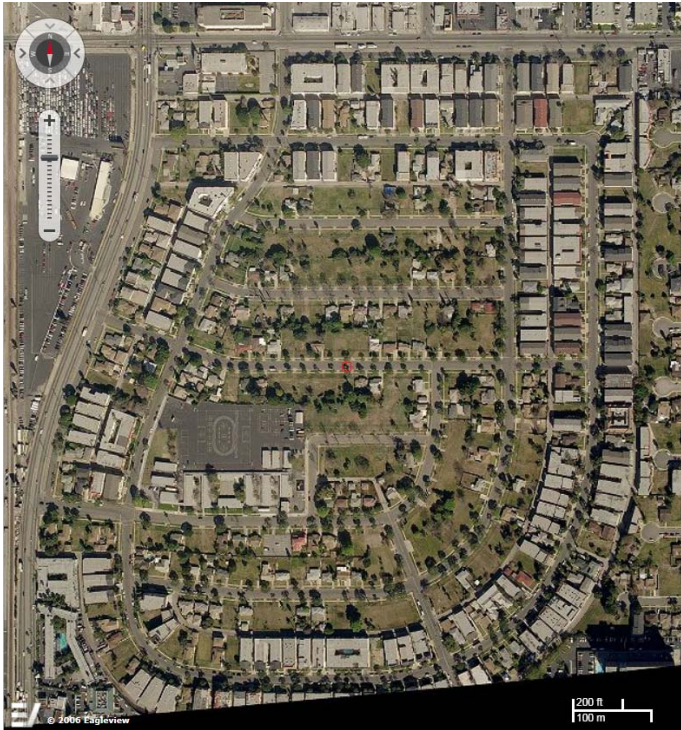
# Access to CONNEXplorer



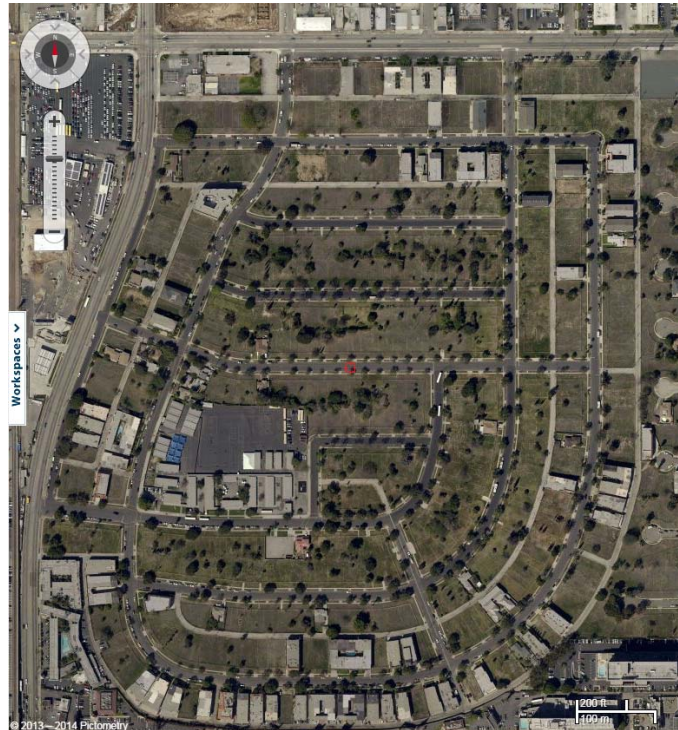
- All
- Latest
- Early Access
- 2019 Oct - 2019 Oct  
2019\_Fall\_LARIAC5\_Urban
- 2019 May - 2019 May
- 2019 Apr - 2019 Apr  
2019\_Spring\_LARIAC5\_Urban
- 2019 Mar - 2019 Mar  
2019\_Spring\_LARIAC5\_Urban
- 2017 Jan - 2017 Jun
- 2017 Jan - 2017 Jun  
2017\_Winter\_LARIAC5\_Countdown
- 2017 Jan - 2017 Jun  
2017\_Winter\_LARIAC5\_Countdown
- 2014 Jan - 2014 Jun
- 2013 Dec - 2014 Jun  
2014\_Winter\_LARIAC4\_Countdown
- 2010 Dec - 2011 Jul
- 2008 Jan - 2009 Jul
- 2006 Jan - 2006 Sep
- 2002 Jan - 2003 May



