

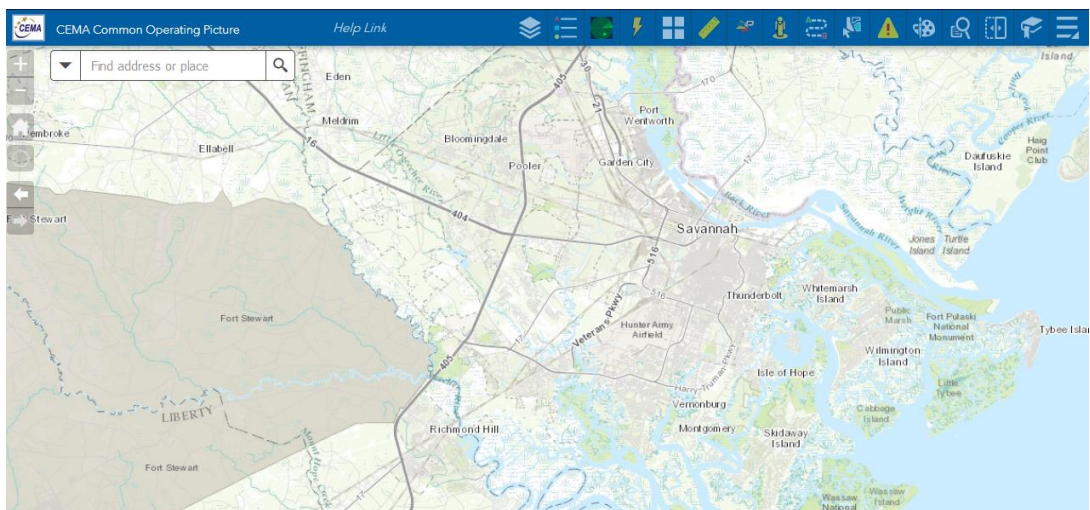


Chatham County Emergency Management

Map Viewer

User Manual

<http://sagiscloud.thempc.org/cema>



Step by step instructions for using the Chatham County Emergency Management (CEMA)

Map Viewer. Published April 28th, 2017.

Frequently Asked Questions

Layers won't turn on!

Answer: If the layer names are grey, zoom the map in more to see them. If they still do not appear, make sure the checkbox for the layer is on, as indicated by the checkbox. Layers may be inside a group; a group checkbox needs to be on in addition to any sub-layers inside of the group. Expand groups with the arrows on the left of the layer name. To see options like transparency, click the three dot option (...) menu to the right of the layer name.

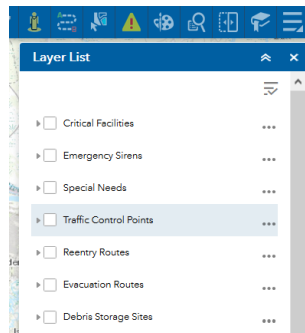
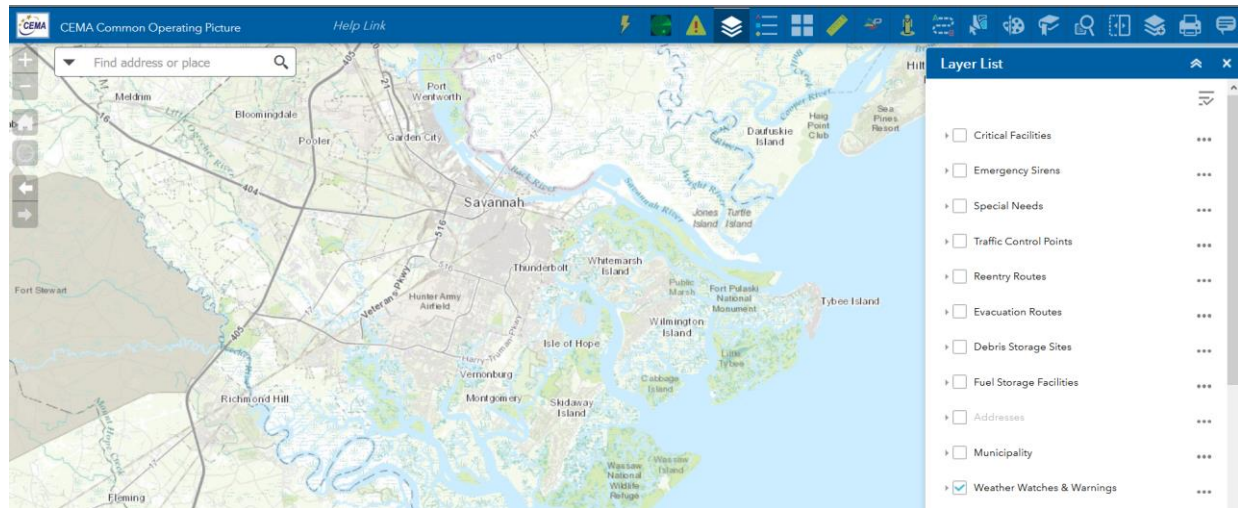


TABLE OF CONTENTS

Note: The section titles on this page are clickable hyperlinks when viewed on a computer.

1.0	Introduction	P. 4
2.0	Map Navigation	P. 5
3.0	Map Toolbar	P. 7
3.1	Weather Watches/Warnings and Radar	P. 7
3.2	Situational Awareness	P. 8
3.1	Layer List	P. 9
3.2	Basemaps and Legend	P. 11
3.3	Measure	P. 12
3.4	Streetview	P. 13
3.5	Identify by Selection	P. 15
3.6	Draw	P. 16
3.7	Bookmarks	P. 17
3.8	Filter by Layer	P. 17
3.9	Swipe	P. 17
3.10	Add Data	P. 18
3.11	Print and About	P. 19
4.0	Pictometry	P. 20
5.0	Contact Information	P. 25

