Welcome to the
LAR-IAC 3 Status Meeting

February 9, 2012

LOS ANGELES • REGION
LAR|ac
imagery acquisition consortium

Agenda

- **What is LARIAC?**
- **LAR-IAC3 Status Updates**
  - **Administrative Update**
  - **Schedule/Status Update**
    - **Ortho Status**
    - **Delivery Status**
  - **Delivery Planning**
- **POL Update**
- **County Mapping Services Access**
- **LAR-IAC 4**
- **Discussion / Other Items / Closing – LA County**

What is LAR-IAC?

- Los Angeles Regional Imagery Acquisition Consortium (LAR-IAC)

  "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."

- Established in 2003 by LA County DRP and CIO.

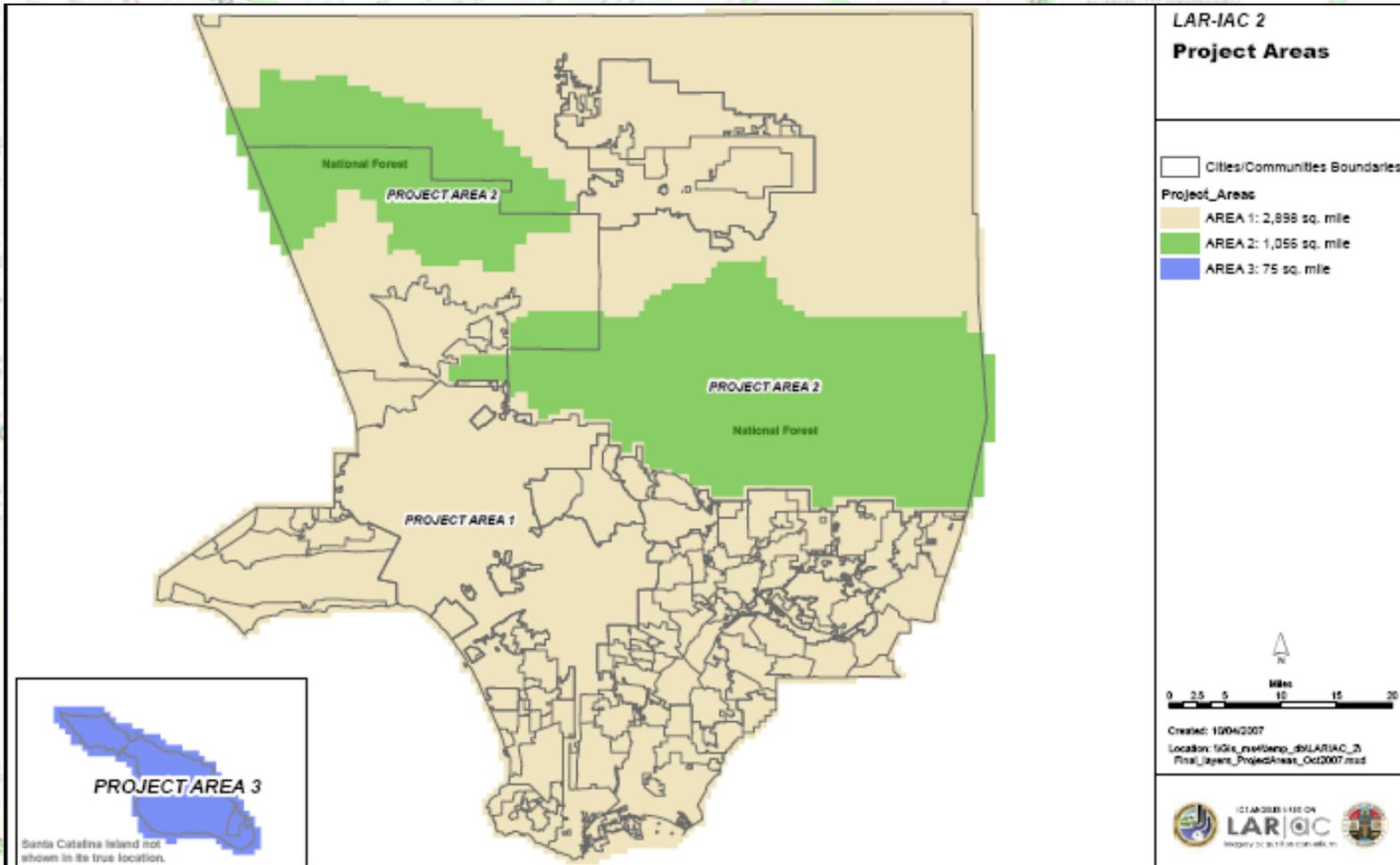# Orthogonal Imagery

- Also known as "Satellite View"
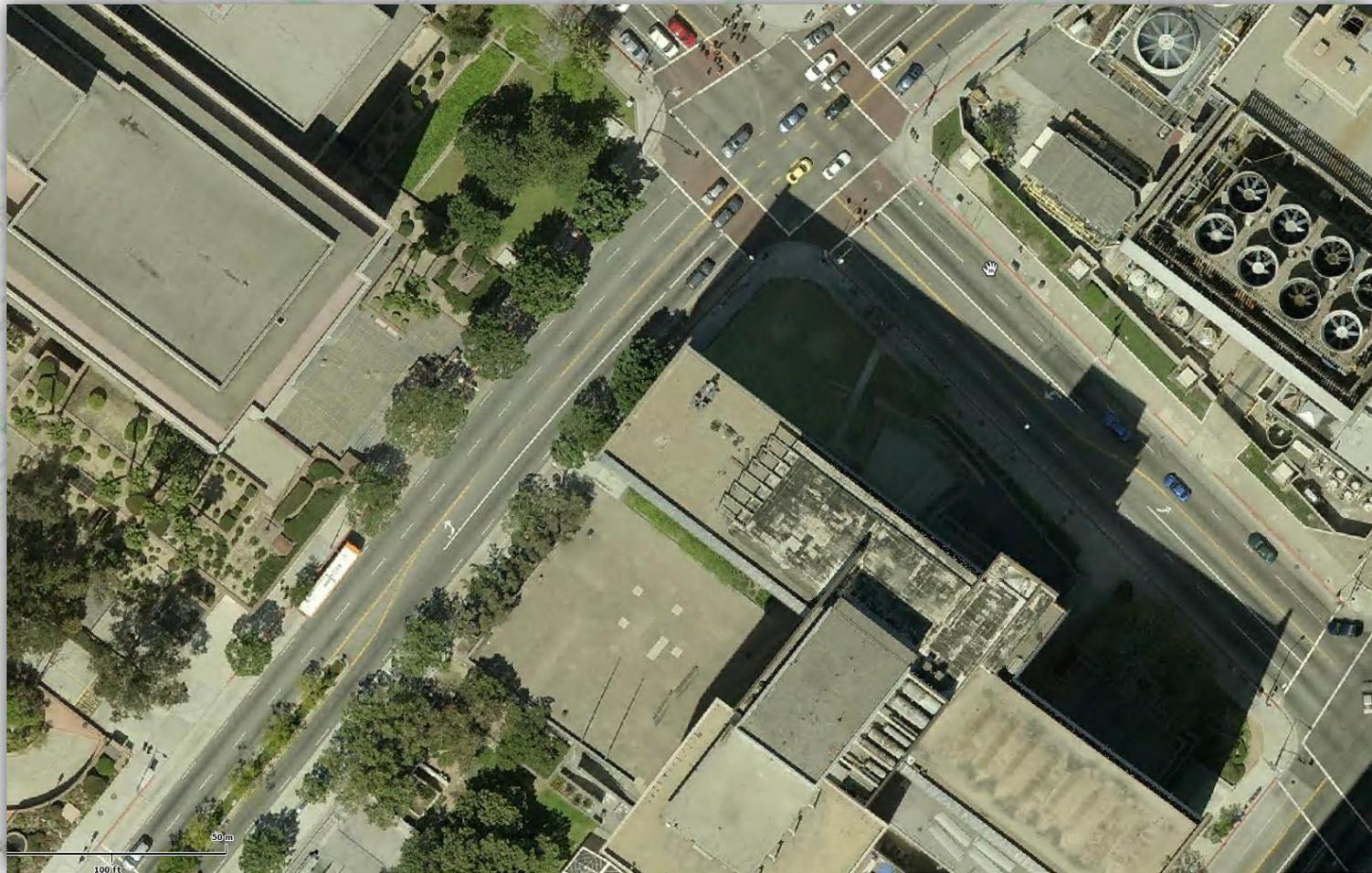
Oblique Imagery

- Also known as "birds eye"

Project Areas - Ortho Imagery

LAR-IAC 3
ADMINISTRATIVE UPDATE

Current Participants

Cities

Agoura Hills	Hermosa Beach	Monterey Park
Bellflower*	City of Industry	Rancho Palos Verdes
Beverly Hills	City of Inglewood	Redondo Beach
Burbank	La Canada Flintridge	Rosemead
Carson	La Habra Heights	San Dimas
Claremont	Lakewood	Santa Clarita
Commerce*	Los Angeles	Santa Fe Springs
Culver City	Lynwood	Santa Monica
Downey	Malibu	South Gate
El Segundo	Manhattan Beach	Torrance
Glendale	Pasadena	Whittier
Glendora	Montebello	

Green = Paid, Red = Not Paid, Black = prospective,*=New Member

Current Participants

LAR-IAC3

County Departments	
Agricultural Comm./Weights and Measures	Mental Health Department
Assessor	Parks & Recreation
Beaches and Harbors	Probation
CEO OEM	Public Health Administration
Chief Information Office	Public Library
Children and Family Services	Public Social Services
Community and Senior Services	Public Works
Community Development Commission	Regional Planning Department
Health Services	Registrar-Recorder/County Clerk
Internal Services Department	Sheriff

Other Agencies

LA County Sanitation Districts	University of Southern California
Santa Catalina Island Conservancy	LARGIN
US Geological Survey	Santa Clarita Water
Los Angeles Air Force Base	Central Basin Water

What we need from you now

- **Participant Agreement!**

- **Funding – please fund your initial payment.**

- Updated contact information

- Email to mgreninger@cio.lacounty.gov

Optional Items

- Participants can leverage the optional items portion of our contracts to get additional work done.
  - Building outlines
  - 3D Buildings
  - Planimetric features
 - Etc.

