Community Science & Engagement Historic West End Case Study

Mecklenburg County Air Quality
Leslie Rhodes - Air Quality Division Director
Tori Jercich - Air Quality Specialist

Introduction & Background

CLEARING THE AIR IN THE HISTORIC WEST END

A Report by the Historic West End AirKeepers and Clean Air Carolina



February, 2019

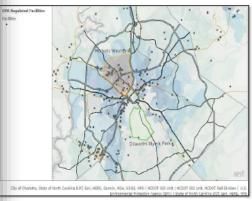


Figure 1. Map of Charlotte neighborhoods and permitted facilities. 2017

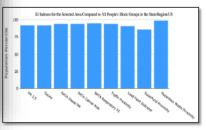


Figure 2. Historic West End Index (higher is greater risk)

AIRKEPPERS DOCUMENT POLITION

The lasting effects of these patterns of development was underscored by the AirKeepers project, which began in 2016. With the help of community leaders, Clean Air Carolina established permanent fine particle pollution monitoring sites in three west side neighborhoods: Oaklawn Park, Historic Washington Heights, and Northwood Estates. We compared the results with a monitor installed in Myers Park, and with Mecklenburg County's federal regulatory monitor at Garinger High School in the eastern part of the city. A year of data from all five sites indicates that the Historic West End had more instances of higher concentration and more outliers than the other neighborhoods (Figure 4).

PRESENT-DAY RISKS

Today, people living in the Histor End are at greater risk from air p than those in affluent, historical neighborhoods, which are located well away from highway other sources of pollution. A businesses that have permits pollution underscore these diffe with far more permits issu businesses in the African A neighborhoods around the Histor End (Figure 1). Bar graphs create software from the Environ Protection Agency (EPA) demonst dramatic differences between mental health risks for the Histo End neighborhoods and for My (Figure 2, 3).

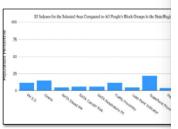


Figure 3. Myers Park / Dilworth Index

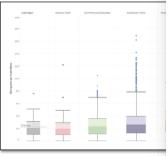


Figure 4. PM2.5 concentrations in five distinct areas Charlotte. 2017. Clean Air Carolina

MONITORING LEADS TO ACTION

The work of the AirKeepers demonstrated the importance of monitoring pollution and pollution-related activities. In addition to overall pollution levels, AirKeepers documented pollution spikes produced by street paving, mountain wildfires, and increased truck traffic linked to a major construction project on I-77. They worked on strategies to inform neighbors about pollution sources and opportunities to advocate for cleaner air.

CREATING A CLEAN AIR CORRIDOR

The pollution these efforts revealed has led residents to call for establishment of a Clean Air Corridor in the Historic West End. Creating this corridor will include helping residents learn about air pollution and its causes, working with businesses and individuals to reduce pollution emissions and advocating for policies that will produce cleaner air. Areas of action will include:

- PASSENGER VEHICLE EMISSIONS: Passenger vehicles are the most significant source of air pollutants
 linked to a wide range of health impacts. This effort would expand Clean Air Carolina's IdleFree Schools
 campaign into the broader Historic West End community by installing signage in key places such as
 libraries, health clinics, churches, fast-food restaurants and other public places.
- CLEAN CONSTRUCTION: Diesel emissions from construction projects are highly toxic and carcinogenic.
 Developers can voluntarily join Clean Air Carolina's Clean Construction Partnership, demonstrating their commitment to protect the health of residents by using low-emission equipment in the area. Residents can also advocate for special zoning which would require the use of low-emission equipment.
- PERMITTING AND ZONING: Businesses must apply for and receive air quality permits, and many request
 rezoning when they open or expand operations. Neighborhood residents can to learn more about how
 permits and zoning requests are reviewed and approved, about the role that they can play in
 commenting on those permits, and about opportunities to serve on the Mecklenburg County Air Quality
 Commission.
- USE OF COMMUNITY BENEFITS AGREEMENTS: A Community Benefits Agreement or "CBA" is a contract signed by community groups and a company whose operations are impacting the community in a detrimental way. The agreement requires that the company provide specific amenities and/or mitigations to the local community or neighborhood.
- TREE PLANTING: A healthy tree canopy can absorb a portion of an area's air pollution. Strategic tree
 planting in the Historic West End would help filter air pollution from vehicles along Beatties Ford Road
 and surrounding highways.
- CLEAN AIR ADVOCACY TRAINING: Residents and stakeholders are invited to attend a free 4-week series
 of classes in March at Johnson C. Smith University's New Science Center to learn about advocating for
 clean air.

CLEAN AIR CORRIDOR TO LAUNCH SPRING 2019

A special community event will be held in the Historic West End to celebrate the launch of the Clear Air Corridor in April. Stakeholder organizations and individuals interested in supporting this initiative are invited to attend. A guest speaker from the U.S. Environmental Protection Agency will attend the event along with local leaders to discuss ways to improve air quality and public health in the community.

