

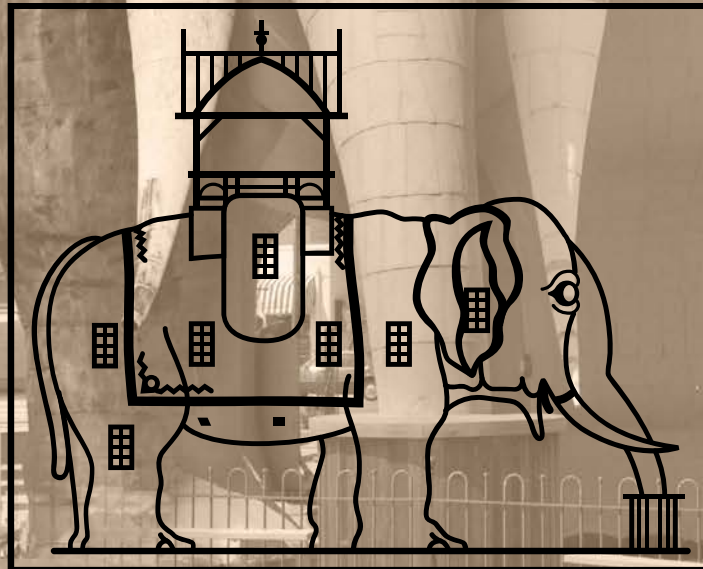


USER GUIDE

■ LUCY ■ NJCRGIS

ONLINE VIEWER

"The elephant never forgets..."



KEEP OUT

Cover Image: Lucy is depicted before and after restoration in this composite image; Visit www.lucytheelephant.org to learn more about NJ's most iconic National Historic Landmark. **Credit:** *Library of Congress, Prints & Photographs Division, HABS, HABS NJ,1-MARGCI,1- (<http://www.loc.gov/pictures/item/nj0006/>, Accessed 3/2018).*

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LUCY: NJCRGIS Online Viewer

User Guide

NJ Historic Preservation Office, March 2018

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I. Introduction

The New Jersey Historic Preservation Office (HPO) is pleased to provide the [LUCY Online Map Viewer](#), for New Jersey's cultural resources inventory. With this initial release, HPO is fulfilling an important mandate to disseminate cultural resources inventory data to constituents and the public, and hopes this platform may serve as a portal to additional cultural resources content as it is developed.

This **User Guide** is intended to assist you with the map application and its various tools. It is not intended to be a comprehensive manual for the ArcGIS Online platform upon which this application is built, but we hope this browser-based approach to delivering HPO's rich content will facilitate increased awareness and proactive planning for NJ's valuable cultural heritage. The application is designed to function in a variety of web browsers, devices, and screen types. Note that the appearance of various components of the application may appear differently than illustrated here depending on the combination of browser, device, and screen size.

As you explore NJ's cultural landscape with LUCY, HPO welcomes your comments, questions, and feedback on the application or the GIS data provided. Please email the HPO with a brief message at njhpo@dep.nj.gov. Be sure to include LUCY GIS VIEWER in your subject line.

Why "LUCY"?

HPO is providing a means for you to "Look Up Cultural-resources for Yourself," and what better represents the diversity of NJ's cultural landscape than one of our most iconic landmarks, Lucy, The Margate Elephant.

[Learn more about Lucy the Elephant...](#)

1. Accessing LUCY Online Map Viewer

LUCY can be accessed in most browsers and on most devices here:

<https://njdep.maps.arcgis.com/apps/webappviewer/index.html?id=44ce3eb3c53349639040fe205d69bb79>

2. Alternative NJCRGIS Applications

NJ HPO also makes CRGIS data available from the following sources:

NJ Geoweb: An online GIS application combining environmental map layers into a single integrated map. Profiles have been developed to address the needs of specific user communities, including a Historic Preservation Profile. Use the following links to access NJ Geoweb 3.0:

- [Launch Page](#) (See *Historic Preservation* in Profile list)
- [NJ Geoweb Tutorial \(PDF\)](#)

NJ OIT Open Data Platform: The NJ Office of Information Technology (OIT) hosts an open data platform from which GIS data can be linked, or downloaded for use off-line. Each of HPO's GIS layers and associated metadata can be accessed through this data portal. Each of these layers is described in more detail below at **III. Data Included**. Use the following links to access the CRGIS layers:

- [Historic Districts](#)
- [Historic Properties](#)
- [Historic Property Features](#)
- [Archaeology Grid](#)

II. Data Included

The HPO has defined the following layers to represent cultural resources in GIS applications: Historic District Polygons, Historic Property Polygons, Historic Property Feature Points, and Archaeological Site Grid. The data provided in these layers represents historic resources that:

1. Are National Historic Landmarks (NHL),
2. Are included in the NJ and/or National Registers of Historic Places (LISTED),
3. Have formal determinations of eligibility for inclusion in the Registers (ELIGIBLE),
4. Have been designated as local landmarks and districts by municipalities (LOCAL), or
5. Have been documented and evaluated through cultural resources survey efforts statewide (IDENTIFIED).

