



# Deployment LAR-IAC User Group 2021

Amanda Bullen

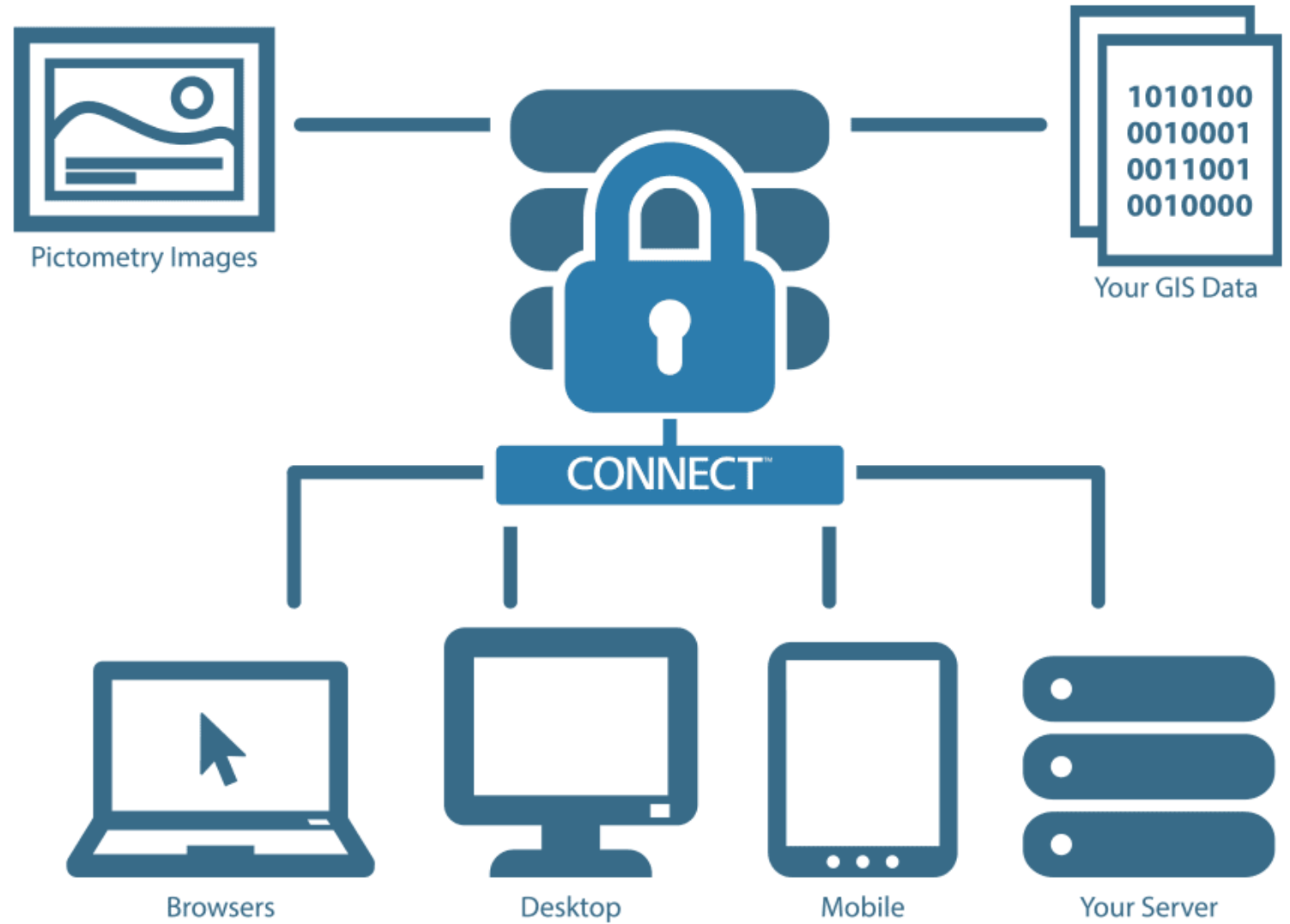
602.228.8232

[amanda.bullen@eagleview.com](mailto:amanda.bullen@eagleview.com)