LARIAC 3
SCHEDULE/STATUS UPDATE

Simplified Schedule

- September – TAG finalizes specifications
- December – set up bridge funding (CIO and CEO)
- December - complete contracts (all firms)
- December - start flying
- March 2011 - flying completed...start processing
- May – August - Processing and QC underway
- August – Delivery of Oblique Imagery
- **January 2012 delivery underway**
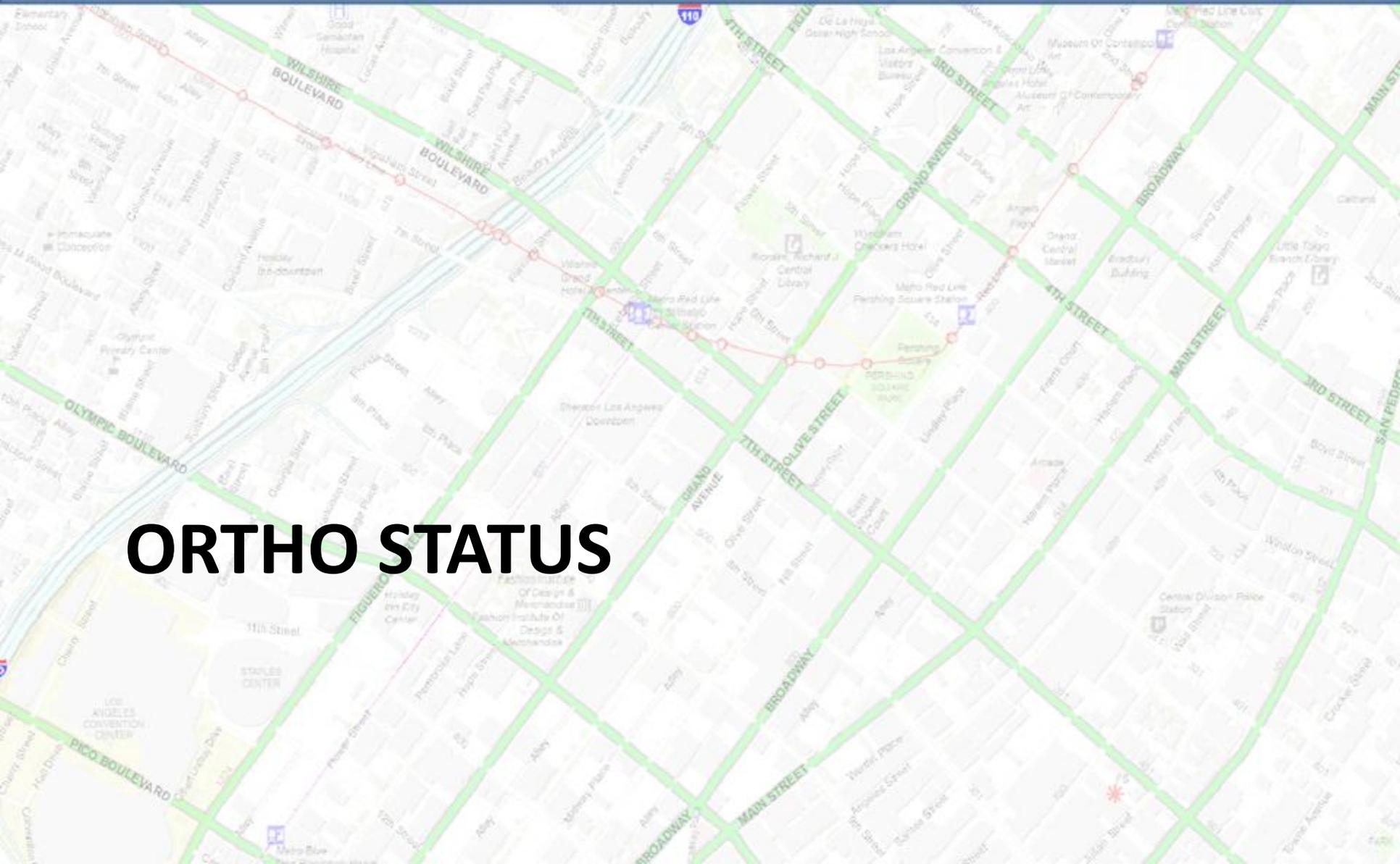
ORTHO STATUS

# Status - November
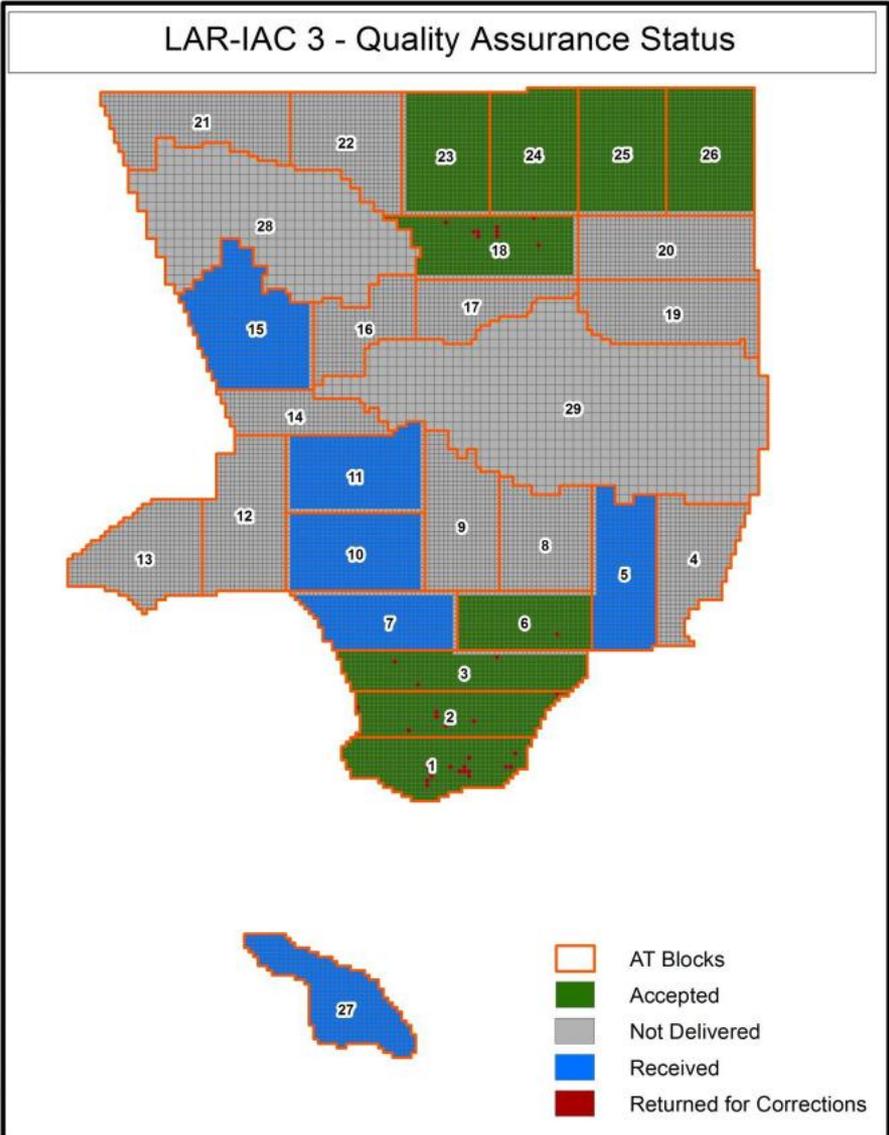
LAR-IAC 3 Quality Assurance Status Current

- Currently 97% complete with the QA process
- Anticipated completion date for all remaining edge tiles is 2/10
- Anticipated completion date for block 28 is 2/24
- Final Horizontal Accuracy Assessment report is currently being produced and will be delivered on 2/27

LAR-IAC 3 - Quality Assurance Status

Legend:
- Block Boundaries
- Accepted
- Not Delivered
- Received
- Returned for Corrections
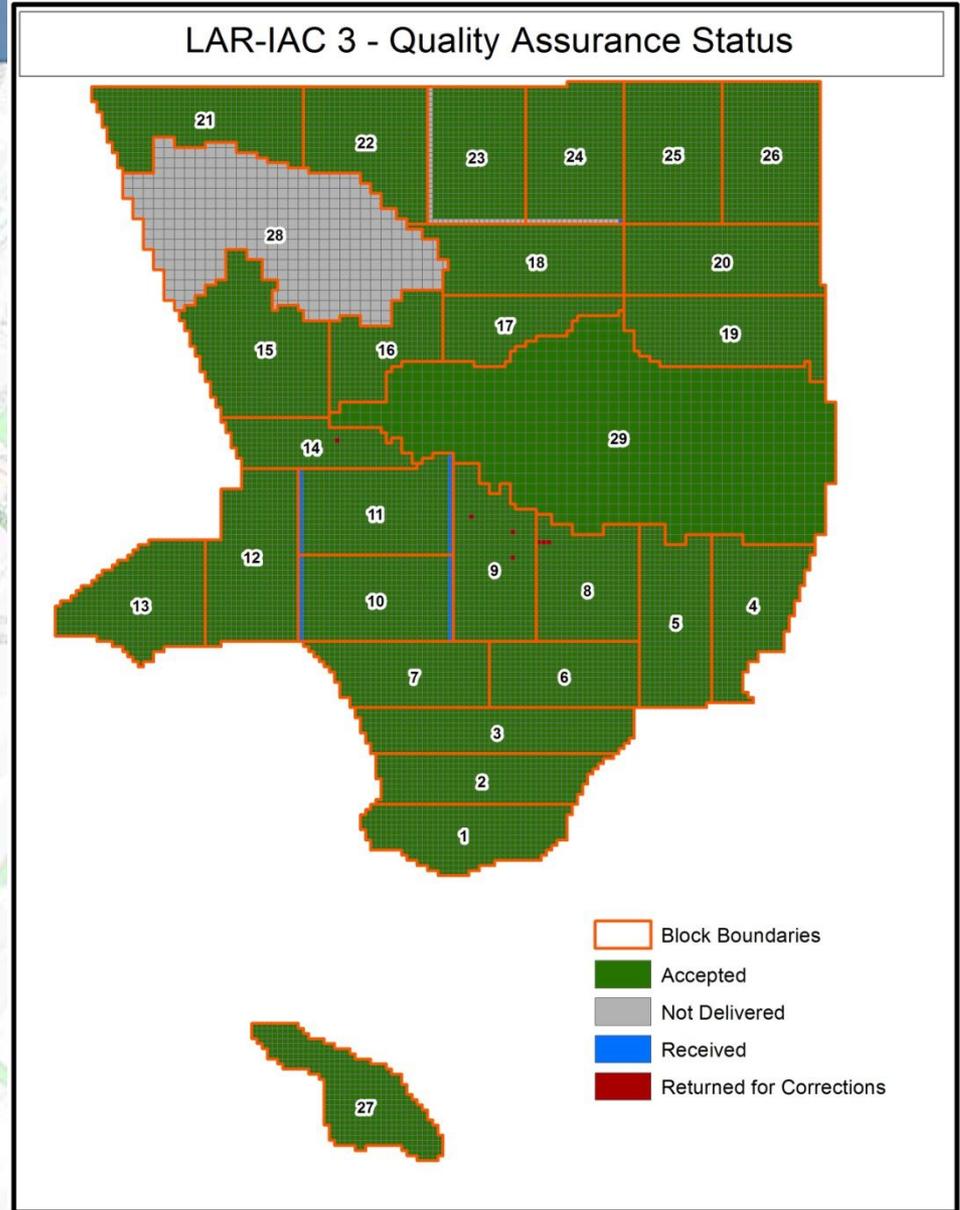
Status - Current