These layers also include resources no longer considered as historic, that:

6. Have been formally determined not-eligible for inclusion in the Registers (NOT ELIGIBLE), or
7. Have been formally de-listed and removed from the NJ and/or National Registers of Historic Places (DELISTED).

It is important to note:

- Not all resources in each of these categories have yet been digitized into the GIS database.
- Most features in these datasets represent categories 1, 2, and 3 above. HPO is still in the process of comprehensive digitizing for categories 4 and 5.
- These data sets include data for all 21 New Jersey counties.
- These datasets are not exclusionary; other historic resources may exist which are as yet unidentified, unrecorded, or undocumented.

1. NJ Historic Districts

Historic Districts possess a significant concentration, linkage, or continuity of buildings, sites, structures, or objects united historically or aesthetically by plan or physical development. This dataset represents the polygon boundaries of historic districts meeting one of the seven categories above and are symbolized accordingly (Fig. 1). Full metadata is available here:

https://njin.state.nj.us/NJ_NJGINExplorer/ShowMetadata.jsp?docId=8D610061-2228-11DF-A53E-0003BA2C919E

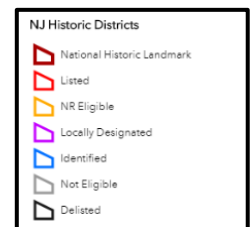


Figure 1: Districts

2. NJ Historic Properties

Historic Properties are buildings, sites, structures or objects evaluated individually or that form the individual components of an historic district. This dataset represents the polygon boundaries of historic properties meeting one of the seven categories above and are symbolized accordingly (Fig. 2). For each category, a property is either:

- INDV: Evaluated individually, or
- HD: Evaluated has part of one or more historic districts

Full metadata is available here:

https://njin.state.nj.us/NJ_NJGINExplorer/ShowMetadata.jsp?docId=93475664-2228-11DF-A53E-0003BA2C919E

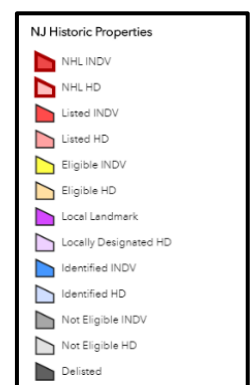


Figure 2: Properties

3. NJ Historic Property Features

Historic Properties Features are the discreet buildings, sites, structures or objects that make up an historic property. This dataset represents the point locations of historic property features (Fig. 3), symbolized as either:

- **CONTRIBUTING:** Related to the significance and integrity of the property
- **NON CONTRIBUTING:** Un-related to the significance and integrity of the property
- **NOT ASSESSED/UNKNOWN:** Status relative to the property is un-documented

Full metadata is available here:

https://njin.state.nj.us/NJ_NJGINExplorer/ShowMetadata.jsp?docId=76B8BECE-21CD-4731-982D-4658325AB39C



Figure 3: Property Features

4. NJ Archaeological Grid

Archaeological Sites are locations of prehistoric or historic occupation or activity possessing archaeological value. This dataset includes a vector grid of approximately 1/2 mile cells indicating the presence of Archaeological Districts or Sites meeting one of the seven categories above and are symbolized accordingly (Fig. 4). This data is generally limited to archaeological resources on-file at HPO and does not yet include the comprehensive catalog of archaeological sites on file at the New Jersey State Museum or the New Jersey Pinelands Commission. Full metadata is available here:

https://njin.state.nj.us/NJ_NJGINExplorer/ShowMetadata.jsp?docId=B7CE18E4-237F-477F-9C66-8BCBC10B9C2B3



Figure 4: Archaeological Grid

5. NJ Historic Properties – Demolished

Historic Properties which have been demolished or destroyed have been filtered out of the NJ Historic Properties layer above based on attribute coding, but are included here for reference purposes and as an illustration of historic resources lost through time (Fig. 5). HPO makes every effort to update this status as it is discovered or documented, but this categorization is not comprehensive and the datasets above may include properties which have since been demolished/destroyed.



