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nc

Health and Equity in the Historic West End Green District

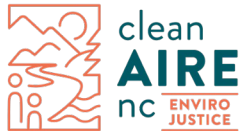
Daisha Wall, Environmental Justice Manager
Ron Ross, Historic West End Green District

December 12, 2022

CleanAIRE NC Programs & Initiatives

We advocate for the health of North Carolinians by pursuing equitable and collaborative solutions that address climate change and air pollution.

- Environmental Justice Program
- Health Program
- Policy Program
- Citizen Science Program



Air Pollution is a Leading Cause of Death

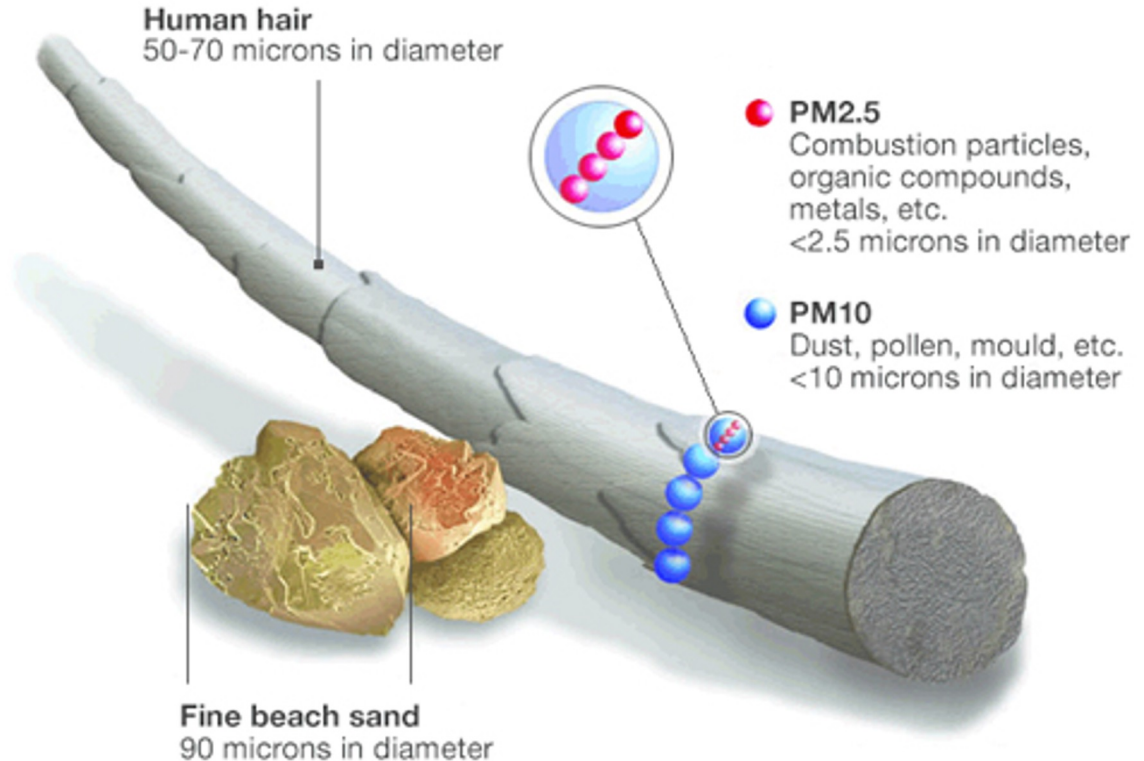
Leading Causes of Death in <i>North Carolina</i>		
Rank	Cause	Deaths, 2020
1	Heart Disease	20,373
2	Cancer	19,996
3	Covid-19	161.7 (crude death rate per 100,000)
4	Accidents	7,379
5	Stroke	5,720