1.0 INTRODUCTION

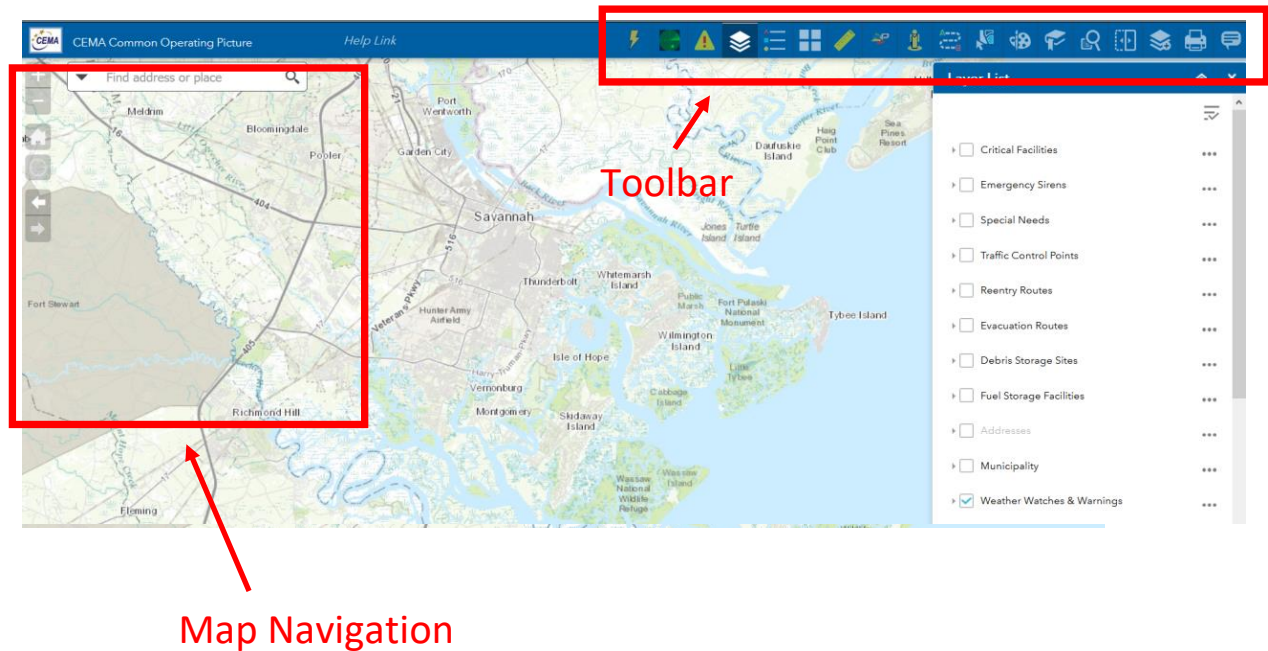


The CEMA Map Viewer is a Common Operating Picture map view for official use only (FOUO) by local emergency management professionals and associated personnel. It is applicable to property within Chatham County, Georgia. Savannah Area Geographic Information System (SAGIS) and the Metropolitan Planning Commission (MPC) makes no warranty, representation or guaranty as to the content, sequence, accuracy, timeliness or completeness of any of the database information provided herein.

As shown above, this is how the viewer appears on startup. If you encounter problems on your first use of the updated site, clear your browser cache, restart the browser and reload the website. See www.refreshyourcache.com for instructions on clearing your browser cache.

There are two main sections of the map viewer: Map Navigation and the Toolbar.

The uses pertaining to each button and tool is described in this document.



2.0 MAP NAVIGATION

When you first open the map, you can left-click the mouse and hold down, and then drag to move the map. Map navigation is similar to Google Maps and other popular map websites.

You can always zoom in and out by using your mouse's scroll wheel. Scroll up to zoom in. Scroll down to zoom out. Use the + / - buttons as described below.



Zoom In

Click the Zoom In Tool to zoom the map in one level.



Zoom Out

Click the Zoom Out Tool to zoom the map out one level.



Zoom Previous

Click the Zoom Previous button to return to the last area of the map displayed. This can be repeated multiple times. If there is no previous area available, nothing will happen. The map area displayed on screen is referred to as the map extent in GIS.



Zoom Next

Click the Zoom Next button to go to the next extent display. This is only possible if you clicked the Zoom Previous button. If there is no next extent available, nothing will happen.



Home (Zoom to whole county)

Click the Home button to return to the original extent shown at startup, which is all of Chatham County.



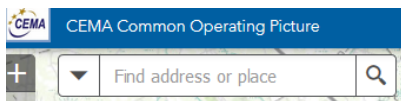
Locate

The Locate tool will locate your position on the map using any sensors available. If the site is accessed on a device with GPS like a smartphone it will ask permission to use GPS. If there is no GPS antenna, it will attempt to locate your position with the network location. This may narrow the position down to a building or a block, but may be inaccurate depending on network configuration and security.



Map Overview

The Map Overview is located in the bottom-right of the screen. It is a mini map showing a view of the area represented on the big map as the dark rectangle within the larger region. It is a quick way to see what general part of the county you are in, if, for example, the big map is zoomed in to a neighborhood or block level. Click the ↗ arrow to expand it, and when it changes to a ↖ arrow, click it again to minimize.



Address Search

Enter an address or PIN and click the magnifying glass or press the Enter key to search for an address. The top address is the closest match. Do NOT use street suffix abbreviations like “St” for street or “Rd” for road; using abbreviations incorrectly may rule out the correct address. Click an address to zoom to it. The Address Search uses the street Centerline locator and SAGIS Address Point locators to search. To use only the Master Address Database (SAGIS Address Points) locator, click the dropdown arrow by the magnifier. If no results are found with the SAGIS Address Points, use the Centerline locator. The Centerline locator is more likely to find an address, though at the cost of lower spatial accuracy in most cases, since the point will be in the street and not on the building, as it is located by street address ranging. You may also search by parcel identification number (PIN). Note most PINs have spaces, such as 2-0032 -63-001 for Forsyth Park.

3.0 MAP TOOLBAR



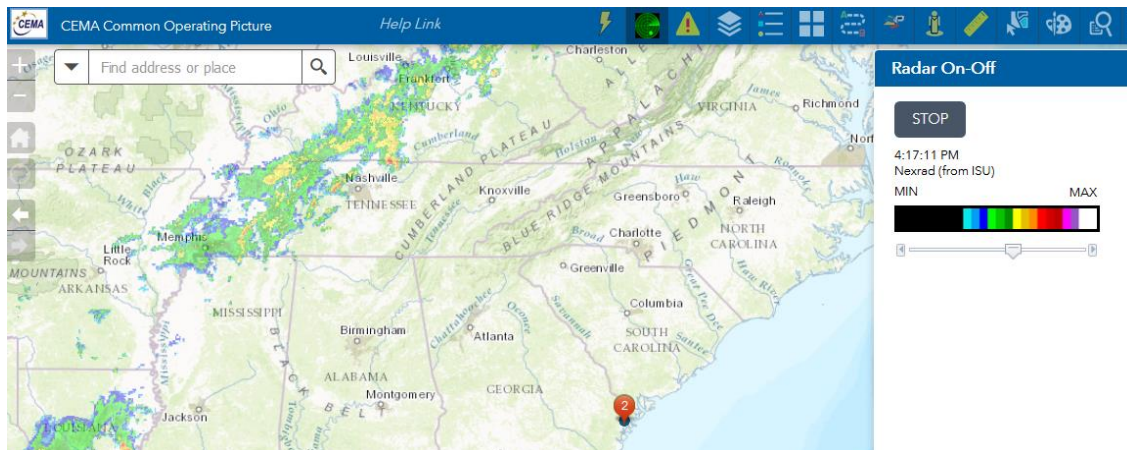
Weather Watches & Warnings

Click this tool's button to toggle visibility of National Weather Service Watches and Warnings. The layer will turn on and off in the Layer List by clicking this button to toggle visibility. This layer is already turned on by default on the map. Clicking it the first time will turn off the watch and warning layer.