Figure 5: Properties Demolished

III. Annotated Application Screen

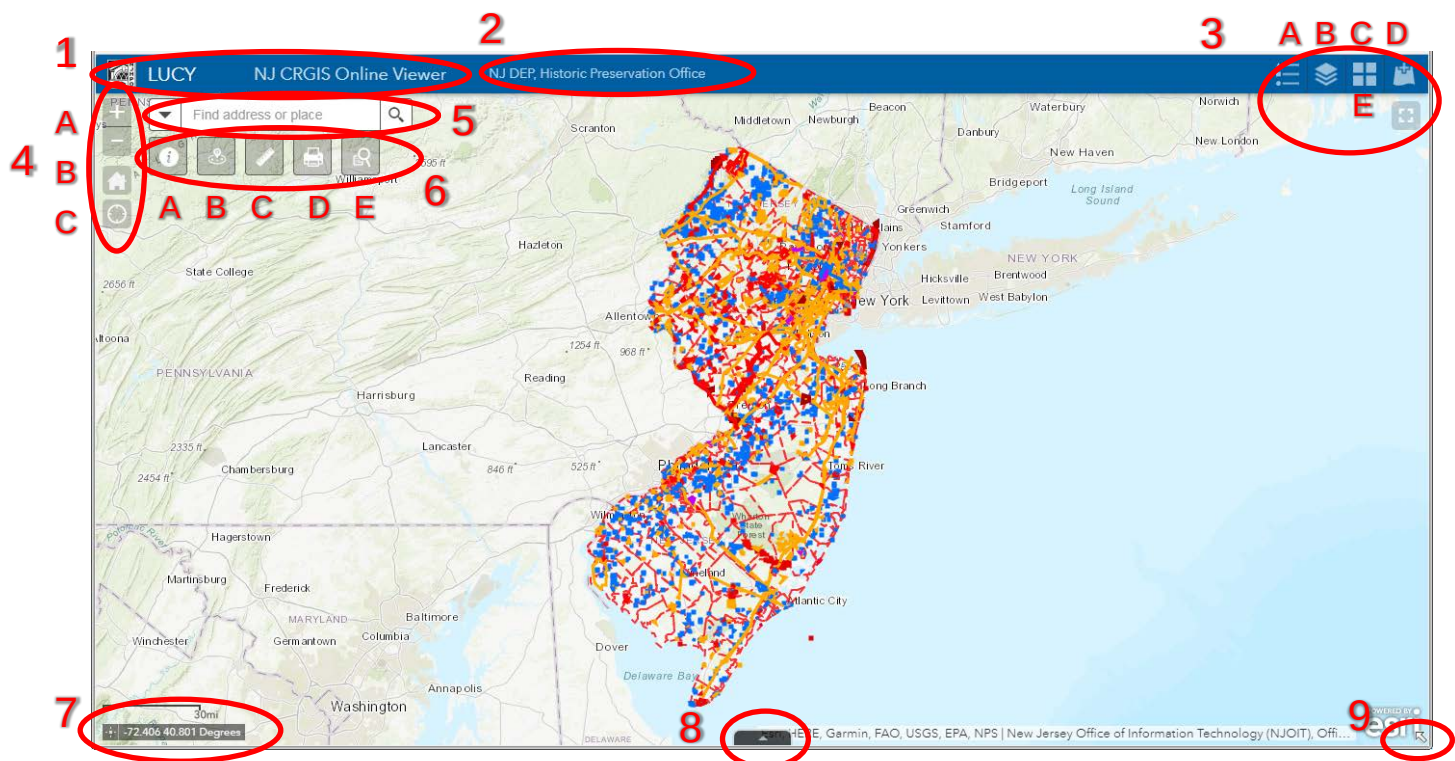


Figure 6: LUCY v.1.0 Screenshot, 11/2017, NJHPO

The screenshot above presents a desktop browser view of the LUCY application. The annotated features represent the core functions of the application as follows:

- | | |
|-----------------------------|--------------------------|
| 1. Logo / Application Title | C. My Location |
| 2. HPO Web Link | 5. Search Control |
| 3. Layer and Data Controls | 6. Widgets: |
| A. Legend | A. About |
| B. Layer List (On / Off) | B. Near Me Search |
| C. Basemap Selector | C. Measurement Tool |
| D. Add Data | D. Print Dialog |
| E. Full Screen | E. Parcel Search |
| 4. Navigation Controls | 7. Scale and Coordinates |
| A. Zoom In/Out | 8. Attribute Table |
| B. Default Extent | 9. Map Overview |

Each of these items are described in greater detail below at: *IV. Tools and Controls*.

IV. Tools and Controls

1. Logo / Application Title:

HPO's logo and title for the web application.

2. HPO Web Link:

Currently links to HPO home page; in future will link to focused content about the web application.

3. Layer and Data Controls:

These buttons interact with how the information is displayed in the map application.



- A. **Legend (On / Off):** Toggles the Legend dropdown, which displays the symbology for currently visible layers (Fig. 7).



- B. **Layer List (On / Off):** Toggles the Layer List dropdown. The Layer List displays the layers currently included in the application (Fig. 8).
- (1) Use the checkboxes to turn layers on or off.
 - (2) Use the "" symbol to refine the display of an individual layer (Fig. 9)
 - (3) Layers Included:

- **NJ Historic Districts**
- **NJ Historic Properties**
- **NJ Historic Property Features:**
Point layer of buildings/sites/structures/objects.
- **NJ Historic Properties – Demolished:**
- **NJ Archaeological Grid**
- **NJ Municipalities**
- **NJ Parcels**
- **1930 Imagery:** Included here as statewide image services have not yet been successfully implemented as basemaps for AGO. HPO will revisit once that changes.

