



County of Los Angeles  
Enterprise Geographic Information Systems (eGIS) Program

# LA County GIS Viewer

## Class 1: Introduction to the LA County GIS Viewer

Internal Services Division - Christine Lam  
November 2012

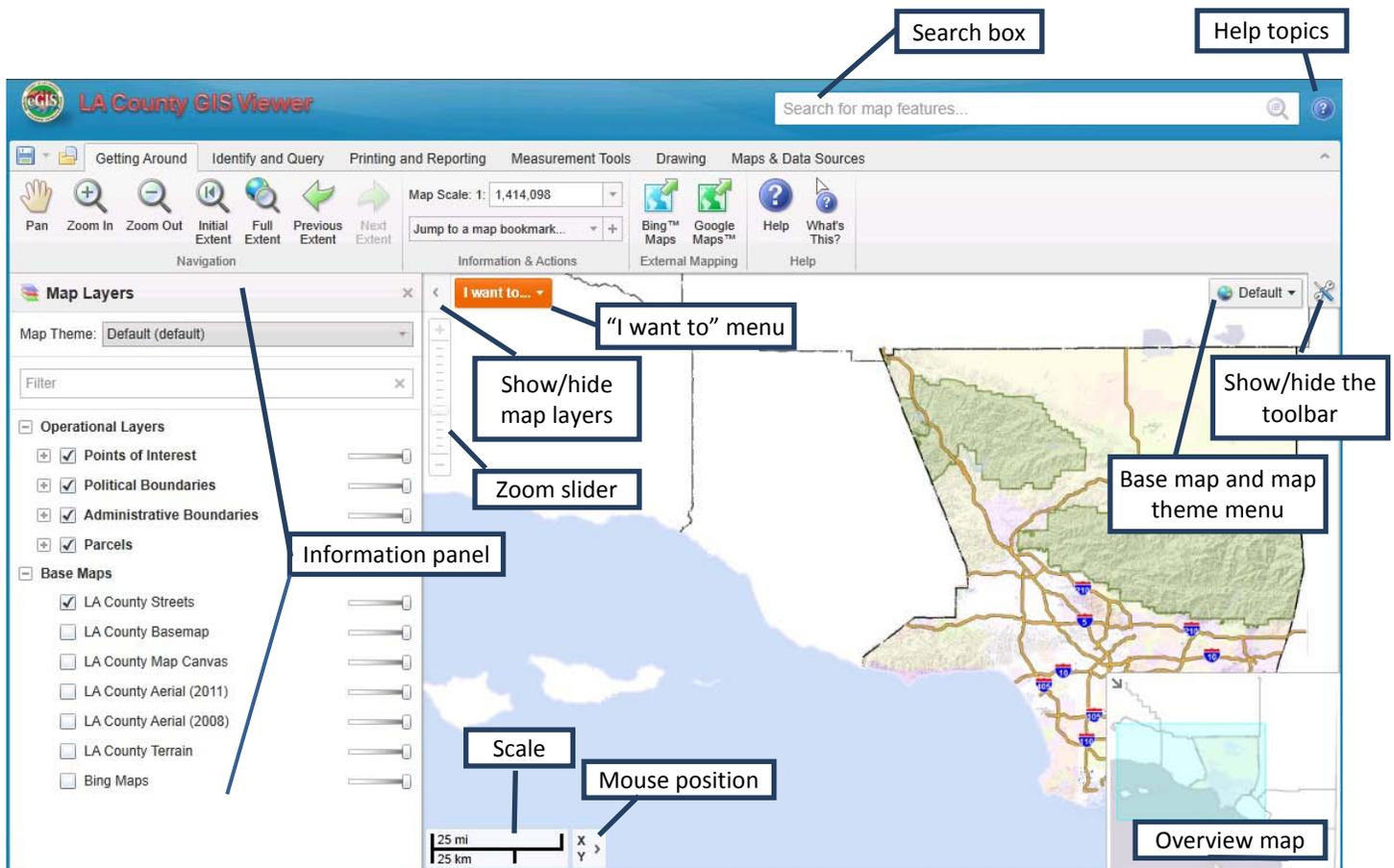
Creation Date: November 5, 2012  
Last Updated: November 8, 2012  
Version 1.0

## 1. Introduction

The LA County GIS Viewer was created by the Chief Information Office and the Internal Services Division Enterprise Geographic Information Systems (eGIS) Program. The objective of the GIS Viewer is to enable wide access to the County's authoritative GIS data through a powerful set of web-based GIS tools. Anyone can use them to explore geographic phenomena, perform basic spatial analysis, and create custom maps and reports. The best part of the GIS Viewer is that it is free! All you need is a web browser. If you have previously used Esri ArcMap or any other GIS software, then this GIS Viewer should be relatively easy to use and navigate. If you are a new or novice user of GIS, then this document will serve you quite well.

## 2. LA County GIS Viewer Layout

Launch an internet browser, type in the following URL address, and your GIS Viewer will load in a few seconds - <http://gis.lacounty.gov/gisviewer>. It may take some time because there are many layers of information being loaded.



*Note: Changes are occasionally made to the GIS Viewer interface so it may appear differently here.*



Here is a brief description of the navigation features in the main screen of the GIS Viewer:

**“I want to...” menu:** A menu of shortcuts to frequently-used tools.

**Show/hide map layers:** When you chose to show layers, an information panel appears where you can select different layers to hide/show on the map and also adjust their transparency levels.

**Zoom slider:** Use this slider to zoom in or out on the map by clicking the + or - or by dragging the marker up and down.

**Search box:** You can type in the name of a feature to search for it on the map.

**Help topics:** Takes you to the Geocortex Viewer for Silverlight Help interface

**Show/hide toolbar:** Shows or hides the toolbar when clicked.

**Base map and map theme menu:** This menu lists the Base Maps and any Layer Themes

**Information panel:** This interactive panel allows you to manipulate (i.e. hide or show) different layers, adjust the layer’s transparency, etc. and the panel displays results upon using the Identify tool or performing a search

**Scale:** The current scale of the map.

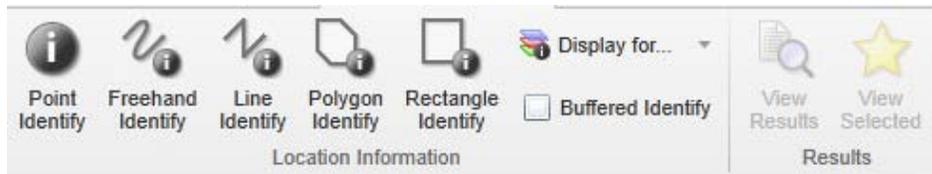
**Mouse position:** The position (co-ordinates) of the computer cursor on the current map. To hide the mouse position, click the small arrow on the right.