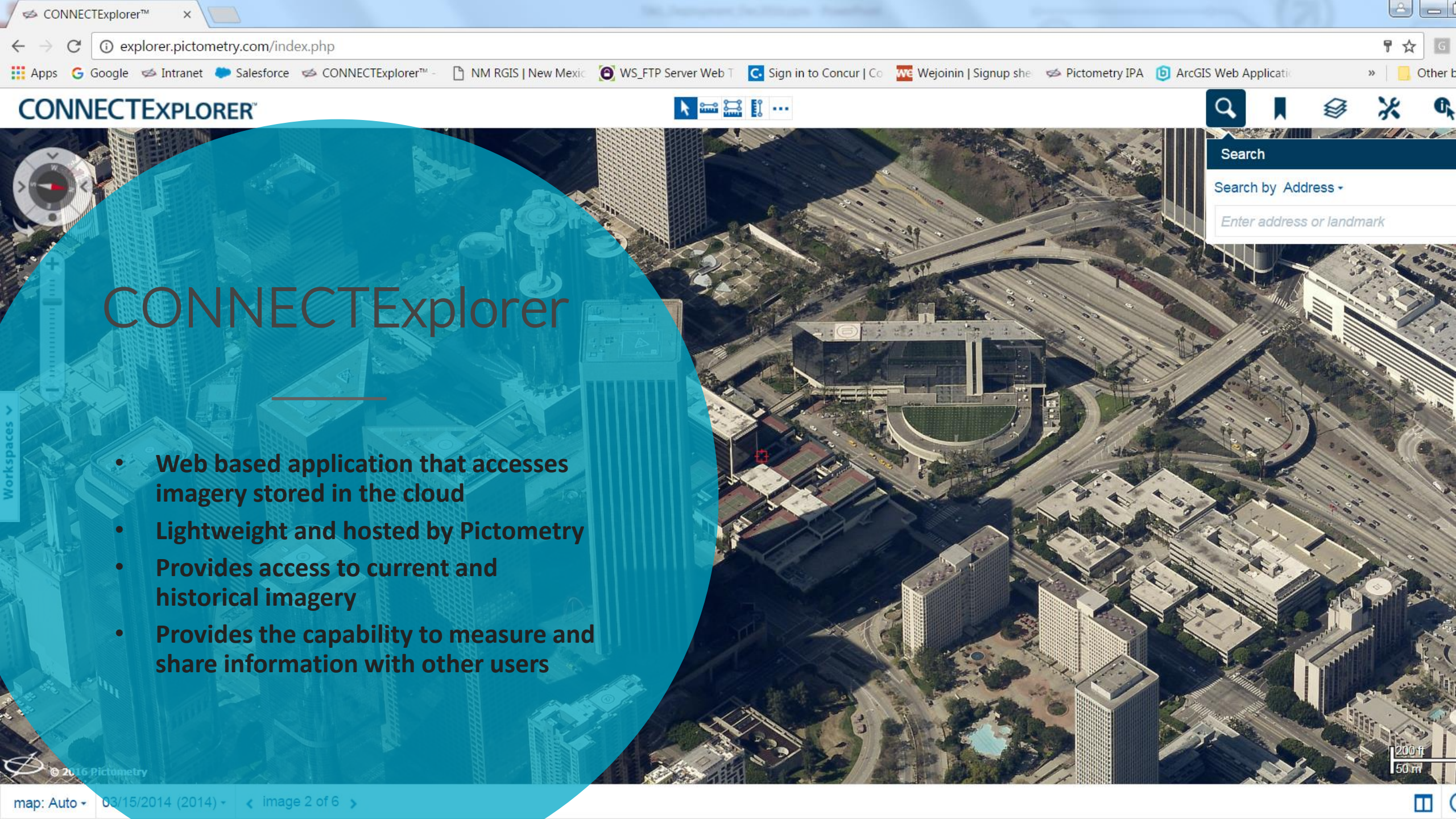
# Agenda

- Deployment Options
  - CONNECTExplorer
  - CONNECTMobile
  - ArcGIS Desktop/Pro Plugin
  - Web Based API (Integrated Pictometry Application – API)
  - REST Services
  - Image Service
- Questions

