

MEMBER SPOTLIGHT

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Virginia Council on Environmental Justice

Why Air Quality

Matters in Our Communities

Air pollution is not evenly distributed across our city. Communities in Northeast and Southeast DC face disproportionately higher exposure to harmful pollutants, creating significant health disparities that demand our attention and action.

Air pollution is not evenly distributed across neighborhoods

Communities in NE & SE DC face higher exposure levels

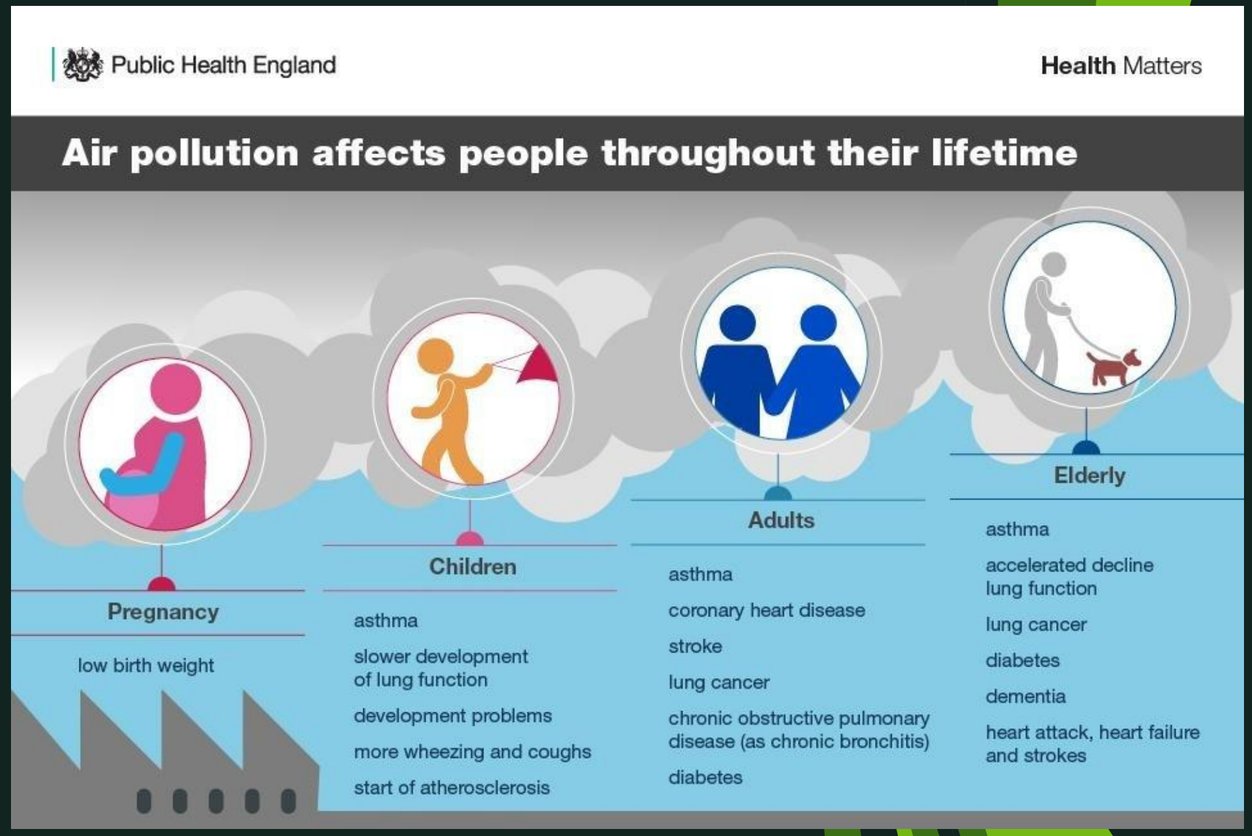
Children and elders are most vulnerable to health impacts

Many pollution sources go undetected by current monitoring

Why $PM_{2.5}$ is Harmful to Our Health

Fine particulate matter poses serious threats to human health, especially for children and vulnerable populations in our communities.

- Asthma attacks and respiratory disease
- Heart disease and cardiovascular problems
- Adverse birth outcomes for pregnant mothers
- Impacts on children's brain development



Why Current Monitoring Isn't Enough

Traditional air quality monitoring systems leave significant gaps in our understanding of local pollution levels. These limitations limit communities access to the data they need to protect their health and advocate for change.

- **Few government monitors cover our neighborhoods**
- **Miss critical neighborhood-level variation**
- **Regulations govern types of pollutants**
- **Limited accessibility of data to communities**



Black Carbon: Not measured by FRM's

Black carbon is a proxy for diesel fuel contamination. It is a better indicator of local pollution sources, especially from trucks and buses using diesel fuels.

- **Diesel engines**
- **Residential heating & cooking**
- **Open burning**
- **Coal fired industries**



Black Carbon: Health Impacts

Most of the health impacts are on the lungs and include long term effects like lung cancer and short term effects like asthma attacks, bronchitis and pneumonia.

