
Welcome to the Community Data Health Initiative Gathering!

Monday, July 20
9AM – 11:30AM
Detroit, MI



MAKALA CONNER, MPH

Program Manager, Community Data Health Initiative, Office of Sustainability

Makala Conner is a public health professional who is passionate about supporting efforts that strengthen community voice and expand equitable access to health and social services.

As the CDHI Program Manager, Makala provides evidence-based strategic advising to leaders, convenes more than 70 stakeholders across government, academia and community through various workgroups and manages the team portfolio.

Makala completed a 2-year Fellowship with the Harvard Kennedy School Government Performance Lab focused on Safety & Justice initiatives. She assisted the development of the Department of Public Health in Dearborn, MI and managed both quantitative and qualitative data at a local food bank providing meals to underserved youth. Makala also served as an AmeriCorps volunteer working at EcoWorks in Detroit to advance environmental justice efforts.

Makala earned a Masters of Public Health with a certificate in Social Epidemiology from the University of Michigan. She also holds a B.S. in Health and Human Sciences from Loyola Marymount University.



Agenda

9:00 AM – DOORS OPEN, BREAKFAST & NETWORKING

9:20 AM – WELCOME REMARKS

Dr. Luke Shaefer, Detroit Chief Executive of Health, Human Services, and Poverty Solutions

9:30 AM – COMMUNITY DATA HEALTH OVERVIEW

Makala Conner, Program Manager, Detroit Community Data Health Initiative

9:45 AM – HEALTH DEPARTMENT COLLABORATION

Ali Abazeed, Chief Public Health Officer, Detroit Health Department

10:00 AM – EMERGING DATA FROM DEPARTMENT OF PUBLIC WORKS

Augusta Gudeman, Freight Specialist, Detroit Department of Public Works

Maria Harris, Senior Scientist, Environmental Defense Fund

Agenda

10:10 AM – MONITORING EFFORTS FROM ENVIRONMENTAL AFFAIRS

Ben Kunstman, Environmental Specialist, Detroit Environmental Affairs

10:20 AM – THE IMPORTANCE OF COMMUNITY LEADERSHIP

Theresa Landrum, Community Organizer and Activist

10:30 AM – COMMUNITY CONVERSATION

Introduction by Tepfirah Rushdan, Director, Detroit Office of Sustainability

Speaker details outlined on next page

11:15 AM – CLOSING REMARKS

Maria Galarza, Deputy Director, Office of Sustainability

11:30 AM – ADJOURNED

DR. LUKE SHAEFER

Chief Executive of Detroit Health, Human Services, and Poverty Solutions

H. Luke Shaefer, PhD is the City of Detroit's first Chief Executive of Health, Human Services, and Poverty Solutions, overseeing the City's Health Department, Office of Immigrant Affairs and Economic Inclusion, and the new Department of Human, Homeless and Family Services. He is on academic leave from the University of Michigan, Ford School of Public Policy, where he is the Hermann & Amalie Kohn Professor of Social Policy. From 2016 – 2026, Shaefer served as the founding director of U-M Poverty Solutions, a presidential initiative that partners with policymakers and communities to find new ways to prevent and alleviate poverty.

Shaefer has presented at the White House and has testified before Congress on multiple occasions. His research has been published in top academic journals, has been featured in media outlets such as the *Washington Post*, *USA Today*, and *The Wall Street Journal*, and he has appeared on programs such as *PBS NewsHour*. Shaefer's co-authored book, *\$2.00 a Day*, was named one of 100 Notable Books of 2015 by the *New York Times*. His co-authored book, *The Injustice of Place*, received the Lester Award in labor economics given by Princeton University's Industrial Relations Section.