Source: Centers for Disease Control & Prevention, 2020, 2021

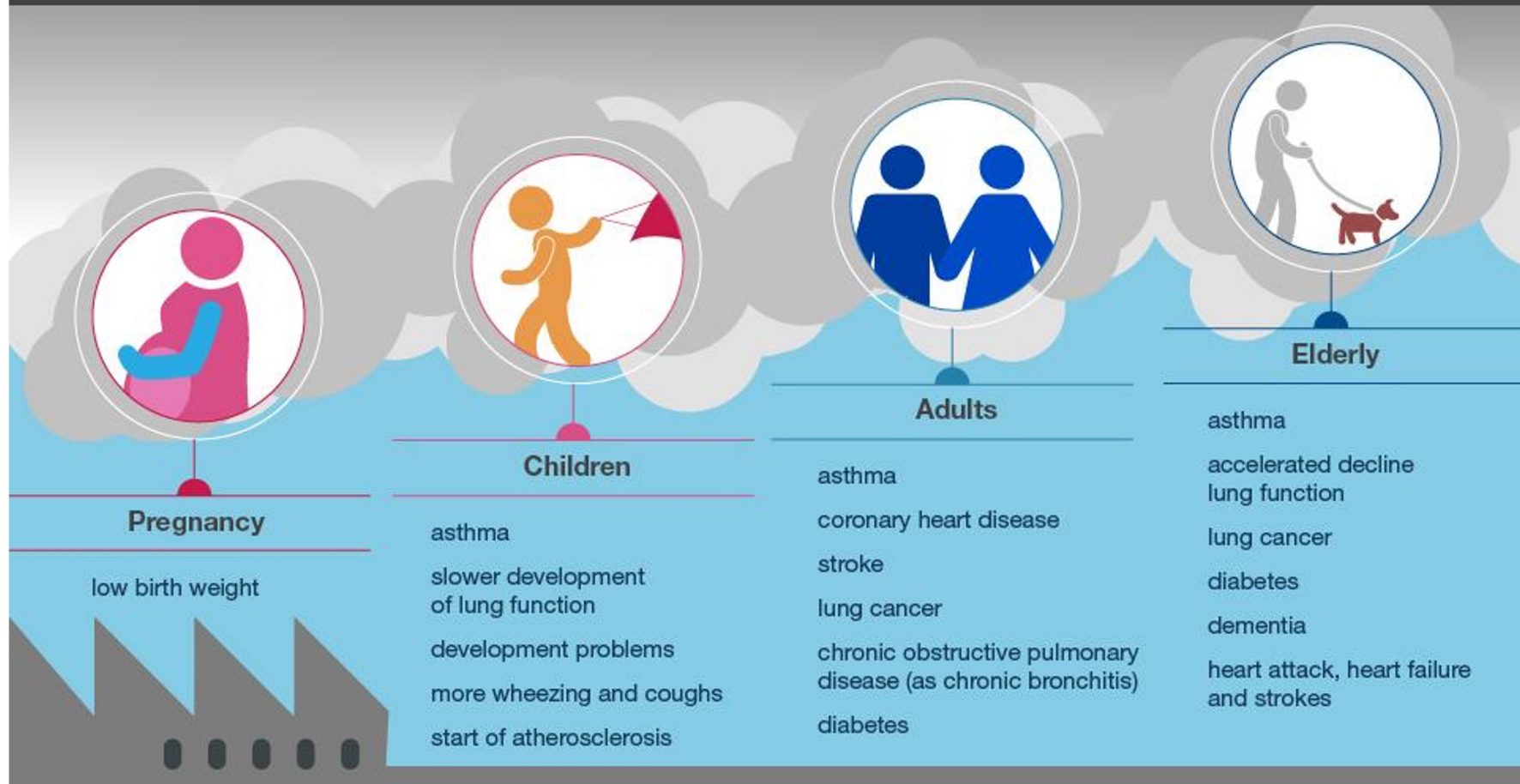
PM

Airborne particles found in smoke, dust, dirt, soot, and salt. The sources of these particles include vehicles, factories, fires, and other natural or human activity resulting in the addition of particles into the air.

