

Environmental Health Indicators Map: ArcGIS Online Tools

Division of
Environmental
Health Epidemiology

5/2/2022



pennsylvania
DEPARTMENT OF HEALTH

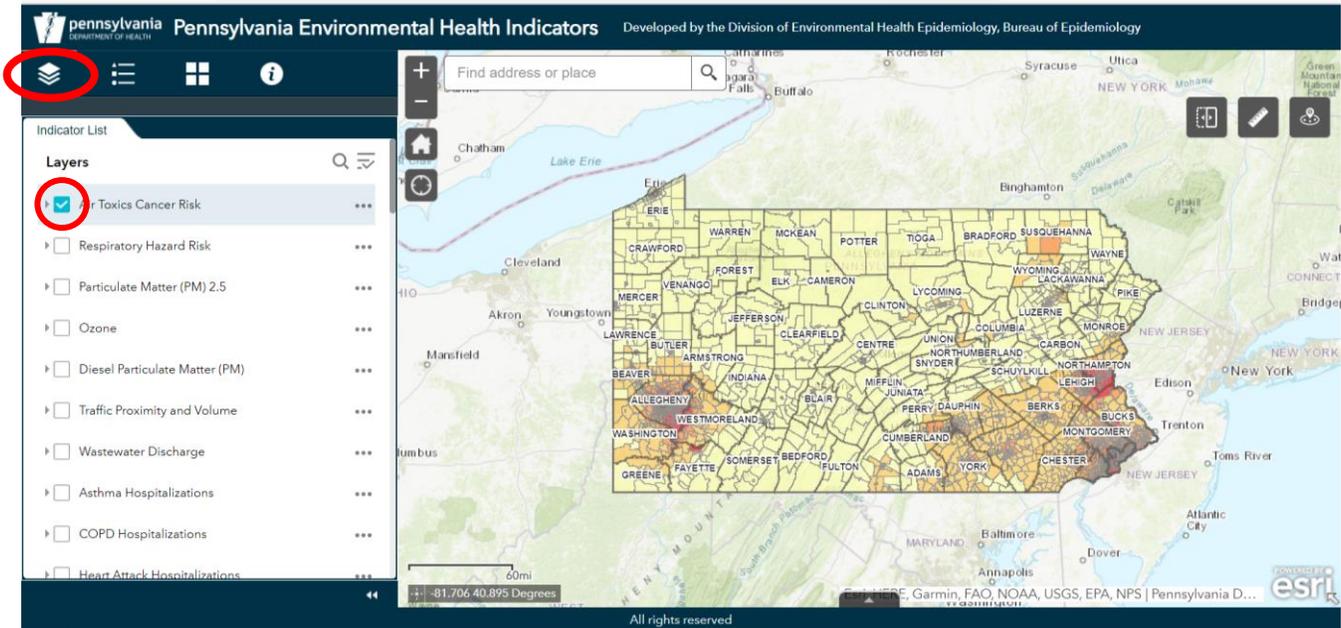
Explanation of Tools

The following capabilities have been enabled in the Pennsylvania Environmental Health Indicators Map. This document provides additional detail about each tool, including screenshots from the ArcGIS Online Web App. Please direct questions to dehe@pa.gov.

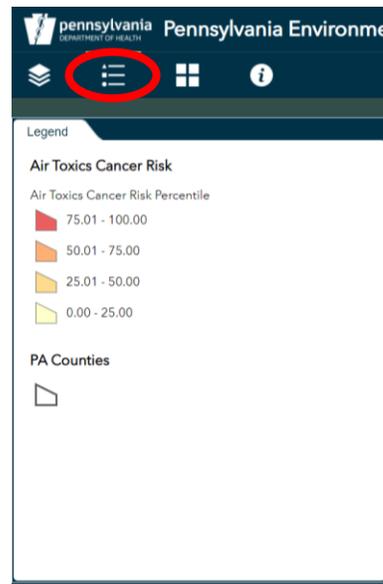
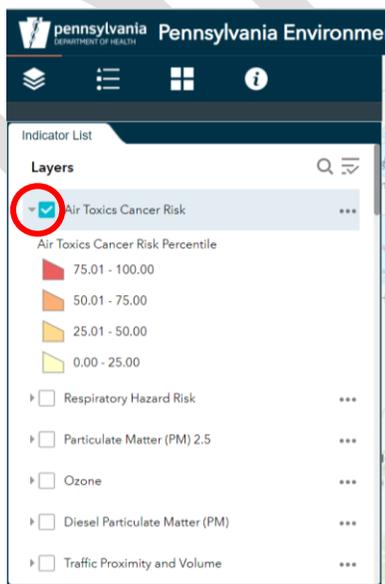