For more information about the Clean Air Corridor contact Ron Ross at <u>roneross@gmail.com</u>.

For more information about Clean Air Carolina's Airtisepers Program or to see the full report, contact
Calvin Cupin, Program Manager at <u>calvin@cleanciracrolina.org</u>.

MECKLENBURG COUNTY



Response & Process

Keys to Success

- Reframe your thinking
- Research
- Relationships
- Resource, not Roadblock

Reframe your thinking

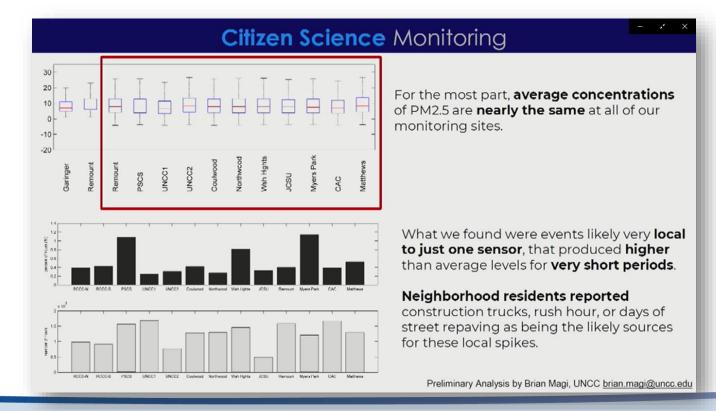
- Focus on why they collected the data:
 - What does the community think the data means?
 - What does the community want out of coming to you with the data?
- Start by listening to their concerns



Research

MECKLENBURG COUNTY

- Internally, we reviewed the data and did our own analysis
- Partnered with a trusted source (a UNC Charlotte professor) to communicate information to the public



Relationships

- Build trust & listen
- Transparency
- Long-term partnership



Be a Resource, Not Roadblock

- Created & helped distribute educational materials about backyard burning
- AQ 101 presentations in the community
- Friendship Park Monitoring Station
 - Open House
 - Educational materials

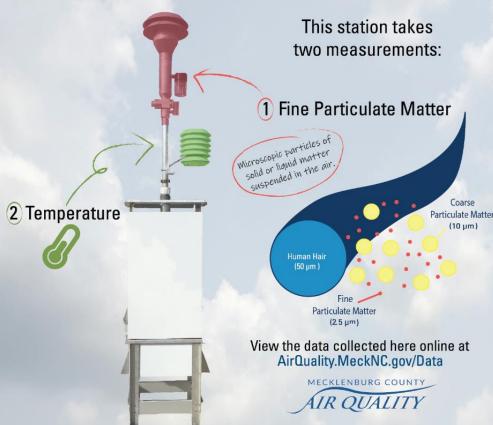




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AIR QUALITY

Welcome to the Friendship Park Air Quality Monitoring Station!





9/19/2019

Megan Green Mobile Sources Program Manager Mecklenburg County Air Quality 2145 Suttle Avenue, Charlotte, NC 28208

To whom it may concern,

We are writing on behalf of the AirKeepers of the Historic West End to support Mecklenburg County and their efforts to expand access to EV charging stations in our neighborhoods. Our area is home to some of the region's most historic neighborhoods and institutions, as well as being a center of critical areas of need in public health, proximity to traffic, industrial facilities, and underserved populations.

We strongly support efforts to prioritize sustainable investment in the Historic West End as a way to add access to innovative technologies, create opportunities for local economic development, give residents improved mobility choices, and improve environmental health for our neighbors who need it most.

We look forward to working with you to advance EVs and charging stations in the Historic West End.

Sincerely,

Historic Washington Heights

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Ronald Ross

Northwood Estates Community Organization

William Hughes Oaklawn Park

MECKLENBURG COUNTY



BACKYARD
BURNING

GOOD NEIGHBORS DON'T BURN TRASH



Smoke from burning trash is harmful. It poses a health threat to you, your family & neighbors, especially kids and seniors



An average classroom in Charlotte has 3 students that suffer from asthma.

Chemicals from burning trash cause bronchitis, cancer, emphysema & other lung conditions.

Asthma is the #1 reason kids miss school in Charlotte.

TODAY'S TRASH MAKES TOXIC SMOKE

(HYDROGEN HYDROGEN CYANIDE CHLORIDE

DIOXIN

Plastic or paper with coatings & ink create particles in the air.

Particles that are very dangerous to breathe.



Report unsafe conditions by calling 911.

SMALL FIRES TURN INTO BIG TROUBLE

Burning trash is against the law and could lead to a \$200 ticket!

CALL 311 FOR SAFE REMOVAL



Call 704-336-7600 for free bulky pick-up and for info on the next free document shredding event in near Historic West End.

Questions?

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