clean AIRE nc

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AIRKEEPER
DASHBOARD

Quick Start Guide

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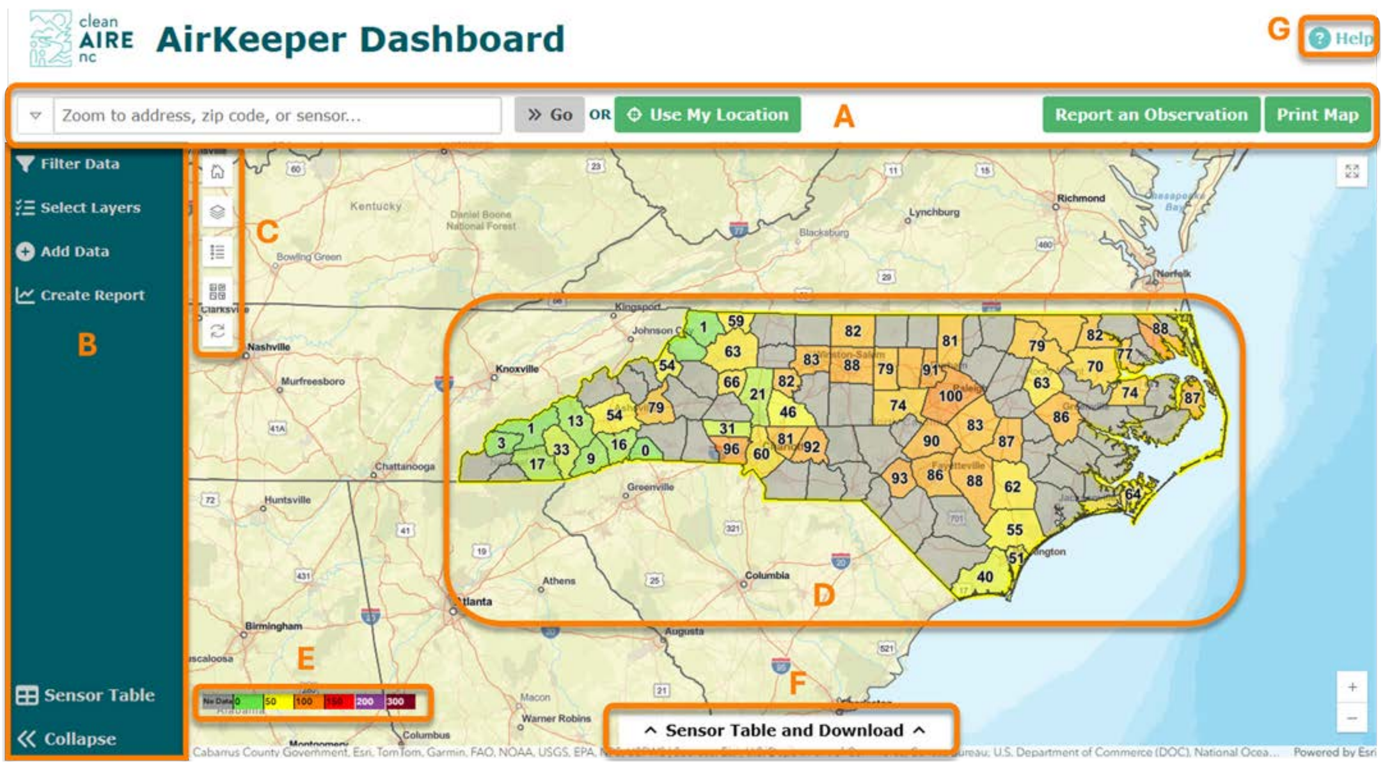
Welcome to the AirKeeper Dashboard! This interactive new mapping tool combines real-time air quality data with critical information such as the location of pollution sources, demographic data, and health statistics, providing a powerful resource to understand and communicate environmental realities.

The next few pages provide a quick tour of the major panels and components of the AirKeeper Dashboard and how to use them:



(A) Top Control Panel

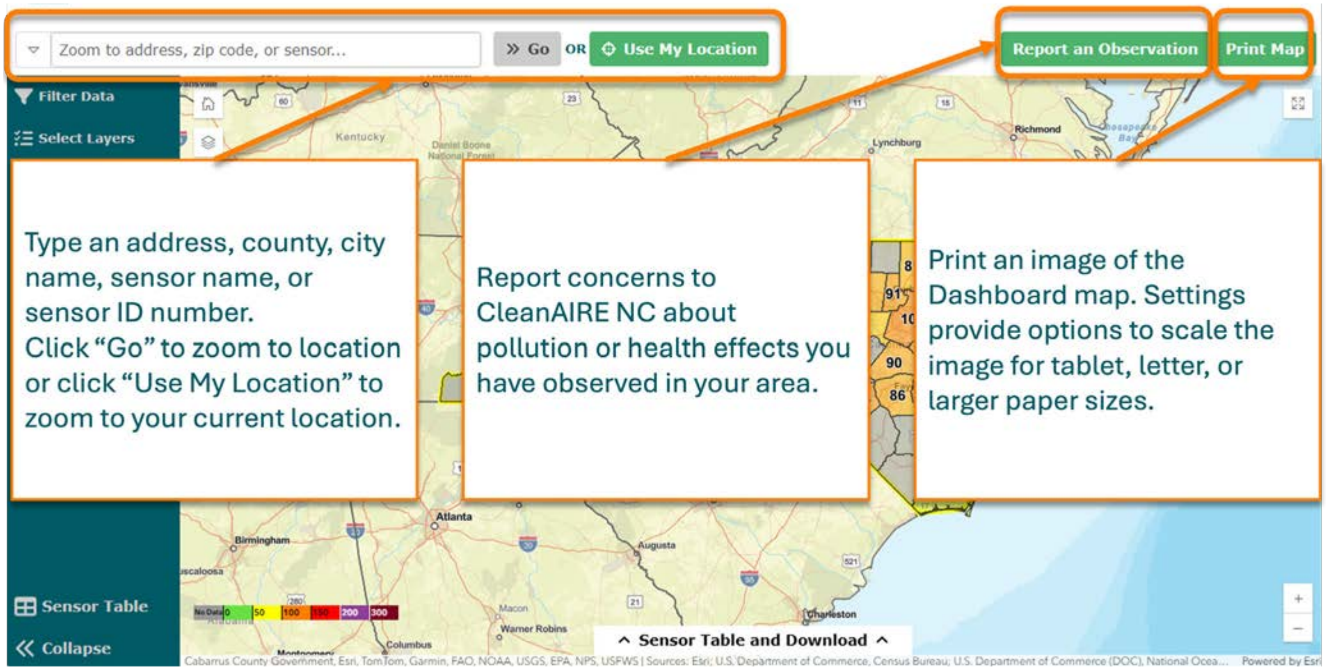
Actions at Your Fingertips

The Top Control Panel provides quick access to essential tools:

Zoom to Location/Sensor
Easily navigate to specific areas or individual sensors.