# CONNECT Platform







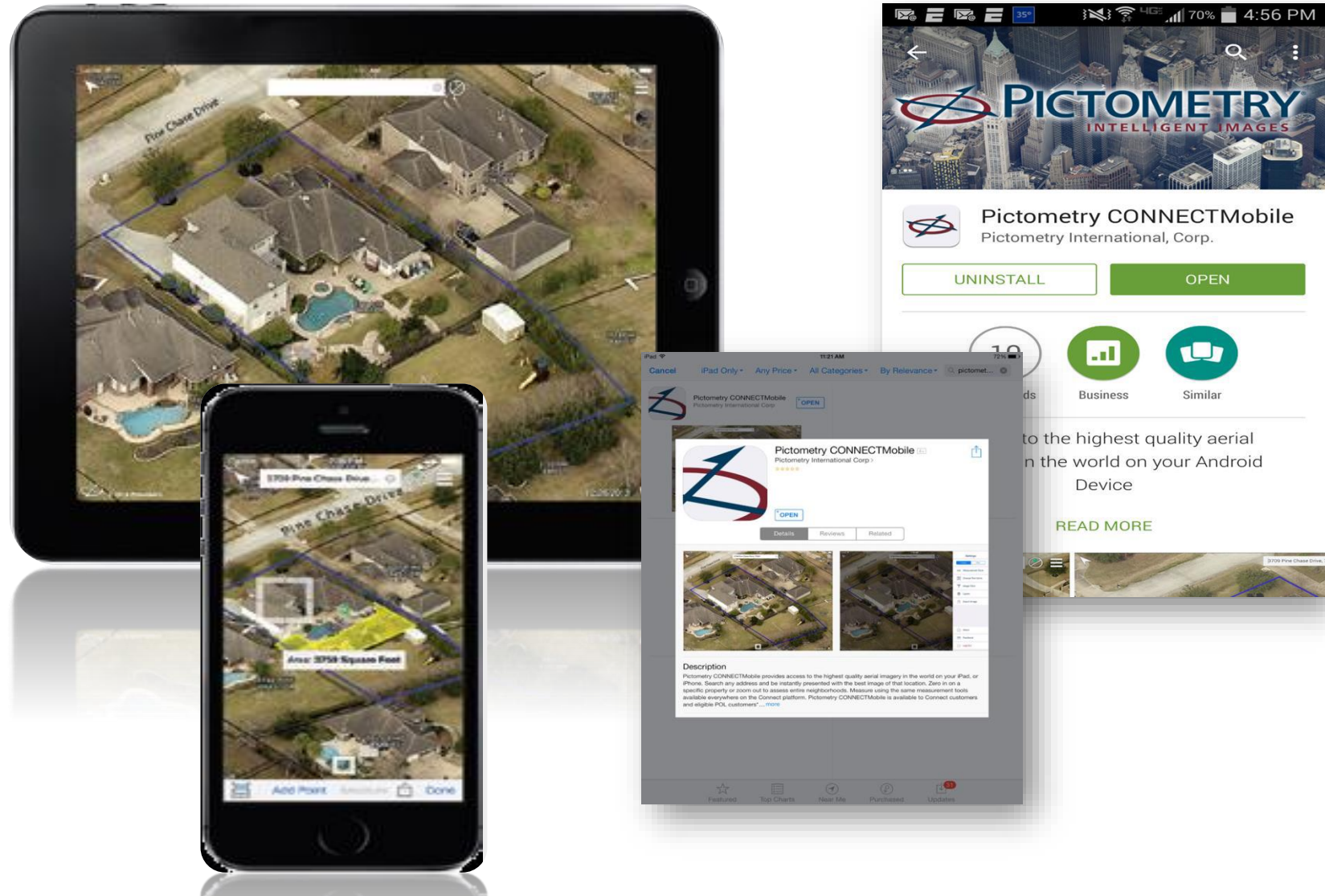
# CONNECTExplorer

- Web based application that accesses imagery stored in the cloud
- Lightweight and hosted by Pictometry
- Provides access to current and historical imagery
- Provides the capability to measure and share information with other users



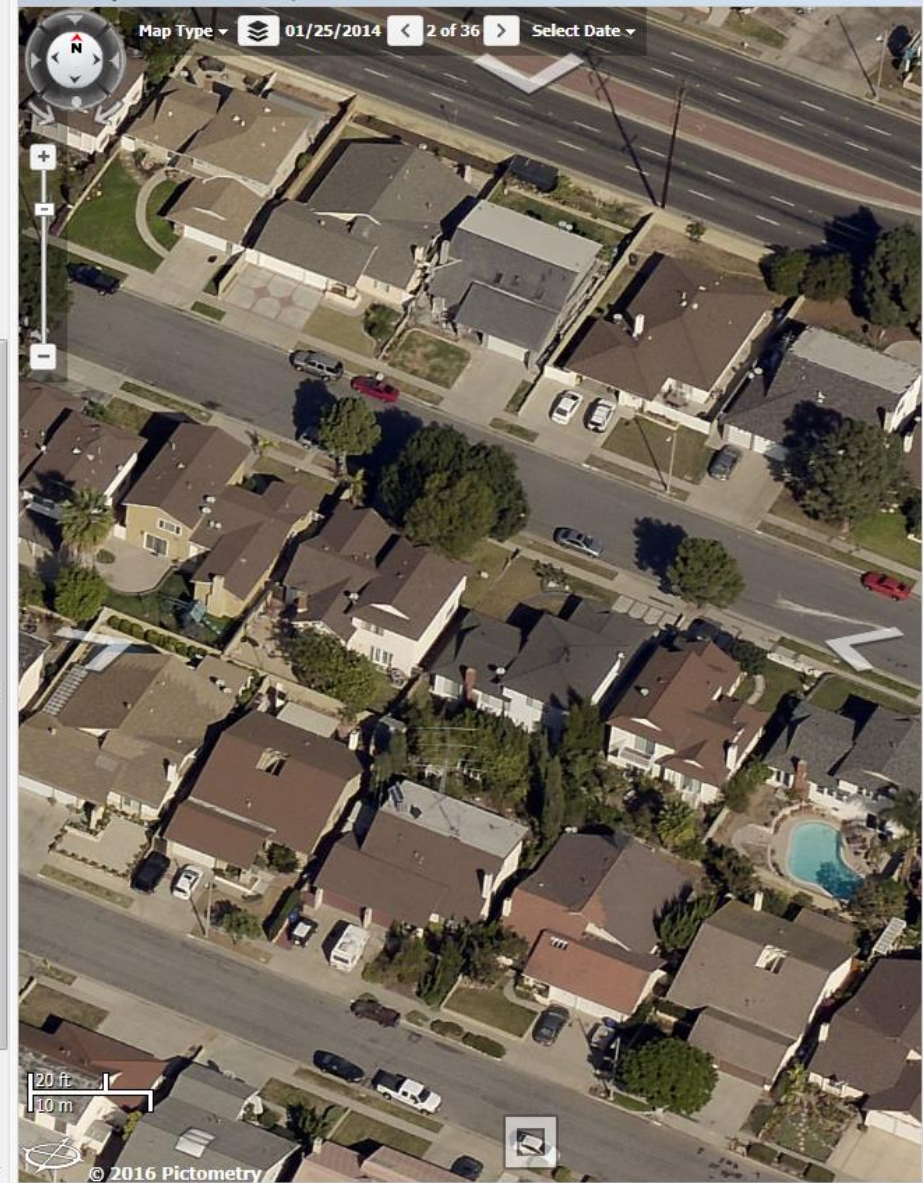
# CONNECTMobile

- Lightweight mobile version of CONNECTExplorer available on iOS or Android devices
- Geolocates using GPS enabled device
- Logins count towards the 1500 co-current user limit (unlimited named users)
- Available to **ALL** LARIAC users



# ArcGIS Desktop and ArcPro Plug-ins

- Gives access to oblique imagery and measurement tools without having to leave application
- Streamlines workflow
- Allows for export of oblique imagery into ArcGIS Desktop for reference and reports



# Non-CONNECT Explorer Image Views in Past Year

5,945,237



Who is using  
these  
integrations?