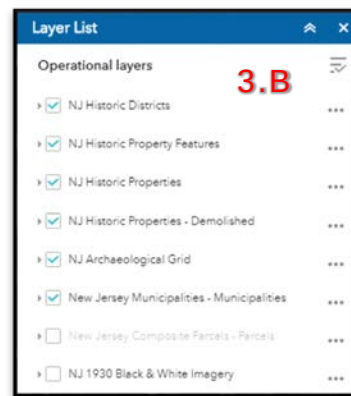


Figure 8: Layer List (3.B)

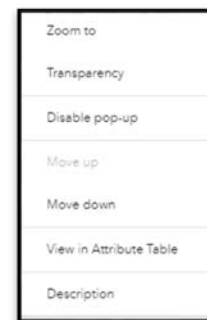


Figure 9: Layer controls (3B(2))

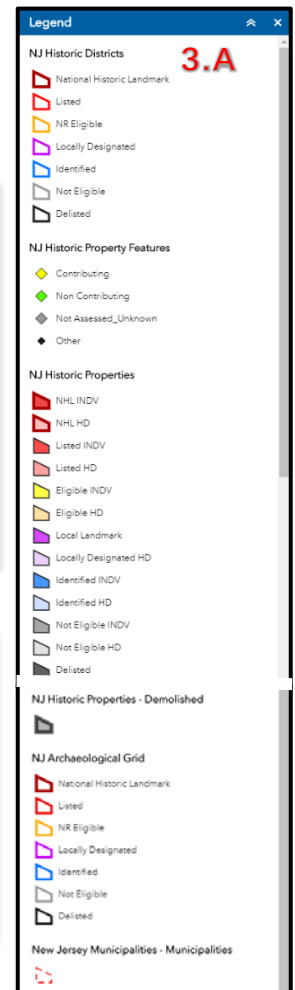


Figure 7: Legend (3.A)



- C. **Basemap Selector:** Allows the user to change the basemap for the application (Fig. 10). As noted, additional basemaps may be made available as NJ statewide imagery are converted for use in AGO.

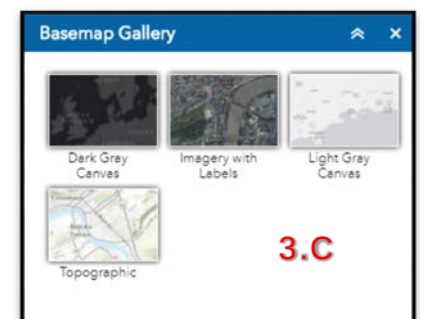


Figure 10: Basemap Gallery (3C)



D. **Add Data:** Allows the user to add additional data layers to the map application. Layers may be added from multiple sources as follows:

- (1) **Search:** searches for existing online sources by keyword(s) (Fig. 11).
- (2) **URL:** Enter URL for a known data source such as from [NJOGIS Open Data](#) platform or from [NJGIN Explorer](#) (Fig. 12)
- (3) **File:** Add from local data in SHP, CSV, GPX, or Geo JSON formats (Fig. 13).



E. **Full Screen:** Allows the map application to be displayed full screen.

4. Navigation Controls:

Allows user to control the location and extent of the map display. *(Note there is not a separate control to move or pan the map; simply click and drag with the mouse or touch and drag on touch enabled devices).*



A. **Zoom In/Out:** Click the plus (+) icon to zoom in or the minus (-) icon to zoom out. The scroll wheel on the mouse will also zoom in/out. (Use “pinch” on touch enabled devices to zoom in/out)



B. **Default Extent:** Click the “home” icon to return the map to the default extent.



C. **My Location:** Click to turn on location marker and pan/zoom map to the current location. Note that the location will be approximate in desktop browsers, and more precise on mobile devices with location services enabled. Refer to your mobile device’s manual for guidance on managing location services.

5. Search Control:

Use the search box dropdown to search for specific locations or features in the map (Fig. 14). User can select a search option using the dropdown selector:

- A. **All:** Searches all available content
- B. **NJ Historic Districts:** Searches on *Name* and *Alternate Name* in the historic district layer.
- C. **NJ Historic Properties:** Searches on *Name* and *Alternate Name* in the historic properties layer.
- D. **ESRI World Geocoder:** Searches for place names and/or addresses.

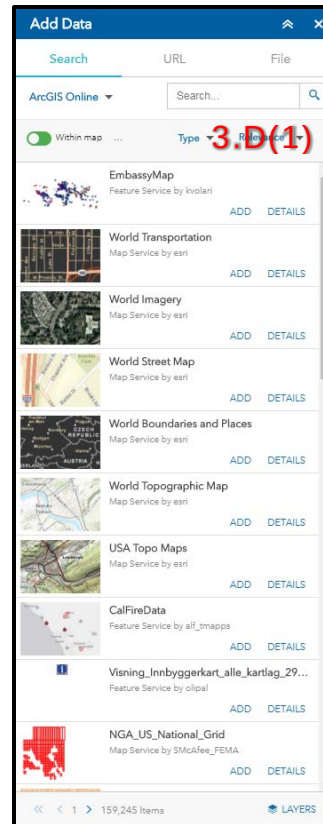


Figure 11: Add Data: Search (3.D(3))



Figure 12: Add Data: URL (3.D(2))

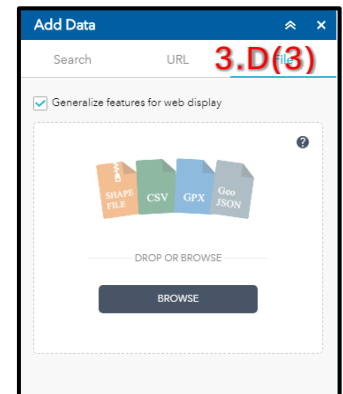


Figure 13: Add Data: File (3.D(3))