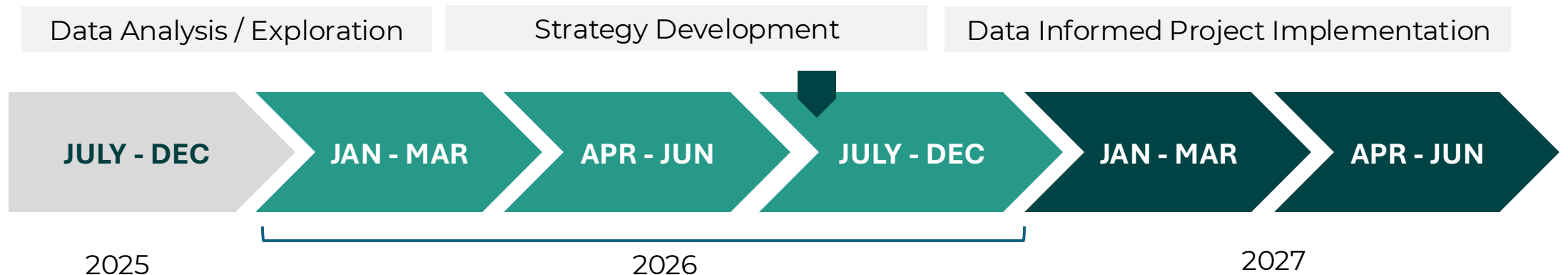


PROJECT GOAL

Under the Data-Smart Cities Program from Bloomberg Center for Cities – the Community Data Health Initiative (CDHI) aims to increase cities' data capacity so that local leaders can create targeted, pollution-reduction strategies, as well as other data-backed environmental solutions to improve the health outcomes of their constituents.

In Detroit, this initiative will serve to inform the implementation of the Detroit Climate Strategy, advance the creation of a Detroit-specific community index and support decision-making on initiatives underway.

PROJECT TIMELINE



Project Team



Maria Galarza, AICP
Deputy Director, City of
Detroit Office of Sustainability



Makala Conner, MPH
Program Manager, CDHI



Christine Calleja, MS
Geospatial Data Analyst, CDHI

Partners and Funders

- Harvard Kennedy School (Cohort Led)
- Environmental Defense Fund (TA Support)
- Meharry Medical College (Research Capacity)
- African American Mayors Association
- Kresge Foundation (Funder)
- Robert Wood Johnson Foundation (Funder)
- Government collaboration (EPA, EGLE, Wayne Co.)
- Over 20 Detroit Community Organizations

Project Workstreams

1 Building Evidence to Understand AQ Exposures and Impacts

- ✓ Analysis of sensor network (reference and community grade sensors) – historic data 18 months

2 Cultivating and Strengthening Collaborative Capacity

- ✓ Monthly Inter-Departmental Working Group
- ✓ Bi-monthly Detroit Community Air Projects

3 Informing and Implementing Sustainable Interventions

- ✓ Inventory of City programs and opportunities
- ✓ Data driven Community Data Index to prioritize implementation (beta version)



Detroit Health Department Collaboration



ALI ABAZEED, MPH, MPP

Chief Public Health Officer & Director, Detroit Health Department

Ali Abazeed is the Chief Public Health Officer and Director of the Detroit Health Department, appointed by Mayor Mary Sheffield. He leads a department of more than 280 public health professionals and oversees a nearly \$60 million budget, advancing a Health in All Policies approach that embeds health across city government and centers the needs of Detroit residents.

Before returning to Detroit, Abazeed served as the founding Director and Chief Public Health Officer of the Dearborn Department of Public Health, where he built one of Michigan's newest municipal health departments from the ground up. He previously served across the U.S. Department of Health and Human Services as a Presidential Management Fellow and Public Health Advisor at the National Institutes of Health.

He is also a faculty member at Wayne State University, where he teaches Health in All Policies and mentors emerging public health leaders. Abazeed holds graduate degrees in public health and public policy from the University of Michigan and completed executive education at Harvard Kennedy School.



Emerging Data From Detroit Department of Public Works

In Collaboration with the Environmental Defense Fund



**RISE
HIGHER**
MAYOR MARY SHEFFIELD

AUGUSTA GUDEMAN

Freight Infrastructure Specialist, Detroit
Environmental Affairs



Augusta Gudeman, Freight Infrastructure Specialist, does freight planning in the City of Detroit. With master's degrees in urban planning and public policy from the University of Michigan, she has over 10 years of experience in local and federal government.