Report an Observation
Submit air pollution concerns directly to CleanAIRE NC.

Print Map
Create a printable image of your current map view.



(B) Side Control Panel

Customize Your View

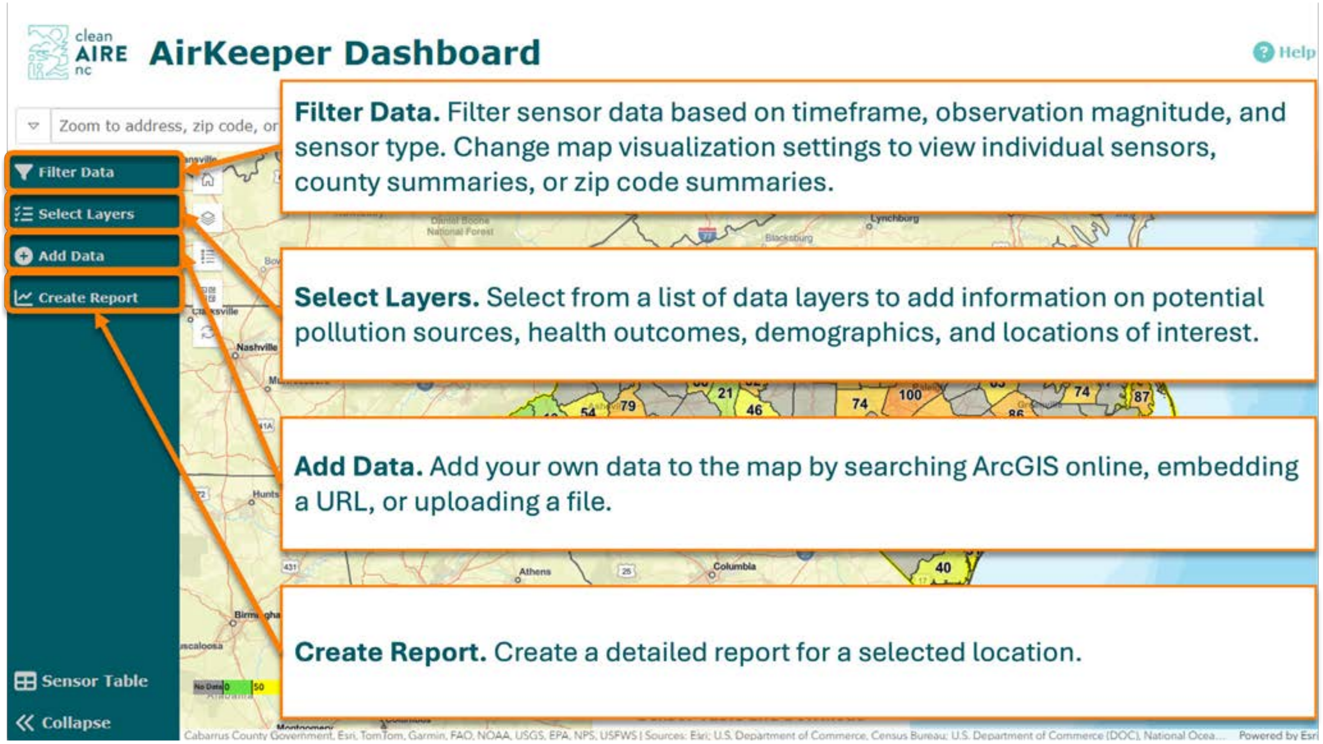
The Side Control Panel allows you to tailor the Dashboard to meet your needs:

Filter Data
Control what sensor data is presented, and how it is displayed.

Select Layers
Add preselected data layers to the map for contextual information.

Add Data
Search for external data to add the map or import your own.

Create Report
Generate a detailed AirKeeper Report for a specific location.



(C) Map Controls

Explore and Visualize

The Map Controls help you manage the map display:

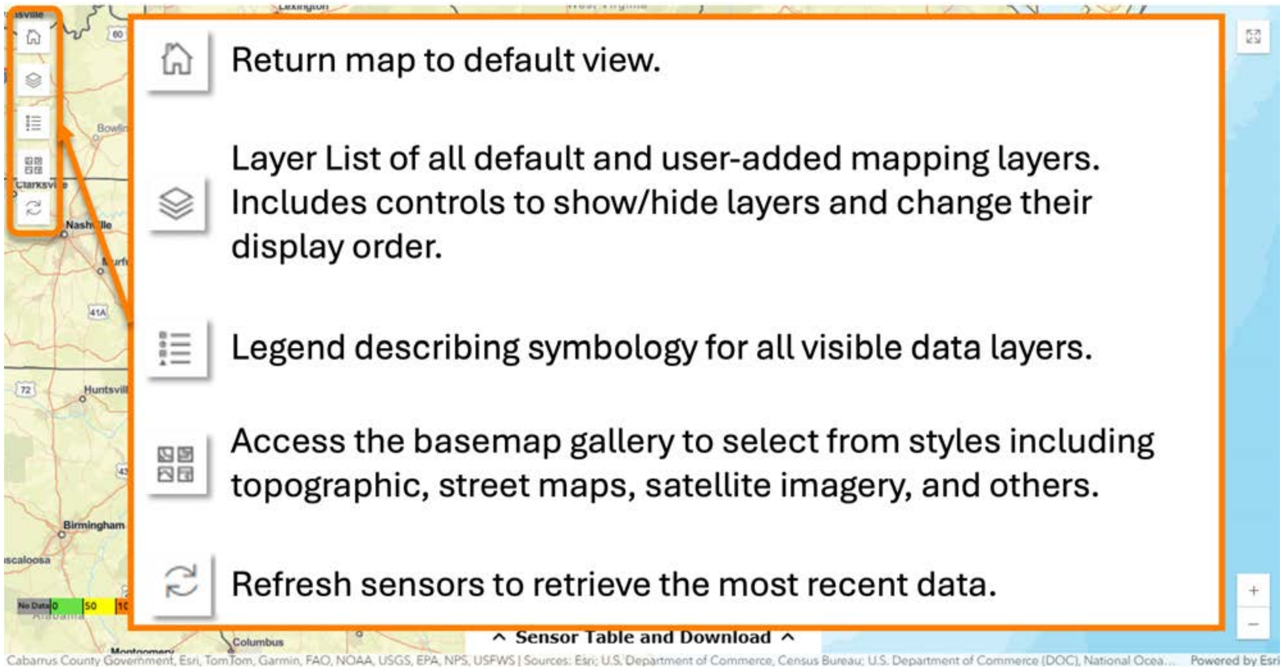
Home
Return map to the default view.