Weather Radar

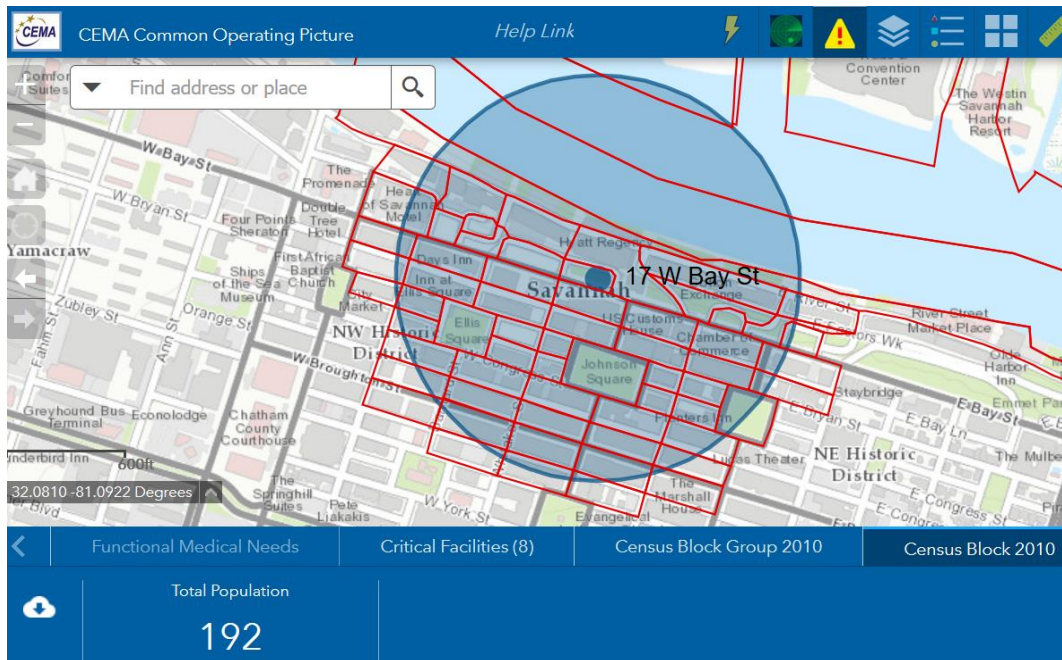
The Radar tool displays current weather radar in a moving loop. You may adjust layer transparency levels. Turn the radar on or off by clicking the tool button, and clicking it again. Closing the radar window turns off the radar layer. If interested in displaying other information underneath the radar, first turn other layers on, and then display the radar on top of other layers as the final step.





Situational Awareness

The Situational Awareness tool creates a buffer of a set distance around a point, line or polygon. The tool can then summarize information in this area. Total population (census 2010), critical facilities, and functional medical needs population are summarized. For example, if there is a hazardous material spill with a backoff distance of 1,000 feet, an emergency management specialist may use the tool to calculate the population within this distance of the release point.





Layer List

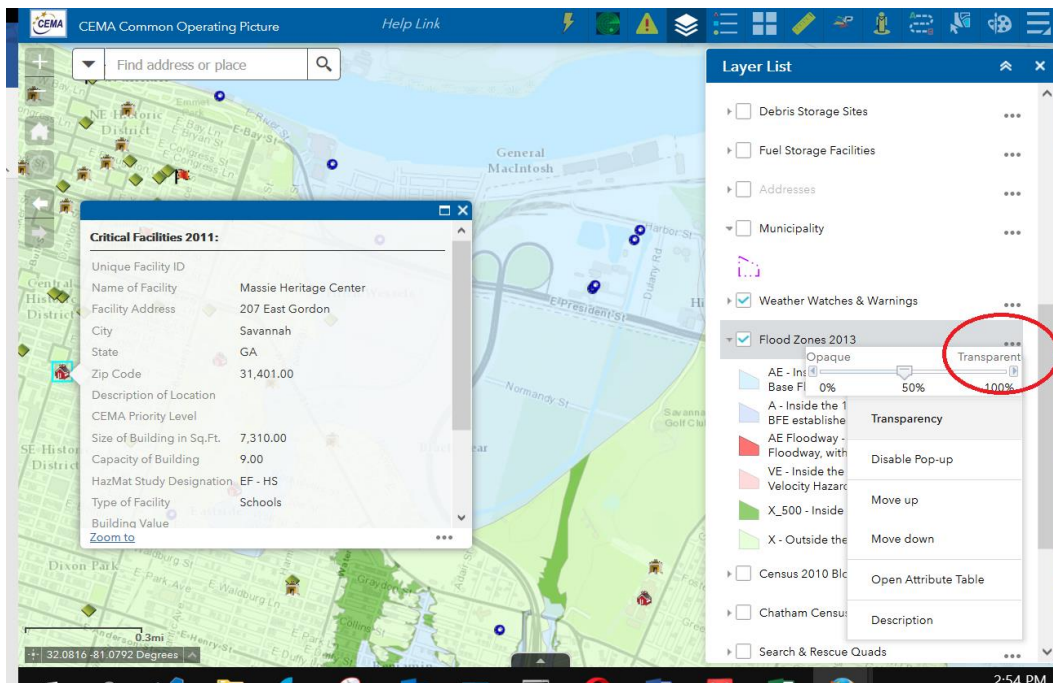
The Map Layer List allows you to **turn layers in the map on or off**. (Example: Critical Facilities) It shows a Legend and allows for adding the map layer to the Attribute Table, adjusting transparency, and other options. Click the three dot layer menu for these options (...)

The screenshot displays the CEMA Common Operating Picture interface. The top navigation bar includes the CEMA logo, the text "CEMA Common Operating Picture", a "Help Link", and various utility icons. A search bar with the placeholder "Find address or place" is located above the map. The map shows a street grid in Savannah, Georgia, with labels for streets like E Bay St, E River St, and E Congress St. A pop-up window titled "Critical Facilities 2011:" is open over a specific location. This window contains a table with the following data:

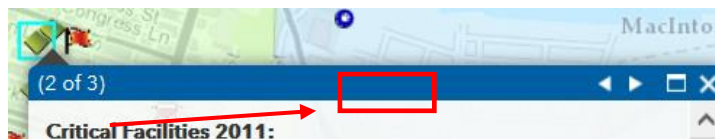
Critical Facilities 2011:	
Unique Facility ID	
Name of Facility	Massie Heritage Center
Facility Address	207 East Gordon
City	Savannah
State	GA
Zip Code	31,401.00
Description of Location	
CEMA Priority Level	
Size of Building in Sq.Ft.	7,310.00
Capacity of Building	9.00
HazMat Study Designation	EF - HS
Type of Facility	Schools
Building Value	
Zoom to	

To the right of the map is the "Layer List" panel. It contains a list of map layers with checkboxes and three-dot menus for each. The layers are:

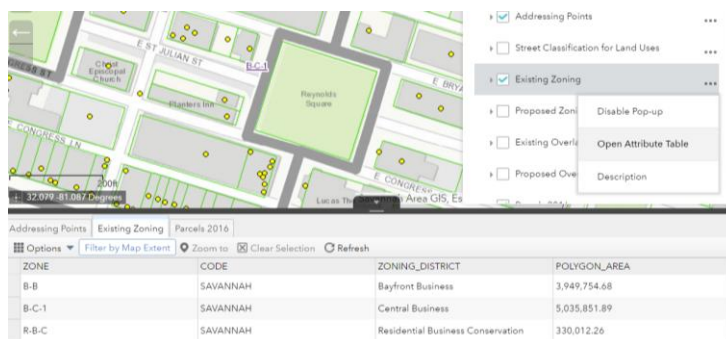
- ☒ Critical Facilities ...
- ☐ Cultural & Historical Sites
- ☐ Government Buildings
- ☐ Hazardous Material Sites
- ☐ Other
- ☐ Police, Fire & Medical Sites
- ☐ Schools
- ☐ Transportation Sites
- ☐ Vulnerable Population Sites
- ☐ Water & Sewer
- ☐ Emergency Sirens ...
- ☐ Special Needs ...
- ☒ Traffic Control Points ...
- ☐ Reentry Routes ...
- ☐ Evacuation Routes ...
- ☐ Debris Storage Sites ...