**Overview map:** Displays a thumbnail of the whole map with the current view shown as a small square on the map.

The toolbar contains many tools and they are grouped into tabs by their functions. The default tab that appears is the [Getting Around tab](#):



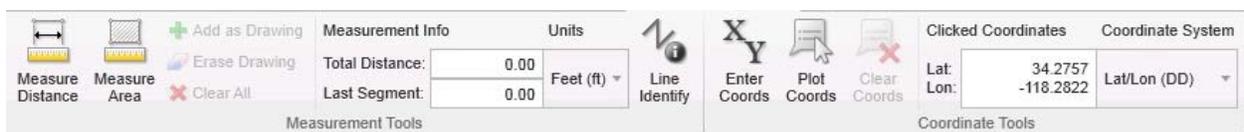
**Identify and Query tab:**



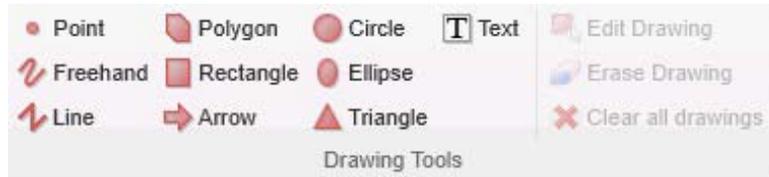
**Printing and Reporting tab:**



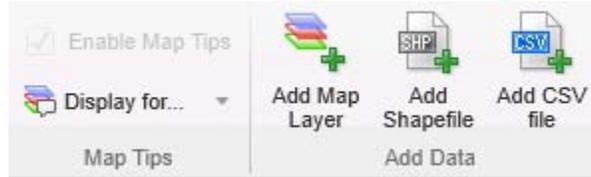
**Measurement Tools tab:**



### Drawing tab:



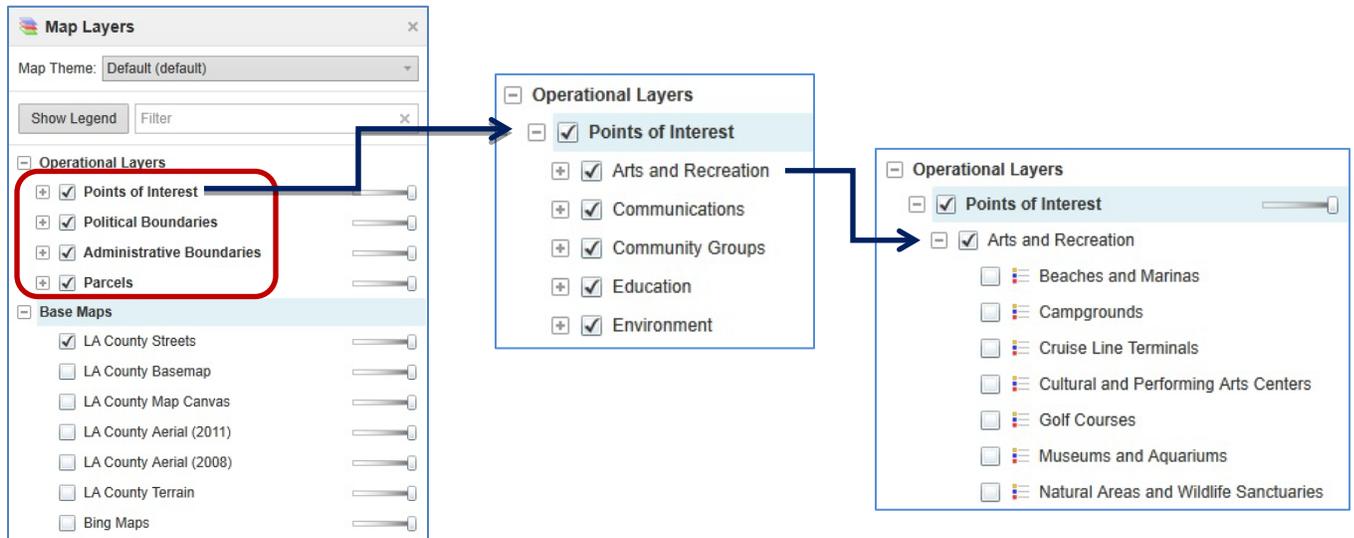
### Maps & Data Sources tab:



## 2. Navigating the GIS Viewer

### 2.1 Map themes and layers

Map themes are customized maps that emphasize a particular theme or a special topic. The GIS Viewer opens up to the “Default” map theme which consists of popularly “searched for” datasets within the County and are categorized into four group layers: Points of interest, Political Boundaries, Administrative Boundaries, and Parcels. These four group layers may further be divided into sub-categories and then you will see the individual map layers (Beaches and Marinas, Campgrounds, etc.)

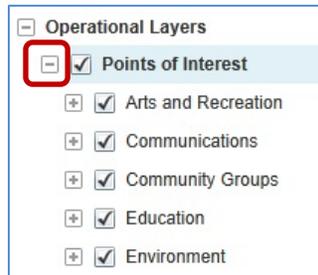


Each map layer is used to display and interact with a specific GIS dataset. The layer references the data stored in our server and we have customized the data to display in its most meaningful way for our users.

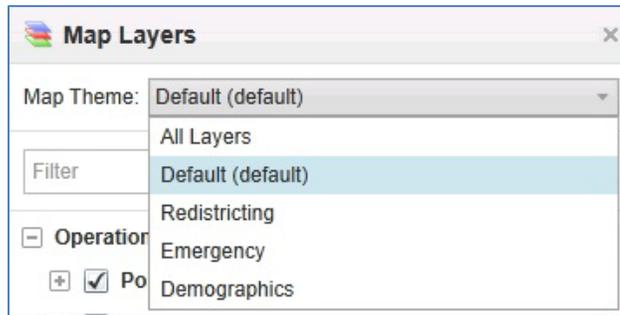
To expand a group layer, click on the Plus icon to the left of its name.



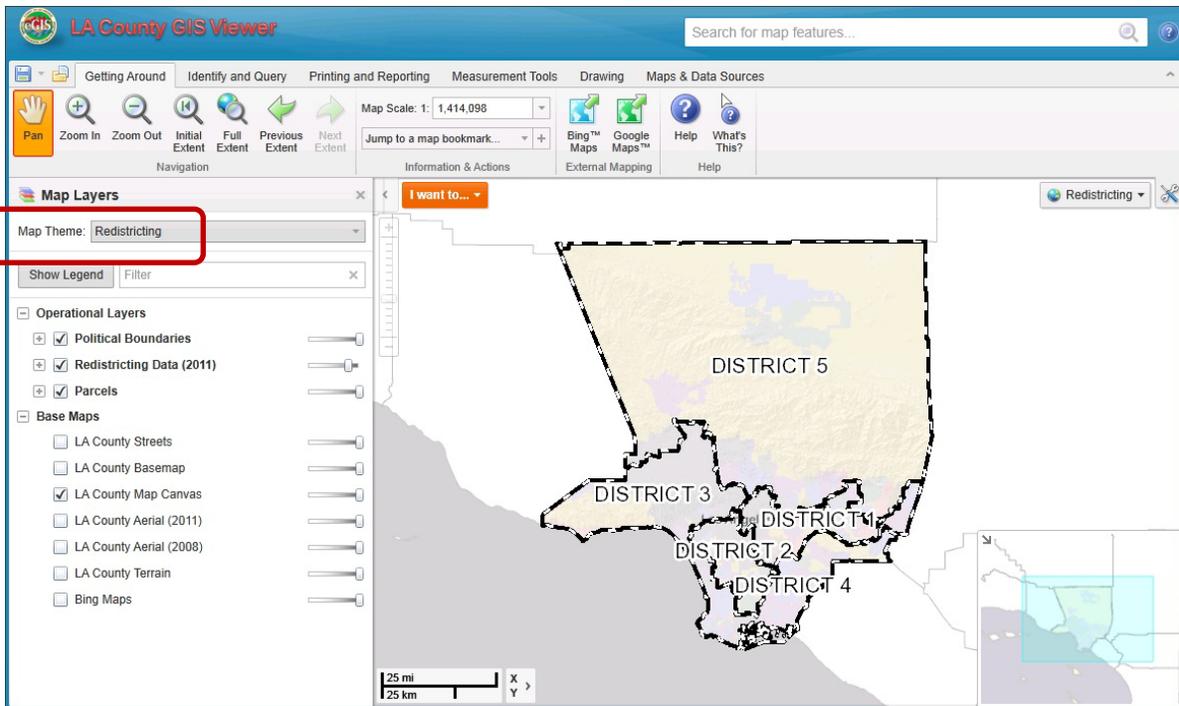
To collapse the group layer, click on the Minus sign.



