

Air Quality Commission FY24 Annual Report

Presented by: Peter McGrath, Chair

Staff Support: Leslie Rhodes, AQ Director

2024 Air Quality Commission



Pictured (left to right): Mr. Marcus Hackler, Dr. Brian Magi, Ms. Lisa Hooker, Mr. Gregory Twait, Rev. Janet Garner-Mullins, Mr. Peter McGrath, Dr. Karl Welke, Mr. Richard Matulis.

Not pictured: Dr. Aaron Levy, Mr. Bill Powers, Mr. Bill Lawrence

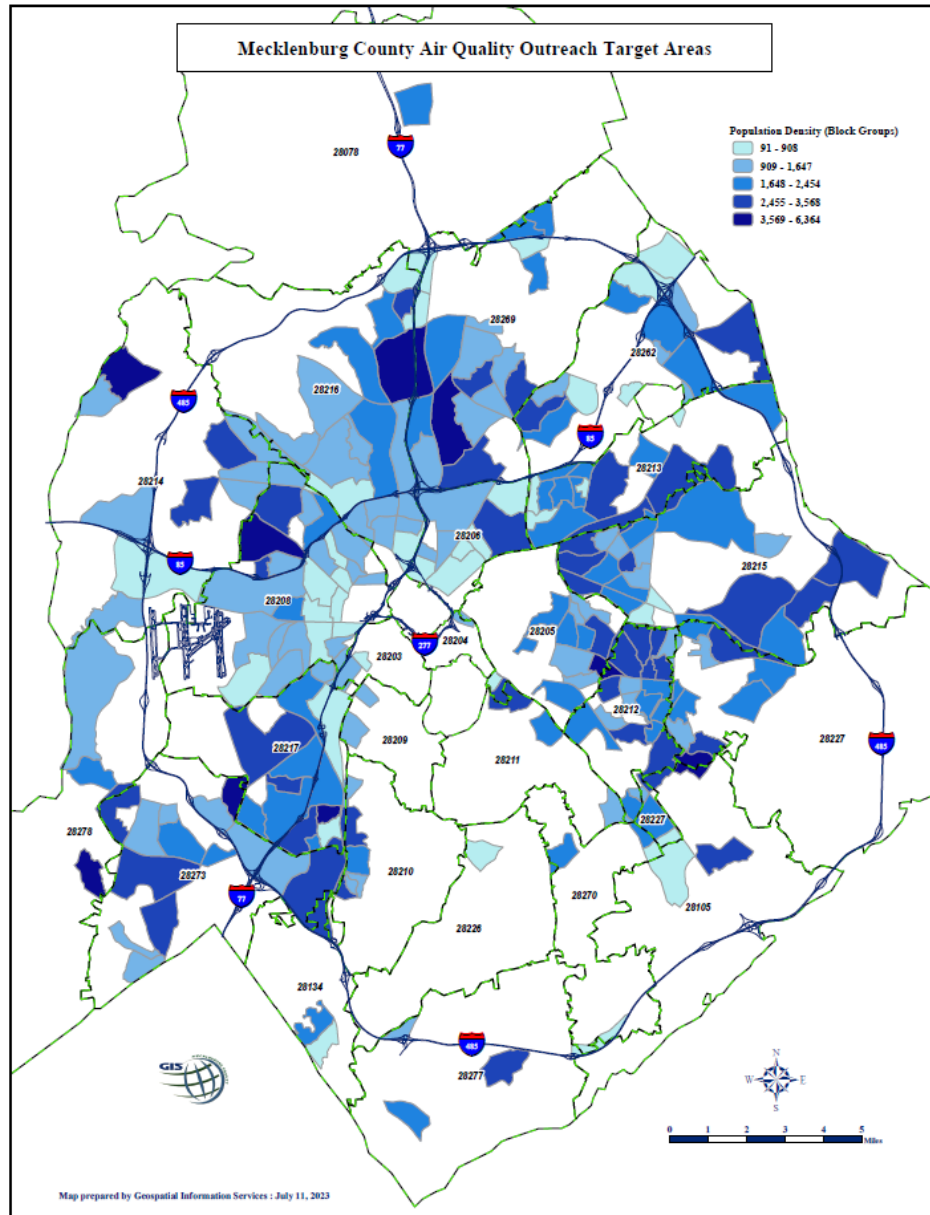
Conducting Community Outreach

In 2023, the Air Quality Commission took an active role in education and outreach in the community. Here are a few examples:

- Attended tabling events at libraries, parks and monitoring stations
- Provided AQ updates on community neighborhood coalitions
- Presented at conferences
- Served on non-profit boards as an air quality resource.



