



CLEARING THE AIR IN THE HISTORIC WEST END

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



February, 2019

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LEADING BY EXAMPLE

Citizen scientists and community leaders Mattie Marshall, William Hughes and Ron Ross have spent the past two years monitoring air pollution in the historically African American neighborhoods of Charlotte's Historic West End as part of Clean Air Carolina's AirKeepers program. Now, they are partnering with Clean Air Carolina to create a Clean Air Corridor in the area. The Clean Air Corridor effort will use education and advocacy to mobilize citizens, businesses, churches, nonprofits and government agencies to reduce the pollution that currently affects dozens of neighborhoods.

Residents of the Historic West End live with a longstanding legacy of industrial zoning and highway construction that continues to pollute the air in their neighborhoods. Addressing these longstanding hazards will improve public health and advance the goal of environmental justice. But the magnitude of the challenge will require strategic partnerships.

LEGACY OF POLLUTION

During the separate-and-unequal era of Jim Crow segregation, African American neighborhoods in Charlotte were concentrated on the west side of town, close to a major railroad line and one of the city's main industrial areas. From the 1960s through the 1980s, as the nation's growing web of interstate highways reached Charlotte, three major roads (I-85, I-77 and NC-16) were routed through the west side. In subsequent decades, public and private investment focused on developing suburban neighborhoods for well-off residents at the edges of town. Although racial segregation was no longer legal, the persisting effects of racial discrimination meant that African Americans remained concentrated in a crescent of older neighborhoods around the center city.

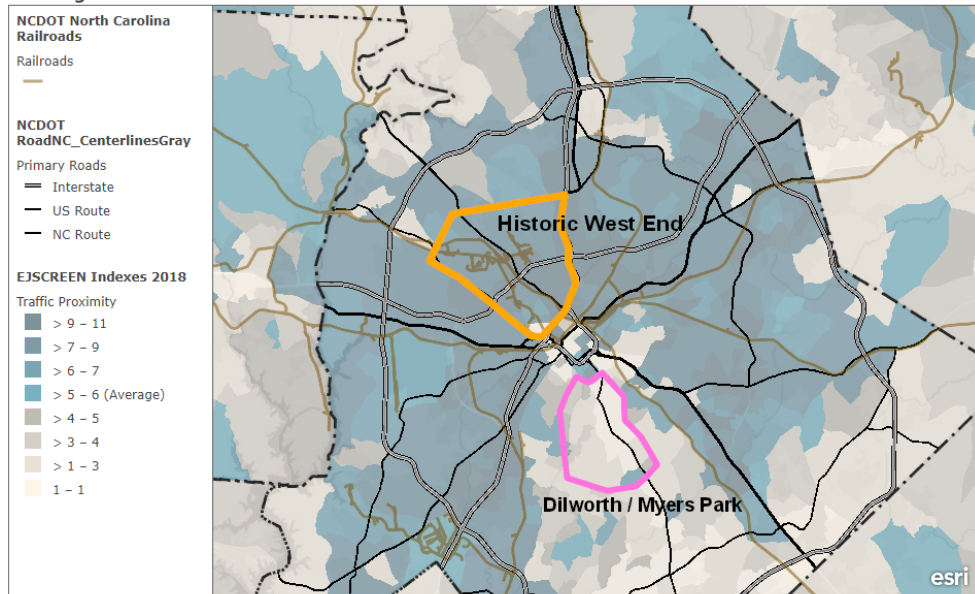


(From Left) Ron Ross, Mattie Marshall, William Hughes

ENVIRONMENTAL JUSTICE

Environmental justice (EJ) means that no group of people should bear a disproportionate share of the negative environmental effects that result from operations or policies pursued by commerce, industry or government. The issue of environmental justice arises when certain communities, through no fault of their own, are more impacted than others by the sources of pollution located near where they live, work, and play.