Turn off/on layers: click on the indicator list icon to toggle layers on/off by clicking the square to the left of each desired indicator listed in the display window.

Note: Transparency was added to the aggregate layers so users can see more than one layer at a time (e.g., one aggregate layer and multiple point sources of interest).



To view the corresponding legend for a layer, click on the arrow next to the **indicator name** in the indicator list or select the legend tab in the panel above the indicator list.





Zoom in/out: click on the zoom slider icon to zoom in or out on the map for a desired scale. *Note: Some layers appear only when the map is zoomed in beyond a specified map scale (e.g., FEMA Flood Hazard Areas); this is called scale-dependent drawing.*

In the example below, clicking the “+” sign twice zooms to the Centre County region. The scale bar in the bottom left of the map also indicates the extent of the zoom.



Identify attributes and show data: click on points or geographic units (e.g., landfills, counties, census tracts) to identify the point, boundary or unit of interest and view relevant attributes of the selected indicator layer.

The example below highlights a census tract near Williamsport in Lycoming County.



 **Attribute Table:** click on the up arrow at the bottom of the map to display tabular information about the features of each selected indicator layer (e.g., facility name, county name). Minimize the attribute table by clicking on the down arrow above the table. *Note: Additional capabilities (e.g., Filter by map extent, Zoom to, Clear selection) for viewing indicator features are available within the attribute table.*



Indicator List

Layers

- Air Toxics Cancer Risk
 - Air Toxics Cancer Risk Percentile
 - 75.01 - 100.00
 - 50.01 - 75.00
 - 25.01 - 50.00
 - 0.00 - 25.00
 - Respiratory Hazard Risk
 - Particulate Matter (PM) 2.5
 - Ozone
 - Diesel Particulate Matter (PM)
 - Traffic Proximity and Volume

Air Toxics Cancer Risk (1 of 4)

- Census Tract ID: 42081000900
- Air Toxics Cancer Risk Score: 31.131533
- Air Toxics Cancer Risk Percentile: 54.000000
- Cancer Risk Summary: 31 lifetime risk per million (54%ile)

[Zoom to](#)

Open Attribute Table



Indicator List

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- Air Toxics Cancer Risk
 - Air Toxics Cancer Risk Percentile
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 - 50.01 - 75.00
 - 25.01 - 50.00
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[Zoom to](#)