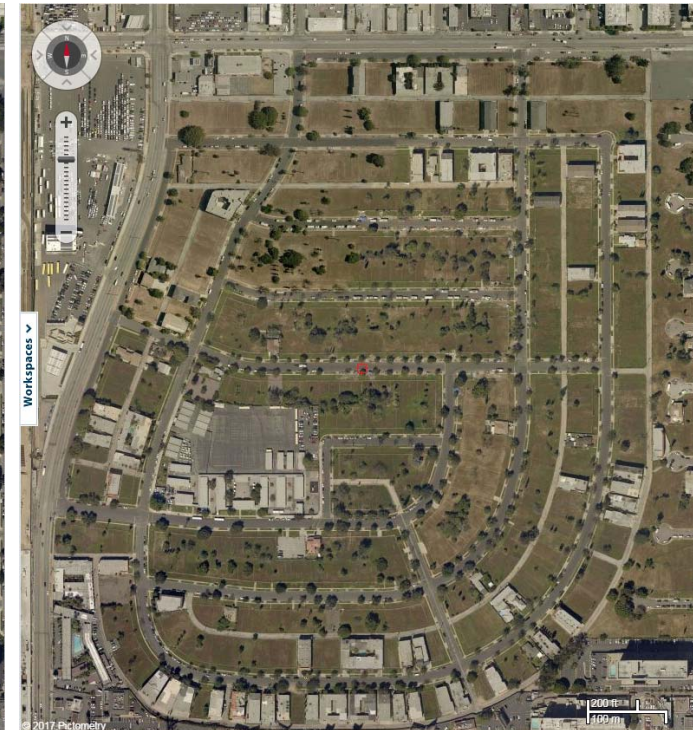
# Manchester Square Over Time



2006



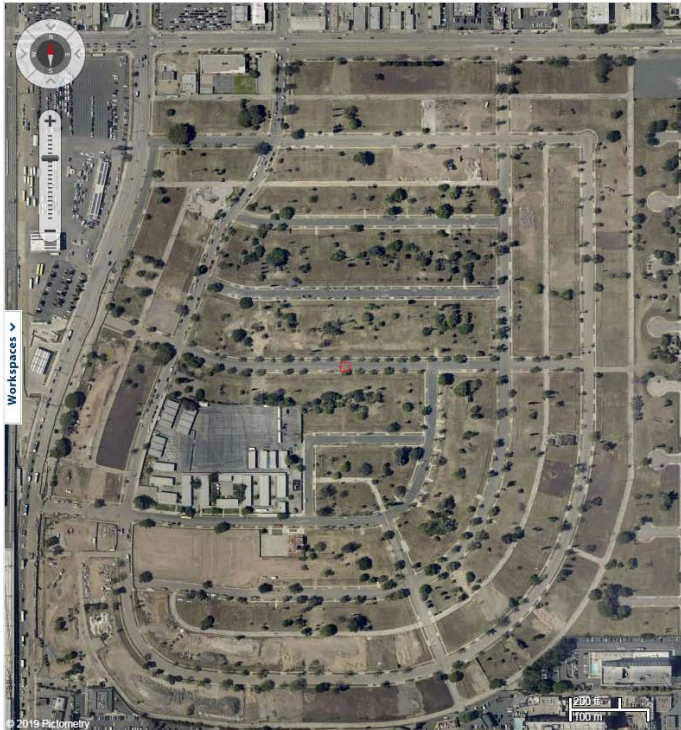
2014



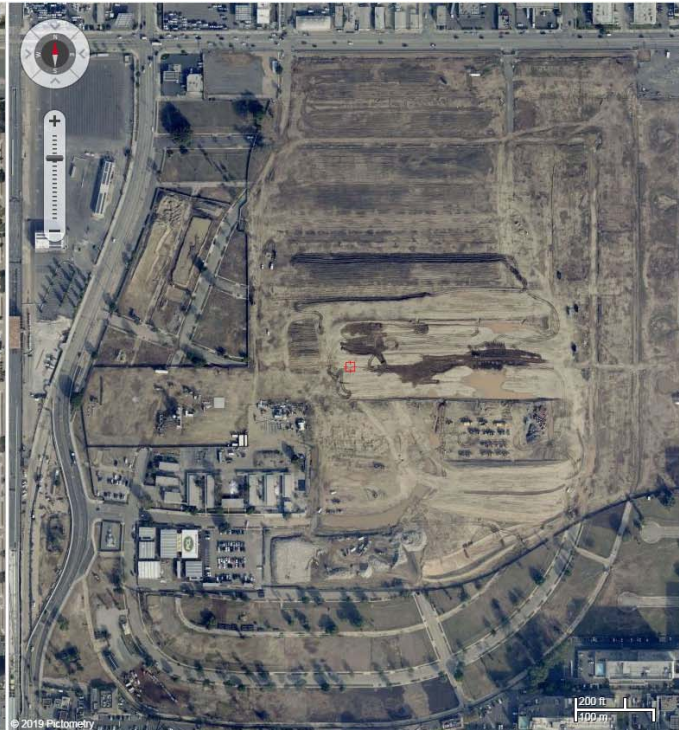
2017



# Manchester Square over Time



April 2019



Oct 2019



2023



# Independent QA/QC

---



## Independent Quality Control and Final Data Processing

Enhancements to LARIAC Program

Los Angeles Region Imagery Acquisition Consortium (LARIAC)





# Independent QA/QC

---

➤ Managed by the Dewberry Quality Team

- 15 Senior QC resources as primary team with 25 additional analysts for support and rapid turn around for reviews

➤ Online tracking portal provides daily status updates and information on what is in review and the status of each tile in the project.