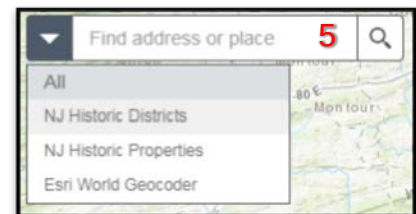


Figure 14: Search Control (5)

The search box defaults to Search ALL if nothing is selected. When searching ALL, an address that is also a property name (or historic district name) will return both items in the results list (Fig. 15). *Note block and lot searches are handled via the Parcel Search widget, explained below.*

Users can also type or paste latitude and longitude coordinates into the search box in either degrees, minutes, seconds (DMS) or decimal degrees (DD). *Note that the formatting of the coordinates will affect the results:*

	Entered directly	Copy/Paste:
DMS	74d11'33.3"W 40d54'56.5"N or 40d54'56.5"N 74d11'33.3"W	74°11'33.0"W 40°54'56.1"N or 40°54'56.1"N 74°11'33.0"W
	- DMS coordinates must be entered without spaces between the DMS elements - Single space or comma between the pair - Can be entered in either order (N then W or W then N) - If typing in manually, use a "d" in place of the degree character (which isn't on the standard keyboard).	
DD	-74.192509 40.915576 Or 40.915576 -74.192509	
	- Decimal degrees can also be entered in either order, but note that results will return the inverse location as well (Fig. 11). "-74" represents the longitude or X coordinate and should generally be entered first. - Can use a comma between values.	

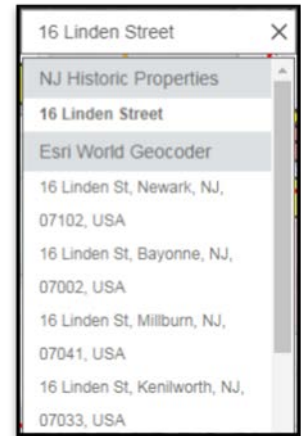


Figure 15: Search Results as Property and Address

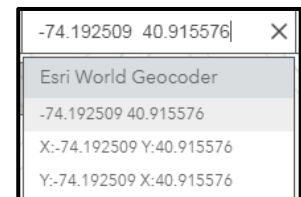


Figure 16: Decimal Degree Results

6. Widgets:

Widgets are additional tools and functionality packaged with ArcGIS Online. HPO has selected several for exploring the historic resources inventory. Additional tools and functions will be evaluated for inclusion as they are developed/modified and based on user feedback about the application.

A. **About:** Opens the About screen pop-up, which contains a summary description of the map application and directs users to additional information.

B. **Near Me:** Search tool to perform a buffer search from within a specified radius of a location of interest. The location can be selected by clicking on the map, or by entering an address or place name in the search box (Fig. 17).

- (1) Adjust slider to set the search distance.
- (2) Enter a location in the search box and hit ENTER or click a location on the map:
 - (a) Map zooms to the search extent buffer
 - (b) Summary results from CRGIS layers
 - (c) Expand the results by clicking each category
 - (d) Click an entry for details about each result

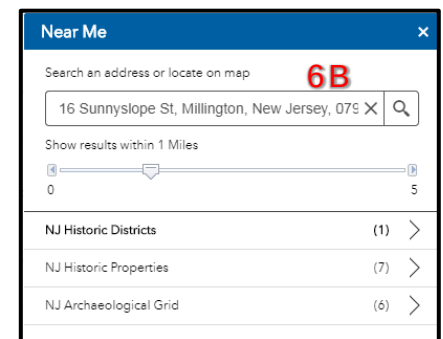


Figure 17: Near Me Search Tool (6B)

Current version of this widget does not support exporting the results as a list, but the text of the results can be copied/pasted into other documents.

- C. **Measurement:** Tool to measure area, distance, or coordinate location on the map. Select a measurement type, then select the units from the dropdown list (Fig. 18).

- (1) **Area:** Provides the area of any delineated polygon. Click to start drawing; double-click to finish. *Note: Units can be changed after the polygon is delineated.*
- (2) **Distance:** Provides the length of a delineated single- or multi-segment line. Click to start drawing; double-click to finish. *Note: Units can be changed after the polygon is delineated.*
- (3) **Location:** Indicates the latitude and longitude of location clicked and the running coordinates at mouse position. Positions are available in either Decimal Degrees or Degrees, Minutes, Seconds.