Hide Attribute Table

Air Toxics Cancer Risk PA Counties

Options Filter by map extent Zoom to Clear selection Refresh

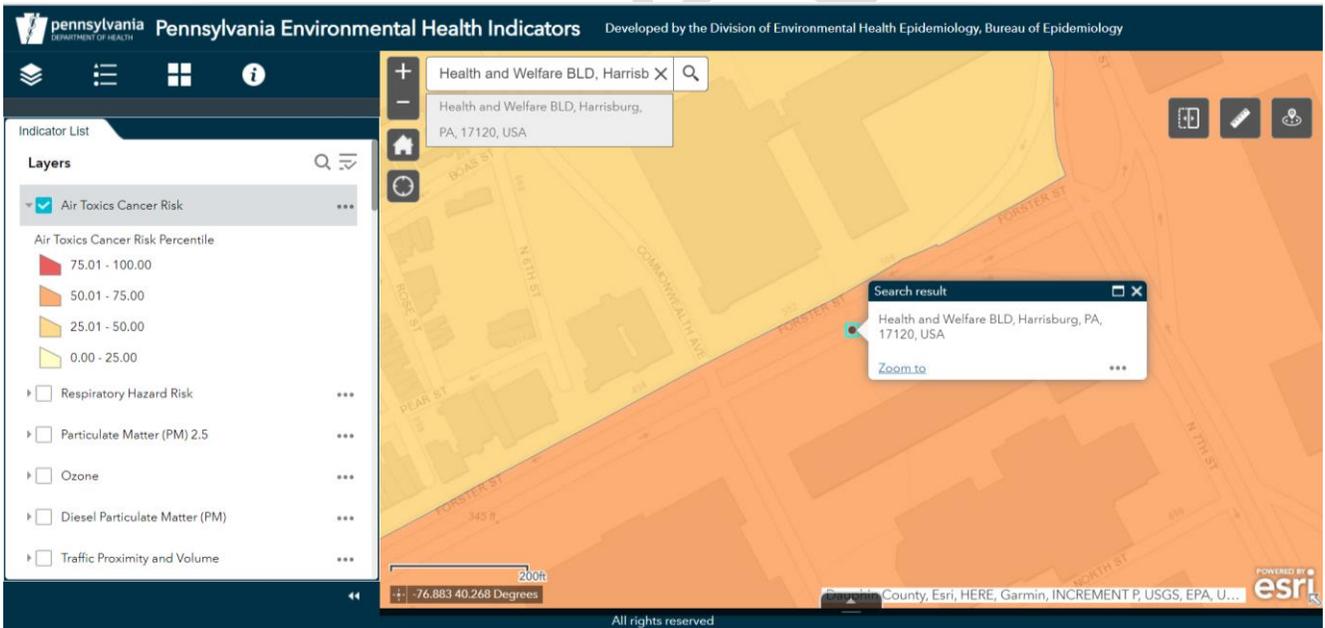
Census Tract ID	Air Toxics Cancer Risk Score	Air Toxics Cancer Risk Percentile	Cancer Risk Summary
42015951300	18.664207	1.000000	19 lifetime risk per million (1%ile)
42015951400	18.235119	1.000000	18 lifetime risk per million (1%ile)
42023960100	17.282522	0.000000	17 lifetime risk per million (0%ile)

124 features 0 selected



Search: click within the search bar icon to search within the map for a specified place or address. Once an address is entered, the map will zoom in on that location providing the ability to view points, boundaries or units of interest within varying distances of the address.

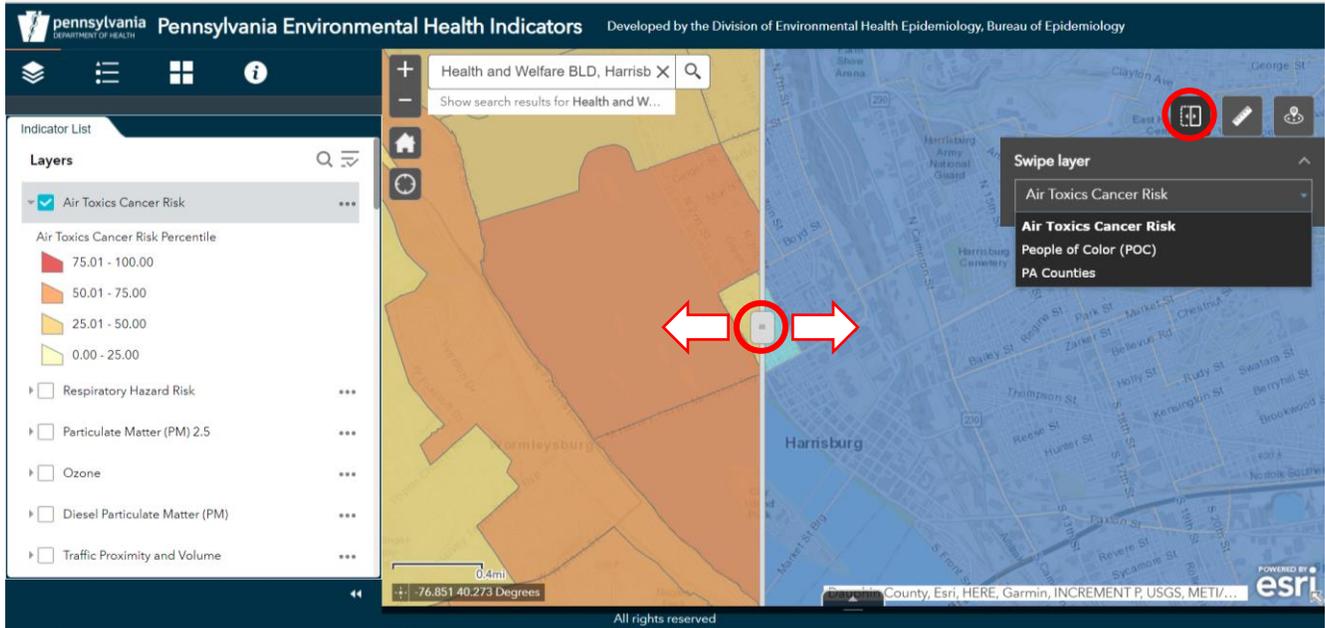
In the example below, the Health and Welfare Building in Harrisburg is entered in the search bar.