Layers
Toggle the map layers on and off.

Legend
View the map legend for interpretation.

Basemap
Choose different basemap styles or displays.

Data Refresh
Update sensor data to the latest readings.



(D) Interactive Map

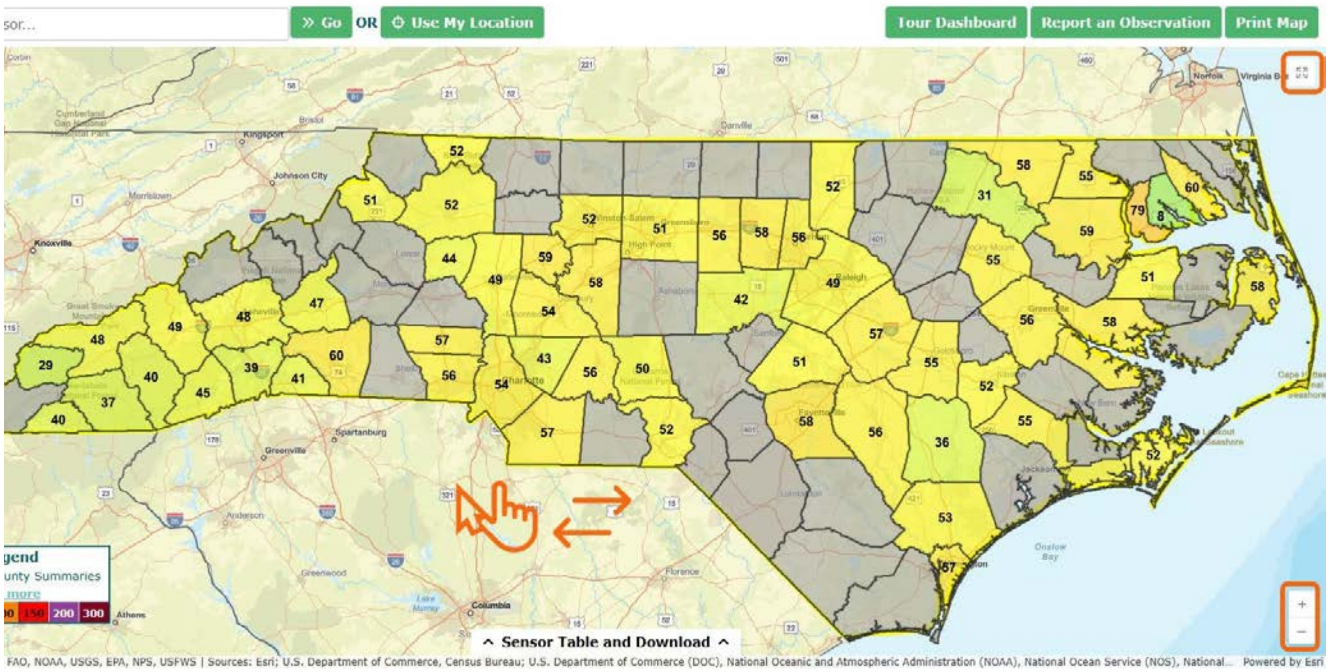
Navigate Your Data Landscape

The central, interactive map is where you view data and navigate to the places you wish to see:

Zoom
Zoom in and out (by using the + and – buttons, mouse scrolling, or pinching on touch screens).

Pan
Pan around the map by clicking and dragging to move the map.

Full Screen
Expand the map to full screen (⛶) and then exit back to normal view (⛶).

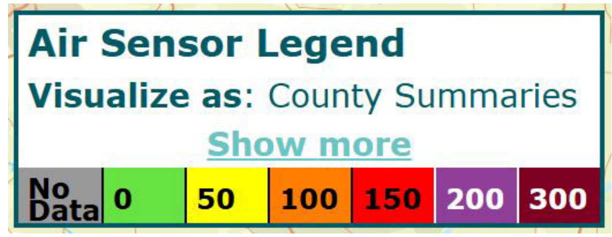


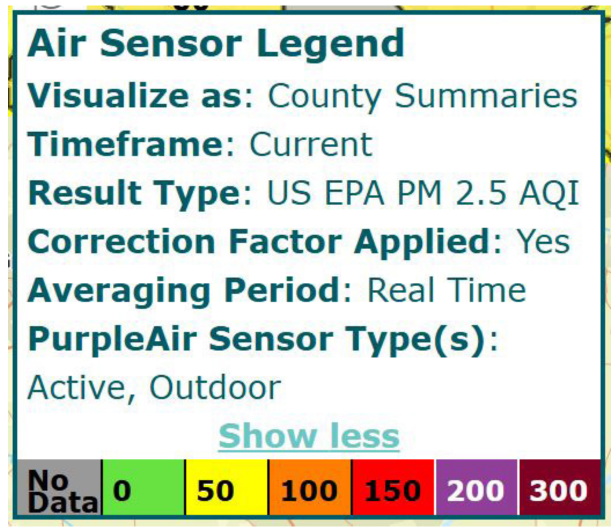
(E) Air Sensor Legend

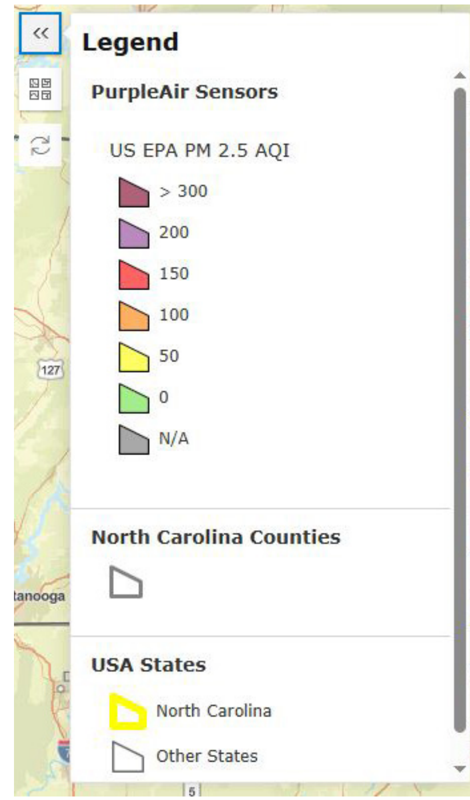
Interpret the Data

This legend explains the PM2.5 Air Quality Index (AQI) and concentration scales associated with air quality sensors, providing context for potential health effects associated with each category.