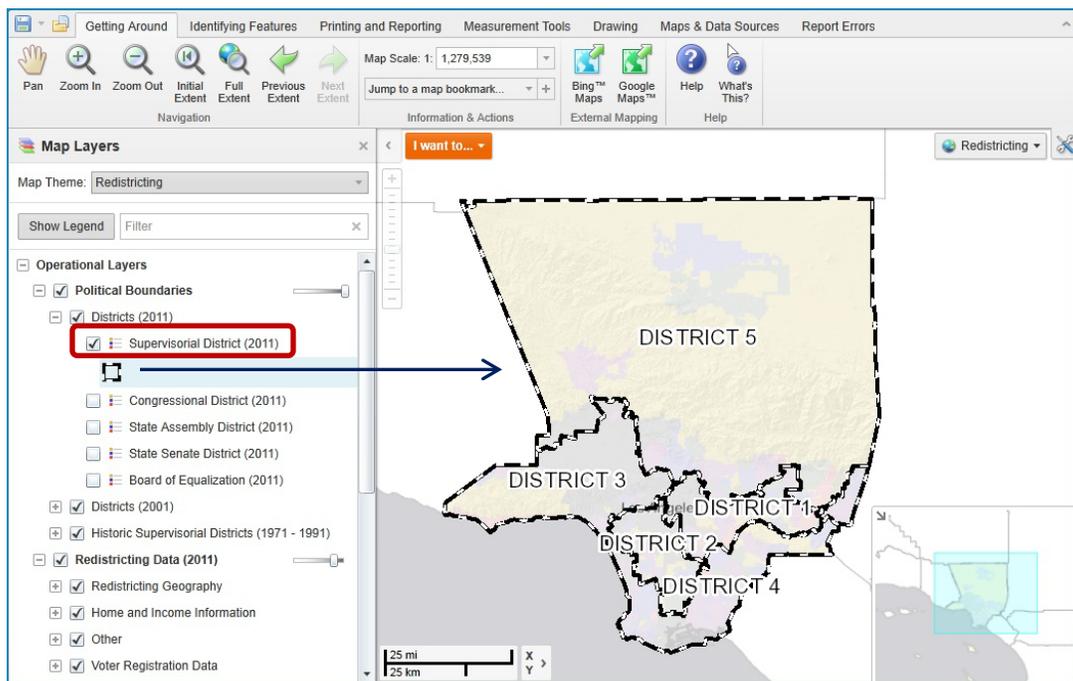
A few map themes have already been created for you to use. When you select a theme (e.g. Redistricting), map layers will subsequently turn off and on by themselves and the map will refresh itself on the right-hand side.



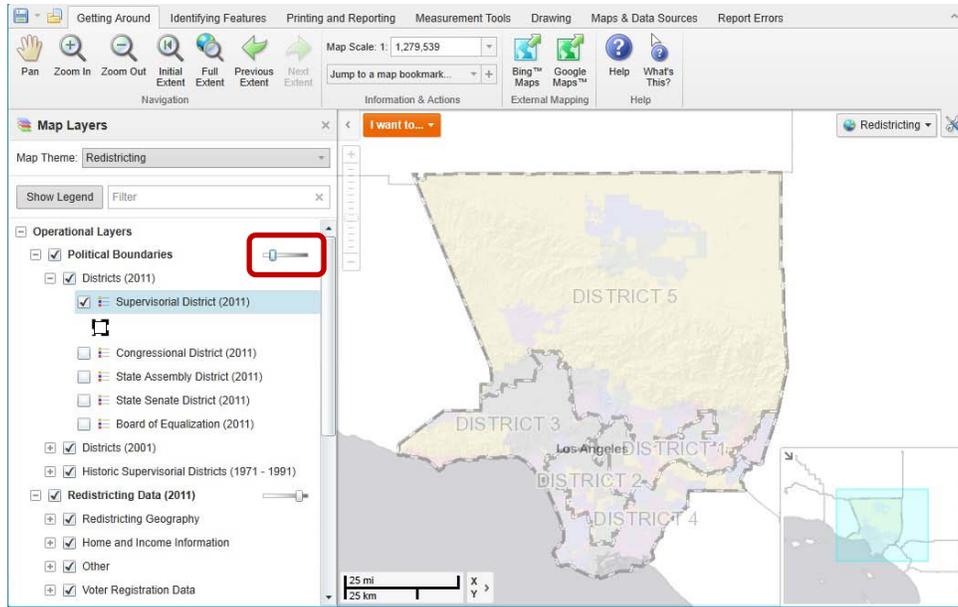
Select "Redistricting" and a new map will appear that displays the 2011 Supervisorial District boundaries and their labels (see figure on next page).



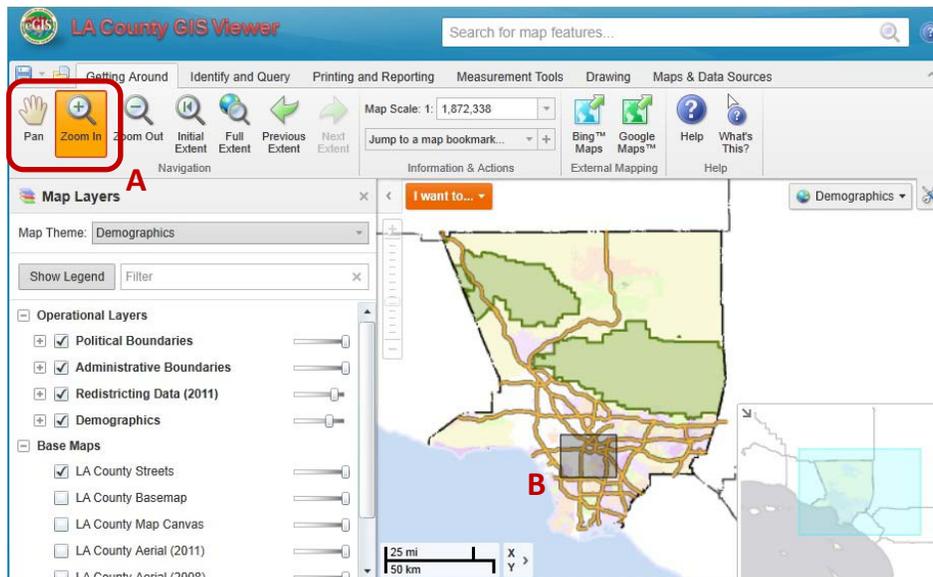
How did I know that the boundaries refer to the 2011 Supervisorial Districts? Again, a single map typically contains many layers, and the layers are organized into groups that you can collapse and expand. Beside each layer or layer group, there is a checkbox that is used to turn a layer on  or off . After I have expanded Political Boundaries and then Districts, the Supervisorial District (2011) layer is "on" and its legend symbol (i.e. alternating black and white lines) matches to what is being displayed on the map.