Elevating Environmental Justice



The AQC recommended that Mecklenburg County Air Quality prioritize outreach in areas of the County in which the percentage of households is higher than 90% of census blocks in the state for the at least one of the following categories:

- people of color
- low-income
- have less than high school education,
- linguistically isolated

An associated FY25 budget request was submitted by the AQC to add an outreach position to work in the highlighted areas.

Data defined by U.S. Environmental Protection Agency's Environmental Justice Screening and Mapping Tool (EJ Screen).

Darker highlighting indicates census blocks with greater population density. Map developed in collaboration with Mecklenburg County Air Quality and with technical resources from Mecklenburg County GIS.

Following Important Issues

- Revisions to the federal regulations for Ethylene Oxide
- Strengthening of the National Ambient Air Quality Standard for Fine Particulate Matter (PM_{2.5})
- Revisions to the Mecklenburg County Air Pollution Control Ordinance to incorporate fee adjustments.
- Issuance of Operating Permits (44), Notices of Violations (55), and Penalties (1) by Mecklenburg County Air Quality

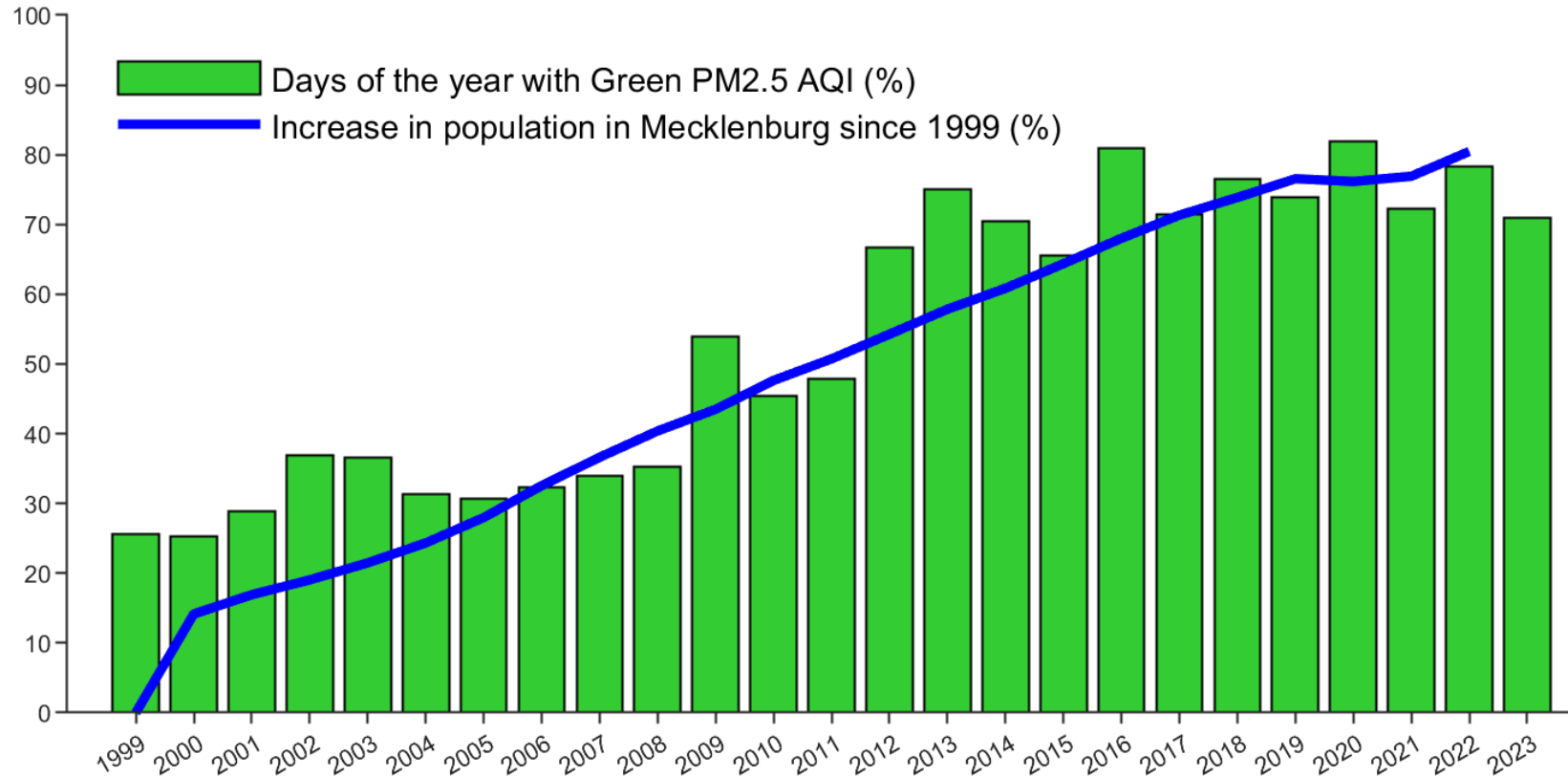
Evaluating Air Monitoring Compliance

2023 Annual Compliance Values

Mecklenburg County currently meets all federal, health-based air quality standards.

Pollutant	Averaging Time	Mecklenburg Compliance Value (2023)	NAAQS	Federal NAAQS Designation
Ozone (O3)	8-hour	69 ppb	70 ppb	Attainment
Particulate Matter (PM2.5)	24-hour	21 µg/m ³	35 µg/m ³	Attainment
	Annual	9.2 µg/m ³	12 µg/m ³	
Particulate Matter (PM10)	24-hour	50 µg/m ³	150 µg/m ³	Attainment
Carbon Monoxide (CO)	8-hour	1.6 ppm	9 ppm	Attainment
	1-hour	2.0 ppm	35 ppm	
Sulfur Dioxide (SO2)	1-hour	2 ppb	75 ppb	Attainment
	3-hour	0.004 ppm	0.5 ppm	
Nitrogen Dioxide (NO2)	1-hour	37 ppb	100 ppb	Attainment
	Annual	10.7 ppb	53 ppb	

Population Growth Did Not Stop Positive Air Quality Trends



Mecklenburg County was impacted by wildfire smoke on several occasions in 2023.