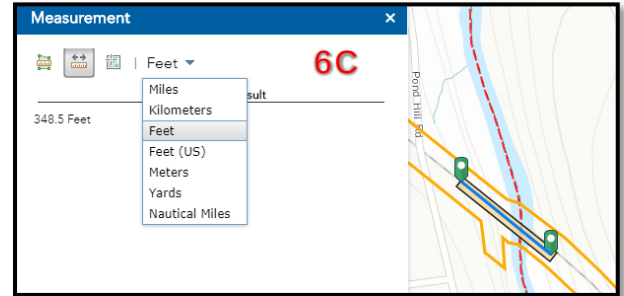


Figure 18: Measurement Tool (6C)

- D. **Print:** Enables printing of a simple layout in a variety of formats (Fig. 19). Only visible layers will be included in the layout (See 3B: Layer List above).
- (1) **Map Title:** Enter a map title if desired
 - (2) **Layout:** Choose layout. Defaults to letter size, landscape orientation.
 - (3) **Format:** Choose output format. Can be saved as PDF or a variety of image types (JPG, PNG, SVG, etc.)
 - (4) **Advanced:** Click Advanced to adjust or set:
 - (a) Map Scale:
 - (i) Preserve Scale to keep the layout at the current scale of the map display, which may change the extent shown in the layout.
 - (ii) Preserve Extent retains the longest dimension of the displayed map, which may change the scale of the layout map.
 - (iii) Force Scale to set a predetermined map scale in the layout.
 - (b) Author and Copyright information
 - (c) Legend on or off
 - (d) Size of the map frame in pixels
 - (e) Print quality (resolution) of the map frame

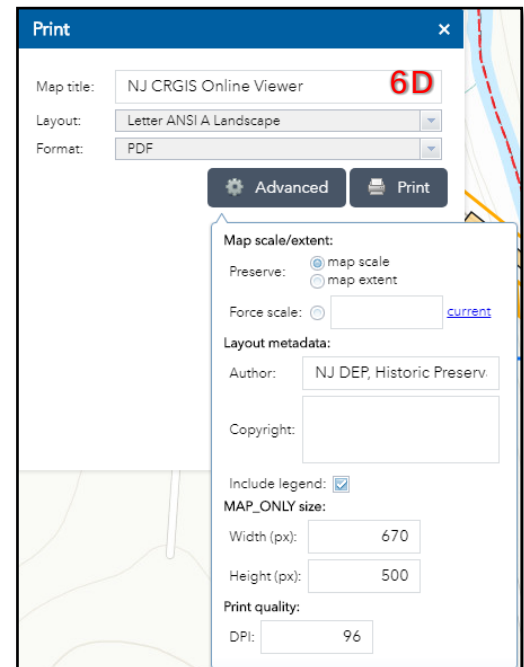


Figure 19: Print Dialog (6D)

Print: Click to generate the layout. This can take a few minutes depending on scale and resolution. Once generated, click the result to view the layout. Use browser tools to save or download the layout. Multiple layouts can be generated in the same session to create a series of maps, if desired. See a sample layout below (Fig. 20). As currently configured, the map does not label features in the layout, but labels can be manually added for key features using annotation tools in Adobe Acrobat or another document/photo editor