- **Chronic respiratory diseases**
- **Lung cancer**
- **Infant & child deaths (LRI’s)**
- **Strokes & Heart Attacks**



A Community-Driven Solution

Community-based air monitoring puts the power of environmental data directly into the hands of residents, enabling local action and informed advocacy.

- **Low-cost sensors placed locally**
- **Block-by-block air quality data**
- **Real-time, accessible information**
- **Community ownership of data**

Why This Matters for Your Community

Air quality monitoring isn't just about data—it's about protecting the people we love and building stronger, healthier communities for generations to come.

Protect children's health from harmful air pollution exposure

Increase environmental awareness across your congregation

Empower community advocacy efforts with real local data

Inform local policy changes to improve air quality standards



What Hosting an Air Monitor Looks Like

Hosting a monitor is **simple and low-maintenance**. Here's what to expect as a partner site in our community air monitoring network.



- Allow placement of a small outdoor air monitor on your property
- Provide access to a power source and WiFi connection
- Permit occasional site visits for maintenance by project staff
- Designate a point of contact for coordination

Success Story: Cheverly Community Network



Map of Cheverly Community Air Monitoring Network (Purple Dots are monitoring locations)

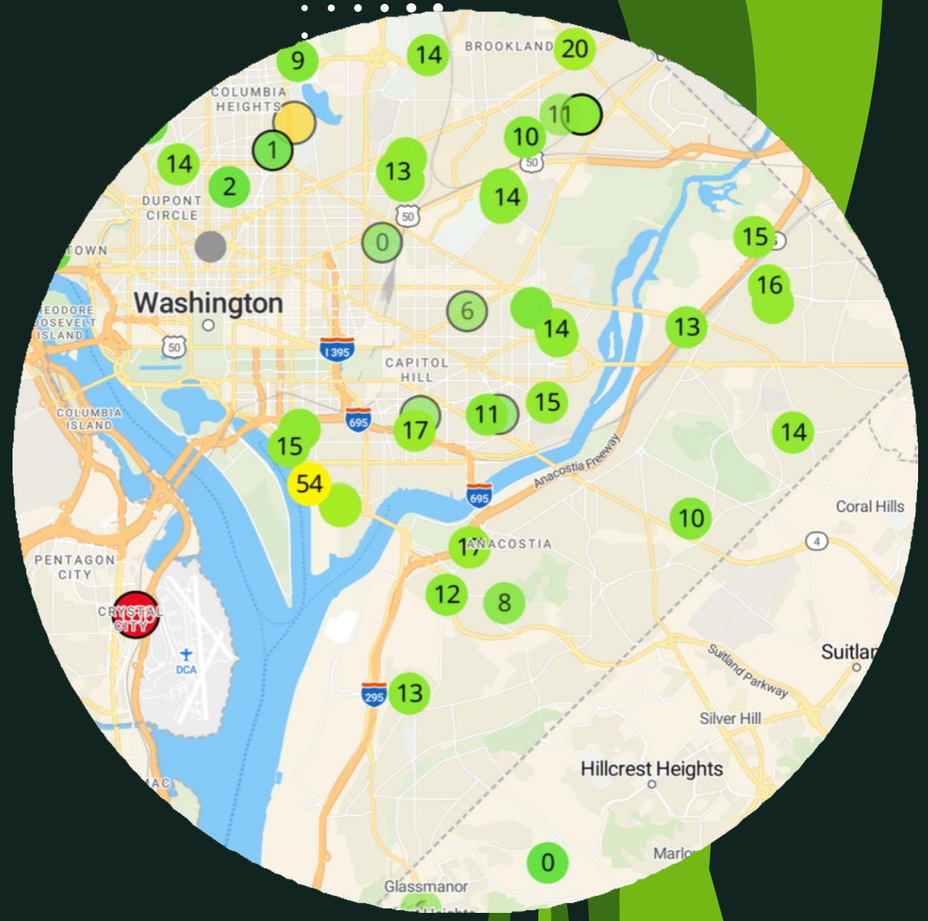
The Cheverly community in Maryland built a local air monitoring network (since 2019) that identified pollution patterns, raised awareness, and drove advocacy efforts to this day!

Their success now guides our DC project, demonstrating that community-led monitoring creates real change.