# Delivery Data Processing

---

- Updated and Streamlined process utilizing our internal computing cluster for rapid turn around on products through parallel processing of participant data
  - 440 processing cores and 1.2 PetaBytes of solid state capacity lead to improved processing time
- Online portal for status updates and delivery information for each SLDS participant.
- SLDS participant areas will be available in 7-14 days after acceptance of all tiles within the participant area.
- Data will be available for download through an AWS link on the data portal (or through traditional hard drive delivery if requested)



# Delivery Data Processing

Home ▾ LARIAC Project Tracking [↗](#) New Map Create Presentat

[Details](#) [Add ▾](#) [Basemap](#) [Analysis](#) Save ▾ Share Print ▾ Directions Measure Bookmarks Find address or place

**Content** Legend

Contents

- SLDS Beverly Hills
- Image Tile Status

Legend

- Not Started
- Received for QC
- QC in Progress
- Pass/Complete
- Returned for Correction
- GDB Tiled Mosaic Status
- ECW Tiled Mosaic Status
- Topographic

**(1 of 25)**

**L5\_6656\_2095b**

OBJECTID	7841
RESOLUTION	4 INCH
FILENAME	L5_6656_2095b
Estimated Receipt Date	
Actual Receipt Date	
Review Status	Not Started
Shape_Area	961778.45703125
Shape_Length	3922.822272860598

[Zoom to](#) [Get Directions](#)

Quick Status Check

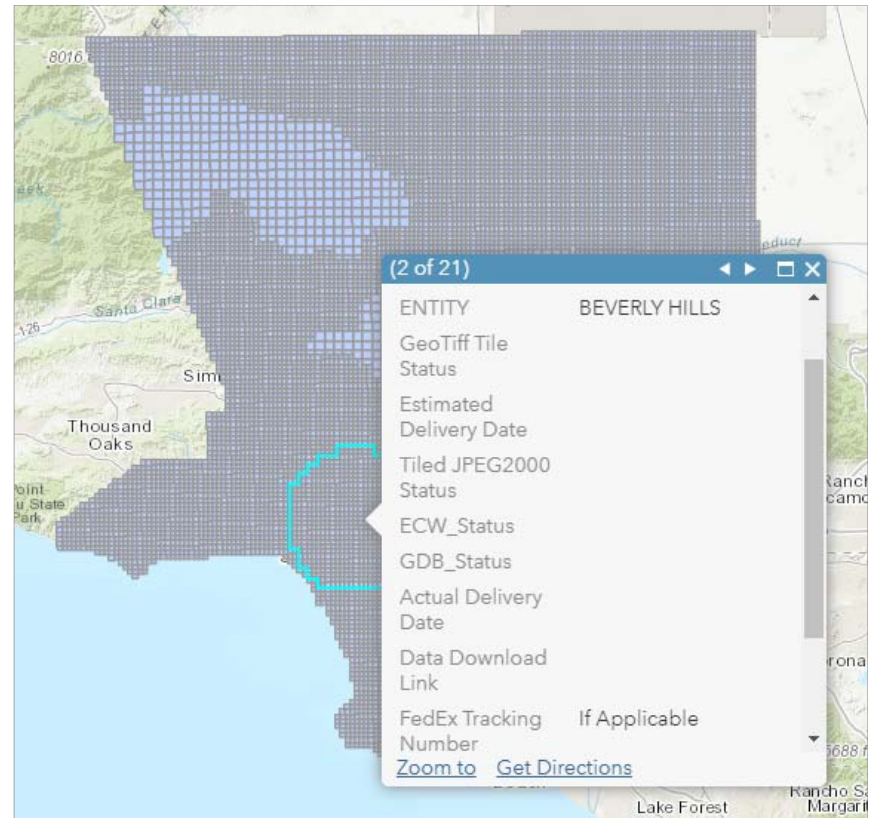
Detailed Tile Information



# Data Tracking & Delivery Portal

## ➤ Detailed SLDS Participant Tracking

- Estimated Delivery Date based on when we expect to receive the tiles for QC (including estimated time for corrections)
- Status of each delivery product updated daily
- Link to AWS for direct download
- FedEx Tracking information if applicable (hard drive delivery by request)



# LARIAC6 – How to Join?

- Letter from Steve Steinberg, LARIAC Project Director
- Letter of Intent
- Participant Agreement