The Air Sensor legend remains visible on the map at all times. Click the "**Show more"** text to view your current settings for displaying air sensor data. It can also be viewed through the **Legend** button on the Map Control Panel.



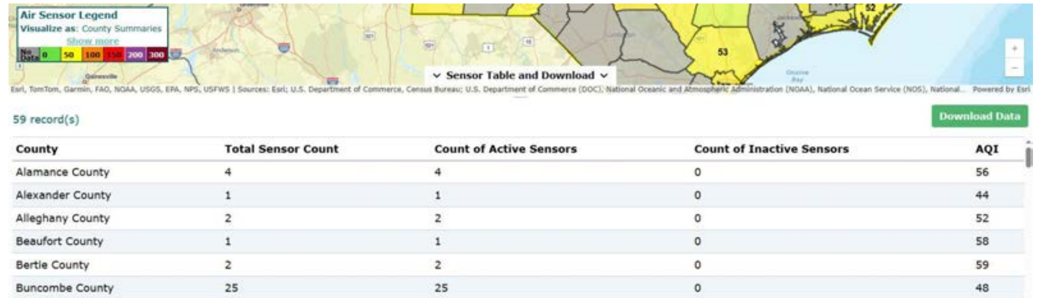




(F) Sensor Table

Data in Detail

The Sensor Table displays PurpleAir Sensor observations in a table format. The data shown matches the user's settings in the Filter Data tool under "Visualize Results..." (e.g. county, zip code, or individual sensors). **Download Data** as a CSV file for further analysis.



County	Total Sensor Count	Count of Active Sensors	Count of Inactive Sensors	AQI
Alamance County	4	4	0	56
Alexander County	1	1	0	44
Alleghany County	2	2	0	52
Beaufort County	1	1	0	58
Bertie County	2	2	0	59
Buncombe County	25	25	0	48

(G) Help

Get Assistance

This button will launch the AirKeeper Dashboard help content and additional resources through the CleanAIRE NC website.

Questions? Connect with us at Dashboard@cleanairenc.org

Using the AirKeeper Dashboard Tools

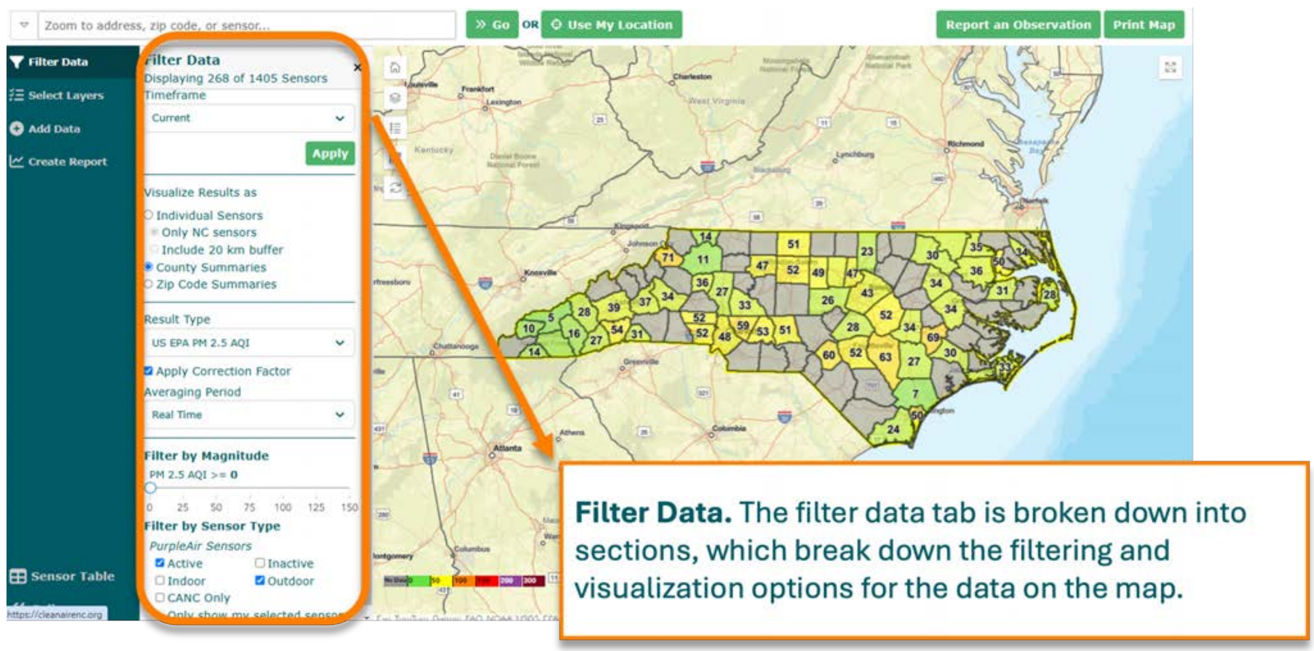
This section dives into some of the specific options users can select from the Side Control Panel to add context to their maps and tailor the AirKeeper Dashboard to their needs.

Filter Data

Tailor Your Air Quality View

The Filter Data tool allows you to customize which PurpleAir sensor data is displayed.

Users can choose which sensors to view, and how to visualize results.