LAR-IAC Member
City of Beverly Hills
City of Burbank
City of Cerritos
City of Culver City
City of El Segundo
City of Long Beach
City of Manhattan Beach
City of Palos Verdes Estates
City of Pasadena
City of Rancho Palos Verdes
City of Santa Monica
City of Torrance
City of Whittier
CSULB
LA City Bureau of Engineering
LA City Bureau of Sanitation
LA City Fire Department
LA County Assessor
LA County Parks and Recreation
LA County Public
LA County Public Works
LA County Regional Planning
LA County Sanitation Districts
LAR-IAC MASTER ( LARIAC )
LAR-IAC MASTER - Public ( LARIAC )
Port of Long Beach

- 26 member setups
- 100's of access points



# Web Based API (aka IPA)

Web integration with EagleView hosted obliques and orthos

- Uses JavaScript and iframes

Can be internal or face the public (available to ALL LARIAC users)

Who is using  
the web-  
based API?

LAR-IAC Member	Active Applications
City of Beverly Hills	1
City of Burbank	3
City of Hermosa Beach	1
City of Long Beach	5
City of Manhattan Beach	1
City of Pasadena	1
City of Rancho Palos Verdes	1
City of Santa Clarita	1
City of Santa Clarita	1
City of Santa Monica	1
City Of Santa Monica	1
City of West Hollywood	1
LA City Building & Safety	8
LA City Planning	3
LA City Port of Los Angeles	3
LA City World Airports	2
LA County Assessor	5
LA County General	13
LA County Parks and Recreation	1
LA County Probation	1
LA County Public Works	1
LA County Public Works	4
LA County Regional Planning	2
LA County Registrar/Recorder County Clerk	1
Port of Long Beach	3
Total Number of Applications	<u>65</u>



## ▼ IPA Guides

[Quick Start Guide](#)[Release Notes](#)[Examples - .NET](#)[Examples - PHP](#)

# Quick Start Guide



## About this guide

This Quick Start Guide describes what you need to do to start using the Integrated Pictometry Application (IPA) API so your users can use Pictometry imagery and tools within your own web applications as quickly as possible. This guide is intended for Software Developers who are already familiar with server-side and client-side web development and specifically JavaScript, HTML, and server-side implementation languages. It assumes that you are familiar with at least one of these programming languages: PHP, Java, C#, VB.NET, Python, Perl, or Ruby. If you find errors in this guide, or if you have comments about it, we'd like to know. Please email us at [documentation@pictometry.com](mailto:documentation@pictometry.com).

## Related documentation

- You should have received the key pair file, which contains the keys and urls for the IPA. You will need these to build your application.
- You may also wish to browse the [API Guide](#) for a complete list of JavaScript functions and events you can use to customize your application.

## Service Levels

The IPA is a highly-configurable web application with features that range from a basic visualization product to an advanced product with analytic capabilities. The configuration model also applies to the level of programmatic control the developer has over the IPA. You will notice that throughout the [API Guide](#) there are badges which indicate the methods, events, properties and parameters/return values that are restricted based on your account configuration. Please contact your Pictometry Sales Representative to discuss the various service levels that are available.

## Overview

The IPA is a web component that can be integrated with your web application by using JavaScript and iframes. The IPA is loaded as part of your web page and makes calls to Pictometry via the IPA JavaScript Library. The steps for integrating the IPA on your web page are covered in this document.

### Contents

1. [About this guide](#)
2. [Service Levels](#)
3. [Overview](#)
4. [Embedding the IPA](#)
5. [Communicating with the IPA](#)
6. [Customer-Hosted WFS](#)
7. [Best Practices](#)
8. [Troubleshooting](#)
9. [Further Reading](#)





## IPA Guides

- Quick Start Guide
- Release Notes
- Examples - .NET
- Examples - PHP



## .NET Examples

## Download

Download ZIP containing example files

## ASP Code

```
<%@ Page Language="C#" CodeFile="example.aspx.cs" Inherits="Example.Ipa" %>
<!DOCTYPE HTML>
<html>
<head>
  <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
  <title>IPA Example - ASP.NET - Advanced</title>

  <!-- include the IPA JS Library from pictometry -->
  <script type="text/javascript" src="<% Response.Write(this.ipaJsLibUrl()); %>"></script>

  <style>
    #content {
      margin-left: auto;
      margin-right: auto;
      border-style: solid;
      width: 95%;
      height: 4.5em;
      text-align: center;
    }

    #pictometry {
      margin-left: auto;
```



## Contents

1. Download
2. ASP Code
3. C# Code



## PictometryHost



Properties 17



Methods 56



Events 27

Filter class members

Show ▾



Class that communicates with a Pictometry IPA.

The following badges indicate the methods, events, properties and parameters/return values from functions that are restricted based on permissions that may or may not be set on your account:

**TOOLS REQUIRED**

This feature requires some tools to be enabled.

**DISTANCE TOOL REQUIRED**

This feature allows the user to measure distances.

**AREA TOOL REQUIRED**

This feature allows the user to measure area.

**HEIGHT TOOL REQUIRED**

This feature allows the user to measure heights on oblique images.

**BEARING TOOL REQUIRED**

This feature allows the user to measure bearing.