Clearing the Air in Historic West End



City of Charlotte, State of North Carolina DOT, Esri, HERE, Garmin, NGA, USGS, NPS | Map Service: US EPA Office of Air and Radiation, Office of Air Quality Planning and Standards (OAR, OAQPS). Data: Various state, local, and tribal air pollution agencies using procedures specified by the US EPA. | NCDOT GIS Unit | NCDOT GIS Unit, NCDOT Rail Division | Map Service: US EPA Office of Air and Radiation, Office of Air Quality Planning and Standards, Air Quality Assessment Division, Air Quality Analysis Group (OAR, OAQPS, AQAD, AQAG). Data: US EPA National Emissions Inventory (NEI). | State of North Carolina DOT, Esri, HERE, NPS | U.S. Environmental Protection Agency, Headquarters

indicate communities with a higher EJ Index with regard to their traffic proximity. You can see in the map where the Historic West End is located in the areas of closer traffic proximity more so than neighborhoods to the south. Bar graphs below (Figures 2 and 3) created using software from the EPA demonstrate the differences between environmental health risks for the Historic West End neighborhoods and for Myers Park.

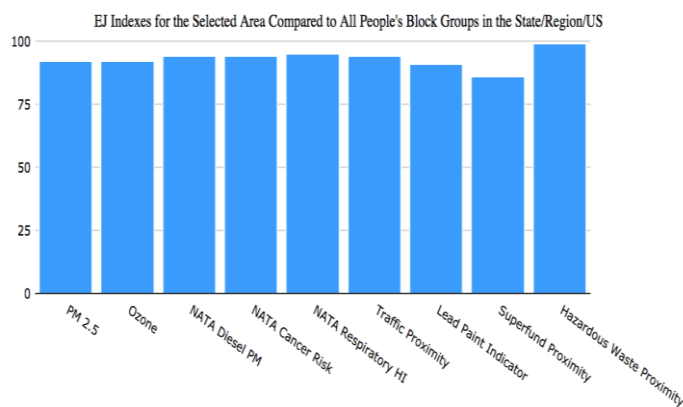


Figure 2. Historic West End EJ Index Percentiles (higher is greater burden)

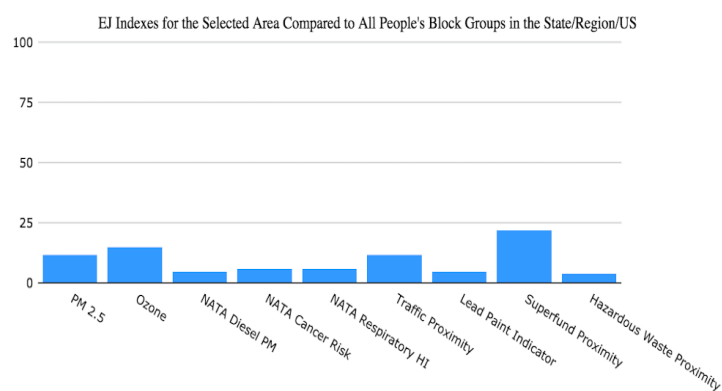


Figure 3. Dilworth / Myers Park EJ Index Percentiles (higher is greater burden)

AIRKEEPERS ENGAGE IN CITIZEN SCIENCE

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. The goals of the project were to broaden the understanding of local air quality, introduce reliable sources of information the community could use to better understand air quality, and connect the possible health impacts of poor air quality with partners and solutions that can address them. All of these goals being instrumental in creating a network of informed, connected citizens empowered with the right tools to make a difference for all communities. Air quality in Charlotte is well understood, but long lasting solutions to address environmental disparities will require deliberate cooperation of all local communities to reach these goals.

PRESENT-DAY DISPARITIES

In the past decades, Mecklenburg County has made major strides in the reduction of ambient air pollution. As of 2018, the transportation sector now represents the greatest contributor to poor air quality in the area. Figure 1 contains a map of Charlotte with major highways and roadways. Layered on top are census tracts colored coded by their traffic proximity according to the National Air Toxics Assessment (NATA) and the Environmental Protection Agency's (EPA) EJ (Environmental Justice) Index. Darker colors

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 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 roneross@gmail.com.
For more information about Clean Air Carolina's AirKeepers Program or to see the full report, contact
Calvin Cupini, Program Manager at calvin@cleanaircarolina.org.*