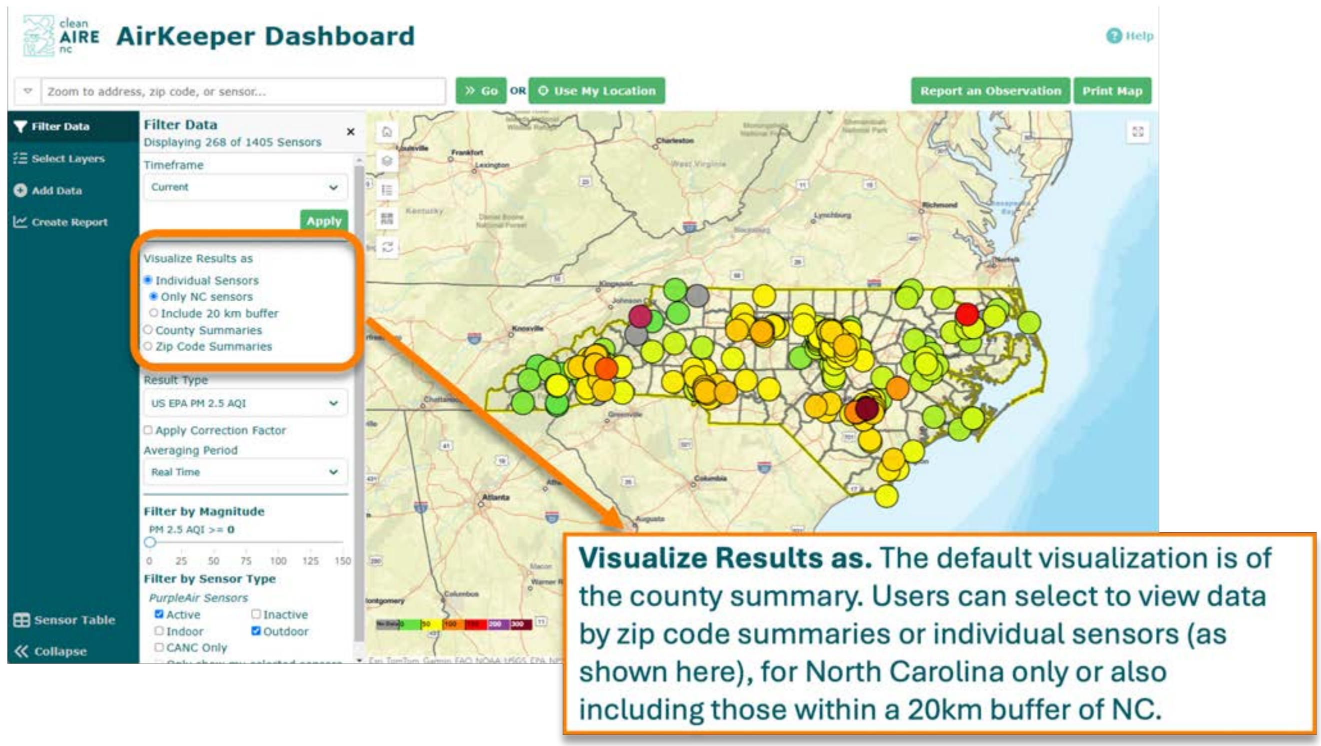
Visualize Results As:

Settings under **"Visualize Results as"** allow you to display individual sensor data or get air quality summaries at the county or zip code levels.

Choose whether to visualize PM2.5 measurements along the Air Quality Index scale or by concentration.

Applying a correction factor will show readings that more closely match regulatory sensors.

Finally, adjust the Averaging Period to show Real Time data or hourly or daily averages.



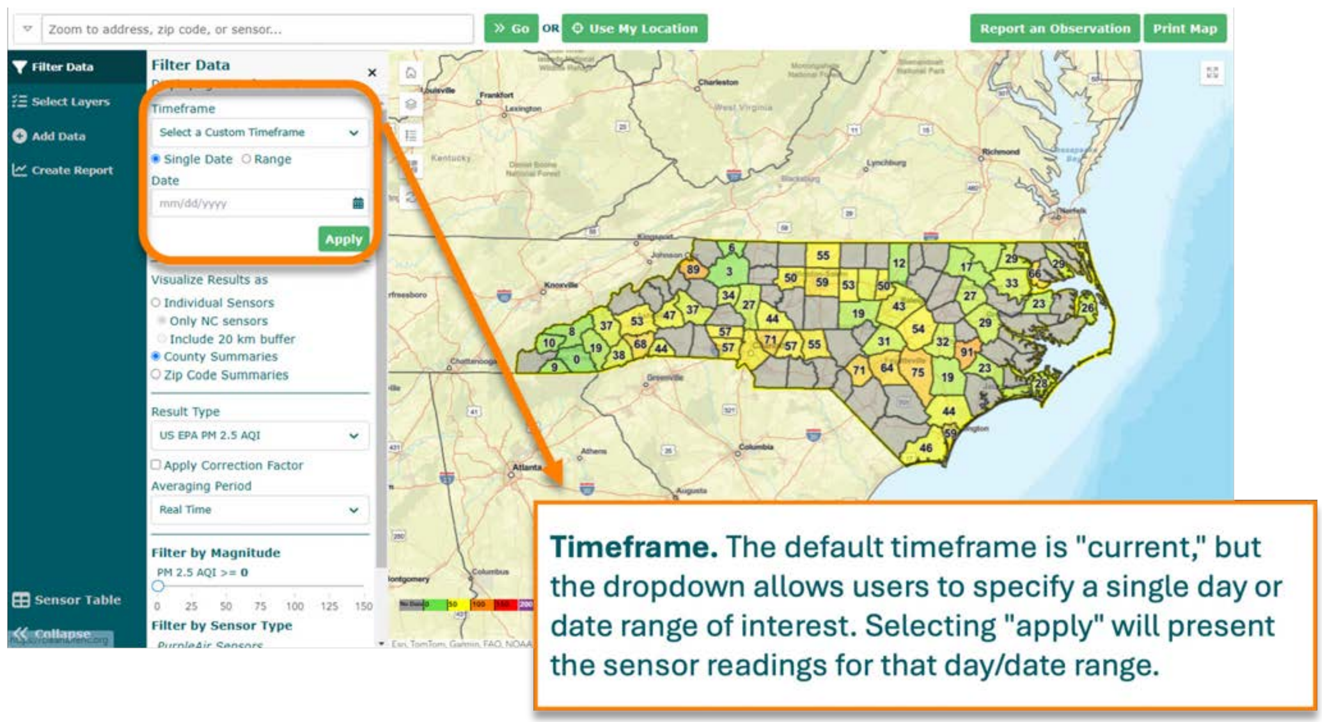
Timeframe:

View current sensor data or choose specific periods for analysis.

Use the dropdown menu to change settings to “Select a Custom Timeframe,” then select Single Date or Range to choose a date on the calendar.

(Don’t forget to click OK after you choose a date.)