- QAQC complete by end of this week (February 9th)
- Block 28 will be complete in 2 weeks.
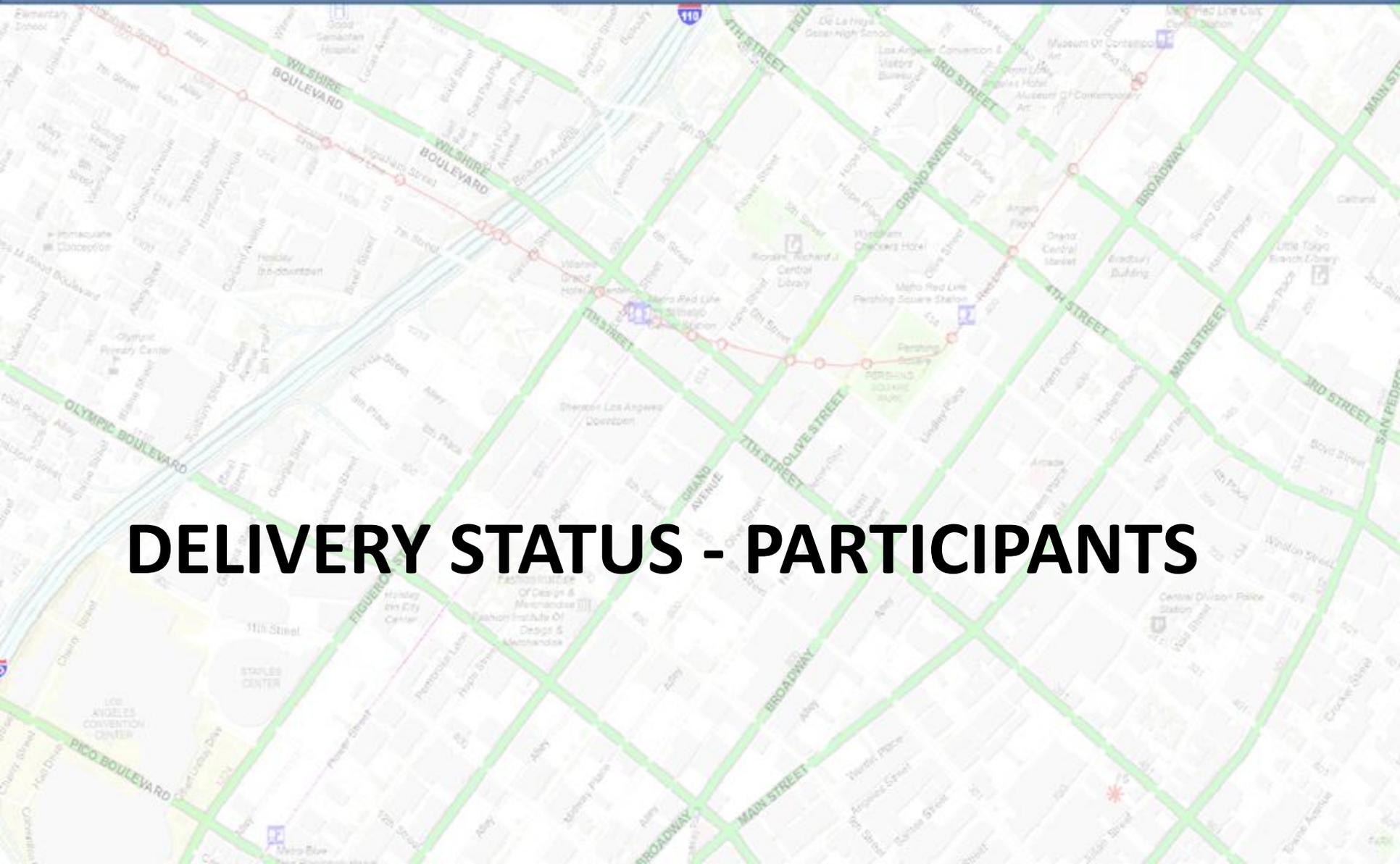
DELIVERY STATUS - PARTICIPANTS

LAR-IAC 3 Processing Status

Current Status of:
- 4 Inch JPEG2000 Compression (20:1)
- 1 Foot Resampling
- 1 Foot Resampled JPEG2000 Compression (20:1)

All processes are run in a single batch with the current "In Progress" files expected having an expected completion date of 2/13. All remaining tiles are expected to be processed and complete by 2/17 with the exception of block 28 that has just started the initial QC processes.

LAR-IAC 3 - Processing Status

Block Boundaries
Not Started
Complete
In Progress
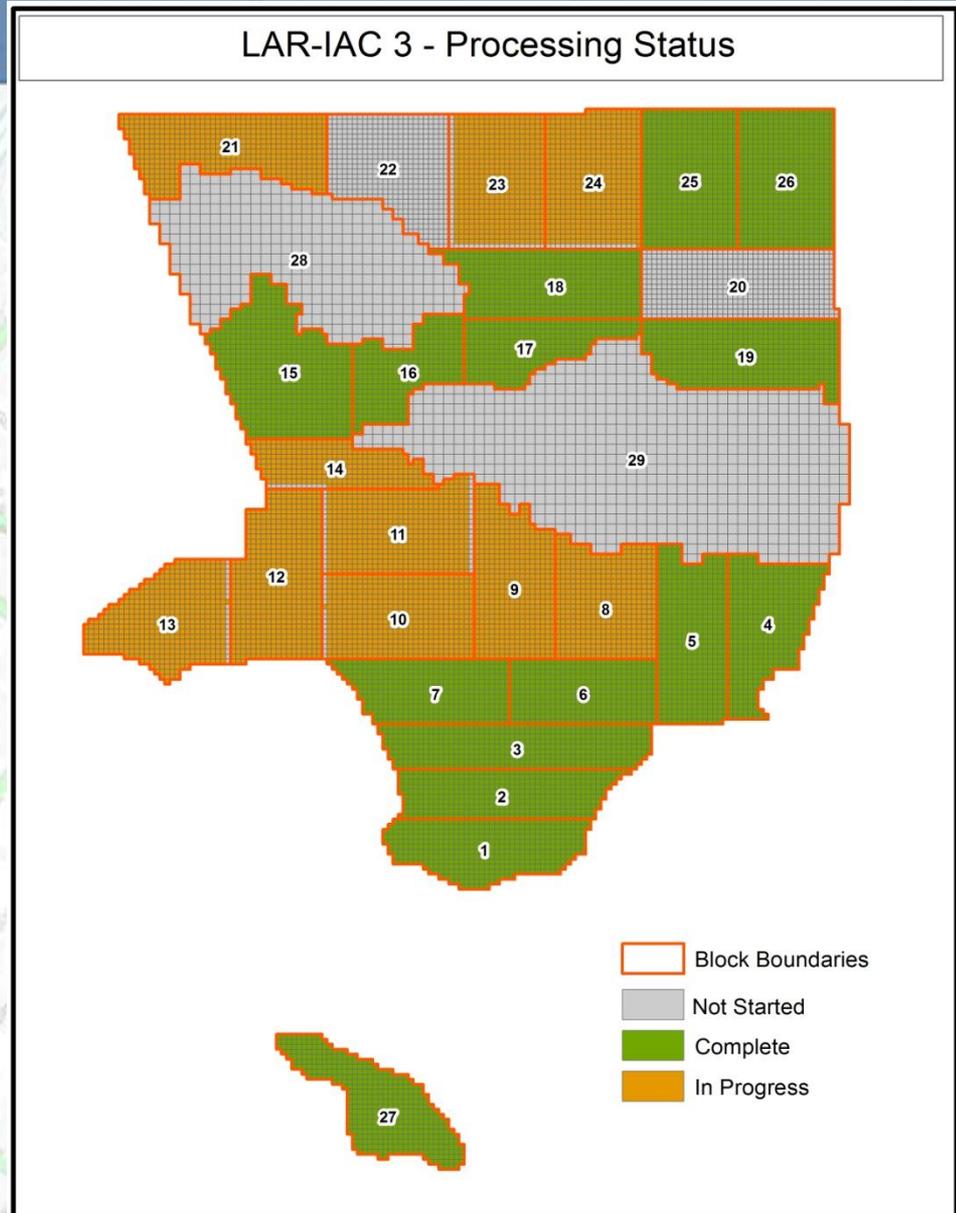
LAR-IAC 3 Processing Workflow

•Upon final Acceptance of a block the final processing takes place to compress, resample, and mosaic the final products.

•During the initial phase of processing each block will take about 2 weeks to process depending on the final size of the SLDS participant.

•After the JPEG2000 compression and resampling of the 4" tiles the remaining processing takes about 1 week for each SLDS participant with multiple participant running in parallel.

•The current schedule for production has between 3 and 5 participant deliverables per week

•A final schedule is provided in the following slides outlining the dates specific processing steps will be complete as well as delivery dates for SLDS participants

LAR-IAC3 Final Processing Workflow
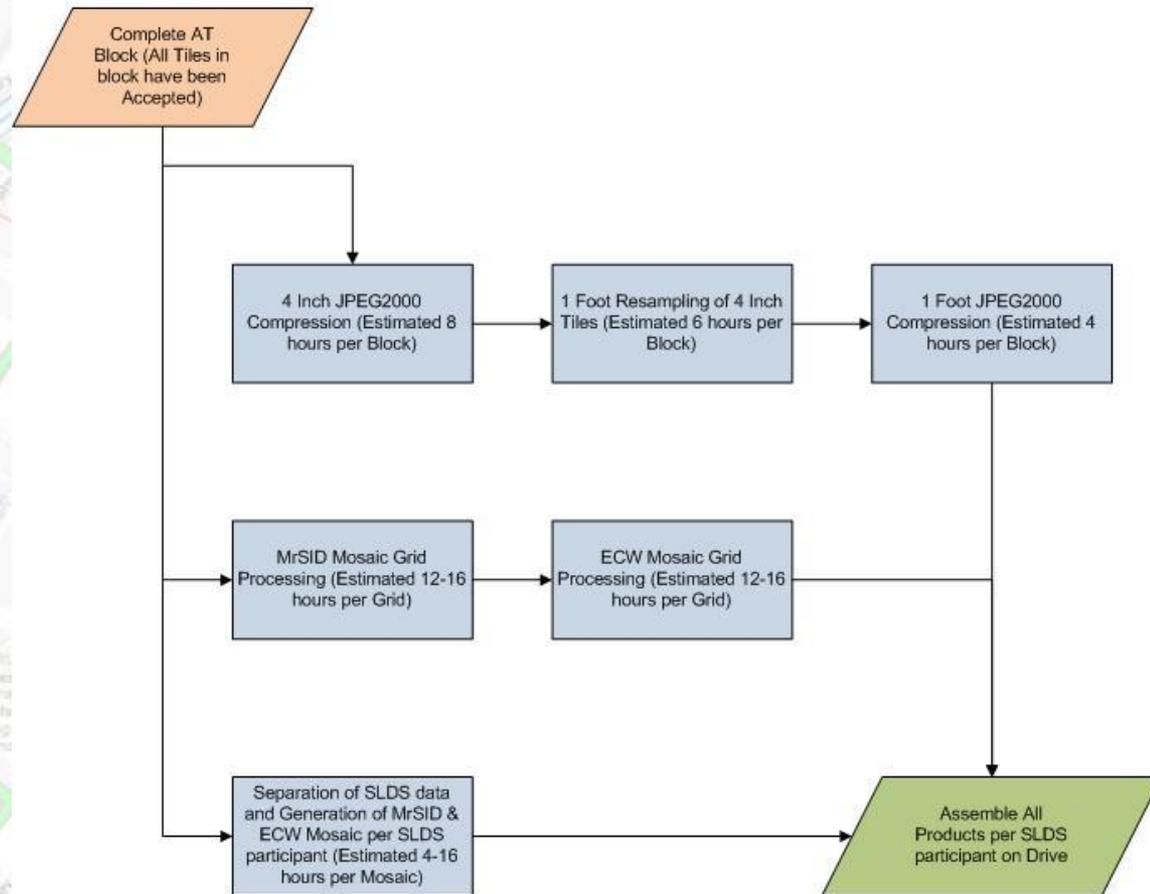
Delivery Strategy