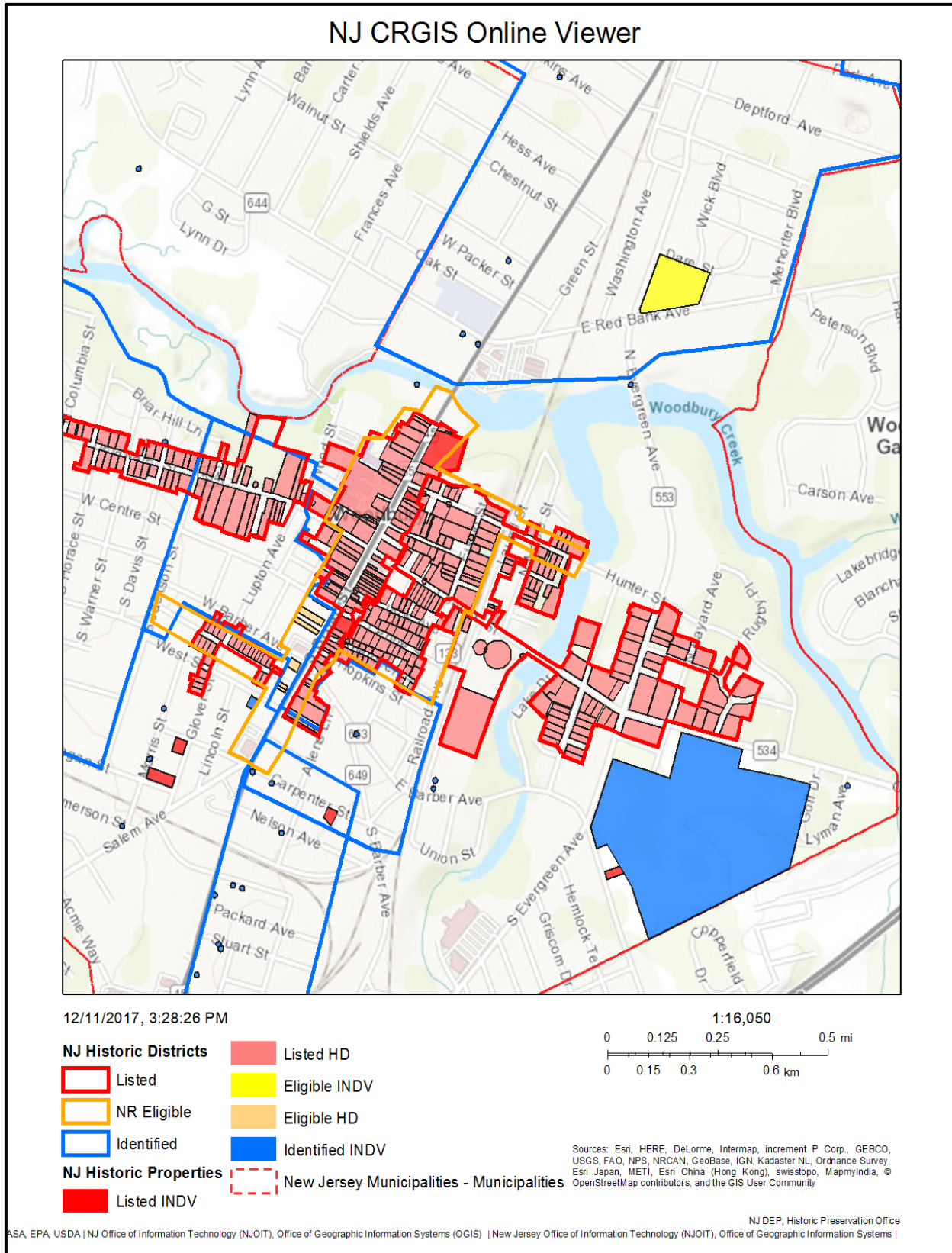


Figure 20: Sample Layout (letter, portrait)

- E. **Parcel Search:** Enables a search for specific tax block and lot within a municipality. All three values must be entered for the search to work (Fig. 21).
- (1) **Municipality Name:** Enter the municipality name. *Note the name is best entered as a single name only; exclude “City”, “Township”, “Borough”, etc.*
 - (2) **Block:** Enter the block number
 - (3) **Lot:** Enter the lot number
 - (4) **Apply:** Click to view the results.

If successful, the Results tab displays the detailed parcel attributes, and the map is zoomed to the result with the parcel highlighted (Fig. 22).

Click the “” symbol to see additional actions for interacting with the result (Fig. 23):

- (a) Zoom to: Zooms to the parcel feature
- (b) Pan to: Pans to the parcel feature at the current map scale
- (c) Flash: Causes the feature to blink momentarily in the map
- (d) Show pop-up: Displays the pop-up attribute window for the feature
- (e) View in Attribute Table: Opens the attribute table window for the feature (*See 8. Attribute Table below for additional information about using the Attribute Table view*).
- (f) Remove this result: Deletes the result from the map window

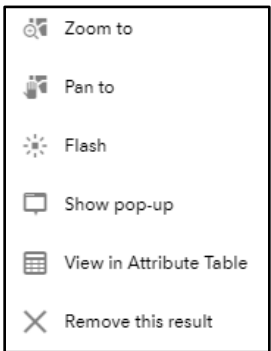


Figure 23: Parcel Search Actions

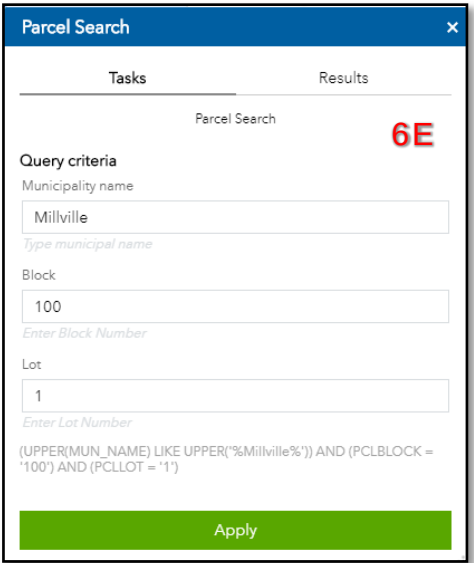


Figure 21: Parcel Search (6E)

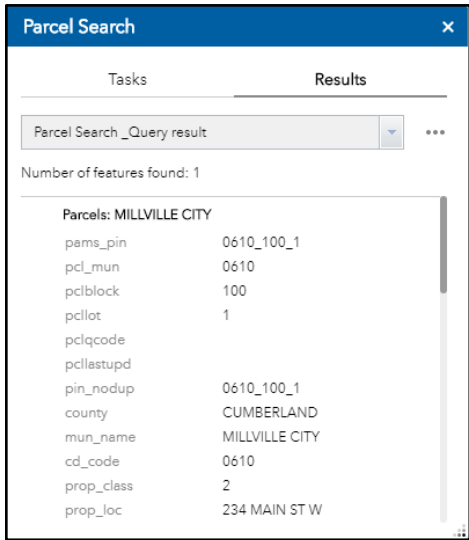


Figure 22: Parcel Search Results

7. Scale and Coordinates:

Displayed in the lower left corner of the screen are the current map scale and running coordinates for the cursor position in decimal degree format (Fig. 24).

- A. Exact coordinate locations can be obtained from the map:
- (1) Click the cross-hairs in the coordinates box (*Cross-hairs will turn blue*)
 - (2) Click anywhere on the map
 - (3) Coordinates for that location are displayed in the box. *Note the coordinate text can then be selected and copied/pasted into other documents.*

Click the cross-hairs again to turn off this feature.