Particulate Matter



Air pollution affects people throughout their lifetime



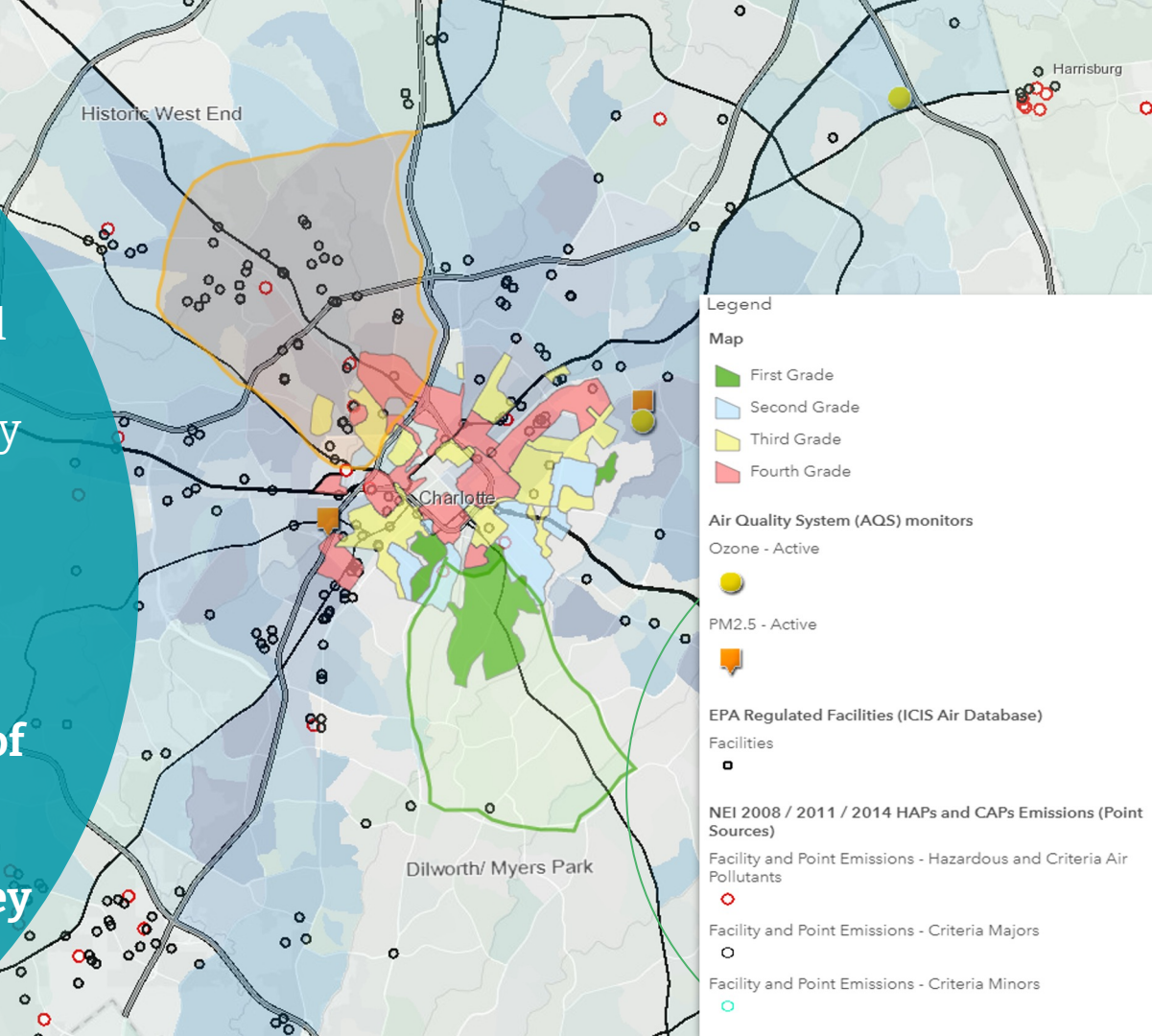
Social Determinants of Health

At every stage of life, health is determined by complex interactions between social and economic factors, the physical environment, and individual behavior. The social conditions we face every day, where we live, work and play, have a greater impact on our health and life expectancy than the health care we receive.

People can be at greater risk to air pollution despite experiencing the same exposures

Environmental justice (EJ) means that no group of people should bear a **disproportionate share** of negative environmental effects that result from operations or policies pursued by commerce, industry or government.

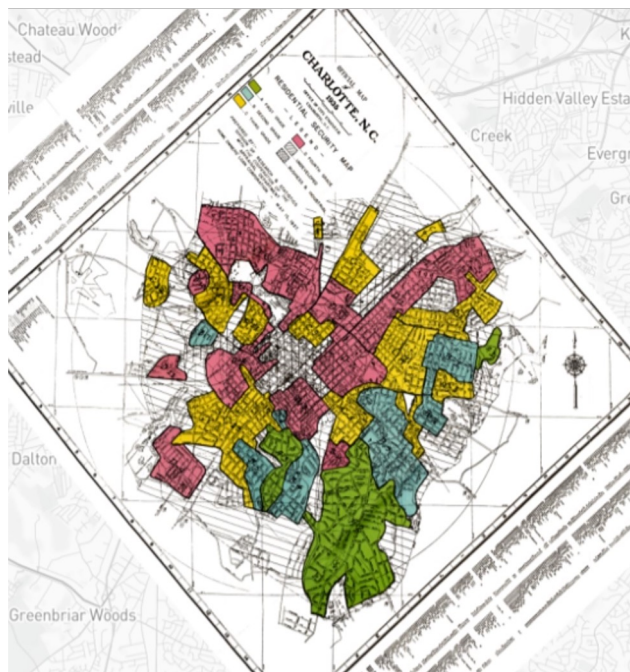
The issue of environmental justice arises when certain communities, **through no fault of their own**, are more impacted than others by the sources of pollution located near where **they live, work, and play**.