- Deliver raw 4" and 1 foot geoTIFFs ASAP
- Provide follow-on delivery of all other formats
  - JPEG2000
  - MrSID
  - ECW
 - Resampled data

LAR-IAC 3 Delivery Schedule

SLDS Product Status			
Delivery Area	**Current Ortho Status**	**Partial Delivery of 4" Tiles Only**	**Anticipated Full Delivery Date**
City of Agoura Hills	Shipped		Shipped
City of Carson	Shipped		Shipped
City of Hermosa Beach	Shipped		Shipped
City of Lakewood	Shipped		Shipped
City of Manhattan Beach	Shipped		Shipped
City of Torrance	Shipped		Shipped
City of Industry	In Process	N/A	Monday, February 13, 2012
Santa Catalina Island Conservancy	In Process	N/A	Tuesday, February 14, 2012
City of Claremont	In Queue	2/17/2012	Monday, February 27, 2012
City of El Segundo	In Queue	2/17/2012	Monday, February 27, 2012
City of Bellflower	In Queue	2/17/2012	Monday, February 27, 2012
City of Beverly Hills	In Queue	2/17/2012	Monday, February 27, 2012
City of Commerce	In Queue	2/17/2012	Monday, March 05, 2012
City of Inglewood	In Queue	2/17/2012	Monday, March 05, 2012
City of La Canada Flintridge	In Queue	2/12/2012	Monday, March 05, 2012
City of San Dimas	In Queue	2/17/2012	Monday, March 05, 2012
City of Culver City	In Queue	2/17/2012	Monday, March 05, 2012
City of Downey	In Queue	2/17/2012	Monday, March 12, 2012
City of Burbank	In Queue	2/17/2012	Monday, March 12, 2012
City of Glendale	In Queue	2/20/2012	Monday, March 12, 2012
Santa Fe Springs	In Queue	2/20/2012	Monday, March 12, 2012
City of Santa Monica	In Queue	2/20/2012	Monday, March 19, 2012
City of Whittier	In Queue	2/20/2012	Monday, March 19, 2012
City of Pasadena	In Queue	2/20/2012	Monday, March 19, 2012
City of Santa Clarita	In Queue	2/20/2012	Monday, March 19, 2012
LA County	Full County	N/A	By March 30, 2012
LA County Sanitation Districts	Full County	N/A	By March 30, 2012
LARGIN (LA Region Gang Information Network)	Full County	N/A	By March 30, 2012
University of Southern California	Full County	N/A	By March 30, 2012
USGS	Full County - 1' GSD Only	N/A	By March 30, 2012
Los Angeles Air Force Base	Not a Participant Yet		Undefined
Port of Long Beach	Not a Participant Yet		Undefined

Summary

- All initial data will ship by February 20th.
- You will receive your data in 2 weeks.
- Another delivery will happen end of March will all other formats.

County Status

- Received Blocks 1-3, 5-7, 23-26
- Phases
  - Load geoTIFF data into Enterprise Repository
  - Pyramid
  - Update Map caches
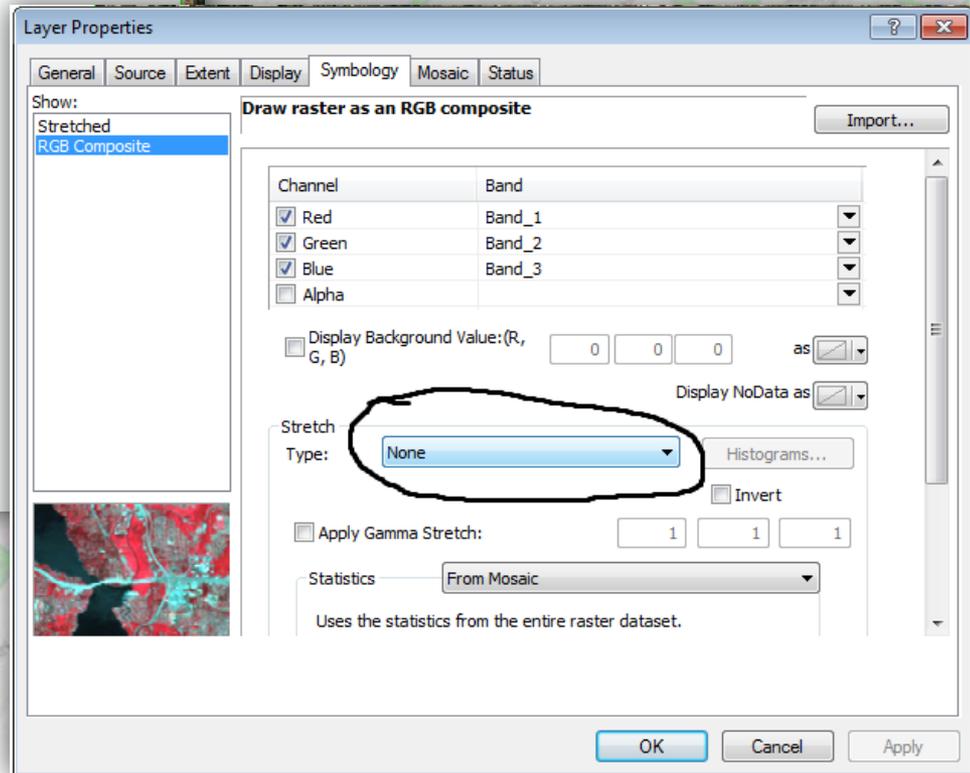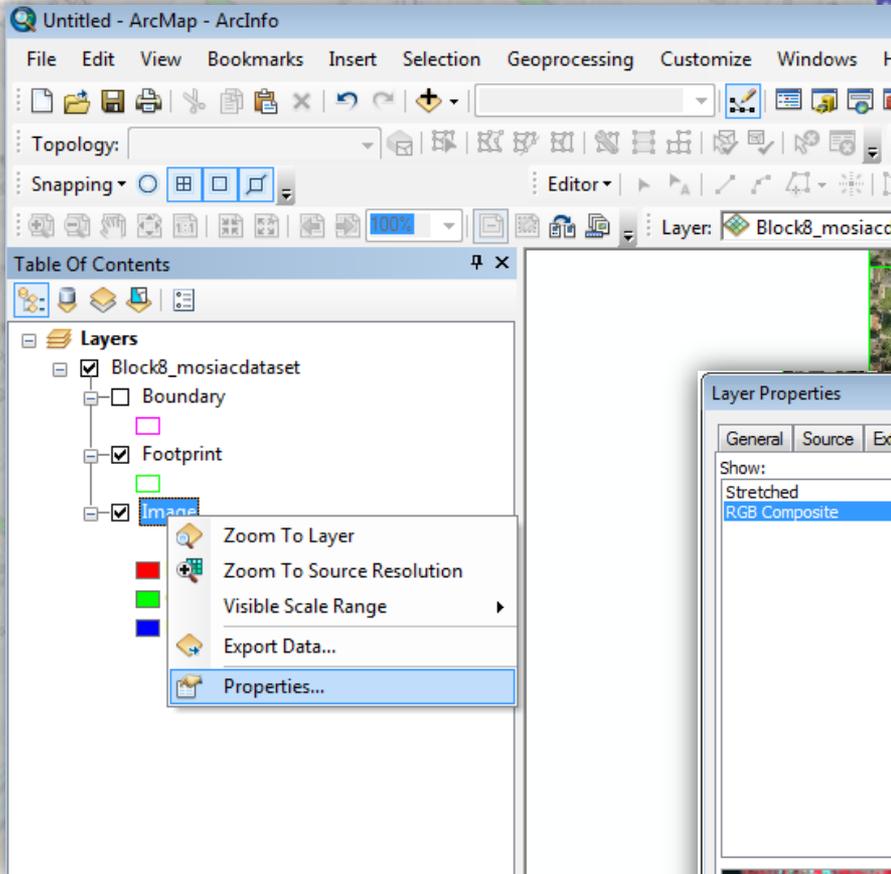   - LACounty_Aerial_2011
    - LACounty_Basemap
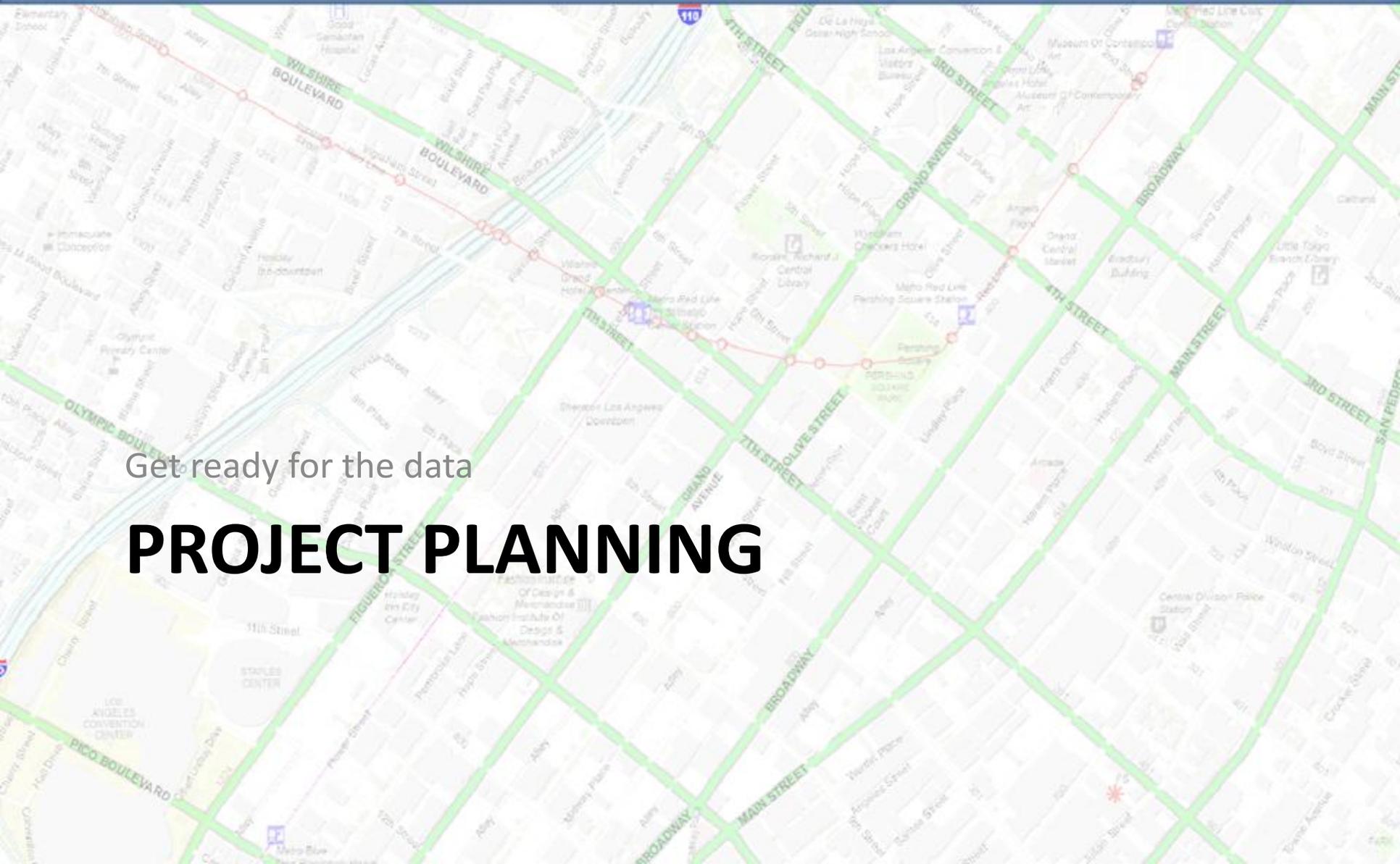
Get ready for the data