MARIA HARRIS

Senior Scientist, Clean Air, Environmental
Defense Fund

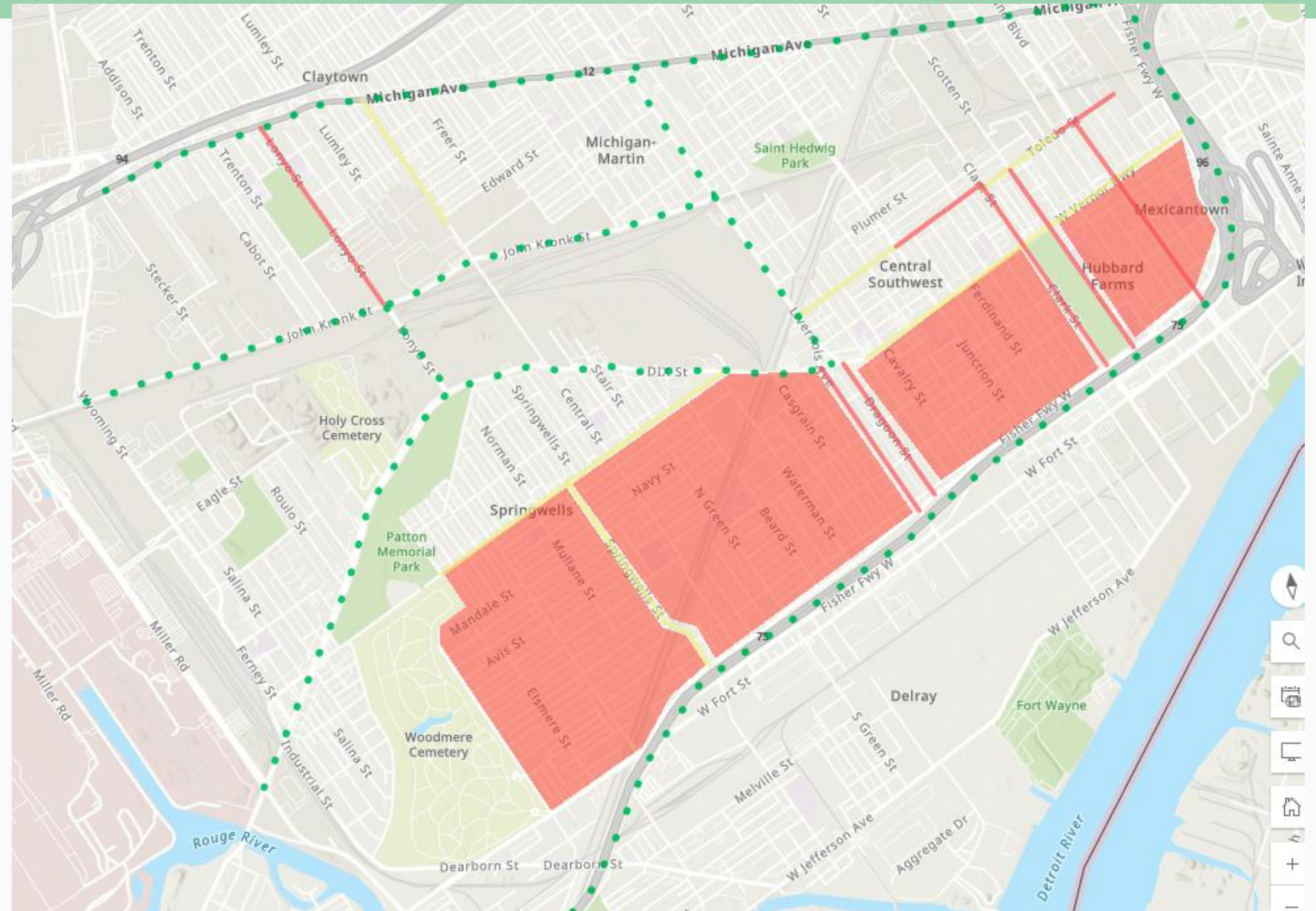


Maria is a Senior Scientist in the Office of the Chief Scientist, supporting the work of EDF's Global Clean Air initiative to reduce disparities in air pollution exposure and health impacts. Maria leads research on air pollution exposure and associated health burdens.