To view the attribute information popup for a feature, simply click on a feature in the map, as shown above, with the critical facilities layer. If there is more than one layer feature where you clicked, click the Next or Back arrow in the upper right:



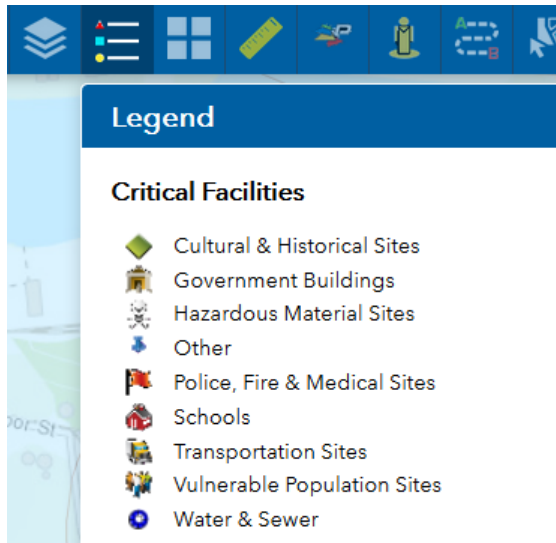
Some layers, like Weather Watches and Warnings, are already turned on by default. Certain layers, like the parcel layers, will appear only as you zoom in closer. The layer names are grey in the layer list if you are zoomed out too far for the layer to be visible. A layer's entire attribute table can viewed, as shown below, and saved as a CSV file that Excel can open. So you can, for example, view the entire parcel dataset as a table, and download it to Excel, in this manner. You can sort this table by clicking the column titles, like in Excel.





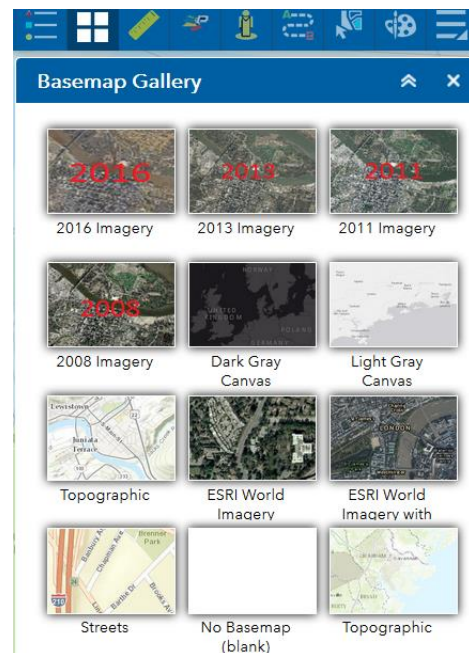
Legend

The Legend displays the legend symbology for the map layers that are visible on the map, which can be turned on or off in the Layer List as described above.



Basemaps

The Basemap menu can change the map background to a variety of basemaps provided by ESRI and the imagery datasets acquired by SAGIS. The default basemap that is on when you first open this site is the Esri Topographicbasemap. The current Esri basemaps use data submitted in 2013.





Measure

The Measure tool will measure distances and areas on the map and display them. Measure has a built-in Help. Follow the integrated prompts on the mouse tooltip for how to measure:

Measure

Select measure type

Clear

Preview

Text

Font Color

Font Size

20

Help!

Select measure tool

Preview:



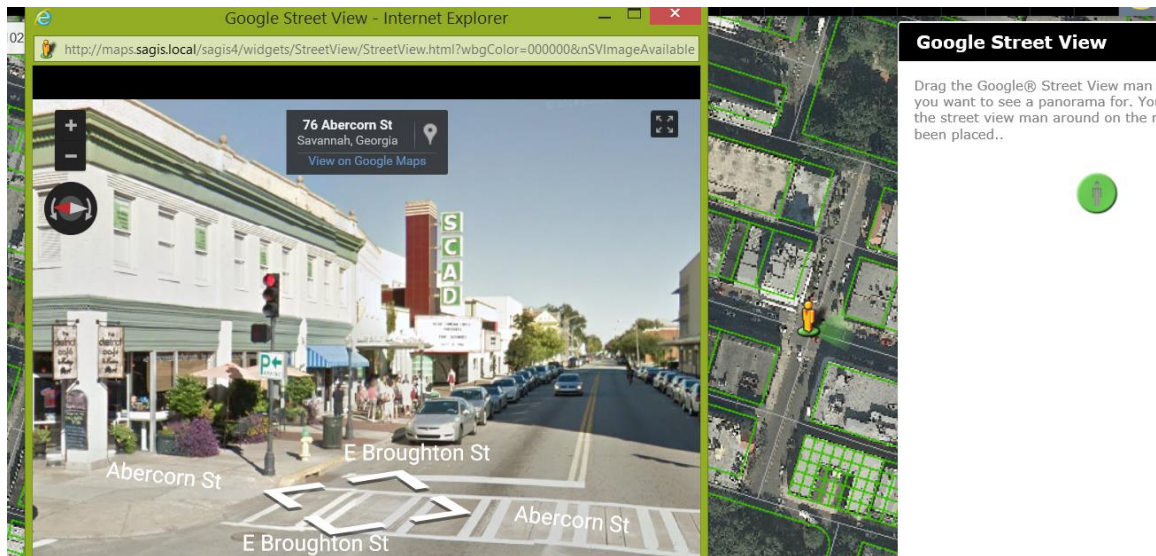
Pictometry

See the last section in this document for an extended chapter on Pictometry.



Google Streetview

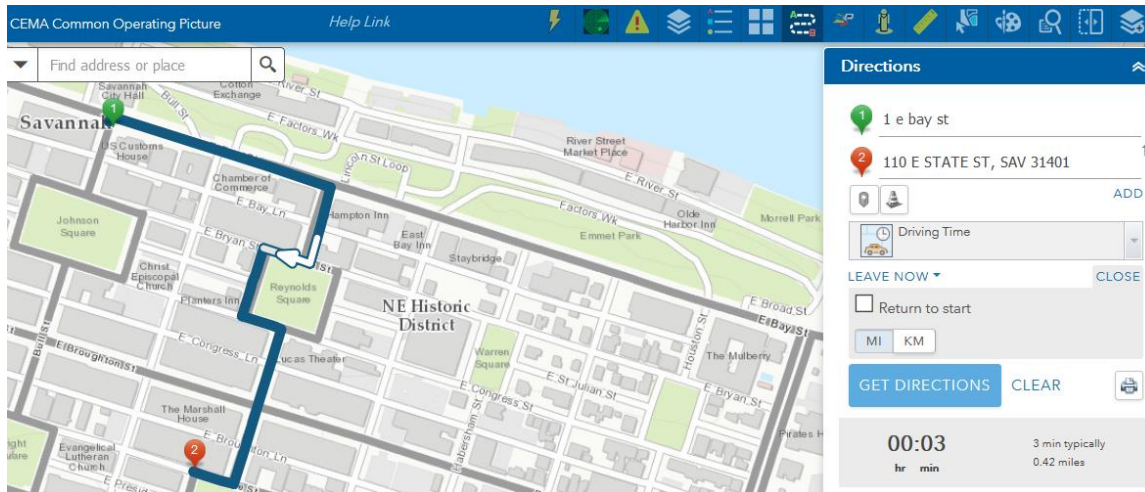
Drag the Google Streetview statue to a location on the map in a street. If there is Google Streetview coverage, the Streetview will open in a popup window. You can maximize this window. When you move the Google statue, it is synchronized with Streetview and it moves the Streetview in the window as well. Note that Google provides the Streetview. SAGIS has no control over the imagery.