PROJECT PLANNING

Get Ready

- Raw data is 540 Mb per square mile (geotiff)
- Delivered on a 1 Tb hard disk
- Delivery formats
  - GeoTIFF
  - JPEG2000
  - Preferred compressed format (SDE 9.2 export format, Raster Catalog)
    - Image Mosaic determined to be uneffective
  - ECW, MrSID tiles

Using the raster geodatabase

Discussion

- LA County's experience
  - Raster Dataset has been very successful for SDE
    - Users see a single image
    - JPEG 60 compression doesn't degrate image but provides 10x compression
    - LA County can provide loading scripts
    - Image Mosaic **not** a feasible delivery
  - ECW, MrSID for public safety
    - There could be a WGS84 delivery
  - JPEG2000 for CAD/Engineering
- How have you been most successful?

County Status

- Blocks 1-3, 5-7 are loaded
- Pyramids caused database overload
  - DBAs are resolving
- Should be available next week
- Map Cache update will begin
  - Aerial_2011 first
  - Basemap next
- All other blocks will be loaded when they arrive.
  - Expect end of February/early March for completion.
- Discuss with me if you need raw data.

Los Angeles
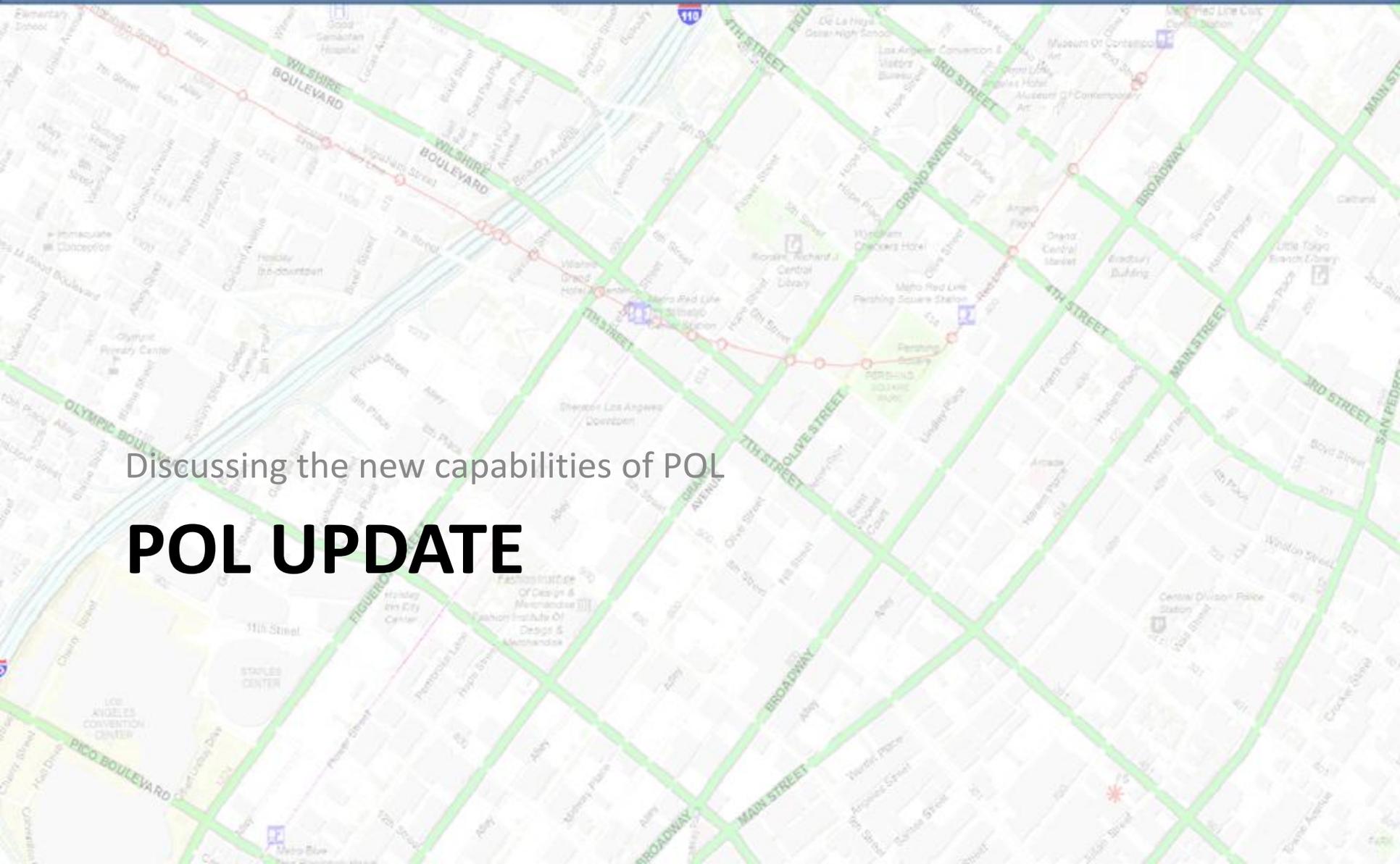
Discussing the new capabilities of POL

POL UPDATE

GIS Layers

- LA County master organization:
  – LARIAC generic account: lariac@lariac.gov
  – Standard GIS Layers for all participants
    - Parcels – **UPDATED to reflect December 2011**
    - ~~Streets (removed)~~ – use existing tool
    - Building Outlines
    - CityBoundaries
    - Address Points
    - Points of Interest
    - Zipcodes
    - ~~General Plan (removed)~~

Participant Account

- Each participant gets two types of accounts
  - Generic Account for each participant (single login for multiple users)
  - Named Account for individual users (save sessions)
- Managed by the participant administrator
  - Can add more GIS Layers to their account(s)
- How?

Adding your own data

- Organize your data
  - Create a folder with your data, and establish standard names for your shapefiles and layers.
  - Create an ArcGIS 10 map document with the symbols you want.
- GIS Uploader Tool
  - Move local GIS data to Pictometry
  - GIS Data rendered at Pictometry not on the client for speed.
- MXD to SLD converter
  - Take the same data that you uploaded and use ArcGIS to style (simple styles).
  - Upload the output sld file to Pictometry

Status

- Process is still in beta (we are the launch customer)
- LA County is testing with the Master Account
  - Found some issues and working to resolve
- Pictometry will schedule training
  - Proposed dates: March 8th and March 22nd
- Email David Peck (david.peck@pictometry.com)
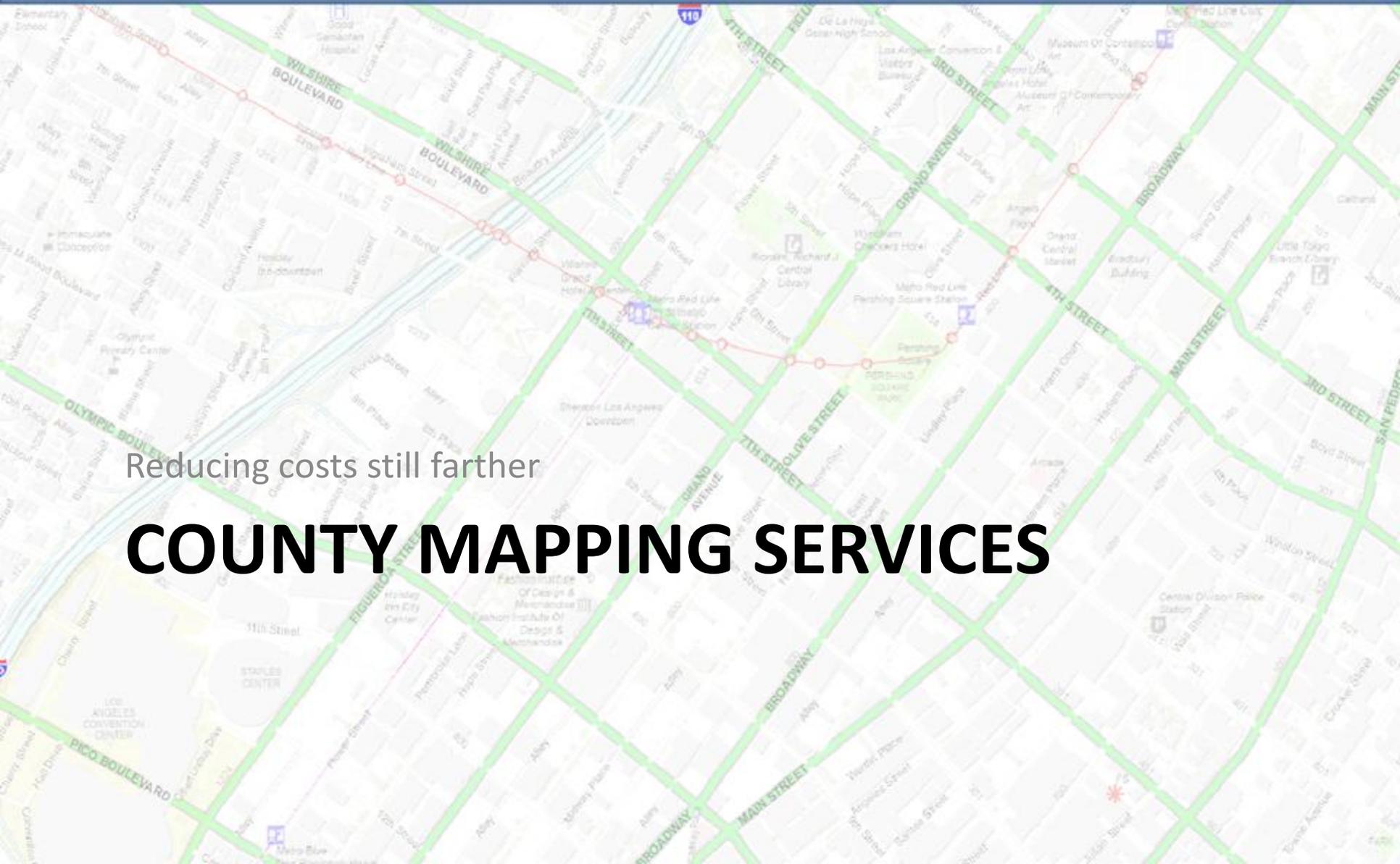
Reducing costs still farther

COUNTY MAPPING SERVICES

Status

- County maintains an Enterprise GIS database and loads LARIAC data.