**ELEVATION TOOL REQUIRED**

This feature allows the user to obtain the ground elevation at a point.

**LOCATION TOOL REQUIRED**

This feature allows the user to obtain the location at a point.

**EXPORT REQUIRED**

This feature allows the user to export the visible area in the viewport.

**EXPORT PDF REQUIRED**

This feature allows the user to export the visible area in the viewport as a PDF file.

**NAVIGATION API REQUIRED**

This feature allows the developer to programmatically control the navigation of the IPA.

**DUAL PANE REQUIRED**

This feature allows the IPA to activate a second pane in which imagery at the current location can be viewed side-by-side.

**VIEW EXTENT REQUIRED**

This feature allows the extent of the viewport to be obtained programmatically.

**POINT TRANSLATION REQUIRED**

This feature allows image coordinates to be translated to geographic coordinates as well as geographic coordinates to be translated to image coordinates.

**IMAGE FILTER REQUIRED**

This feature allows the user to "lock" to a specific year or library.

**COMPARABLES REQUIRED**

This feature allows the user to annotate a primary and many comparable parcel polygons.

**SLOPE TOOL REQUIRED**

This feature allows the user to measure the slope between two points.

By Package

By Inheritance



Show private classes



## IPA Guides

Quick Start Guide

Release Notes

Examples - .NET

Examples - PHP



## Release Notes



## Welcome to IPA Version 1 Release 9

This version provides a number of new features and bug fixes. Here are some of the highlights:

- Features

- Added new preferences to control search annotations display. See [setPreferences](#) for details. The new preferences are:
  - `showSearchAnnotations`
  - `showMapLabel`
- Added new preferences to control default map orientation and map angle. See [setPreferences](#) for details. The new preferences are:
  - `defaultMapOrientation`
  - `resetOnFarSearch`
- Search functions now offer an optional callback function. See [setLocation](#), [searchByBbox](#), or [searchByString](#) for details.

- Bug Fixes

- Using the dashboard "unpin all measurements" button incorrectly removed shapes that had been added using the [addShapes](#) method.
- The **geofenceexceeded** event was not being emitted when the exceeded condition was met.
- Address searches with multiple results would display the wrong label.
- Modifying a pinned measurement didn't emit the proper tool event for the updated measurement.
- Clicking outside a modified measurement was not properly saving the new measurement or disabling the modify.
- Keys that do not have any measurement tool permissions will no longer show the "unpin all measurements" button in the dashboard.

## Welcome to IPA Version 1 Release 8

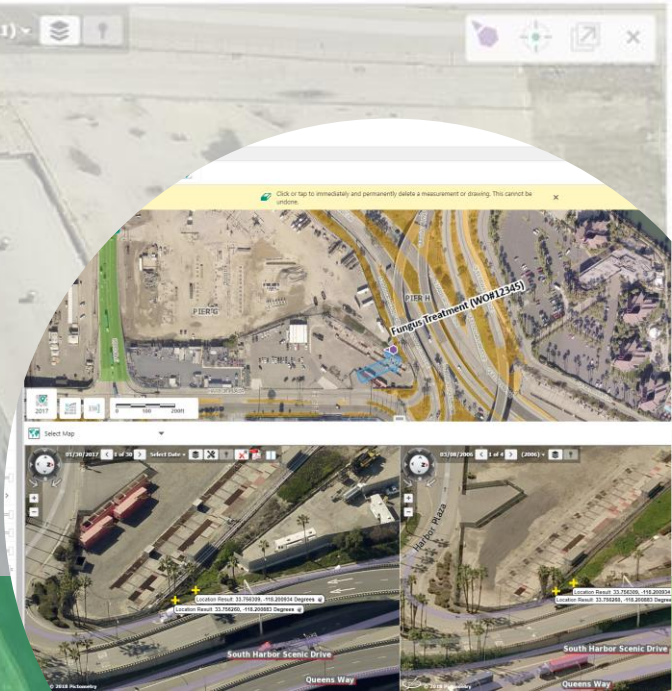
### Contents

- [Welcome to IPA Version 1 Release 9](#)
- [Welcome to IPA Version 1 Release 8](#)
- [Welcome to IPA Version 1 Release 7](#)
- [Welcome to IPA Version 1 Release 6](#)



- For the past two years, the Port of Long Beach has been actively developing an HTML5 platform to provide a feature rich application experience dubbed “Port Atlas” for port staff and selected external users.