Directions

The Directions tool displays directions on the map from one or more points on the map, based on an address, using SAGIS street centerline address ranges, or a location placed on the map manually by clicking with the cursor. You may calculate drive time, walk time, and other travel times and distances.

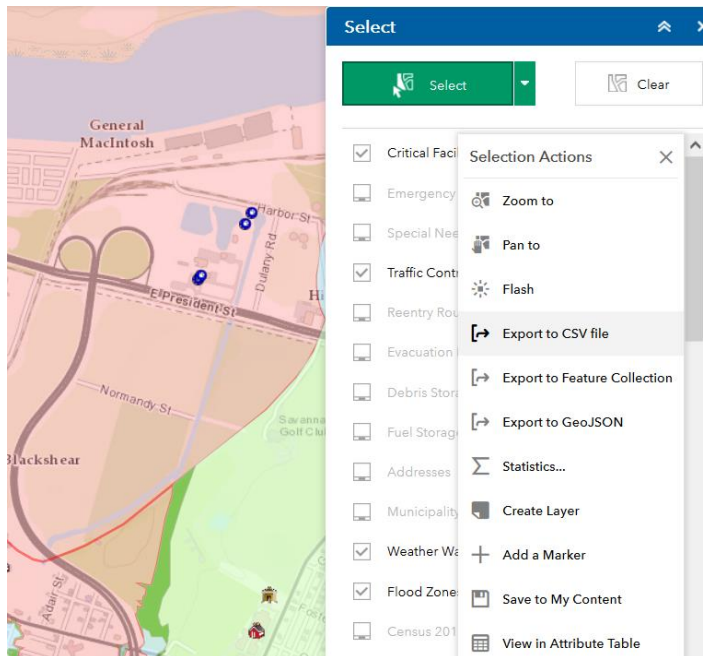




Identify by Selection

Choose what layer to select to search and show info for. Only one layer at a time may be selected. The layer you are trying select **must** be turned on in the Layer List. Select layer features either with a point, line, or polygon methods. A point will select a single feature (i.e. a single fire hydrant) in the layer whereas lines and polygons can highlight multiple features (i.e. multiple hydrants, for example).

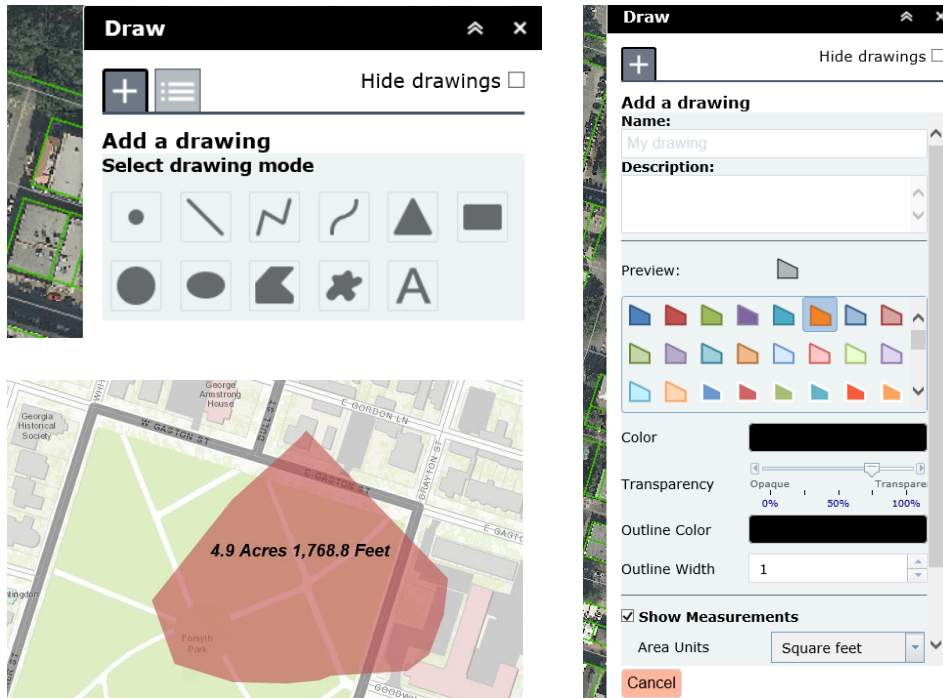
Save the results: You may **save the table results into a .csv Excel file**. You may also view the results in the Attribute Table. Click the three dot layer option (...) to the right of the layer name as below.



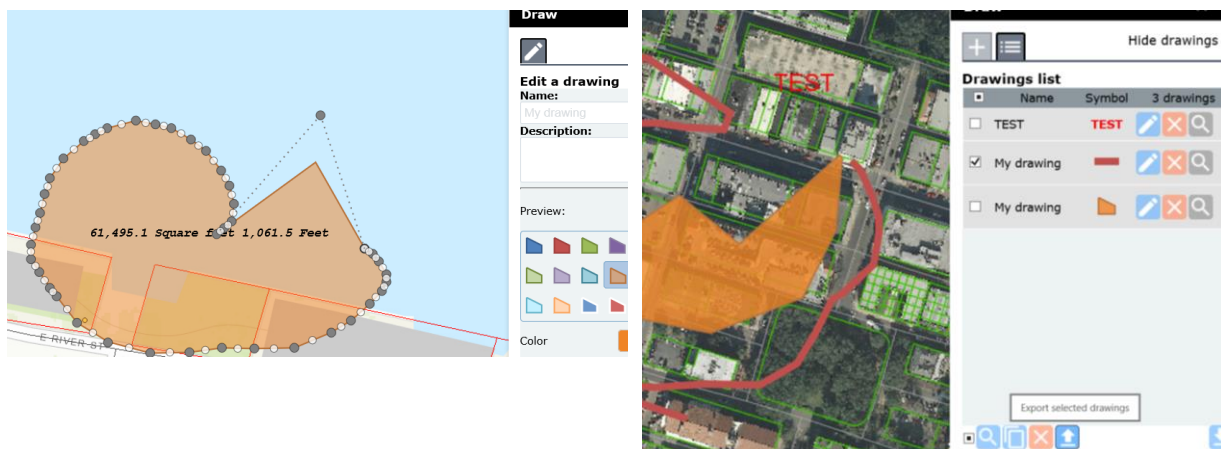


Draw

The Draw tool allows you to draw shapes and create text labels. You can adjust color, size and shape of drawings and display length and area measurements.



You may edit drawings after creation with the blue pencil button. Measurements will automatically be updated after you save your edits. Drawings can be saved and exported using the bottom buttons.





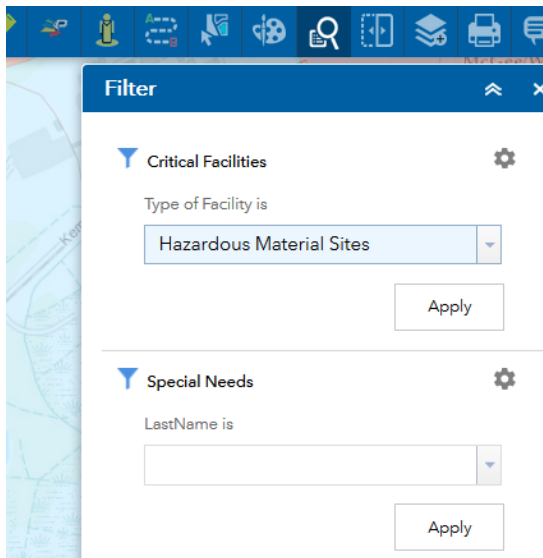
Bookmark

The Bookmark tool contains various preset landmarks that move and zoom the map to these locations, such as Ardsley Park. You can add your own Bookmarks by clicking the “+” button at the top after entering a new bookmark name. These will persist until the browser history is cleared.