- County develops and maintains mapping services for ingestion/inclusion into mapping applications.

  – ArcMap

  – GIS Web Applications

  – GIS Mobile Applications

- Does this already

County and Participants

- LAR-IAC 3 participants can access these services.
  - No loading/managing
  - Faster time to delivery
  - No need to ensure uptime
  - Reduce costs (reduce/eliminate ArcGIS Server costs)
  - Passing the buck to LA County for problems (☺)
- We will provide a username/password
- Unlimited access

Provided map services

- Street Map
- Base Map
- Map Canvas
- Aerial (2008)
- Aerial (2011)
- Terrain
- Parcels
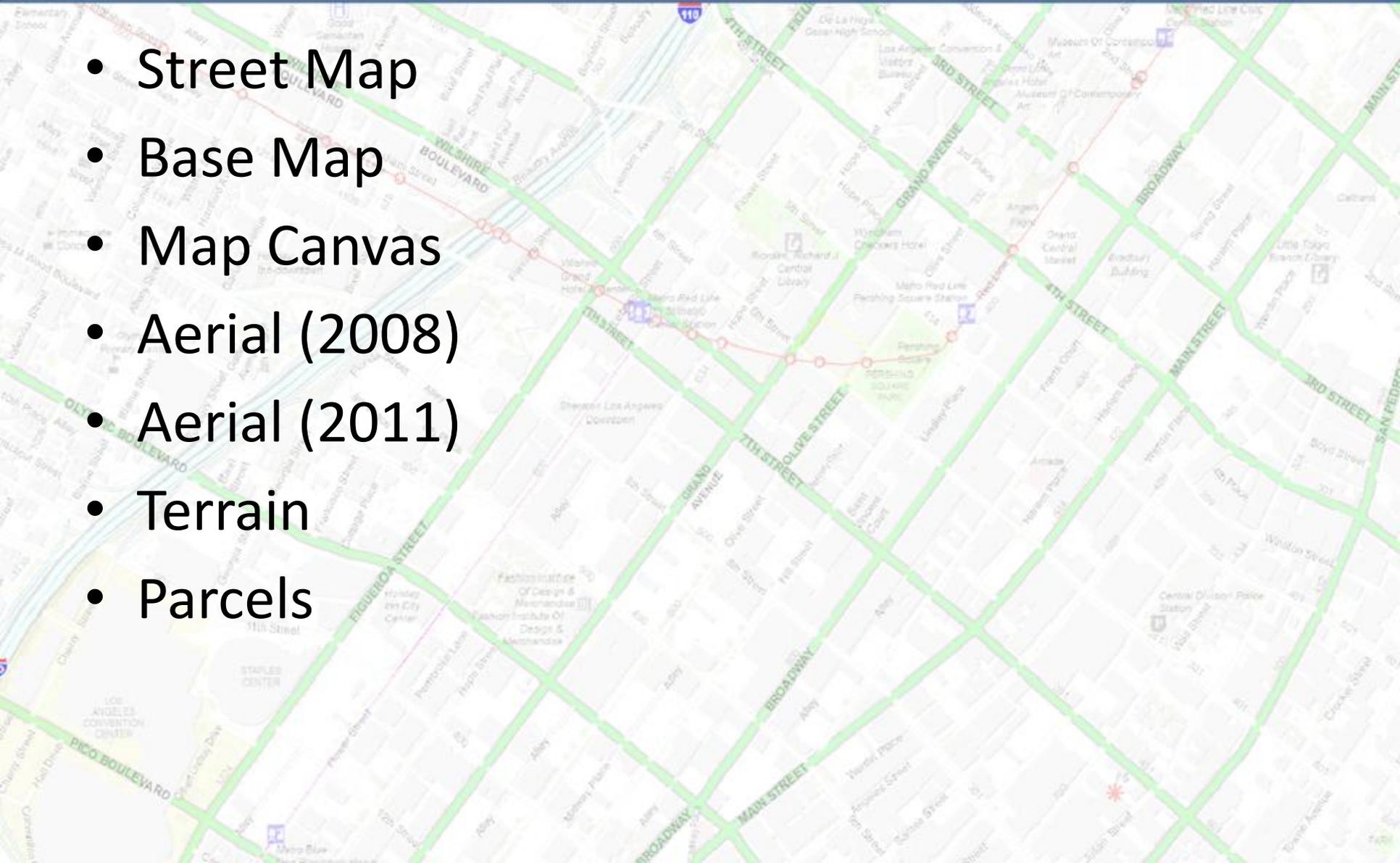
LA County Street Map

Purpose

This provides a rich cartographic map showing streets and the full LA County GIS database.
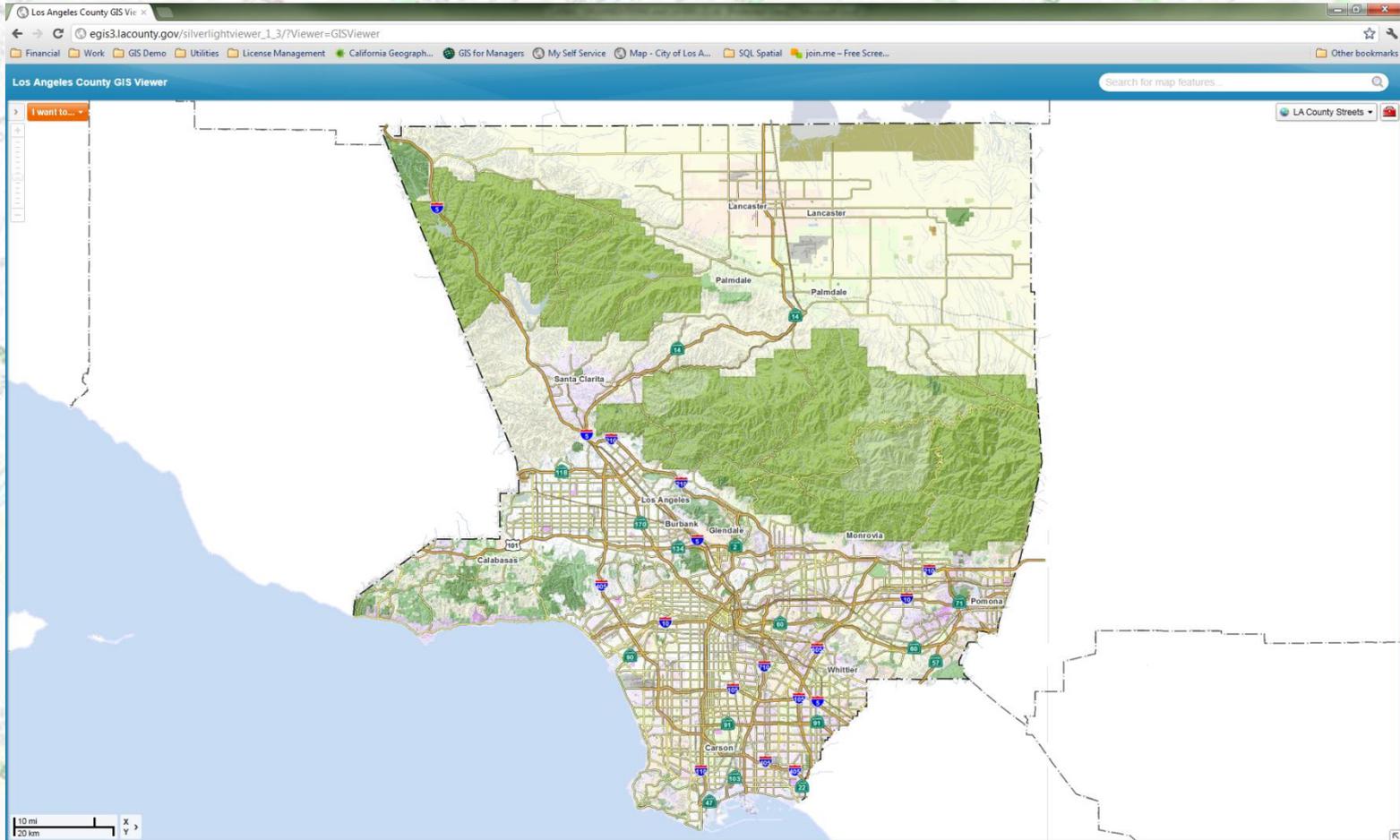
LA County Basemap

Purpose

This provides a rich cartographic map that switches to aerial photography at large scales (for developers who can only use one map).
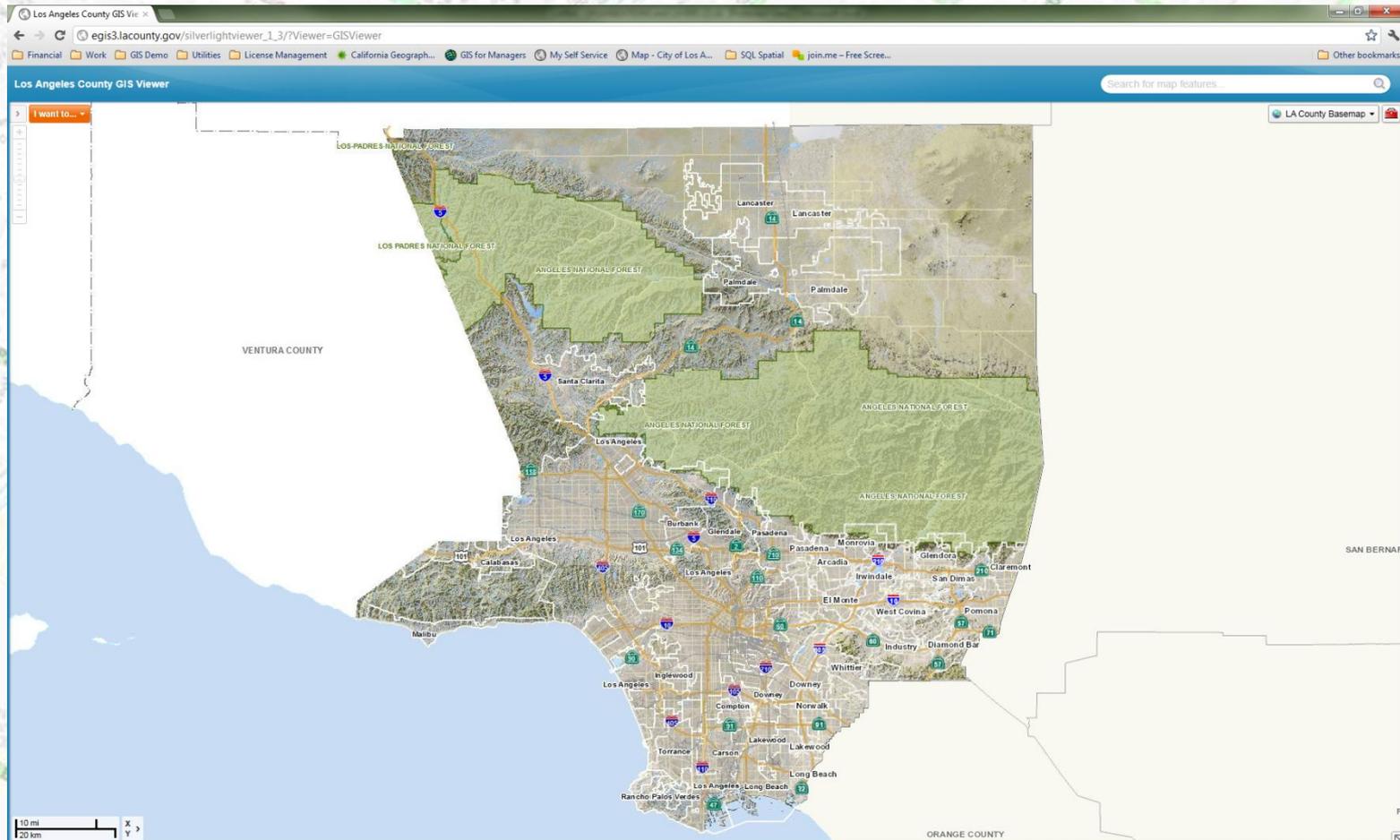
LA County Aerial (2008)