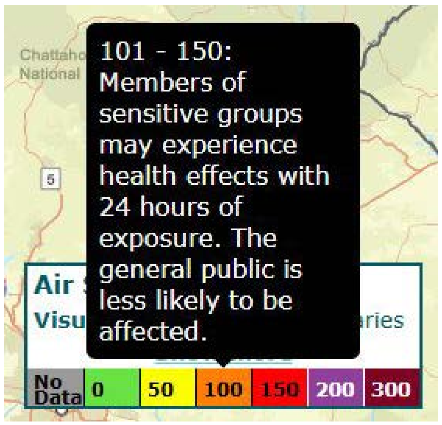
Sensor data does not refresh automatically, so use the Refresh Button (⟳) on the Map Control panel for results closest to the minute.

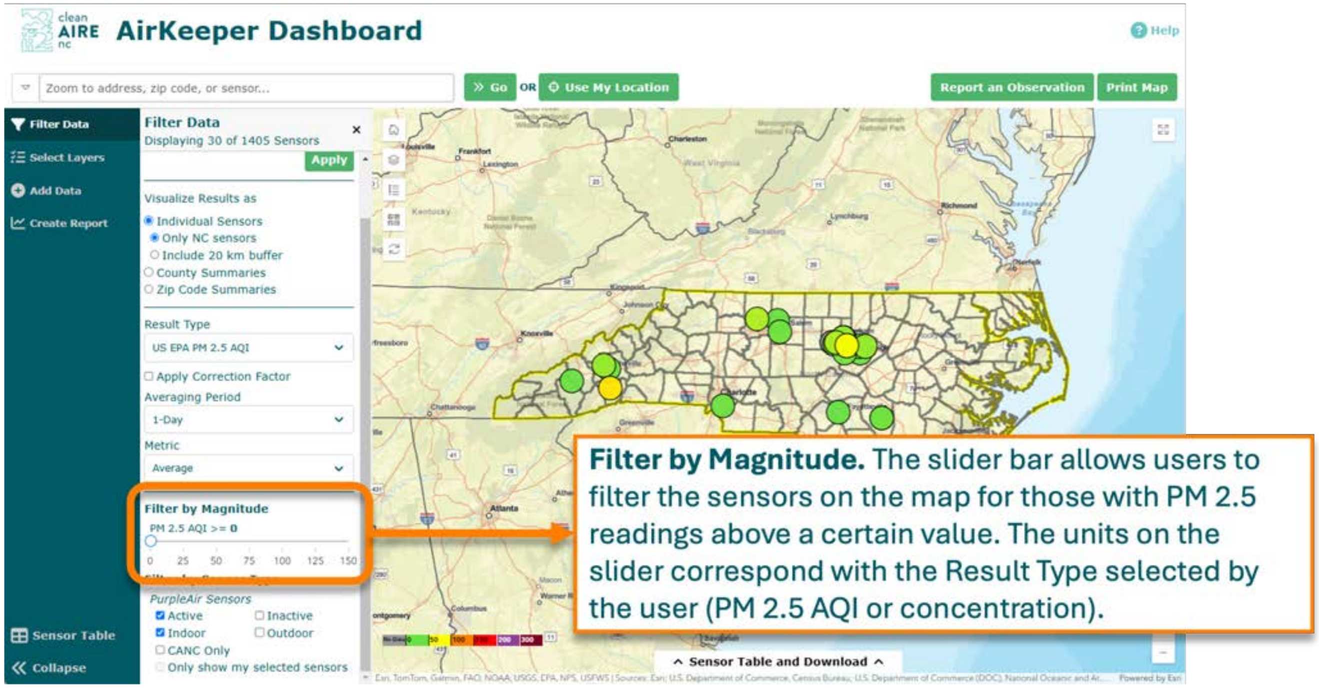


Filter by Magnitude:

Easily visualize areas around the state displaying poor air quality.

Use the slider bar to filter out sensors reading below a certain AQI level so that you can focus on areas with higher risks of health impacts.