Filter by Layer

The Filter by Layer tool allows you to choose and filter any available layer attribute in order to display specific information on the map viewer. This tool can help you search for any attribute from any single layer which may contain unnecessary information than you actually desire for your search.



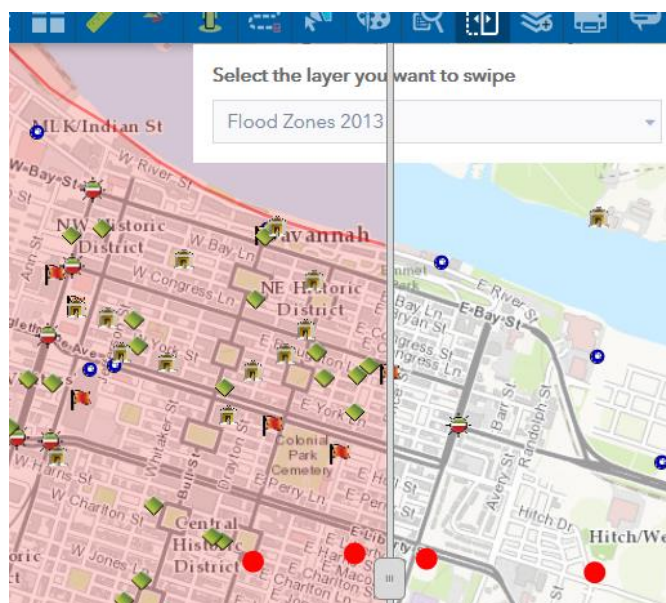
Swipe

The Swipe tool allows you to swipe a layer on and off side-to-side to reveal map layers underneath.



Add Data

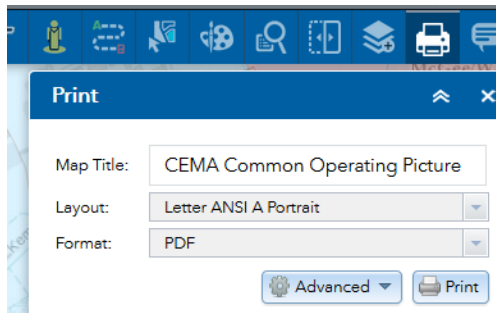
The Add Data tool contains additional state, federal, and other relevant emergency management map layers. You may also add data layers by web links from any other public agency map layer server as a link, or upload data such as shapefiles.



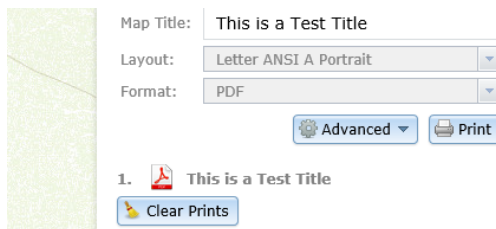


Print

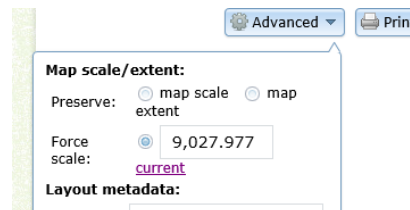
Press the Print Button to open the Print Dialog. It saves to PDF by default but you may save to JPG, PNG or other formats in the format menu, and choose paper sizes in Layout. Esri basemaps do not appear on prints at large scale.



Enter a title for the map and select a layout. Press the Print button and the SAGIS Map Viewer will create a PDF file. Click the printout name to open it in a new window. Popups must be enabled. If you create more than one, they will all be listed in order.



Advanced tip: In the Advanced menu you can display the current absolute map scale by clicking Current.



About

The About button loads information about the viewer and SAGIS contact information.

Help


The “Help link” is a link accessed in About that loads this Help document which you are reading.

4.0 PICTOMETRY

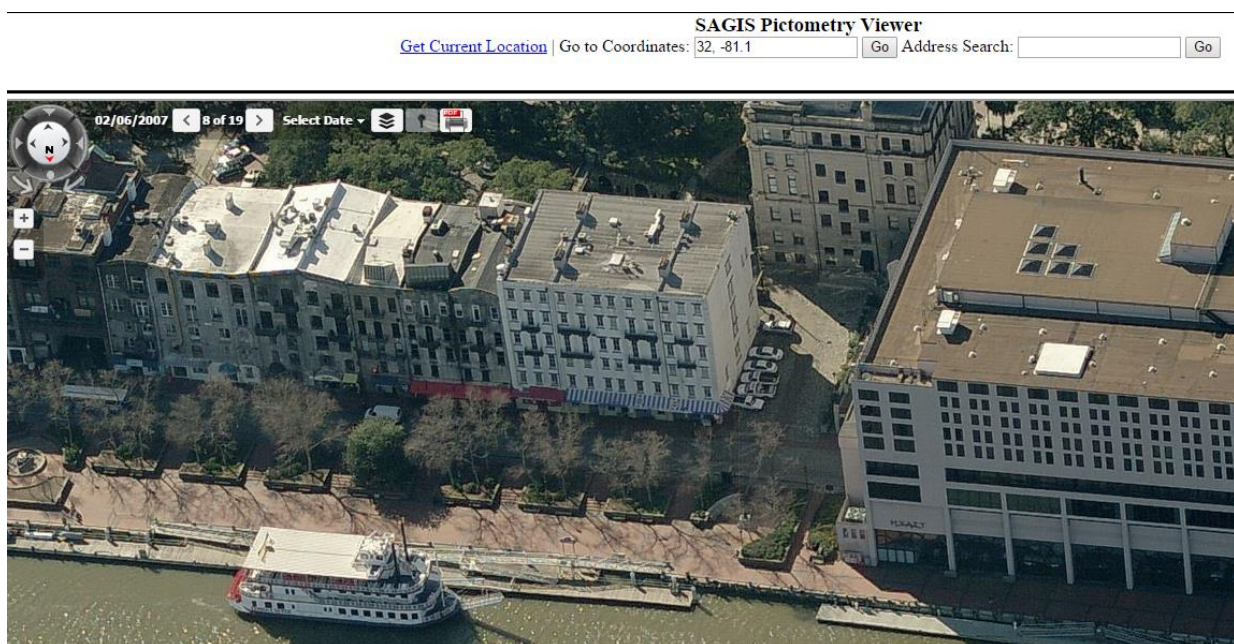


Pictometry

The SAGIS Map Viewer Pictometry tool opens a completely web-based Pictometry Viewer. After activating the tool, click a point on the map and the Pictometry window will open, centered at the point the user has clicked upon. This is the same Pictometry viewer used on www.sagis.org. You may display oblique aerial photography facing north/east/south/west and orthorectified aerial imagery. Parcel boundaries, street centerlines, and elevation contours can be displayed over the imagery. All years of imagery for which SAGIS has collected Pictometry imagery are viewable as well.