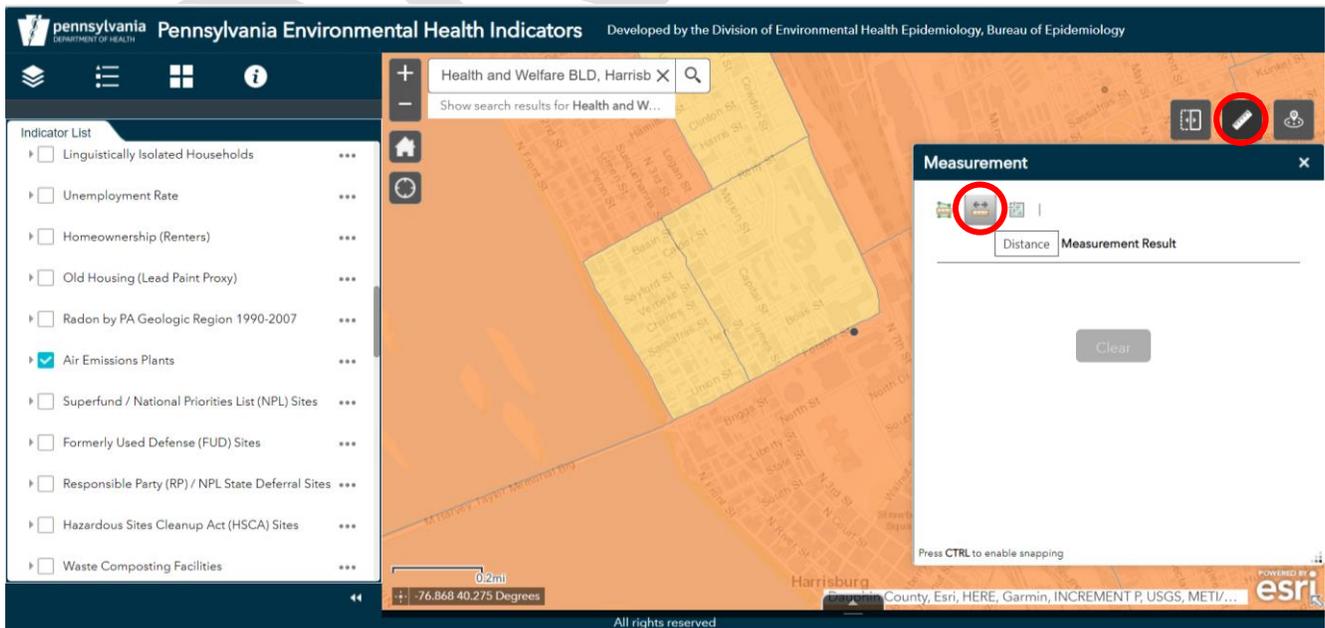
Swipe: click on the swipe icon to easily compare the content of two different layers by dragging the tool left or right to reveal the indicator layer beneath the layer being swiped.