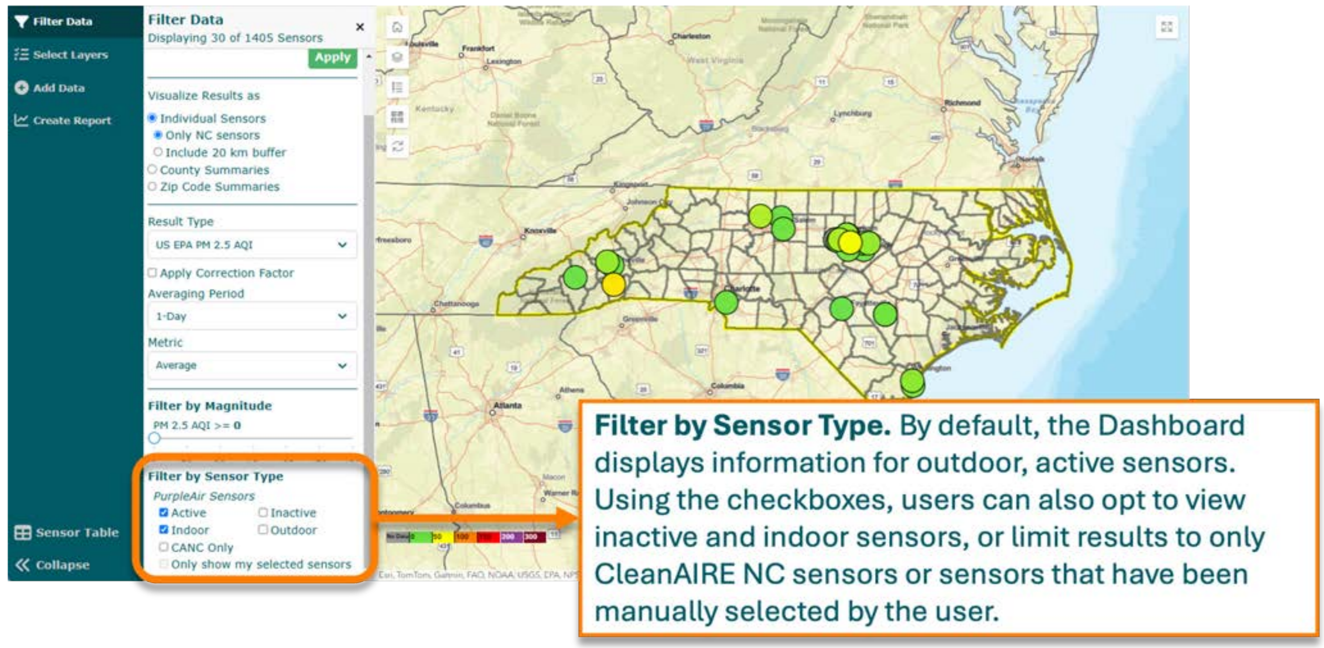




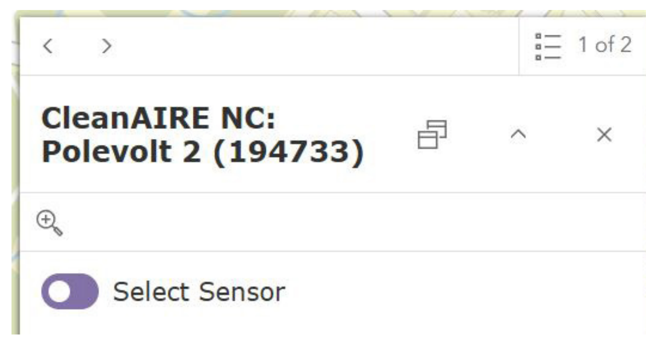
Filter by Sensor Type:

Filter out inactive sensors or choose to isolate data from the CleanAIRE NC AirKeeper Network.

Choose to include or exclude indoor air sensors across the statewide PurpleAir Network.



If creating a selection of sensors (click on a sensor and toggle to select), you can choose to only show those sensors both on the map and within the Sensor Table.



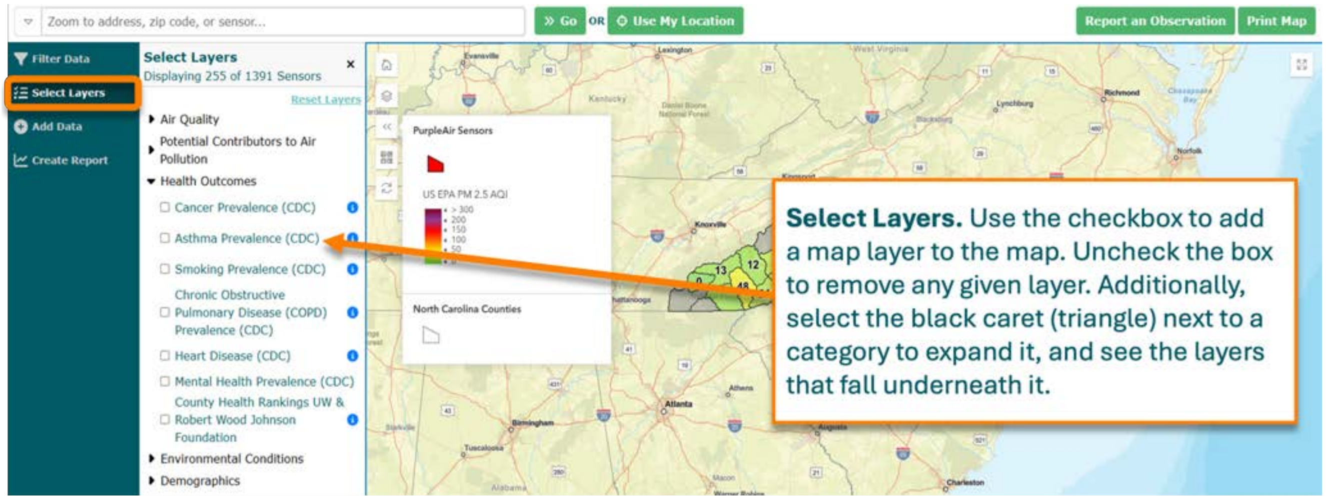
Select Layers

Add Context to Your Map

The Select Layers tool lets you overlay preselected data layers onto the map. This data is organized into nine categories, with subcategories for easier navigation.

Select the black caret icon (▶) next to a category title to view all the available layers within that category. Click the checkboxes to choose which layers to display.

Click the blue information icon (ℹ) to the right of a given layer for an explanation of the data.



Add Data

Integrate External Information

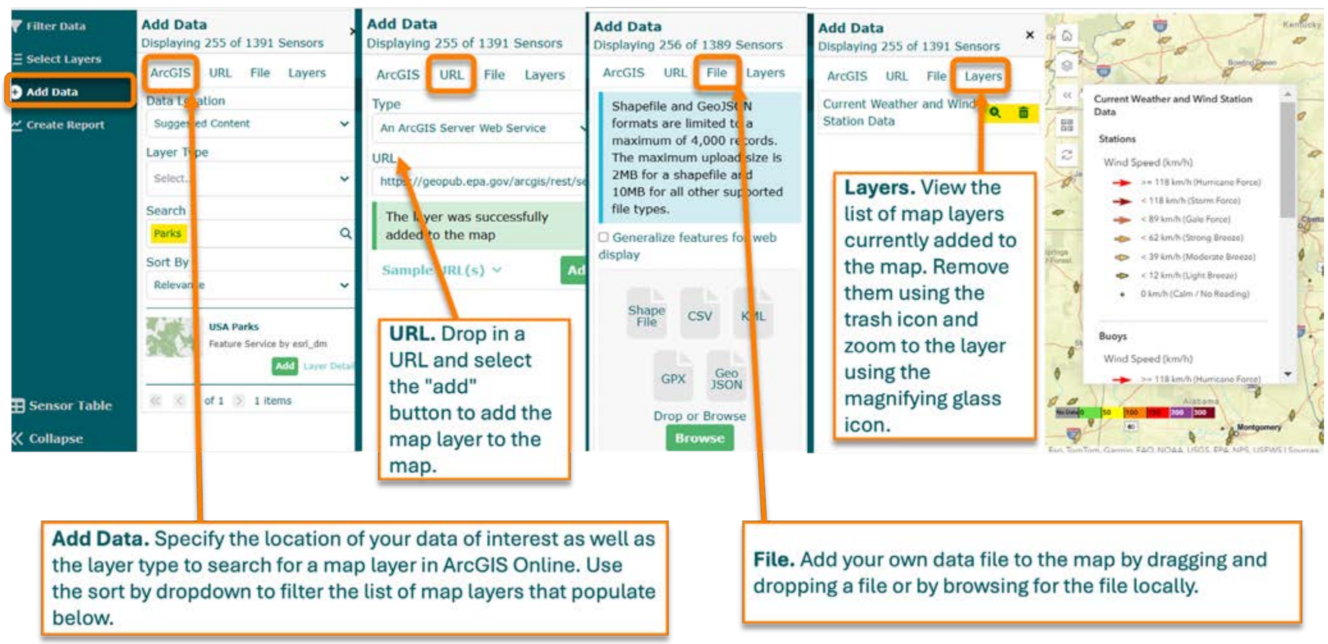
Clicking on the Add Data tool opens up a panel with four new tabs to help users add external data to the map from various sources.