Southwest Trucking Network Updates

- Signs placed in October
- DPD enforcement
 - OT semi truck enforcement detail
 - October: education focused approach
 - November and beyond: enforcement



Southwest Trucking Network Updates

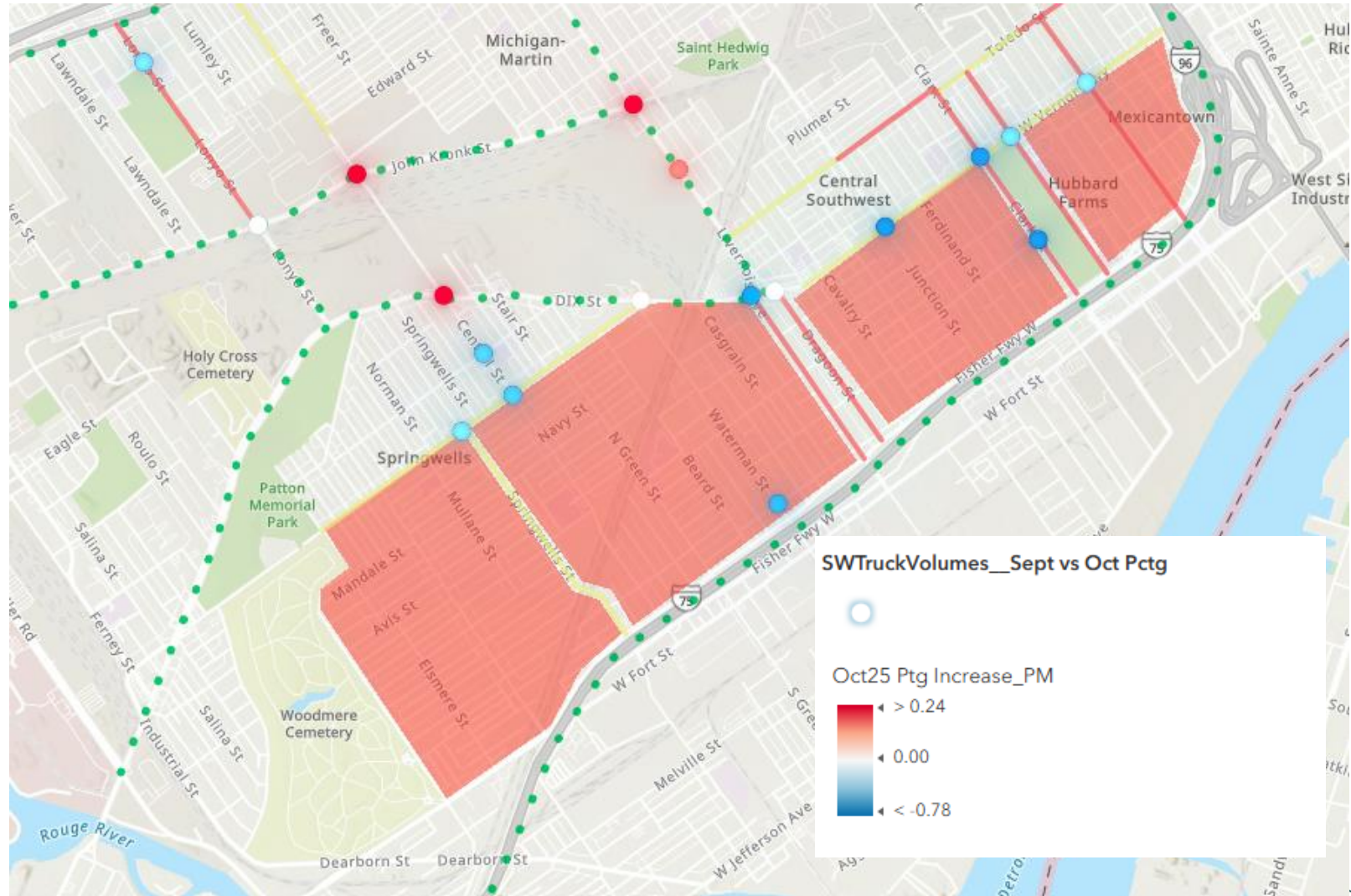
Significant drop in truck volumes seen immediately after signs were placed

- Livernois/Vernor looks specifically at traffic going SB on Livernois
- Dix/Waterman looks specifically at traffic going EB on Dix