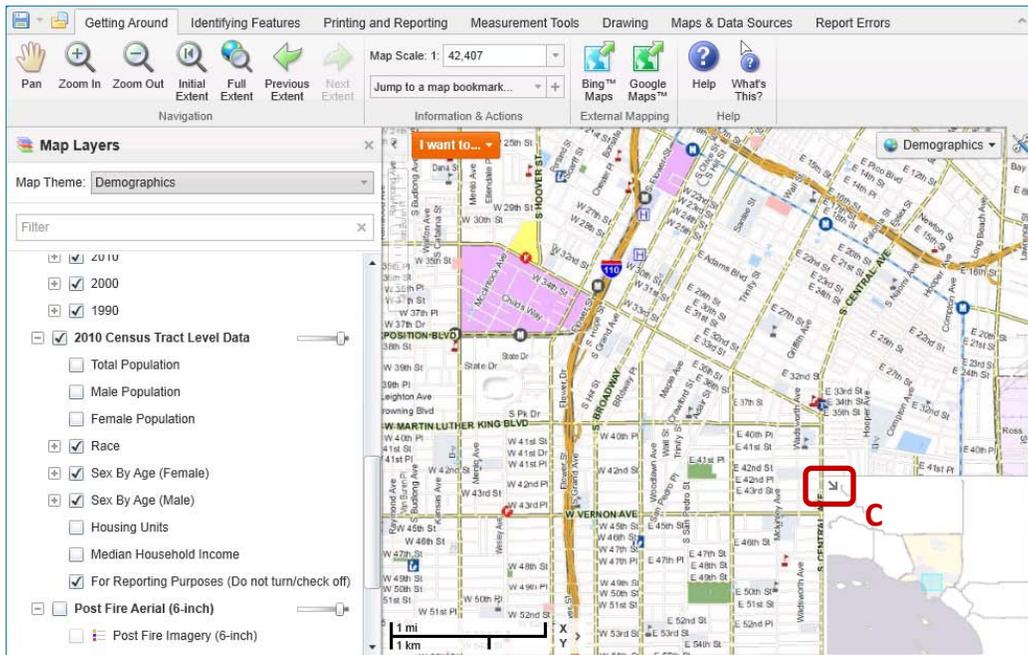
The group layers can be set to display at some percentage of transparency. The transparency slider  allows you to set the transparency level of each map layer. This allows the features beneath them to be visible while seeing the partially transparent features as well. Move the bar on the transparency slider to see the effects.



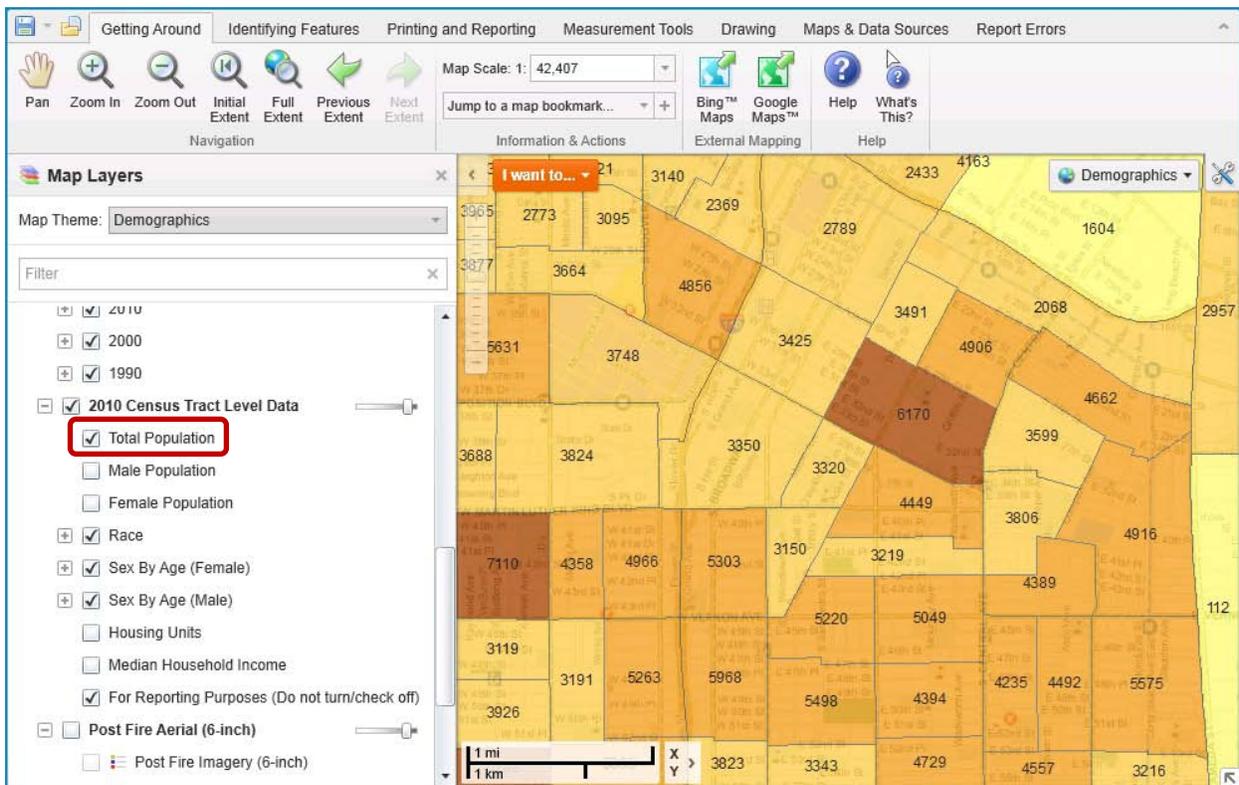
Switch your map theme to “Demographics”. Use the tools in the “Getting Around” tab to pan and/or zoom into a location of your choice (see label A). When using the “Zoom In” tool, you will draw a box by clicking and dragging your mouse. Once you left-click on an area of the map, don’t let go of the mouse button. When you move or drag your mouse, a box automatically forms for you (see label B). Release the button of your mouse when you are satisfied with the box you have drawn and the map will refresh itself.



Minimize the overview map by clicking on the arrow (see label C).



Then scroll down the map layers to “2010 Census Tract Level Data” and turn on “Total Population.”