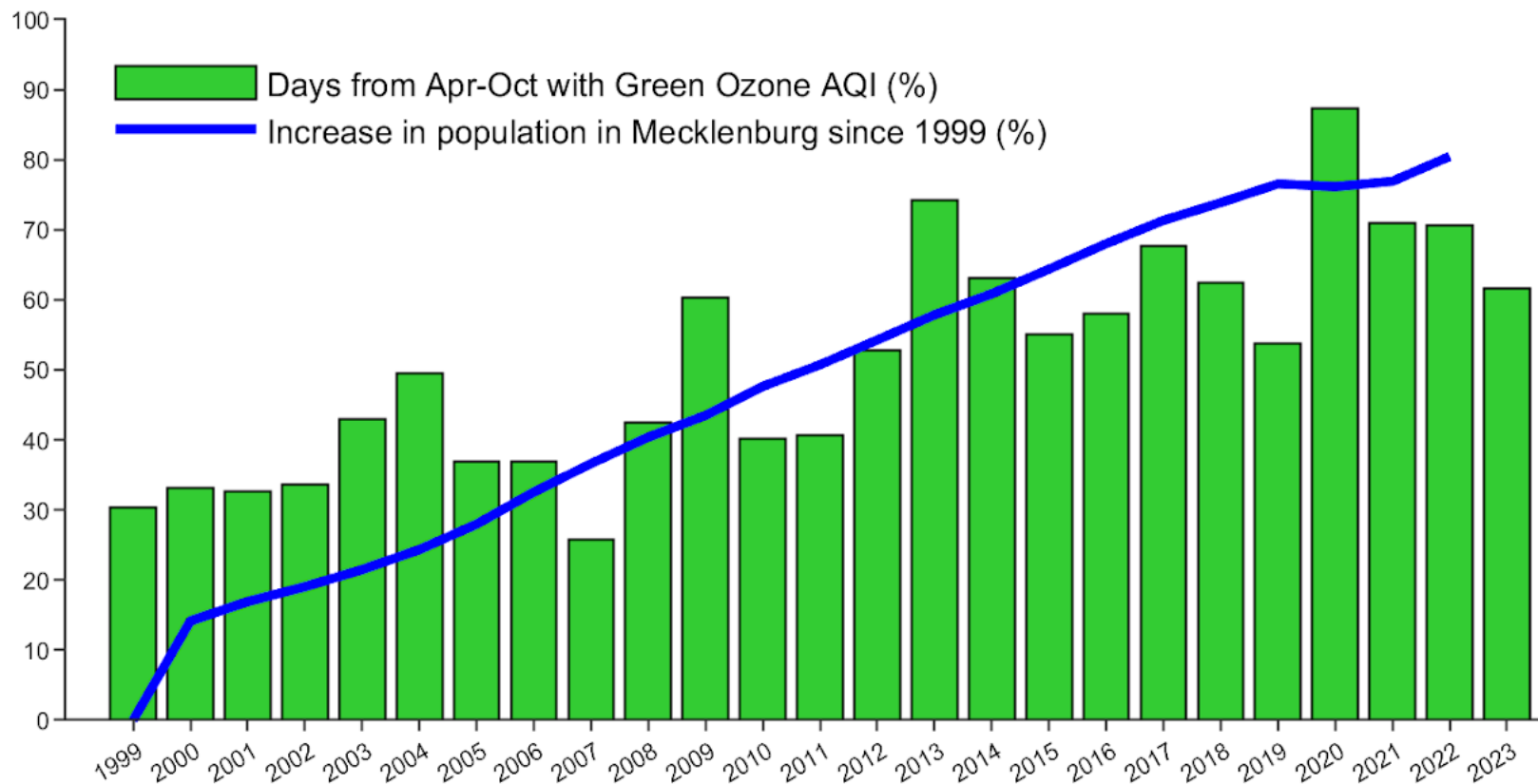
Smoke (a type of PM) from Canadian Wildfires caused several days when conditions were unhealthy for sensitive groups in Mecklenburg County and other areas of North Carolina. These uncontrollable acts of nature resulted in an increase in the 2023 compliance value. Despite this increase, the County's data continues to demonstrate compliance with the current NAAQS for PM₁₀ and 24-hour PM_{2.5}.

AQI data from EPA <https://www.epa.gov/outdoor-air-quality-data/air-data-multiyear-tile-plot>

Population data from Google Data Commons <https://datacommons.org/>

Graphic created by Brian Magi (AQC and UNC Charlotte)

With Our Growing Community, Local Efforts Continue to Improve Air Quality



Mecklenburg County has seen consistent, sustained air quality improvements over time.

Over the last two decades, Mecklenburg County's compliance value for ground-level ozone have improved by 25%.

The temporary air quality improvement seen in 2020 during the COVID-19 pandemic and local Stay at Home Order rolled out of this year's data set, resulting in higher compliance value in 2023. These temporary improvements were above and beyond the sustained improvements seen over time.

It is crucial to continue work to reduce ground-level ozone concentrations in region. Local efforts, such as [Grants to Replace Aging Diesel Engines](#) and [Breathing Room](#) have contributed to overall improvements.

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2024 AQC Membership

AQC Member	Sector	BOCC District
Mr. Peter McGrath (Chair)	Attorney	4
Mr. Marcus Hackler (Vice Chair)	Industry	2
Rev. Janet Garner-Mullins	Public	2
Ms. Lisa Hooker	Public	1
Dr. Aaron Levy	Health Professional	5
Dr. Brian Magi	Scientist	3
Mr. Bill Powers	Transportation	1
Dr. Karl Welke	Public	5
Mr. Bill Lawrence	Public	1
Mr. Greg Twait	Engineer	1
Mr. Richard Matulis	Public	6