Truck Restrictions Streets

- Full Restriction - No Trucks
- • • Approved Truck Route
- Local Trucks Only

Residential Street Truck Restrictions



Truck Route Planning

Southwest Detroit serves as a model for future truck route planning:

1. Design truck route network

- Conduct comprehensive study of area
- Stakeholder engagement (residents and businesses)
- Identify long-term infrastructure improvements
- Socialize recommendations for feedback in advance

2. Implement new routing

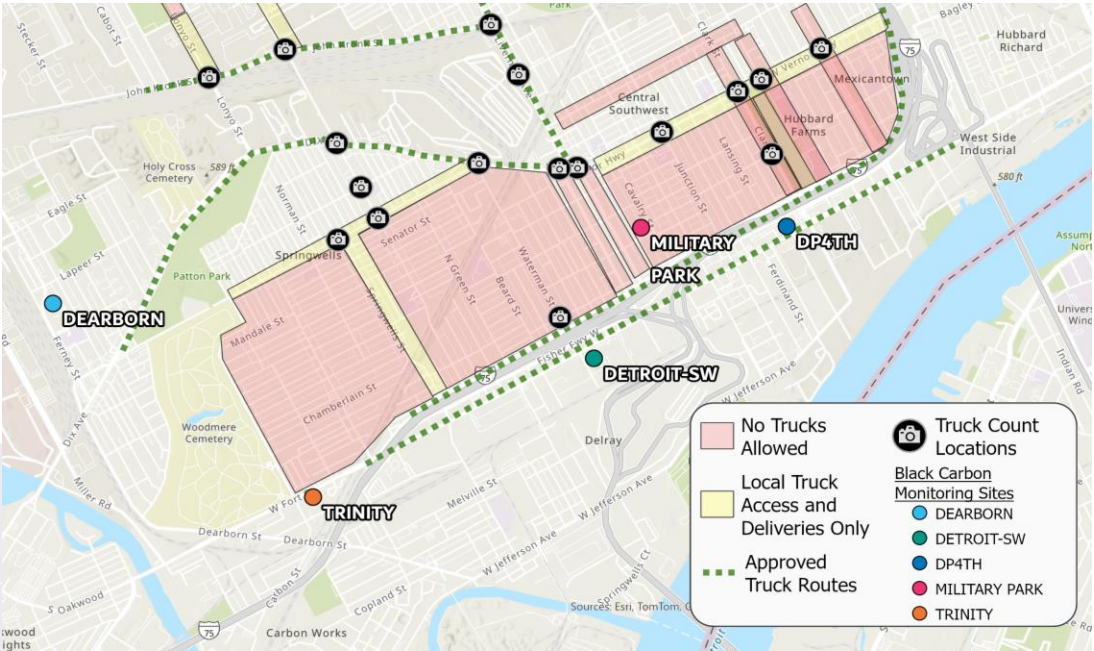
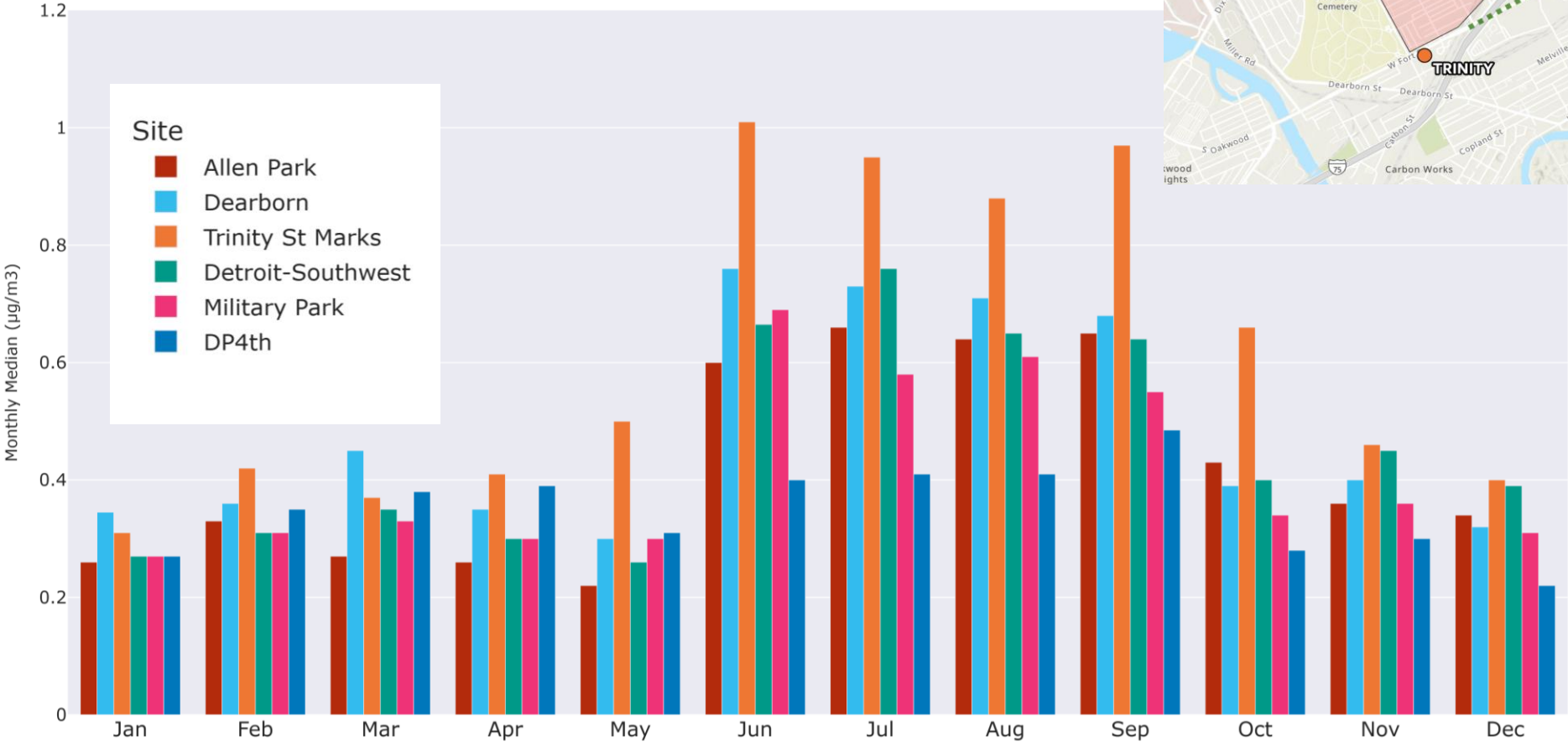
- Communicate new routes
- Place signage
- Conduct enforcement
- Develop funding strategy for infrastructure projects