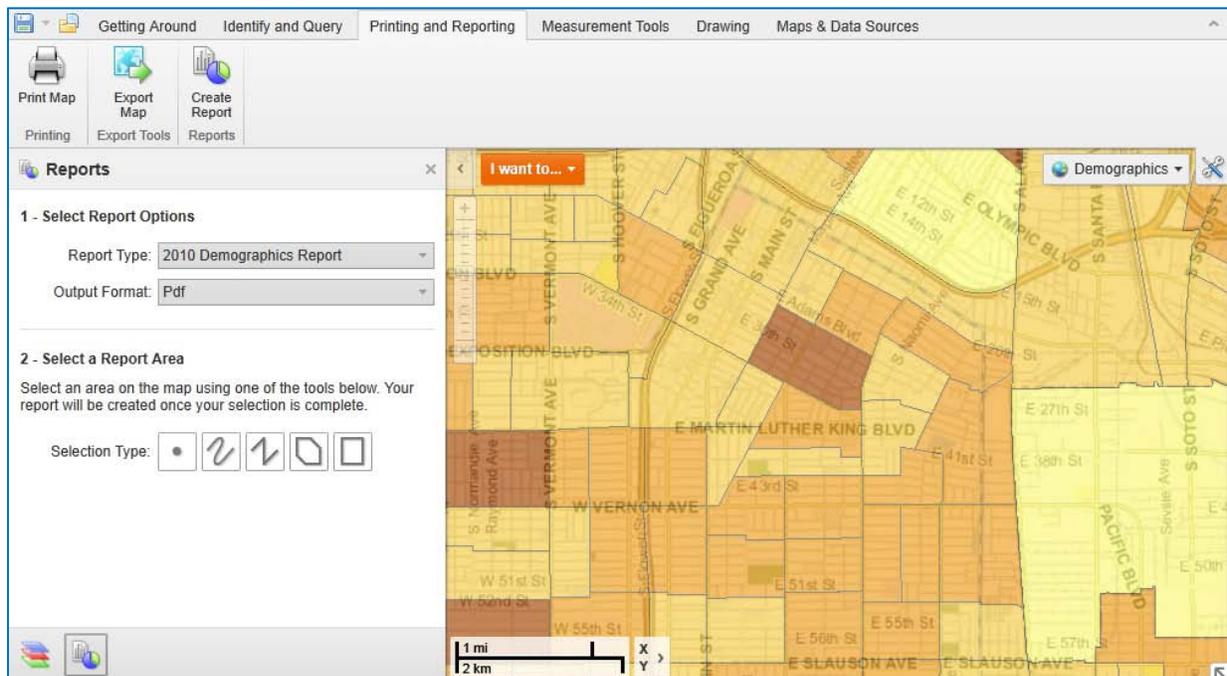
The numbers inside each census tract represent the total population or number of persons. The labeling for this layer is set to appear if you are zoomed in more than themap scale threshold of 1:50,000. In GIS context, a larger scale means that we are zooming in to an area in order to display more detail.

The color gradient (symbology) for this layer, from white to dark brown, has been created for you and you are not able to modify the colors. White census tracts signify no population while darker colors represent higher populations.

## 2.2 Create a Report

You may instantly create a 2010 Demographic Report based on the census tract(s) that you are interested in. Click on the “Printing and Reporting tab” and then click on “Create Report”.

Under Step #2 “Select a Report Area,” choose a selection type. If you choose the dot, then you can only select one census tract. The remaining four options allow you to select multiple census tracts from either drawing a line or a polygon. Choose a method of your choice for selecting your census tract(s).



The census tract(s) that you selected are highlighted in a bright yellow. Click on the “Download Report” button. The report not only lists the total population numbers of the census tract(s) but the report also includes Male Population, Female Population, Sex by Age, Race, Housing Units, Occupancy Status, Tenure, Household Size, and the Average Median Household Income (see figure on next page).

## 2010 Census Tracts Summary Report

This report summarizes the demographic characteristics of the census tract(s) you have selected from the LA County GIS Viewer.  
Data source: U.S. Bureau of the Census, Census 2010

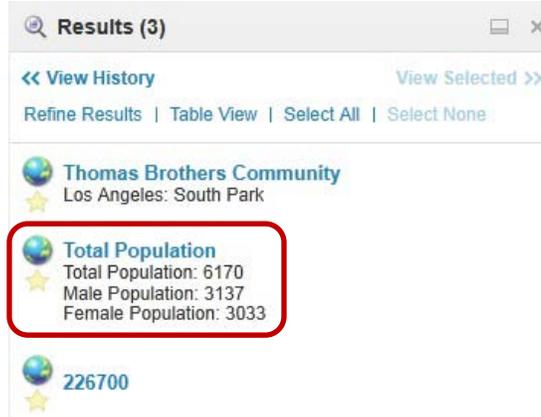


Subject	Number	Subject	Number
<b>Total Population:</b>	6,670	<b>Race</b>	
<b>Sex by Age</b>		White alone	2,199
Male	3,459	Black or African American alone	937
Under 5 years	277	American Indian and Alaska Native alone	139
5 to 9 years	268	Asian Alone	61
10 to 14 years	305	Native Hawaiian and Other Pacific Islander alone	4
15 to 17 years	189	Some Other Race alone	3,007
18 and 19 years	114	Two or More Races	323
20 years	40	<b>Hispanic or Latino Origin by Race</b>	
21 years	61	Not Hispanic or Latino	1,194
22 to 24 years	169	White alone	168
25 to 29 years	306	Black or African American alone	877
30 to 34 years	326	American Indian and Alaska Native alone	28
35 to 39 years	280	Asian Alone	48
40 to 44 years	261	Native Hawaiian and Other Pacific Islander alone	3
45 to 49 years	240	Some Other Race alone	22
50 to 54 years	215	Two or More Races	48
55 to 59 years	162	Hispanic or Latino	5,476
60 and 61 years	40	White alone	2,031
62 to 64 years	60	Black or African American alone	60
65 and 66 years	32	American Indian and Alaska Native alone	111
67 to 69 years	22	Asian Alone	13
70 to 74 years	39	Native Hawaiian and Other Pacific Islander alone	1
75 to 79 years	29	Some Other Race alone	2,985
80 to 84 years	12	Two or More Races	275
85 years and over	12	<b>Housing Units</b>	
Female	3,211	Total	1,434
Under 5 years	278	<b>Occupancy Status</b>	
5 to 9 years	279	Occupied	1,356
10 to 14 years	270	Vacant	78
15 to 17 years	187	<b>Tenure</b>	
18 and 19 years	126	Owned with a mortgage or a loan	239
20 years	46	Owned free and clear	45
21 years	62	Renter-occupied	1,072
22 to 24 years	167	<b>Household Size</b>	
25 to 29 years	256	1-person household	163
30 to 34 years	258	2-person household	212
35 to 39 years	239	3-person household	195
40 to 44 years	214	4-person household	212
45 to 49 years	218	5-person household	206
50 to 54 years	197	6-person household	149
55 to 59 years	160	7-or-more-person household	219
60 and 61 years	51	<b>Average Median Household Income</b>	\$27,350
62 to 64 years	51		
65 and 66 years	20		
67 to 69 years	25		
70 to 74 years	29		
75 to 79 years	38		
80 to 84 years	12		
85 years and over	28		

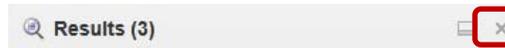
### 3. Essential Functions

#### 3.1 Identify

Keep the “Total Populations” layer displayed on the viewer but zoom out until you no longer see the population values. Go to the “Identify and Query” tab and click on the “Point Identify” tool. Use your mouse and click on a random census tract. Wait a few seconds and the Results window will appear on the left-hand side of your screen. In this instance, we want to focus on the second results on the list. The other two results that were returned are associated with the Demographic map theme.