In the example below, the 'Air Toxics Cancer Risk' layer can be swiped above the 'People of Color (POC)' layer to easily compare the two.

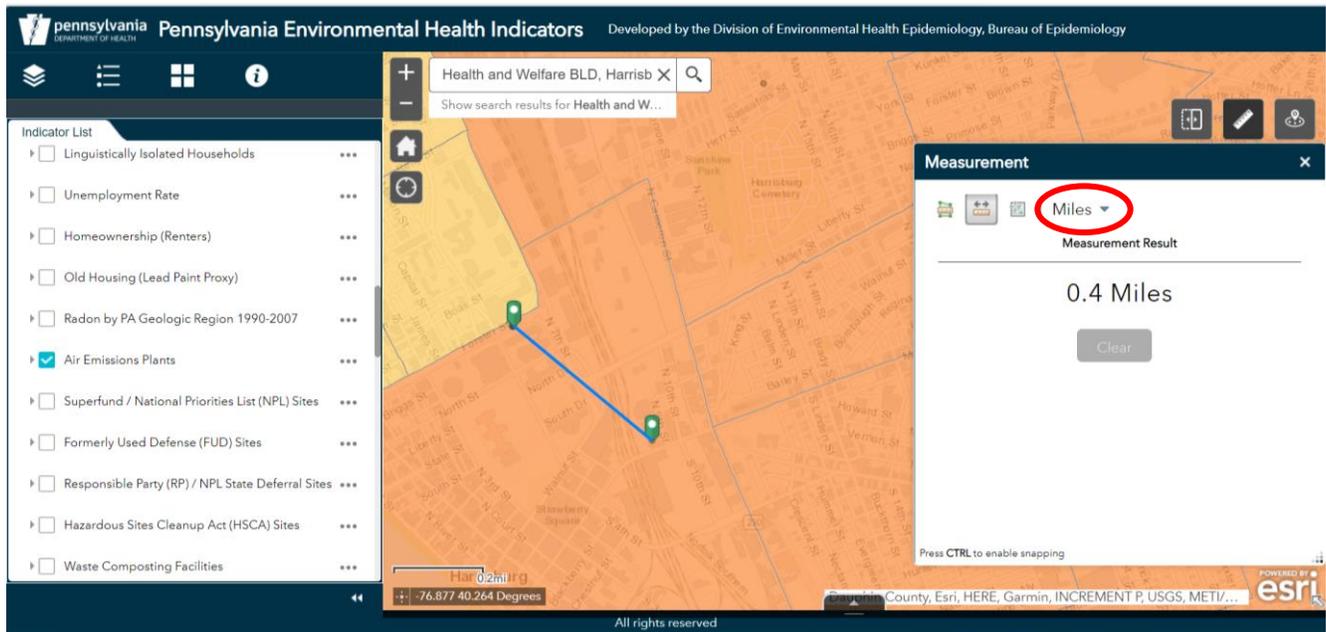


Measurement: click on the measurement icon to measure the area of a polygon, length of a line, distance between two points, or find the coordinates of a point with the map.

In the example below, the Measurement tool is used to measure the distance from the Health and Welfare Building in Harrisburg to the nearest air emission plant. The applicable point feature, in this case the 'Air Emissions Plants' layer, must be turned on to measure distance.