Purpose

This provides access to the LAR-IAC 2 imagery data.
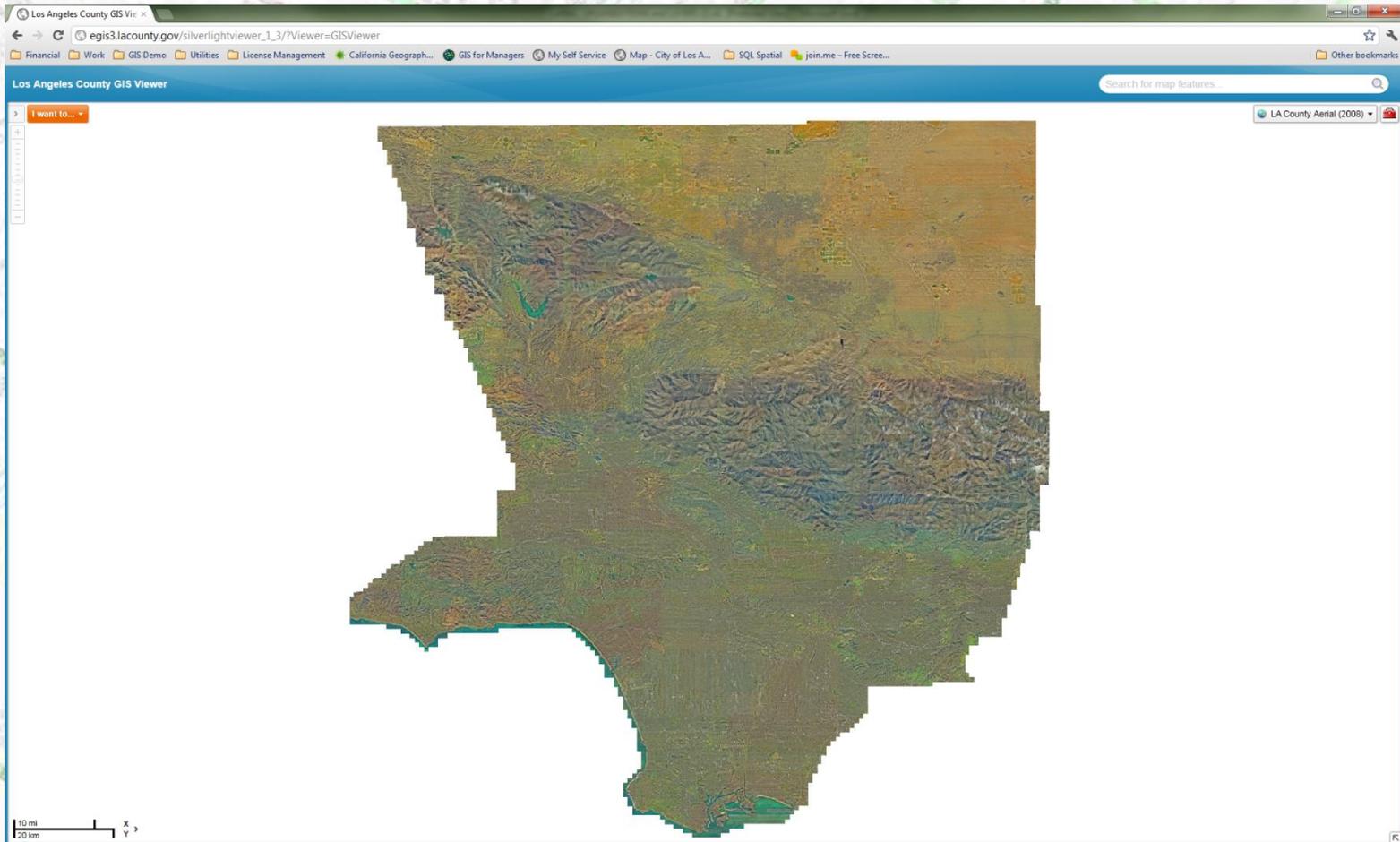
LA County Aerial (2011)

Purpose

Access to the LAR-IAC 3 imagery (not complete).
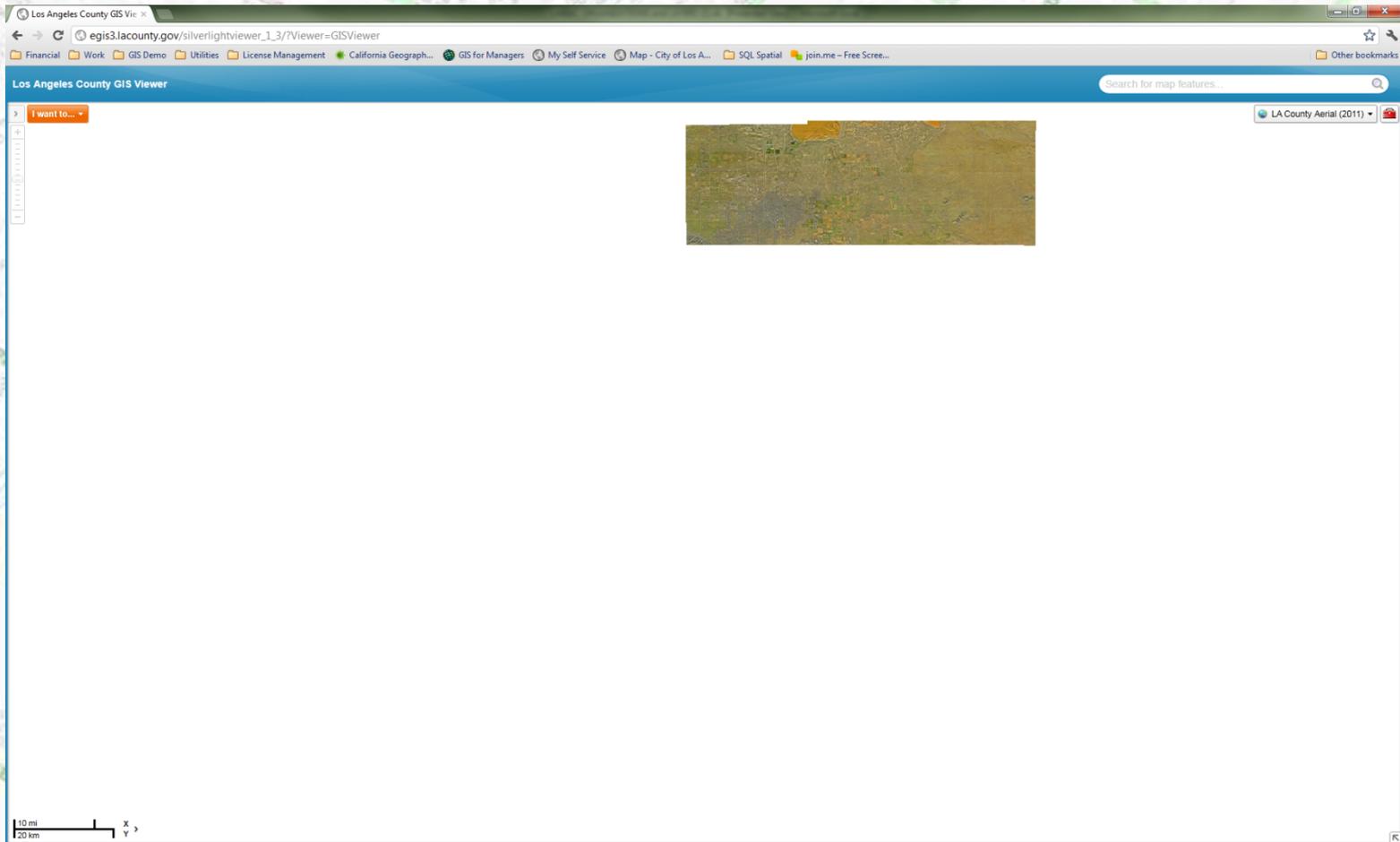
LA County Terrain