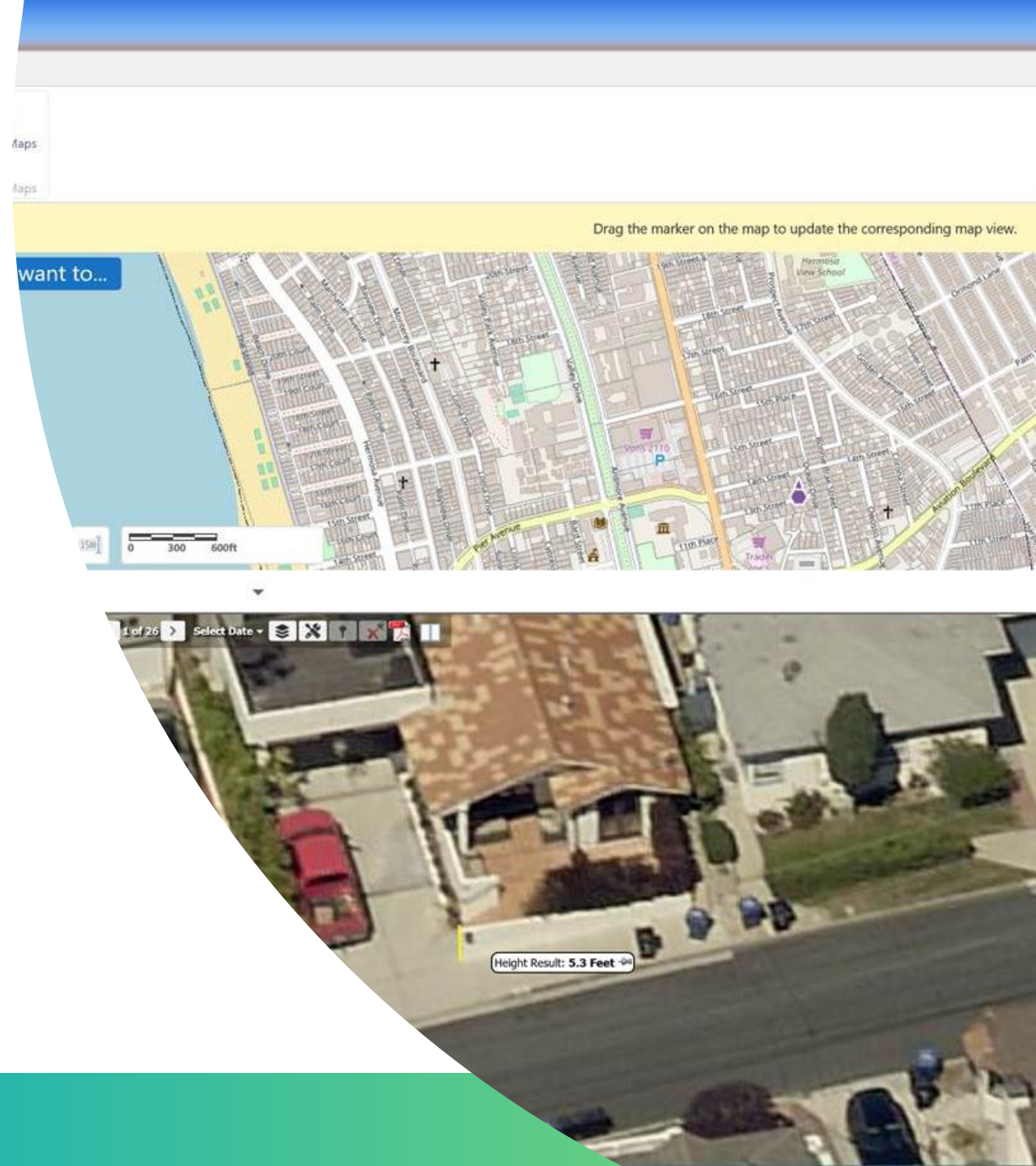
- Assessor Parcels
- 





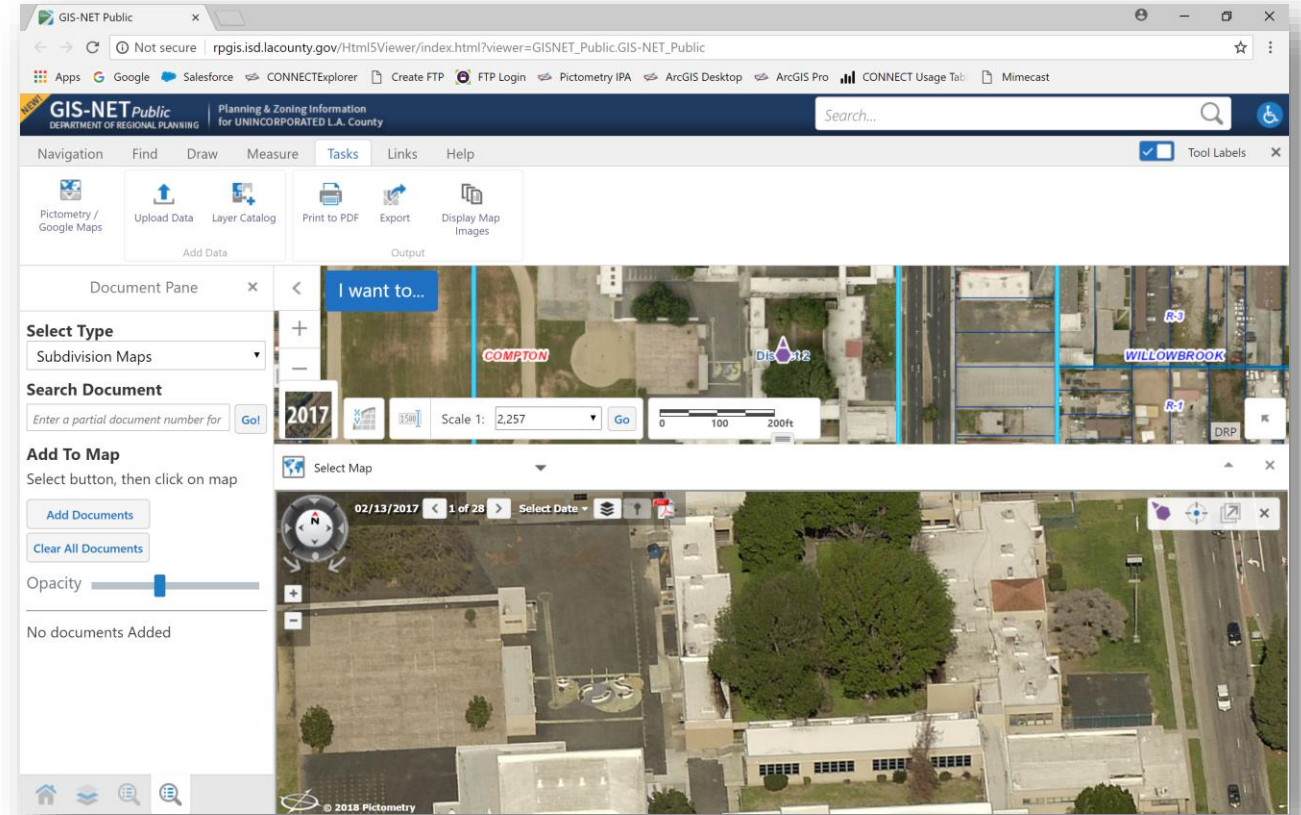
# Hermosa beach

- Planners and inspectors routinely check the Geocortex viewer to get a general idea of what the issue is. In this example the wall that is measured is under review and the inspector took a quick measurement before going over to the site. They routinely check heights of buildings, trees and poles to avoid trips to the field.



# La County Planning

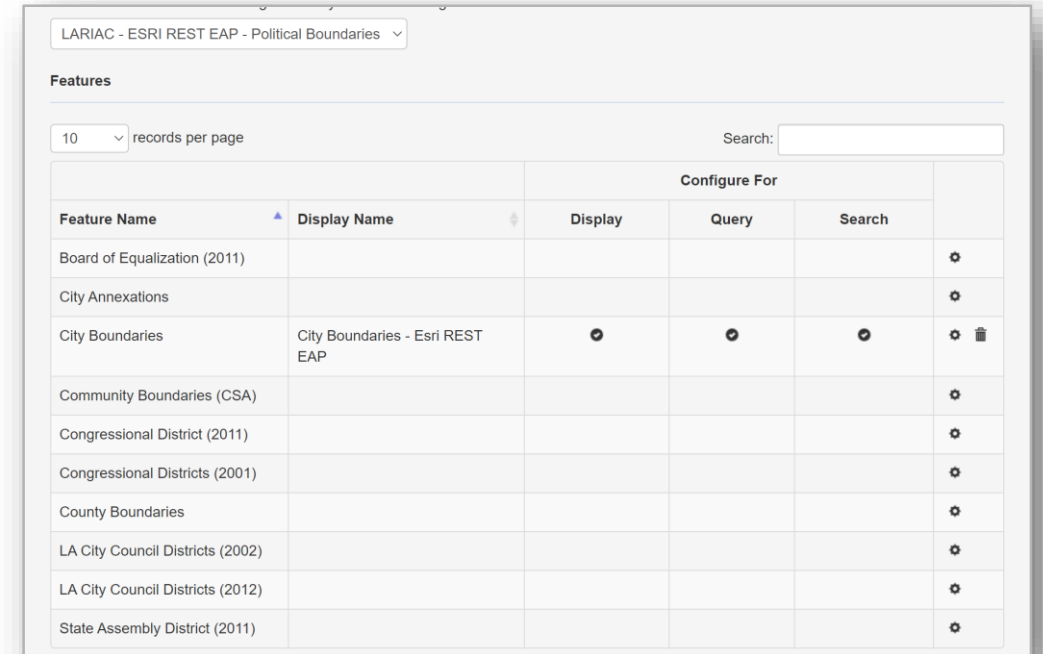
- The primary use is for the public to know their zoning, in addition to wealth of information, GIS layers and links to other pieces of data regarding their parcel at their fingertips.





# REST Services in CONNECT

1. **Your layers must support simpleRenderer, which is where only one symbol can be used per layer.** Symbology based on unique values are **not** supported as of today. It is something we are aware of and plan to make available in the future.
  - a. If you're not familiar with simpleRenderer, you can check out this link: <https://developers.arcgis.com/javascript/latest/api-reference/esri-renderers-SimpleRenderer.html>
2. Layers need to have the “query” capability on in ArcGIS Server Manager.
3. The REST service must be publicly accessible.