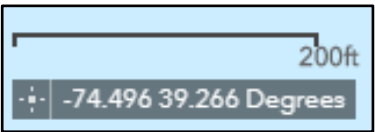


Figure 24: Scale and Coordinates

8. Attribute Table:

The attribute tables for data layers within the application can be viewed by clicking the “Open Attribute Table” arrow centered at the bottom of the screen. The table dialog pulls up from the bottom of the screen, and includes tabs for each feature layer visible in the map (Fig. 25). Users can interact with the data in the attribute table in a variety of ways:



Figure 25: Attribute Table window (8)

- A. **Tabs:** Click each tab to view the data available for each visible layer
- B. **Filters:** The data in the table can be filtered to limit the data displayed (Fig. 26):
 - (1) “**Filter by map extent**” is turned on by default. Click the “**Filter by map extent**” button to turn this off and show all rows (*Note this can take a while to populate depending on which layer is active in the table*).
 - (2) Click **OPTIONS > Filter** to bring up the Filter query window. *Note this option differs from a search in that, once the filter is applied, only features which meet the selected criteria will be displayed in the table or in the map. The filter persists within the map and must be removed to restore all available data to the view.*
 - (a) Click **Add expression:**
 - (i) Select the data field from the first dropdown list
 - (ii) Select the operator from the second dropdown list
 - (iii) Type a value in the third box

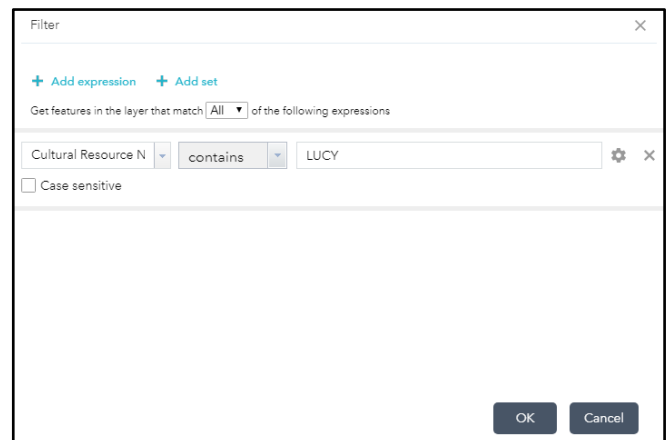


Figure 26: Filter Query Window

- (iv) *OPTIONAL*: Check the box next to “Case sensitive” if desired
- (v) *OPTIONAL*: Add additional criteria by clicking “**Add expression**” or “**Add set**”
- (vi) Click OK

The number of features will be displayed in the lower left corner of the attribute table window. *Note if the display reads “0 features,” either **Filter by map extent** is still active or there were no features that met the criteria.*

- C. **Selection**: Features can be selected in the table by clicking the left edge of the table row. Selected features are highlighted light-blue.
- (1) Click to select records:
 - (a) Single click to select one record
 - (b) Click – Scroll – SHIFT+Click to select a range of contiguous records
 - (c) CTRL+Click to select multiple discontinuous records
 - (2) Click “**Zoom to**” in the Attribute Table menu to zoom to the selected feature(s). *Note features may not be visible due to scale-visibility settings if the selected features are wide-spread.*
 - (3) Click “**Clear selection**” in the Attribute Table menu to de-select all features in the active layer.

9. Map Overview:

An inset map overview can be displayed by clicking the small white “**Show Map Overview**” arrow in the extreme lower right corner of the map frame (Fig. 27):

- A. **Map Overview** displays in the lower right corner of the map frame. Use the following to interact with the map overview:
- (1) **Click and drag** the grey rectangle to pan the map in any direction.
 - (2) **Maximize** the map overview by clicking the grey four-headed arrow in the lower right corner of the overview frame.
 - (3) Click again to restore to original size.
 - (4) Close the map overview by clicking the small white “**Hide Map Overview**” arrow in lower right corner of the the overview frame.

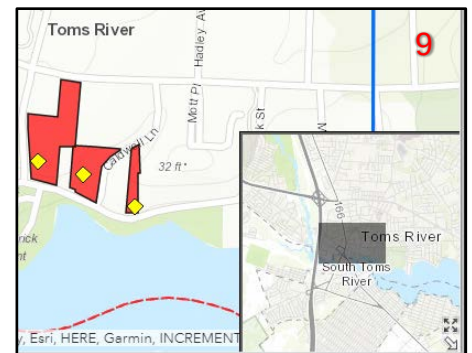


Figure 27: Overview Map

V. Access and Use

LUCY, NJCRGIS Online Viewer web application is provided as a courtesy by the New Jersey Historic Preservation Office (HPO). The cultural resources GIS data contained within this map service is produced and maintained by the HPO to provide accurate cultural resource information to government, regulated customers, and the public. The HPO has defined the following layers to represent cultural resources in GIS applications: Historic District Polygons, Historic Property Polygons, Historic Property Feature Points, and Archaeological Site Grid. These layers are developed and maintained by the HPO, and are provided for informational purposes only.

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