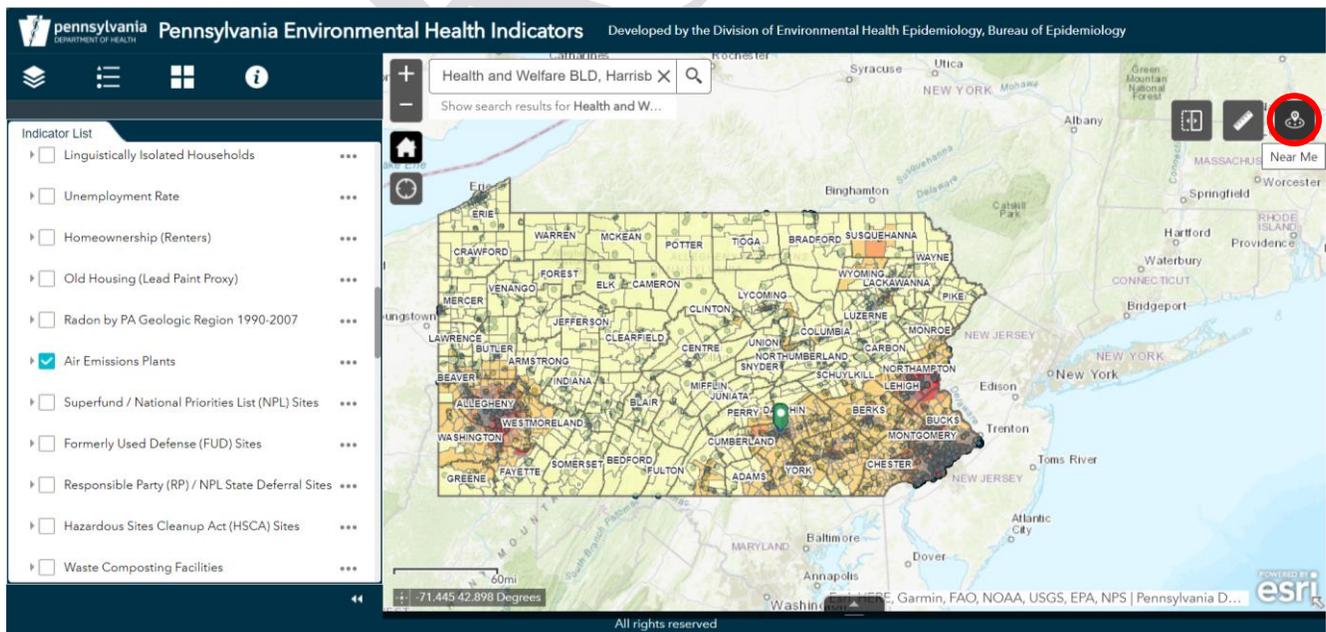


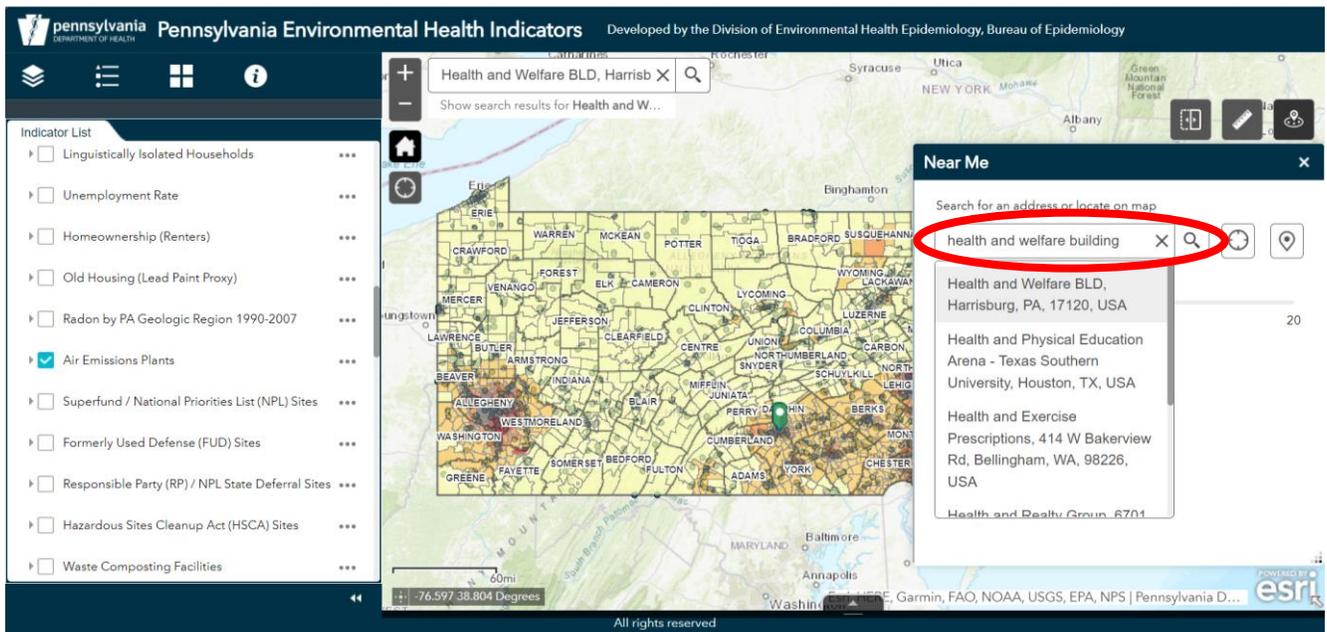
The default unit of measurement is miles. Users can select an alternative unit of measurement by clicking on the down arrow next to 'Miles.'