LARIAC - ESRI REST EAP - Political Boundaries

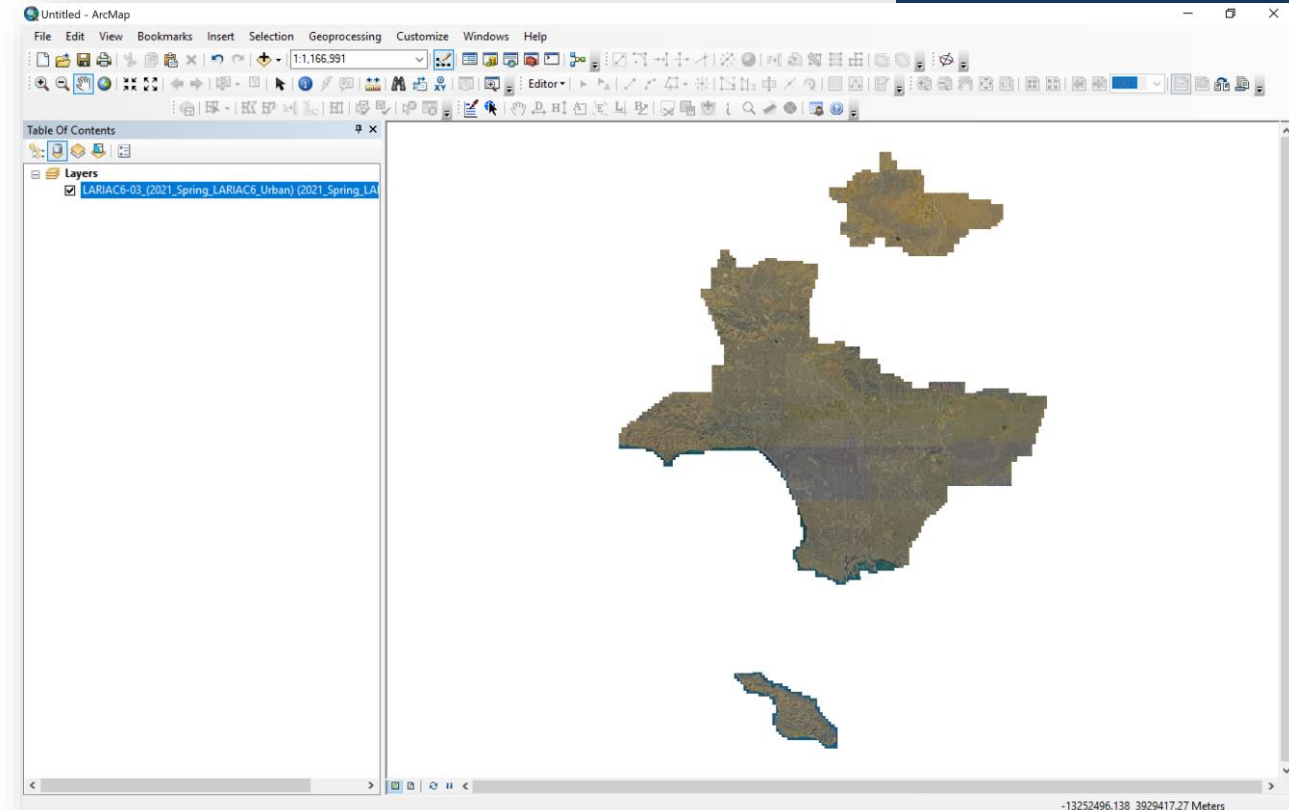
Features

10 records per page Search:

		Configure For			
Feature Name	Display Name	Display	Query	Search	
Board of Equalization (2011)					✖
City Annexations					✖
City Boundaries	City Boundaries - Esri REST EAP	✔	✔	✔	✖ 🗑
Community Boundaries (CSA)					✖
Congressional District (2011)					✖
Congressional Districts (2001)					✖
County Boundaries					✖
LA City Council Districts (2002)					✖
LA City Council Districts (2012)					✖
State Assembly District (2011)					✖

# Image Service

- **WMS, WMTS and TMS supported**
- **Hosted, stored and managed by EagleView**
- **Imagery back to FALL 2014**



# Image Service – WMTS vs WMS

- **WMTS (Recommended)**

- Cached at specific levels on client side and prerendered on server side
- Delivers tiles at each request
- Loads quicker and uses less bandwidth























- **WMS**

- Cached at specific levels on client side
- Delivers individual images at each request
- Can take longer to load and uses more bandwidth



# Image Service

## Naming Conventions

Contents Preview Description		
Name		Type
 CALOSA092_OM (2021 Pictometry Mosaic)		WMTS Layer
 CALOSA093_OM (2021 Pictometry Mosaic)		WMTS Layer
 CALOSA094_OM (2021 Pictometry Mosaic)		WMTS Layer
 CALOSA095_OM (2021 Pictometry Mosaic)		WMTS Layer
 CALOSA096_OM (2021 Pictometry Mosaic)		WMTS Layer
 CALOSA097_OM (2021 Pictometry Mosaic)		WMTS Layer
 CALOSA098_OM (2021 Pictometry Mosaic)		WMTS Layer
 CALOSA099_OM (2021 Pictometry Mosaic)		WMTS Layer
 LARIAC4-01 (2014_Winter_LARIAC4_Countywide)		WMTS Layer
 LARIAC5-01-OLD (2017_Winter_LARIAC5_Countywide)		WMTS Layer
 LARIAC5-01 (2017_Winter_LARIAC5_Countywide)		WMTS Layer
 LARIAC5-02-OLD (2018_Winter_LARIAC5_Woolsey_Fire)		WMTS Layer
 LARIAC5-02 (2018_Winter_LARIAC5_Woolsey_Fire)		WMTS Layer
 LARIAC5-03-OLD (2019_Spring_LARIAC5_Urban)		WMTS Layer
 LARIAC5-03 (2019_Spring_LARIAC5_Urban)		WMTS Layer
 LARIAC5-04 (2019_Fall_LARIAC5_Urban)		WMTS Layer
 LARIAC5-05 (2019_Fall_LARIAC5_Fires)		WMTS Layer
 LARIAC6-01-4in (2020_Winter_LARIAC6_4in_Preliminary)		WMTS Layer
 LARIAC6-01 (2020_Winter_LARIAC6_Countywide)		WMTS Layer
 LARIAC6-01_Old (2020_Winter_LARIAC6_Countywide)		WMTS Layer
 LARIAC6-02 (2020_Seasonal_LARIAC6_Fires)		WMTS Layer
 LARIAC6-03 (2021_Spring_LARIAC6_Urban)		WMTS Layer



Questions?