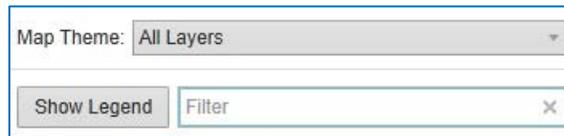


Exit the results window by clicking on the “x” located on the top right of the window.

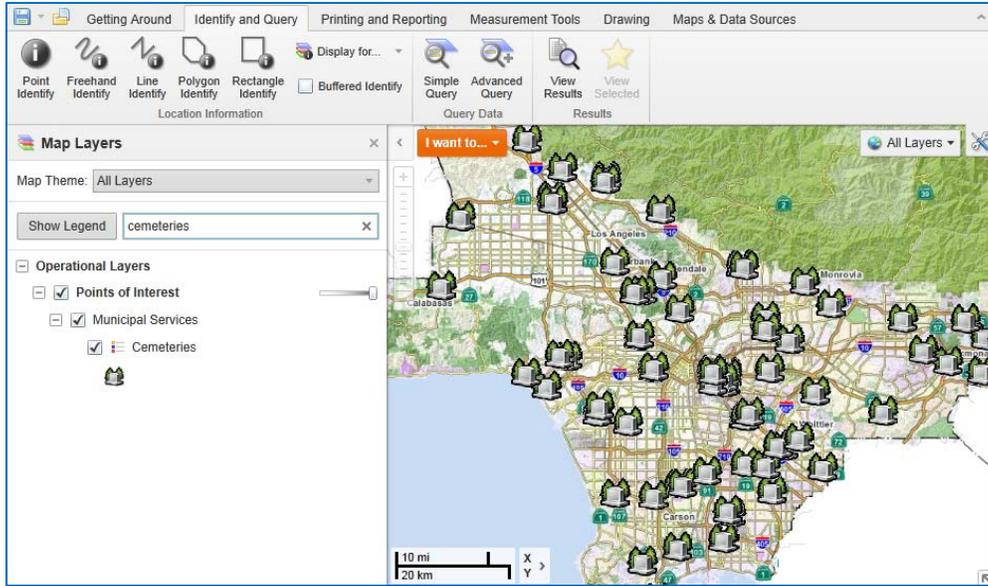


#### 3.2 Filter

There is a method to search for a dataset if you want to avoid going through all the map themes and expanding the group layers. Enter the dataset you would like to find in the “Filter” search box and change the Map Theme to “All Layers.”



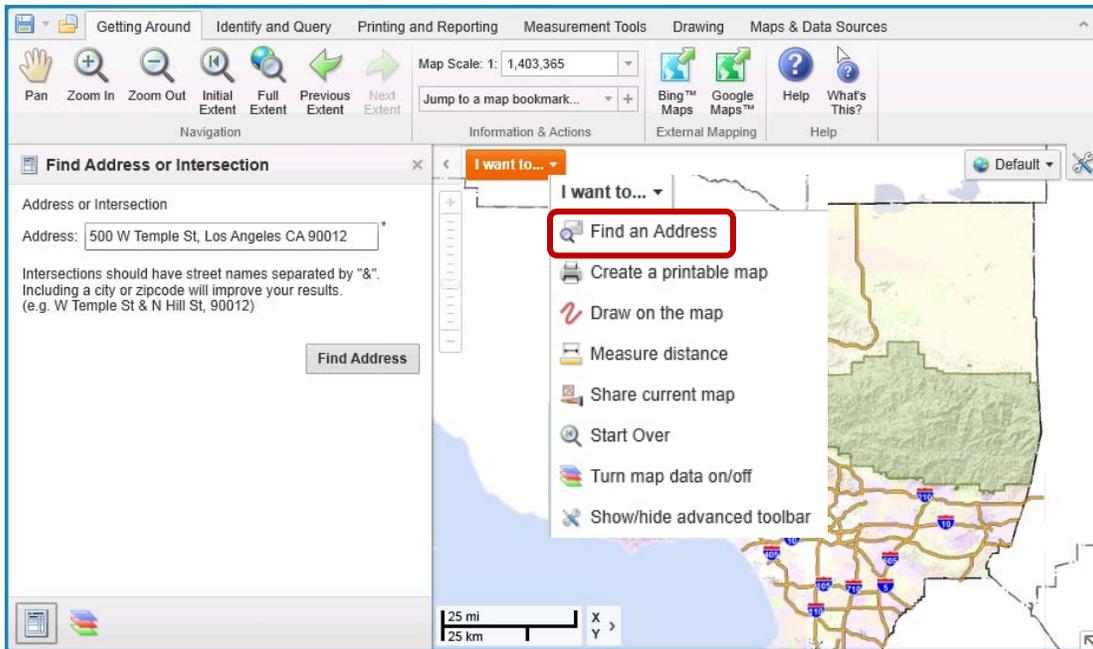
The figure below shows the results for “cemeteries” entered in the Filter search box.



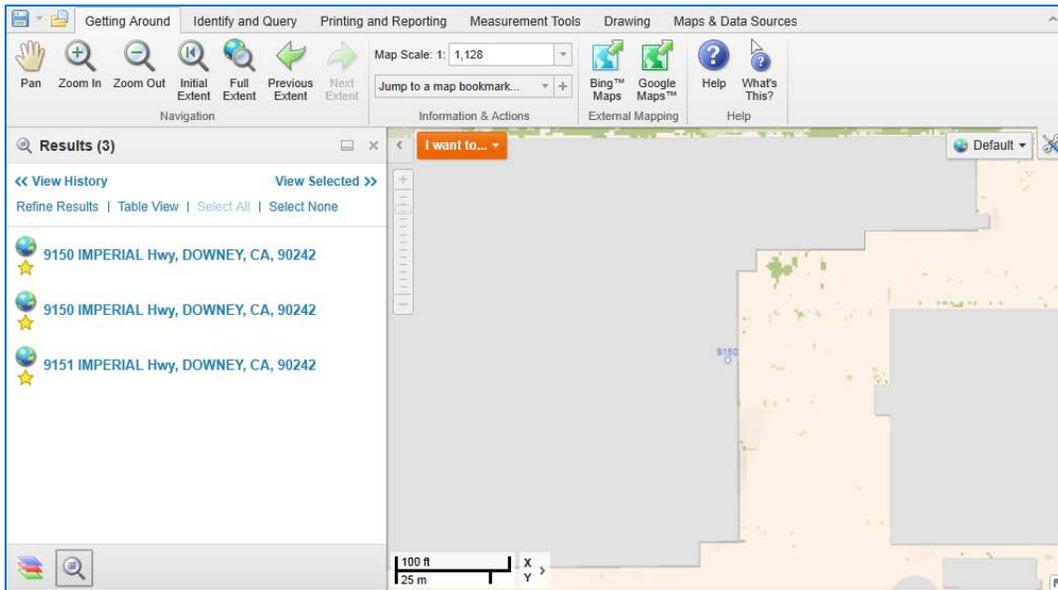
Now make sure all the layers from your search have been turned off. Alternatively, you can refresh the browser to start all over.