Users may:

1. Browse or search for available map data from the ArcGIS Online data library;
2. Add data layers via URL; or
3. Upload data files saved locally on a computer or laptop.

Under the Layers tab, users can remove layers with the trash can icon or zoom to a layer with the magnifying glass icon.

Add Data: ArcGIS, URL, File, and Layers Tabs

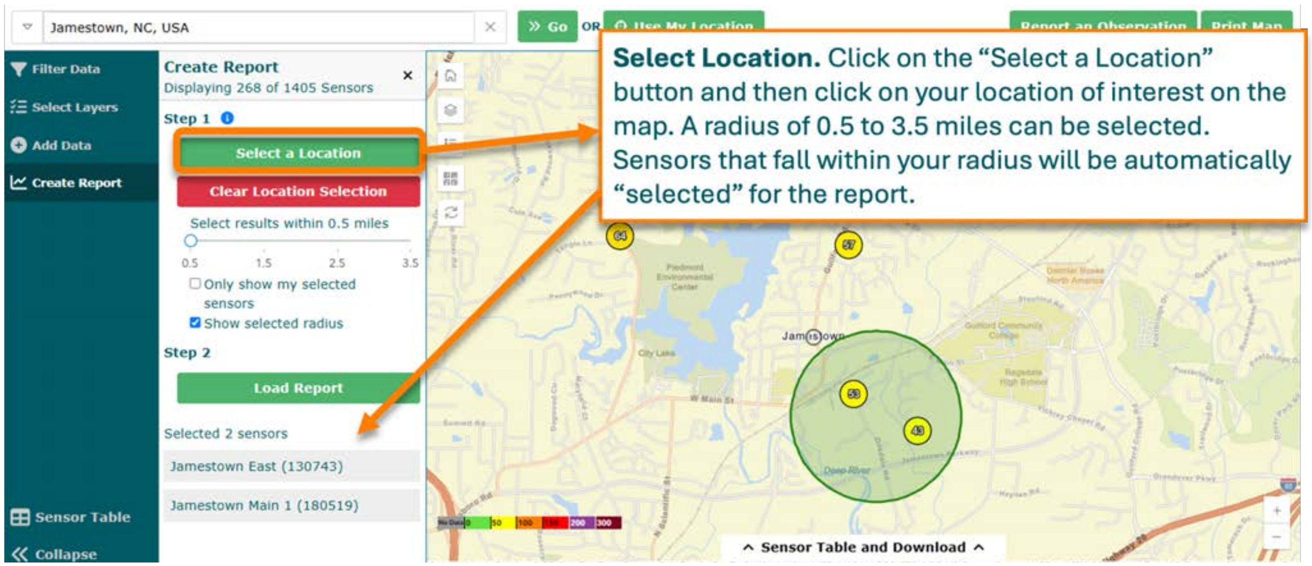


Create Report

Share Key Insights

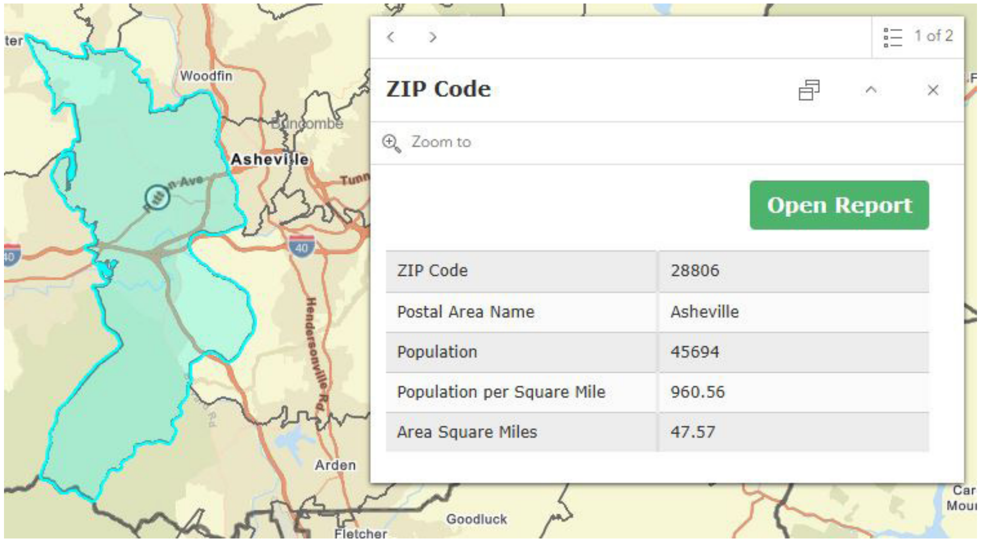
The Create Report tool lets you generate in-depth reports for your area of interest.

Simply click on a location on the map, use the slider bar to define your radius, and load a report.



To create a report for an entire county or zip code, go to the Select Layers menu, then look under Geographic Boundaries and check the box next to the boundaries you wish to see on the map.

You can choose an area with or without sensors to create a location report that summarizes key findings for your radius.



Customize Your Report

Customize your reports with the data you need (including air quality, pollution sources, health outcomes, etc.), all presented in easy-to-visualize charts and tables with options to download and links to more info. Print to PDF to save or share your insights!

Health Data

County Health Rankings

County Name (County FIPS)	Ranking (Out of 100 Counties)	Population (2021 Estimates)
North Carolina		10.7 million
Wake County (37183)	1	1.18 million

Related Resources
- County Health Rankings from the University of Wisconsin Population Health Institute
- Robert John Wood Foundation

CDC Health Metric by County

Geographic Area	Asthma	Cancer	COPD	Smoking	Heart Disease	Mental Health
North Carolina	10.4%	6.7%	7.5%	17%	6.4%	17.6%
Wake	8.8%	6.8%	4.4%	9.7%	4.8%	13.6%

Questions?

Connect with us at Dashboard@cleanairenc.org

AirKeeper Dashboard Team

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Development Team: Environmental Research Group

External Testing and Design: AirKeeper Dashboard Community Stakeholder Group

cleanairenc.org/airkeeper-dashboard