Purpose

This provides access to the LAR-IAC 1 elevation data.
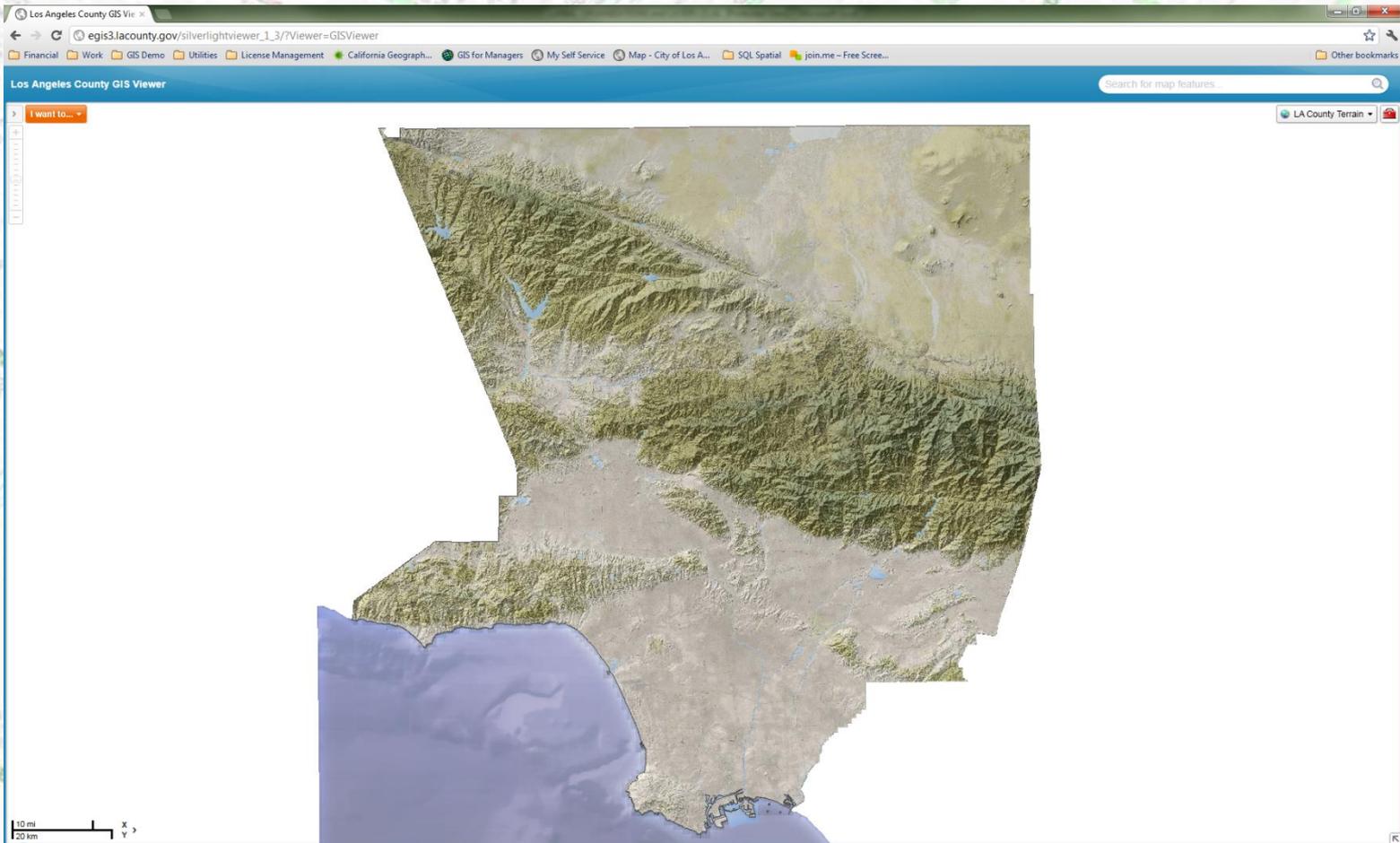
LA County Parcels

Purpose

This provides the current parcel map for overlay on other basemaps and searching.
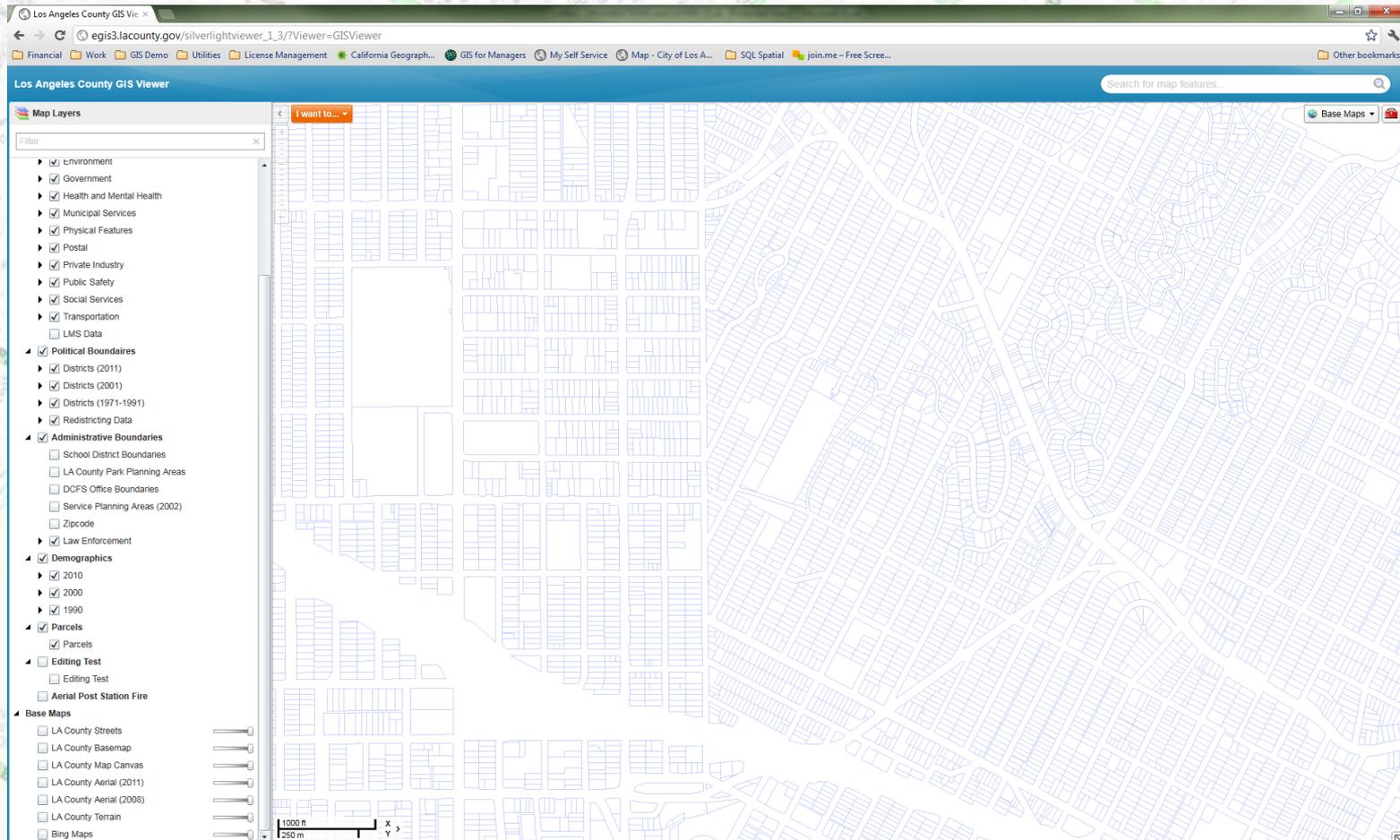
LA County Map Canvas (new)

Purpose

This provides a subdued map background to highlight layers shown on the top.

Demonstration

- http://gis.lacounty.gov/gisviewer

- http://planning.lacounty.gov/znet
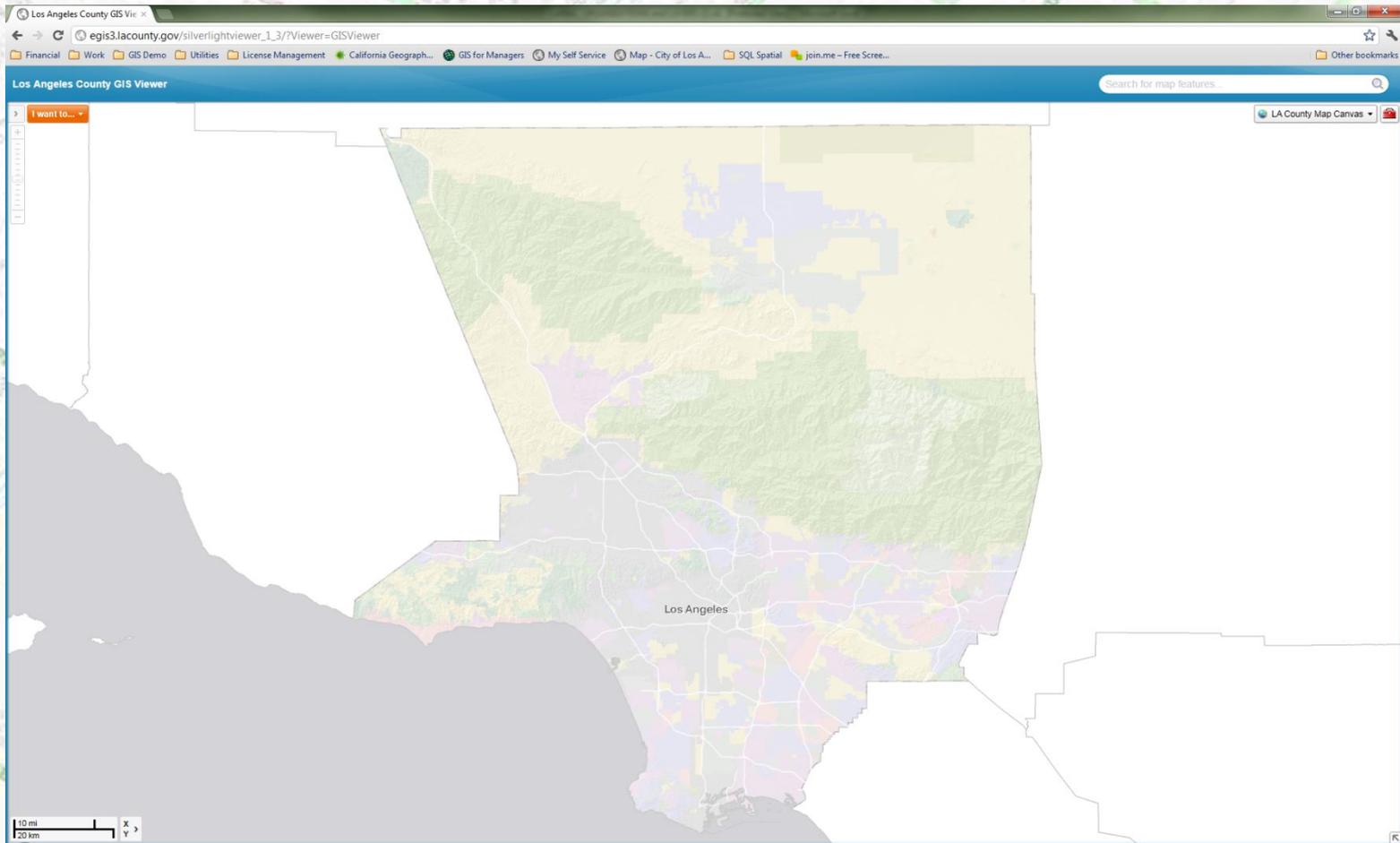
Status

- We have released in beta mode to some participants

- It will be included as part of LAR-IAC

- We have implemented the ArcGIS Server security model

  – We will provide usernames and passwords to access for LAR-IAC participants.

In the future

- We are determining other value to participants
  - Develop GIS Viewers for participants without the capacity to ingest LAR-IAC data.
- Extend beyond just LAR-IAC data
  - Parcel data
  - Points of interest (Locations)
  - Areas of interest
  - Anything from the data portal as a service

LA County Data Map

Los Angeles

LAR-IAC 4

Questions

- Timeframe?
  - 2 or 3 year cycle (acquire in January 2013 or 2014)
- Data
  - Re-acquire LIDAR?
  - Re-acquire Color Infrared?
  - Update buildings?
- Contracts
  - New RFP or continue existing method
- Other changes
  - Faster delivery

Next Steps

- Create survey to get responses
  - Any other suggestions
- Bring Technical Advisory Group together
  - Mid-March meeting
  - Get technical demonstrations from some vendors.

Los Angeles Region – Imagery Acquisition Consortium (LAR-IAC3)

Questions/Comments?
(time permitting)

Prepared by:
Los Angeles County

LAR-IAC Project Web Site

http://planning.lacounty.gov/lariac

Contact Information

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