### 3.3 Find an Address

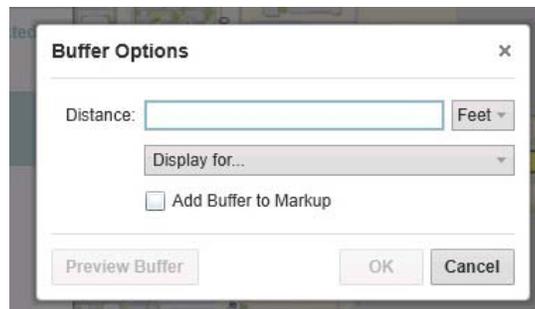
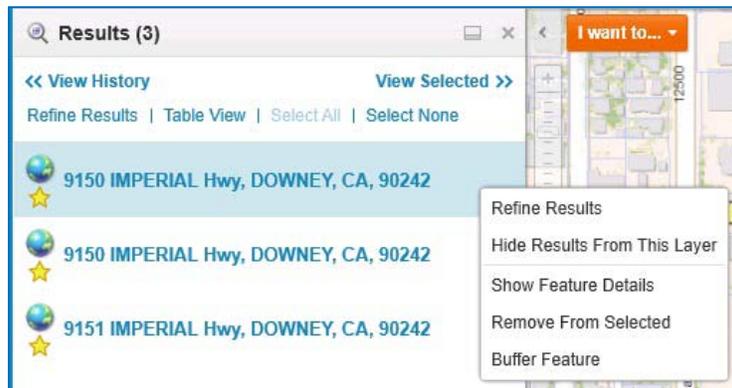
Click on the orange “I want to” button  and a menu of tools that are often used appears. Select “Find an Address.”



Replace the address with “9150 Imperial Highway, Downey” and hit Enter. The map will refresh itself and zoom into the location of your first listed result.

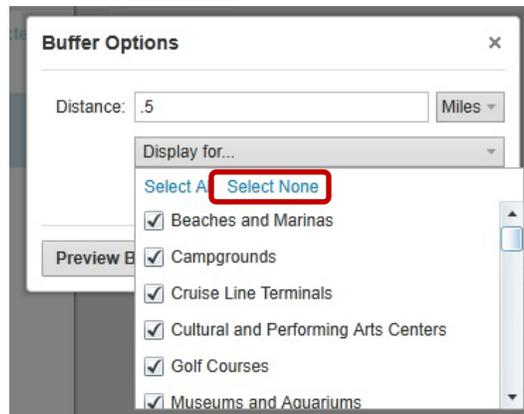


At this juncture, you may want to analyze the surrounding landscape from your current location. Specifically, you want to get a list of all the parcels within a half-mile radius of this location. **Right-click** in the blue area of the first result and select “Buffer Feature.”

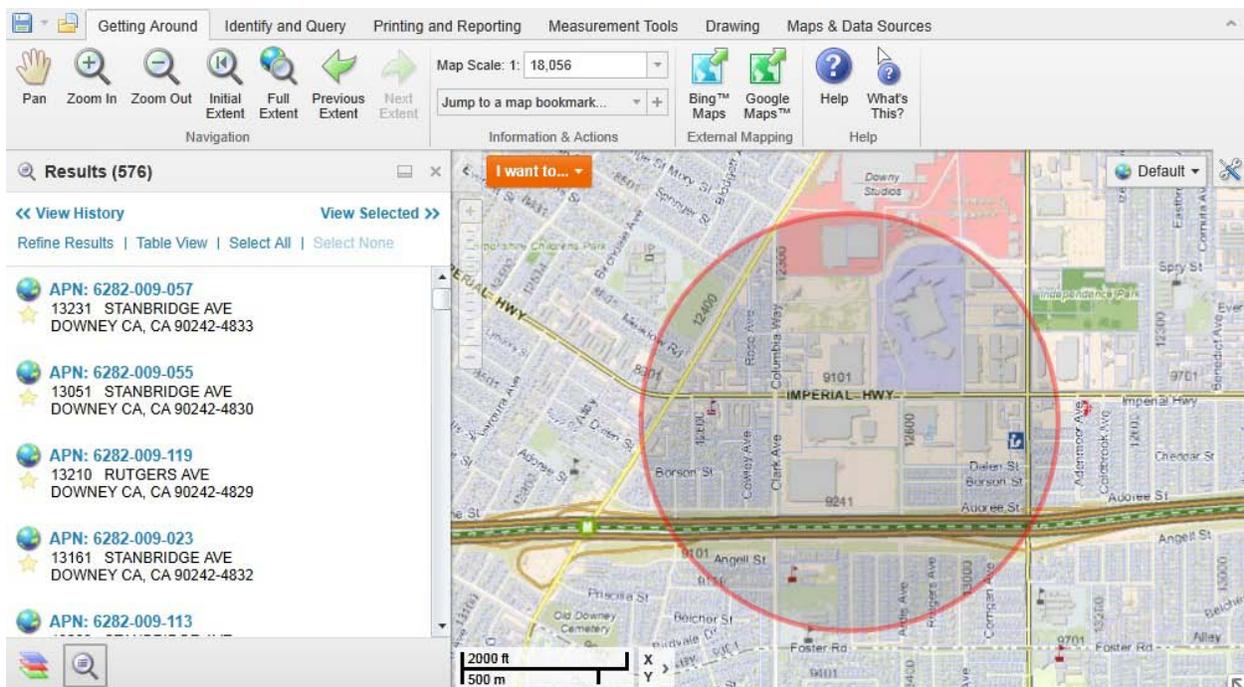


For the Distance box, enter **.5** and change the units to **Miles**. The default function will search for *everything* across all datasets that is within 0.5 miles from 9150 Imperial Highway in Downey. Click on

“Select None” under the “Display for” options. Then find and click on the box next to “Parcels” to activate it – make sure there is a check mark inside the box. Then click on the box next to “Add Buffer to Markup” – again, make sure there is a check mark inside the box.



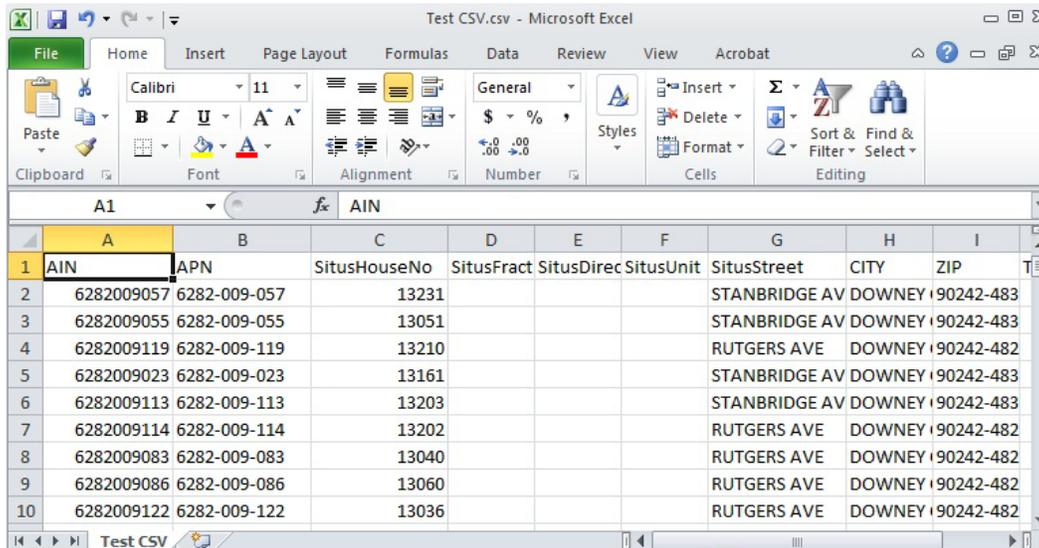
Click on the **OK** box and zoom out until you can see the buffer.