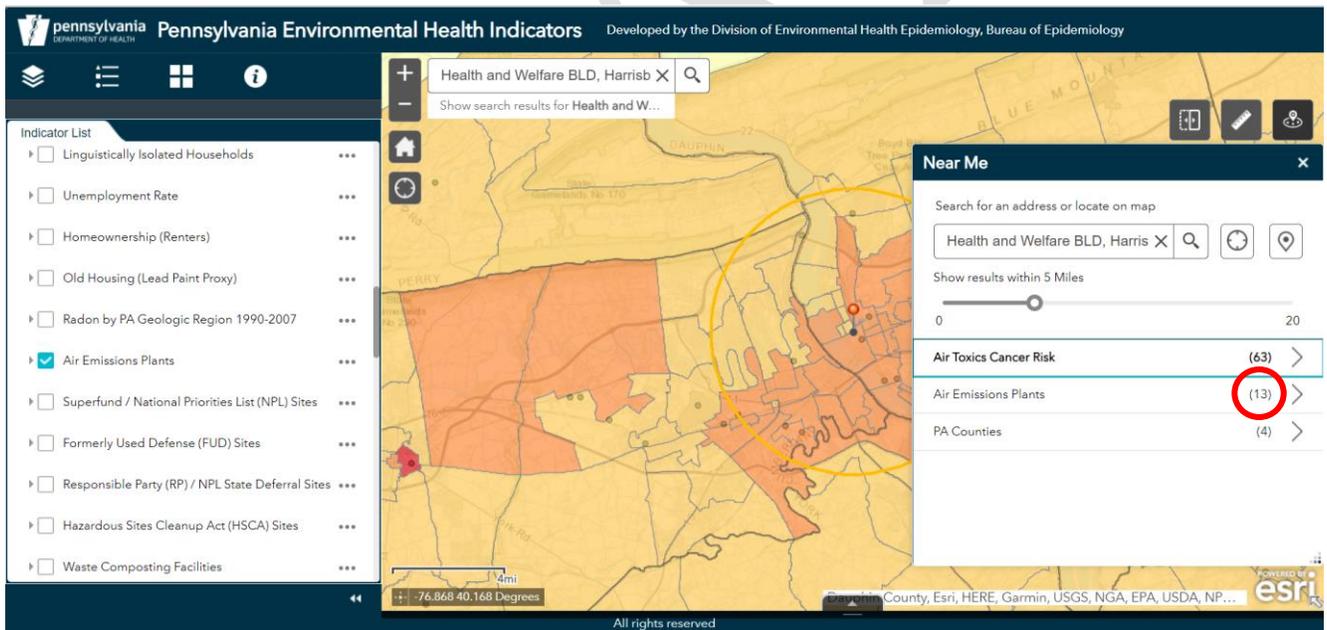
Near Me: click on the icon to find indicator features within a buffer (ranging from 0 miles to 20 miles) of a defined address or place, or of "My Location." View more detailed information about the features, including the number of features for each indicator within the buffer and the distance to each feature within the buffer from the defined location.