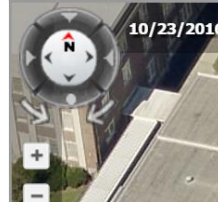
The Pictometry 'Select' button () activates the Pictometry tool. Once this tool is activated, when the user clicks on the map, a new window or tab (depending on user preferences) will open in the browser. In this tab, a new viewer will load, which displays oblique aerial photography (Pictometry imagery) for the years it has been collected in Chatham County. The imagery will be centered on **where** the user clicked on the map.

This oblique imagery is similar to Google's '45-degree' view or Bing Maps 'Bird's Eye' view, in that it allows you to see the imagery from an angle, and rotate in the four compass directions (north, east, south and west). It also allows you to zoom in very close on the imagery to a fine scale. You can zoom in and out of imagery with the mouse wheel, like the main viewer, or click +/- buttons in the upper left of the viewer window. Left-clicking the mouse and dragging the map moves your position, as in the main viewer. The screenshot below shows the whole viewer:



In the upper-left corner, the rotator control allows you

To rotate image north/east/south/west:

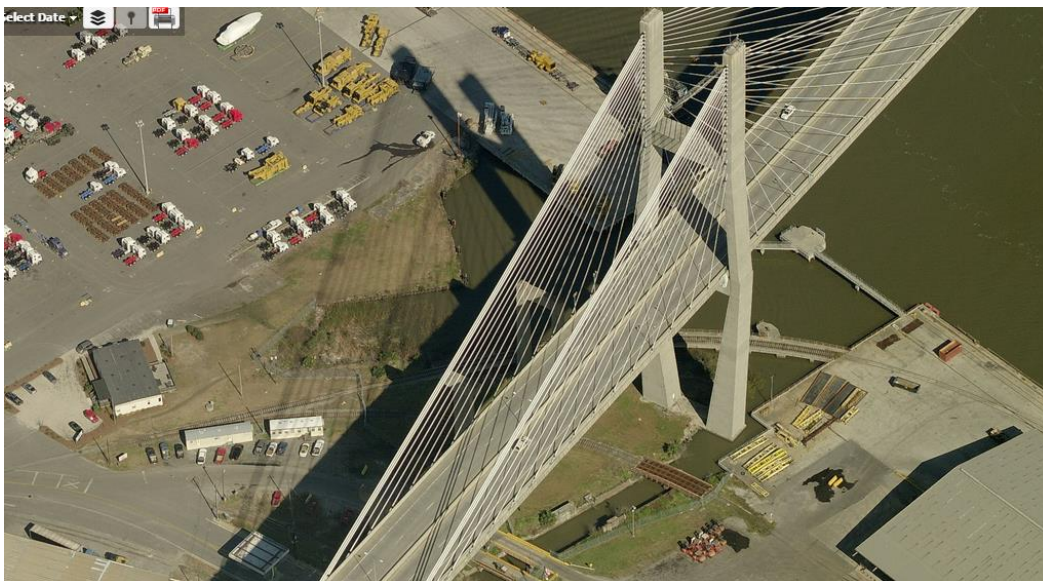


Two examples below show imagery of the Talmadge Bridge, from the north and the south. Notice how you can see under the bridge, because the imagery is captured from an angle.

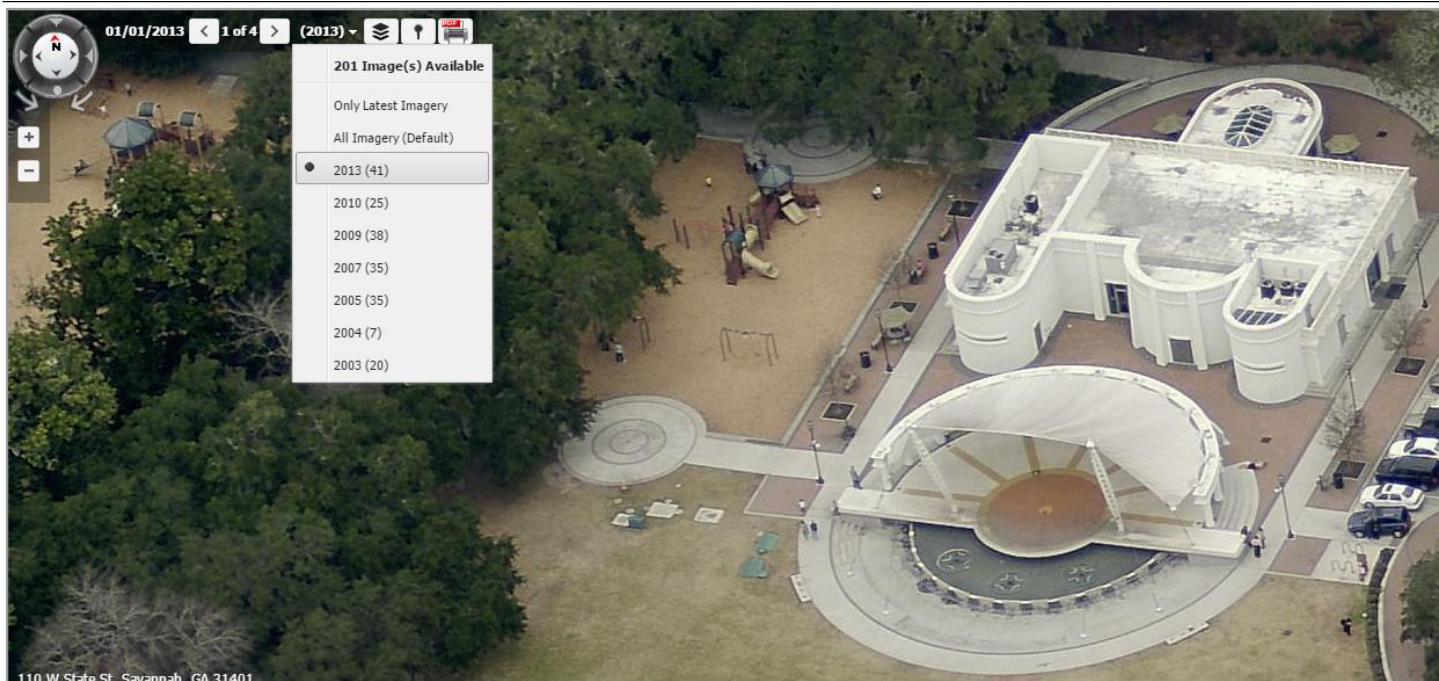
Example of Pictometry imagery from the North:



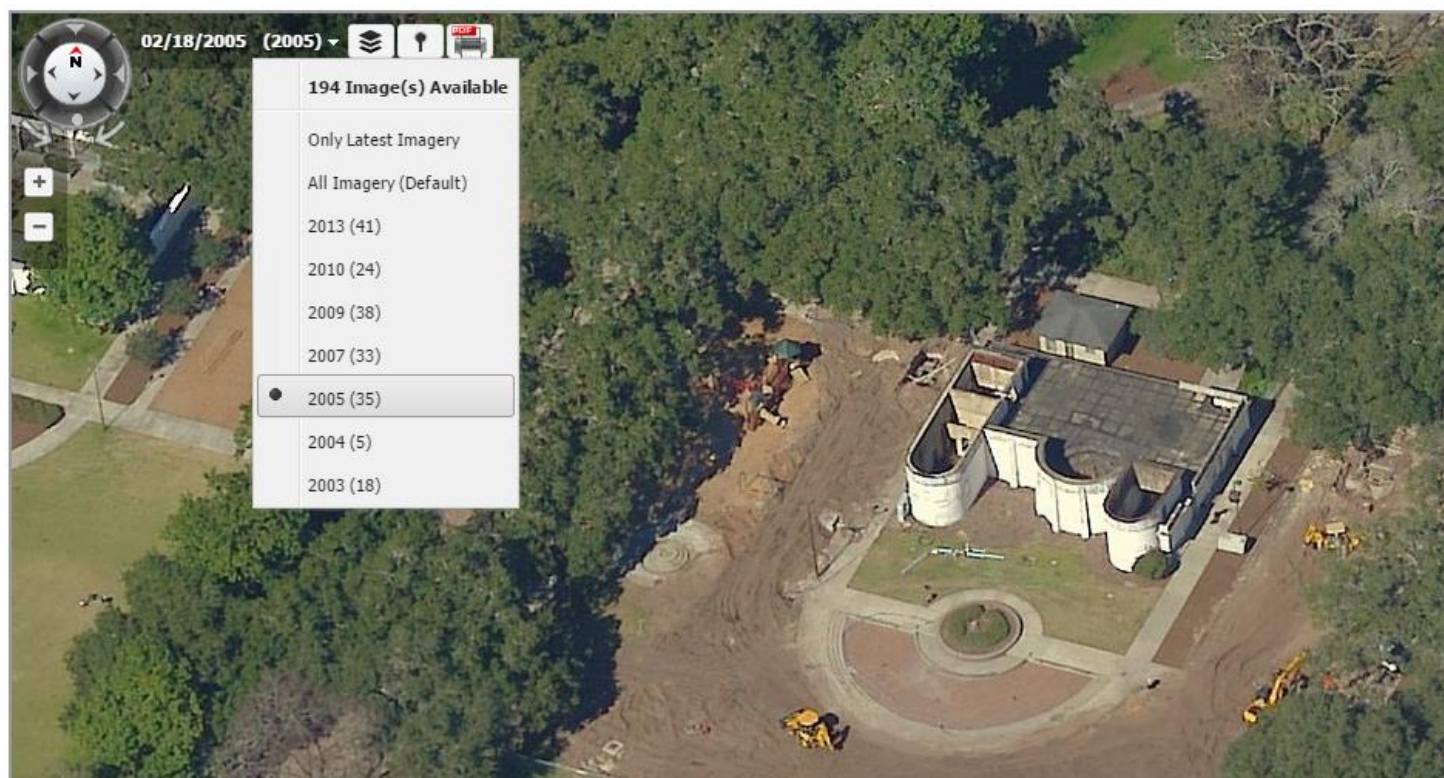
Example of Pictometry imagery from the South:




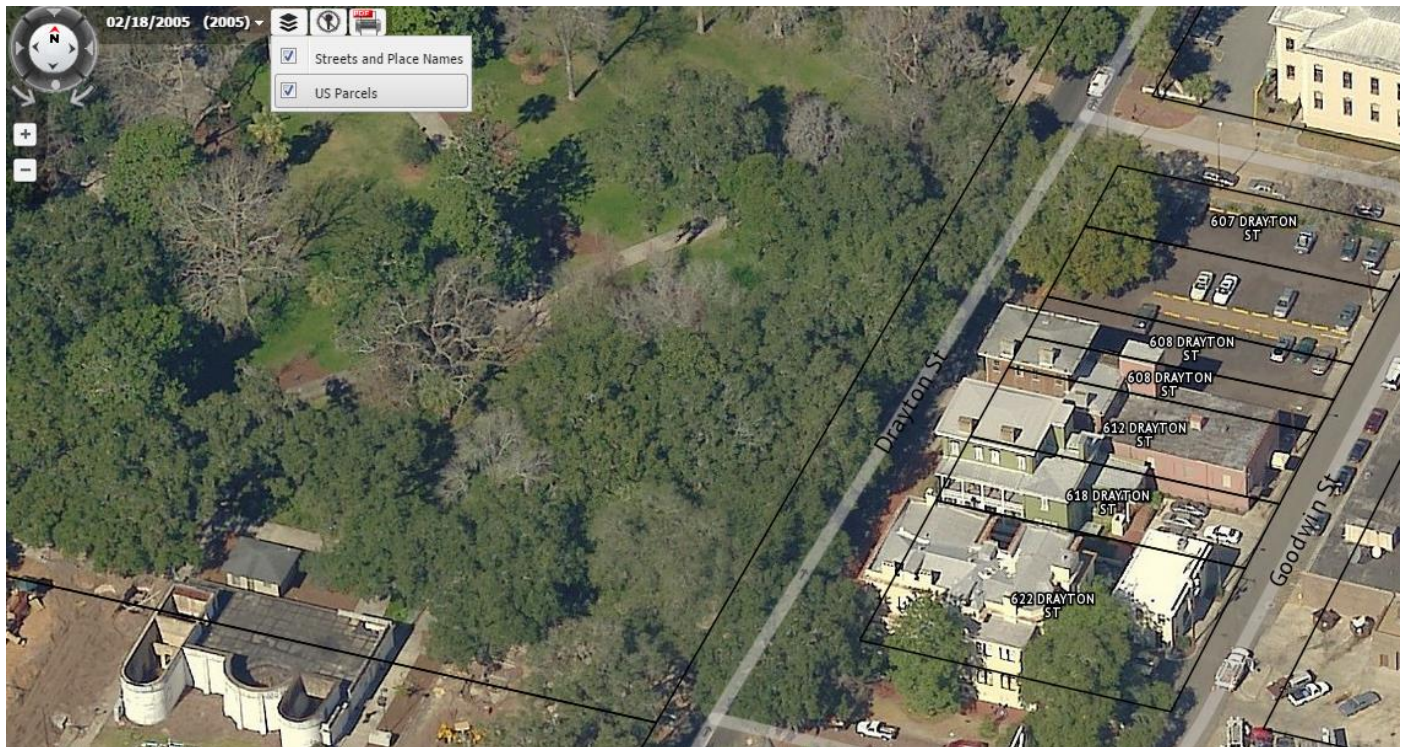
The Select Date tool allows you to view imagery from the following years. Click the dropdown menu to view the available years as in the next screenshot, where 2013 imagery of Forsyth Park is being displayed.




When we select year 2005, we can see that the band shell is still under construction:



The Layers button () can turn on the parcel layer and street name and street address layers, as shown below:



The Print tool () creates a printable PDF with an optional map title.

The Address Search tool locates a street address such as 110 E State St, Savannah GA. Note that city and state are now required in this format.

The Go to Coordinates search tool navigates to a set of coordinates, such as 32, -81.1.

5.0 CONTACT INFORMATION

For questions about this document or help with Savannah Area Geographic Information System (SAGIS) products and data contact a SAGIS staff member. Visit the SAGIS website at www.thempc.org/Dept/Sagis

To view the Chatham Emergency Management Agency (CEMA) website visit www.chathamemergency.org. To request access to this map viewer or to discuss an issue in emergency management contact CEMA staff.

Kevin MacLeod , GIS Programmer / Analyst, SAGIS	(912)-651-1452 / macleodk@thempc.org
Lara Hall , Director, SAGIS	(912)-651-1451 / halll@thempc.org
David Anderson , GIS Analyst, Chatham County	(912)-652-7800 / DGAnders@chathamcounty.org
Randall Matthews , EM Specialist, CEMA	(912)-201-4500 / rjmathews@chathamcounty.org
CEMA Main Line	(912)-201-4500