### 3.4 Share your results

#### 3.4.1 Export to Excel

You have the opportunity to export the results into a format that can be brought into Microsoft Excel. In the results window, click on “Table View” and then “Export to CSV.” Enter a file name, save it to a location of your choice, and click Save. Here is a glimpse of the Excel worksheet.



	A	B	C	D	E	F	G	H	I
1	AIN	APN	SitusHouseNo	SitusFract	SitusDirec	SitusUnit	SitusStreet	CITY	ZIP
2	6282009057	6282-009-057	13231				STANBRIDGE AV	DOWNEY	90242-483
3	6282009055	6282-009-055	13051				STANBRIDGE AV	DOWNEY	90242-483
4	6282009119	6282-009-119	13210				RUTGERS AVE	DOWNEY	90242-482
5	6282009023	6282-009-023	13161				STANBRIDGE AV	DOWNEY	90242-483
6	6282009113	6282-009-113	13203				STANBRIDGE AV	DOWNEY	90242-483
7	6282009114	6282-009-114	13202				RUTGERS AVE	DOWNEY	90242-482
8	6282009083	6282-009-083	13040				RUTGERS AVE	DOWNEY	90242-482
9	6282009086	6282-009-086	13060				RUTGERS AVE	DOWNEY	90242-482
10	6282009122	6282-009-122	13036				RUTGERS AVE	DOWNEY	90242-482

#### 3.4.2 Create a Report

A second option is to create a report listing the parcels and their attributes, similar to Section 2.2. In the Results window, click on “Reports.” Under Report Type, select “Parcel Summary Without Maps” and click on “Run Report.” Click on Download Report and a new pop-up window will appear. You may save the document as a PDF (see figure on next page).

## Summary Property Information Report

Report generated Monday, November 05, 2012 3:43 PM



### Parcel: 6262-015-016

Owner:	not available	Site Address:	9209 PRISCILLA ST, DOWNEY CA 90242-4630
Co-Owner:	not available	Mail Address:	
Transfer Date:			
Document #:			
Land Use:		Bldg SQFT:	Lot Size (sq ft): 9497
Land Value:		Units:	Lot Size (Acres): 0.22
Imp. Value:		Bedrooms:	
Total Value:		Bathrooms:	

### Parcel: 6262-015-035

Owner:	not available	Site Address:	13045 COLUMBIA WAY, DOWNEY CA 90242-2808
Co-Owner:	not available	Mail Address:	
Transfer Date:			
Document #:			
Land Use:		Bldg SQFT:	Lot Size (sq ft): 5370
Land Value:		Units:	Lot Size (Acres): 0.12
Imp. Value:		Bedrooms:	
Total Value:		Bathrooms:	

### Parcel: 6262-015-037

Owner:	not available	Site Address:	9257 PRISCILLA ST, DOWNEY CA 90242-4630
Co-Owner:	not available	Mail Address:	
Transfer Date:			
Document #:			
Land Use:		Bldg SQFT:	Lot Size (sq ft): 6980
Land Value:		Units:	Lot Size (Acres): 0.16
Imp. Value:		Bedrooms:	
Total Value:		Bathrooms:	

### 3.4.3 Print a map

I want to... ▾

Go to the **I want to...** menu and select "Create a printable map." There are a variety of options in which you can tailor your printed map. You can adjust the page layout, output format, resolution, and map scale. If you are content with the current setup, click on "Create File."

#### Create a Printable Map ✕

Select Layout:

Output Format:

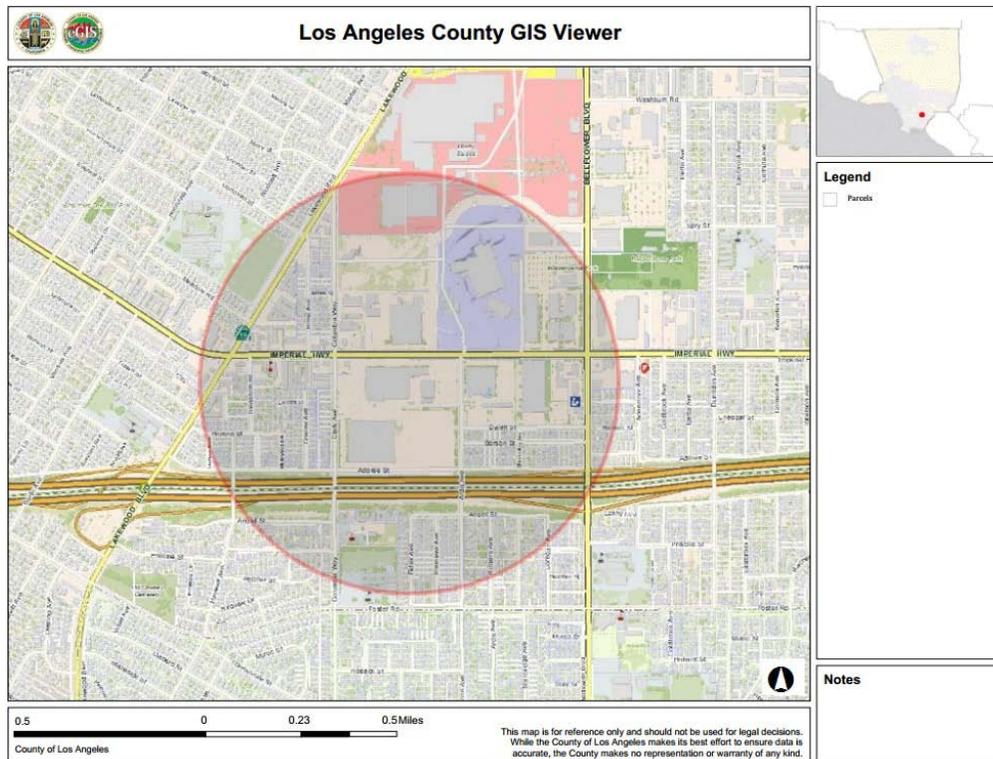
Resolution:

Map Scale:

Title:

Map Notes:





### 3.4.4 Share a map

The final option to share your results is to share your map via a web link. Click on the  menu and select “Share current map.” Click on the “Copy to Clipboard” button and paste the link in an email.

## 4. Conclusion

Now that you have an introductory knowledge of the GIS Viewer, go ahead and explore what is in your area and create your own set of maps!

If you have any comments or questions, please direct them to [eGIS@isd.lacounty.gov](mailto:eGIS@isd.lacounty.gov)

The eGIS Program will also be providing an intermediate/advanced course for the GIS Viewer, which will provide training on some of the other functions in the application. Contact the eGIS Program at the email above to be notified when these trainings are scheduled.