Historic West End Challenges

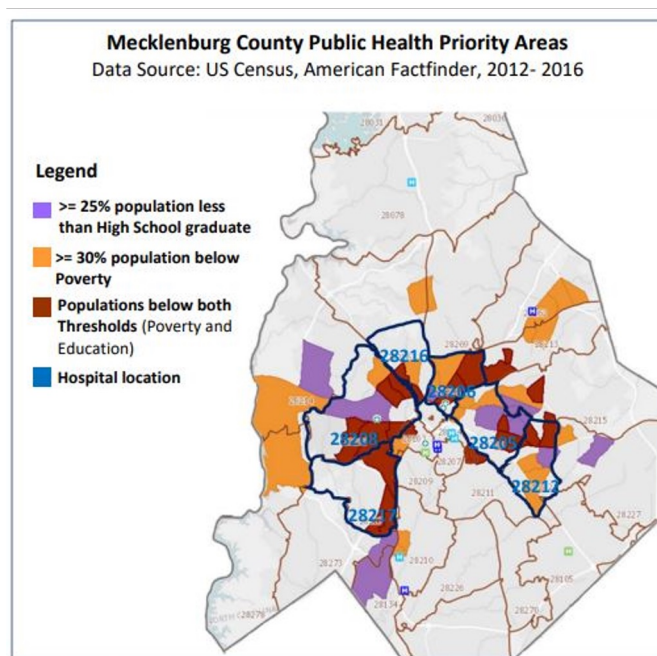
Historical Place Based Social Exclusion

1935 Redlining
Disinvestment Map Crescent



Social Determinants of Health

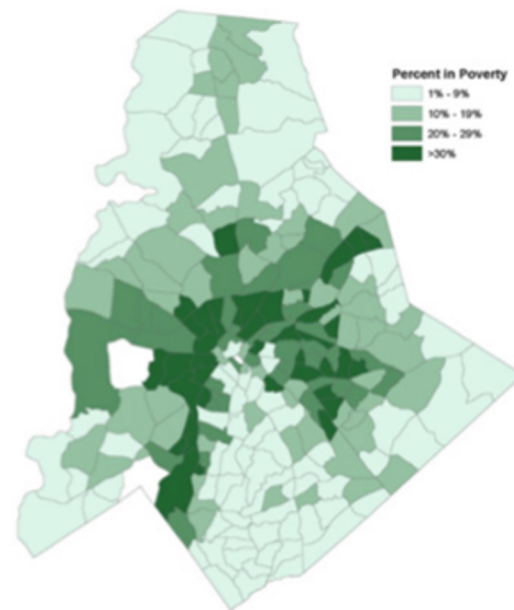
2012-2016 Public Health
Priority Areas



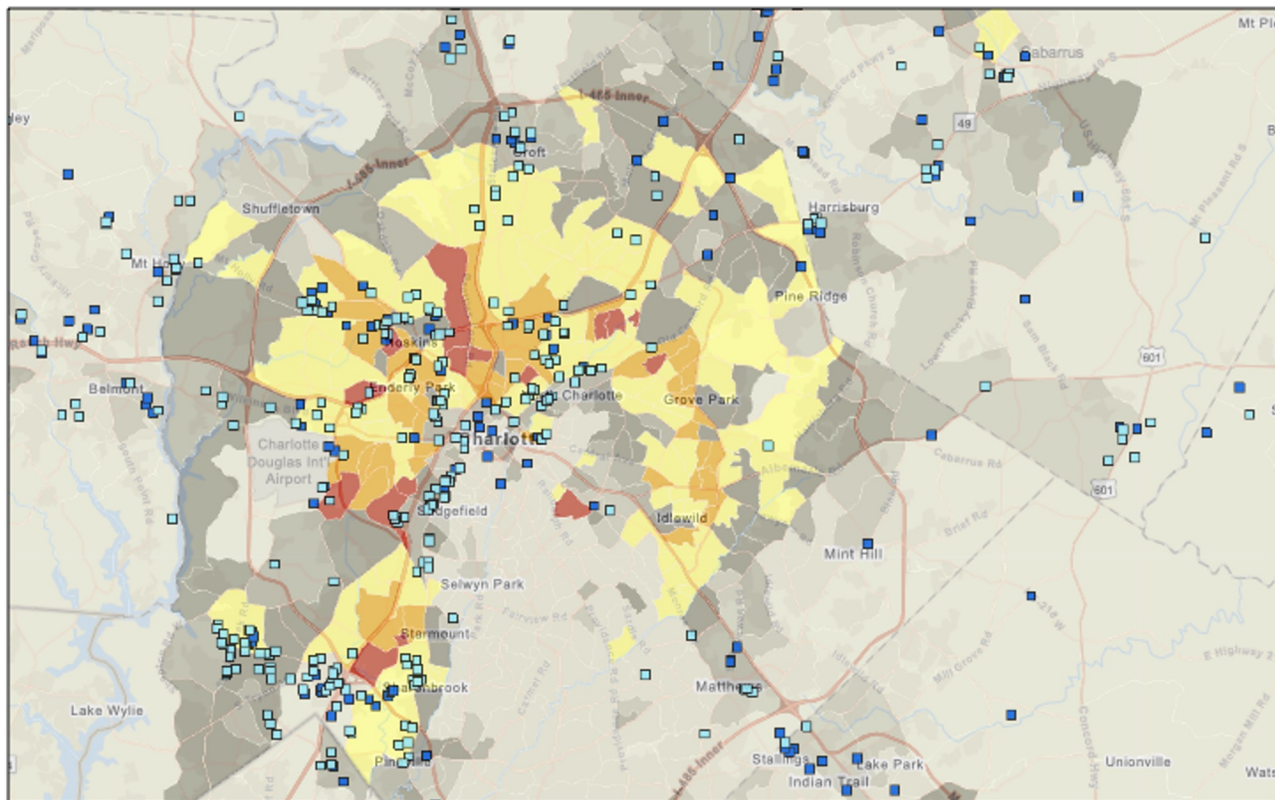
Continued Economic Segregation

2020 Poverty

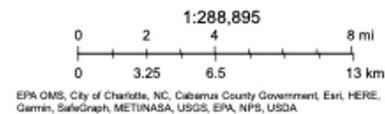
Segregation by Poverty



Meck Co EPA Polluting Sites



3/28/2022

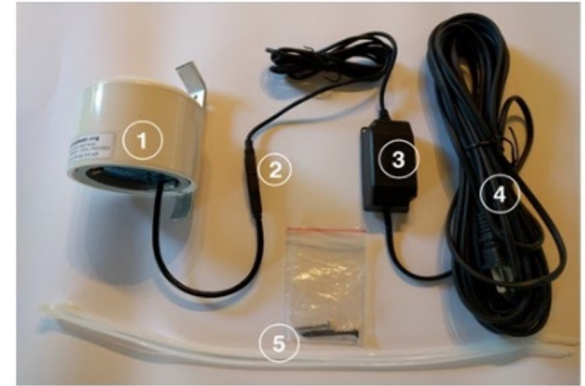


Martin Marietta Quarry

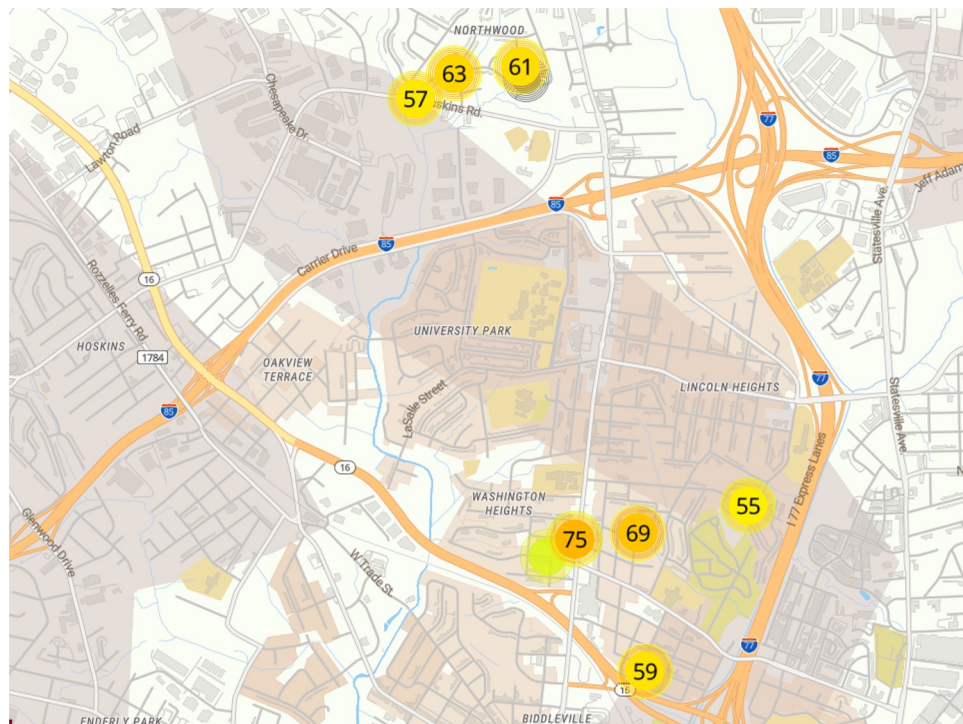


Understanding & Addressing Challenges Through Community Monitoring

- 2017: Community monitoring efforts begin
- Measured levels of PM 2.5
- Connections between social determinants of health and exposure to air pollution



Historic West End Monitors



11 PurpleAir
Monitors across 6
Historic West End
Neighborhoods



AQI (US)	PM2.5 (µg/m3)	Remark
0-50	0-12	Good
51-100	12-35	Moderate
101-150	35-55	Unhealthy for Sensitive Individuals
151-200	55-150	Unhealthy
201-300	150-250	Very Unhealthy
>300	>250	Hazardous

Mecklenburg County Commission Approves EPA Monitor in Historic West End as a result of Citizen Science Monitoring