What This Project Will Do

Our community-driven air monitoring initiative will bring real data and actionable insights to neighborhoods in Northeast and Southeast DC (**and surrounding areas in DC and VA**)

- Deploy approximately 20 air monitors across NE & SE DC
- Identify pollution hot spots in our neighborhoods
- Link pollution data to community health outcomes
- Develop accessible education materials for all literacy levels



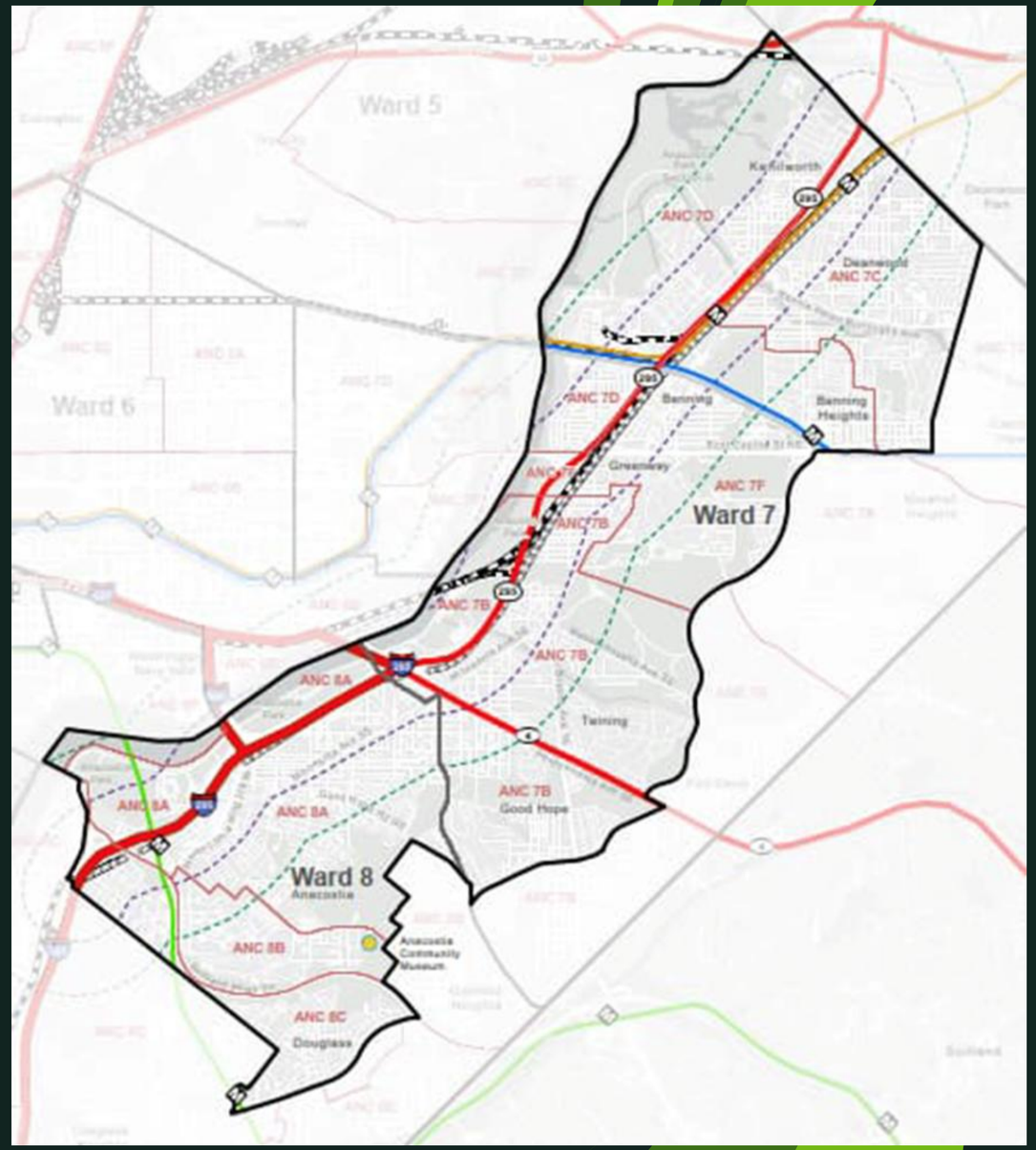
Purple Air Map of Ward 7 & 8

Connecting Communities

Along I-295

The I-295 corridor connects communities facing similar air quality challenges. Cheverly, MD and Wards 7 & 8 in DC share exposure to traffic emissions and stationary pollution sources.

This collaboration unites neighbors across jurisdictional lines for regional environmental justice.



Map of I–295 Corridor layover Wards 7 & 8

Role of
Congregations & Child Care Centers

Trusted Hubs

Congregations and child care centers are trusted community anchors where families gather.

Family Connection

Direct connection to families and children most vulnerable to air pollution impacts.

Monitor Sites

Your locations are ideal sites for air monitors—accessible and representative of community exposure.

Education Leaders

As community leaders, you can drive education and awareness about local air quality.

Project Timeline

Recruitment

We are currently recruiting congregations and child care centers to join as project partners.

Deployment

Air monitors will be installed at partner sites following site assessment.

Training

Partner training sessions will be scheduled soon. Dates to be announced.

Data Collection

Continuous monitoring throughout the project with regular data reports shared with partners.



Coalition for Environmentally
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QUESTIONS & DISCUSSION

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