In the example below, the Near Me tool is used to calculate the number of air emission plants within a 5 mile radius of the Health and Welfare Building in Harrisburg. The default buffer radius is 2 miles.





There are 13 air emission plants within a 5 mile radius of the Health and Welfare Building in Harrisburg. Please note that the number 63 in parentheses for the 'Air Toxics Cancer Risk' indicator denotes the number of census tracts within the 5 mile buffer radius for which there is corresponding air toxics cancer risk data.

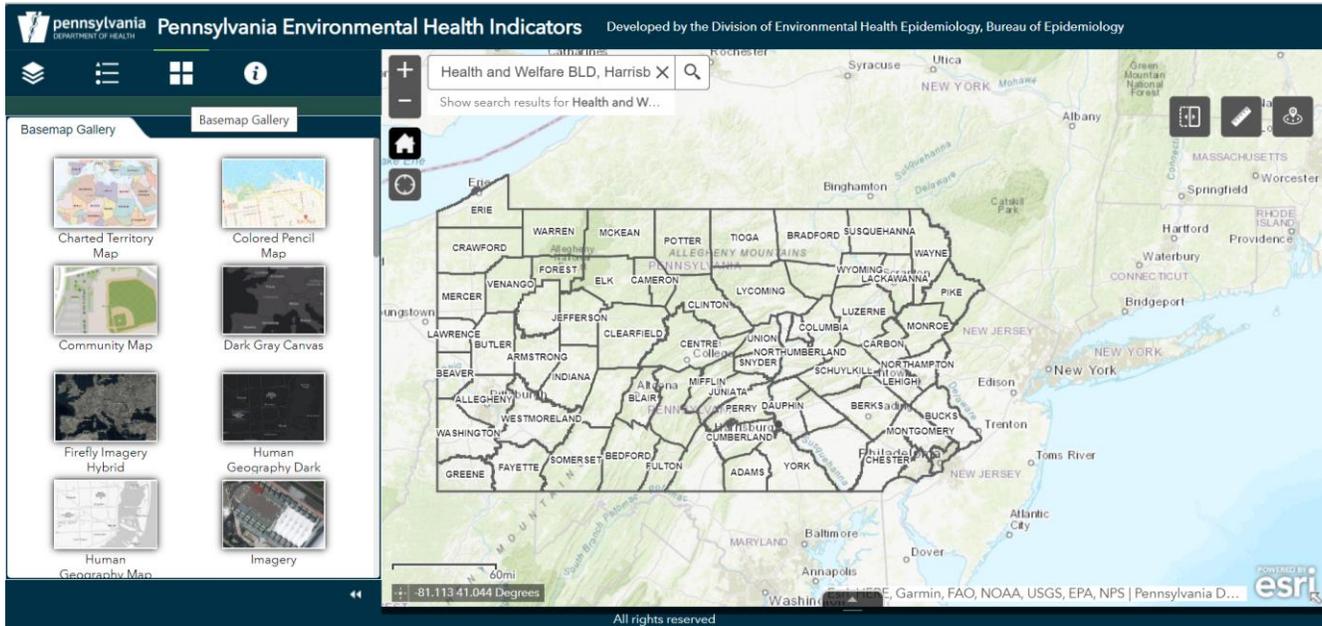


 Home: click on the home icon to zoom the map to the default map extent of Pennsylvania and adjoining states; this extent is the same as the extent of the map when first opened.

 My Location: click on the icon in the upper left of the map to allow the network to detect the user's physical location and zoom the map to it.



Basemap Gallery: click on the basemap gallery to choose from a variety of alternative basemaps (e.g., topographic, imagery, terrain) for desired background. The topographic map is the default.



Overview Map: click on the overview map icon to display the current map extent within the context of the larger region. The overview will change as the map extent changes.

Coordinate bar: allows users to view the coordinates of the cursor location on the map.

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Scale Bar: allows users to view the scale of the current zoom level of the map.