CLEARING THE AIR

CHARLOTTE'S
HISTORIC WEST END

*Historic Washington Heights
Northwood Estates
Oaklawn Park*

Clean Air
Carolina

FALL 2018



Friendship Missionary Baptist Church,
EPA Federal PM 2.5 Air Monitor



Ron Ross (L), Calvin Cupini (R)



Historic West End Green District: Strategic Tree Planting



Goal #1

Increasing, preserving and improving **tree canopy and green infrastructure** along the corridor and in sensitive areas

- Installing green roofs, green walls, and other green infrastructure
- Mitigate and reduce health and pollution impacts

Current Projects & Outcomes:

- Wells Fargo ATM Clean Air Garden
- Tree adoption with TreesCharlotte
- Charlotte 2022 Placemaking: HWEGD Green Pillars
- Monitoring around high polluting areas



Historic West End Green District: EV Expansion



Goal #2

Advocating for **electric vehicle charging stations and more walking, biking, and clean transit** throughout the Historic West End, while also providing economic benefits and career opportunities for the community around EV expansion

Current Projects & Outcomes:

- PoleVolt and associated **PurpleAir** monitor
- EV Ride and Drive Event (**May 21st**)
- Deployment of other EV charging sites: Allegra Westbrooks Library



Historic West End Green District AirKeepers with Gov. Roy Cooper and Charlotte Mayor Vi Lyles at the PoleVolt Unveiling

Historic West End Green District: Education & Advocacy



Goal #3

Increasing **education** around air quality impacts to propel **advocacy** solutions

Current Projects & Outcomes:

- Clean Air Advocacy Trainings (July 2022) : covered zoning, permitting, community and regulatory monitoring, and community benefits agreements.
- Healthy Air Education Series (September 2022)
- City, County and other organizational partnerships to advance goals



Clean Air Advocacy Training FY 2018

Moving Forward

- Improve tree canopy along Beatties Ford Road and within HWE neighborhoods
- Green buffers along I-77, I-85 and NC-16
- Provide heat relief at bus shelters within the community
- Provide economic benefits and career opportunities around EV expansion
- Seeking affordable opportunities for residents to obtain Electric Vehicles
- Community Benefits Agreements
- Meaningfully involve local schools, colleges and universities
- Clean Construction Partnerships

THANK YOU!

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