 <p>SCOTT MINNIX Director</p>	<p>County of Los Angeles <b>INTERNAL SERVICES DEPARTMENT</b> 9150 Imperial Hwy. Downey, California 90242</p> <p>Telephone: (323) 267-2103 FAX: (323) 264-7136</p> <p><i>"To enrich lives through effective and caring service"</i></p>	<p><b>ES</b> <b>PROJECT</b></p>
<p>May 1, 2019</p> <p>Glenn Paik Information Services Manager City of Alhambra</p>	<p>Dear Glenn Paik,</p> <p><b>LOS ANGELES REGION IMAGERY ACQUISITION CONSORTIUM (LARIAC6)</b></p> <p>Established in 2005, the Los Angeles Region Imagery Acquisition Consortium (LARIAC) has delivered highly accurate digital aerial imagery and elevation datasets to participants at substantial cost savings, and has become a national model for collaborative data acquisition. LARIAC participants have included 52 cities, 27 County departments, 16 local, state, and federal agencies, and seven educational institutions.</p> <p>To ensure the currency of the aerial imagery, we are working with consortia members to plan and initiate the next LARIAC cycle – <b>LARIAC6</b>. This document describes LARIAC, highlights its benefits, provides a status update, and discusses the proposed scope, schedule, and cost. Your portion of the cost of LARIAC6 will be <b>\$XX,XXX</b>, which is the same cost as LARIAC5.</p> <p>To conserve paper, we will also E-mail a digital copy of this letter and Participant Agreement to current LARIAC participants. These participants are listed on Attachment I.</p> <p><b>LARIAC BACKGROUND</b></p> <p>LARIAC is a consortium of the County of Los Angeles, in partnership with cities and agencies, which collaboratively acquires valuable digital aerial data, including imagery and elevation data. Leveraging the combined buying power of the member agencies, LARIAC reduces costs, enabled participants to acquire more data than would be possible individually and provides consistent and comparable data over time.</p> <p>The LARIAC Website (<a href="http://egis3.lacounty.gov/dataportal/lariac/">http://egis3.lacounty.gov/dataportal/lariac/</a>) provides comprehensive information about the project, including detailed data descriptions and samples, product guides, documentation, and agreements.</p>	<p>City of ntity" es are</p> <p>l oblique</p> <p>es have ar future;</p> <p>Parties,</p> <p>ms and</p> <p>Telephone</p> <p>set forth</p> <p>ollective sition of ts listed shall be d by the</p>



# LARIAC6 – What if you do not join again?

- ConnectExplorer accounts, GIS Viewer accounts, and LA County-hosted REST services will be disabled for entities that do not join LARIAC6

The screenshot displays the CONNECTEXPLORER GIS application interface. The main map area shows an aerial view of a residential neighborhood with blue parcel boundaries overlaid. Several parcel numbers are visible, such as 4464007013, 4464007026, 4464007027, 4464007028, 4464007023, and 4464007029. On the left side, there is a vertical toolbar with a compass and a zoom slider. Below the zoom slider is a legend for time-series imagery, listing various time periods from 2008 to 2018. At the bottom left, the map style is set to 'Auto (Aerial)' and the current time period is 'Nov 2018 - Dec 2018'. On the right side, there are two panels: 'Layers' and 'Measure/Annotate'. The 'Layers' panel lists various data layers, including 'LARIAC - CAMS Address Points', 'LARIAC - Points of Interest', 'LARIAC - Buildings (2008)', 'LARIAC - Roads', 'LARIAC - Supervisorial Districts (2)', 'LARIAC - County Boundary', 'LARIAC - Land Types', 'LARIAC - ZIPCodes', 'LARIAC - Parcels (streamed)', 'LARIAC - Buildings (2008) - Deleted or', 'LARIAC - Buildings (2014)', 'LARIAC - Buildings (2017)', 'LARIAC - Cities and Communities', 'Parcels', 'LARIAC - Parcels (cached) - June 2', 'Woolsey Fire Response Grid', 'Woolsey Fire Perimeter', and 'LARIAC - FEMA Flood Hazard Zone'. The 'Measure/Annotate' panel contains two sections: 'Measure' with tools for Select, Location, Distance, Dist. Gmd., Area, Circle Area, Vert. Area, Height, Elevation, Gmd. Slope, Bearing, Slope, XYZ, Link Portal, and Coverage; and 'Annotate' with tools for Shape, Circle, Line, Text, and Marker.



# Questions?

<https://egis3.lacounty.gov/dataportal/lariac>

---



# Thank You

Christine Lam  
Principal GIS Analyst  
LARIAC Project Manager  
Enterprise GIS, Internal Services Department  
County of Los Angeles

---

CLam2@isd.lacounty.gov  
(562) 940-3844