A screenshot of a mobile application interface titled 'City of Detroit Truck Issue Reporter'. The interface is displayed on a smartphone screen. At the top, it shows the time '4:43 PM' and the location 'Augusta'. Below the title, there is a paragraph of text explaining the purpose of the portal: 'You've been redirected from Improve Detroit to a portal intended to report suspected truck violations including trucks using restricted routes, truck parking in residential neighborhoods, or truck idling. This portal is for planning and information purposes only. Truck traffic issues typically require long-term solutions.' Below this text are four input fields: 'Your Name*', 'Phone number', 'Email', and 'On what street is this happening?'. The 'On what street is this happening?' field has a small example text 'Example: Livernois between Vernor and I-75' below it. At the bottom, there is a field labeled 'When did this issue happen last?'. The entire interface is framed by a blue border.

MAYOR MARY SHEFFIELD

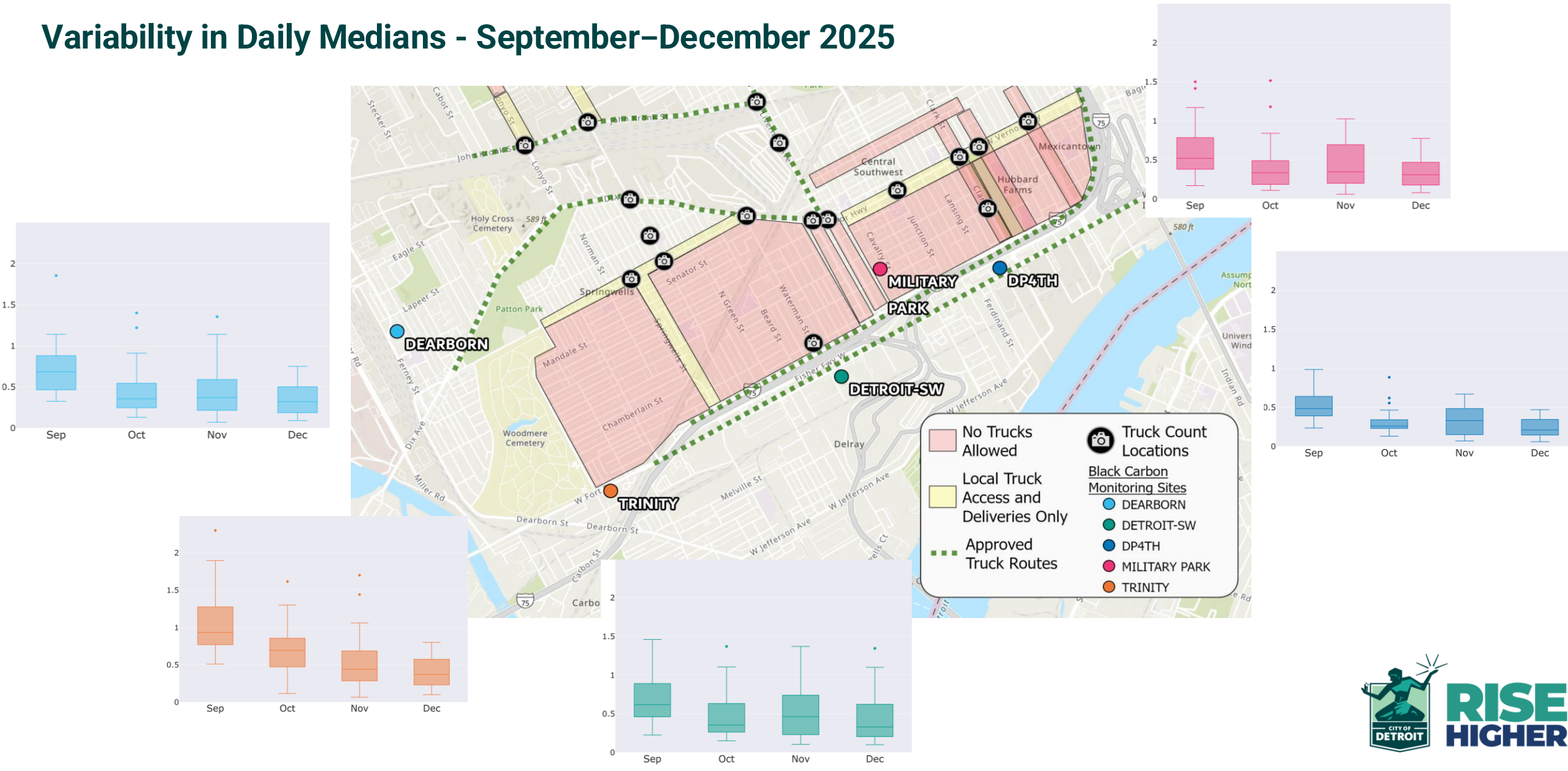
Black Carbon Measurements in Southwest Detroit

Monthly Medians for 2025



Black Carbon Measurements in Southwest Detroit

Variability in Daily Medians - September–December 2025



Enhanced Air Quality Monitoring



BENJAMIN KUNSTMAN

Project Manager, Environmental Affairs

Buildings, Safety Engineering and Environment Department (BSEED)

Benjamin Kunstman is an environmental engineer and air quality specialist with the City of Detroit Environmental Affairs in the Buildings, Safety Engineering and Environment Department (BSEED). Mr. Kunstman brings a decade of multidisciplinary experience working in the environmental and air quality space, including both regulatory experience at the U.S. EPA as well as an environmental nonprofit.



Project Scope of Work/ Background

- Funded through the City of Detroit and an EPA Grant received in 2023
 - Enhanced, regulatory monitoring of air quality
 - Complement existing monitoring
- Project goals
 - Establish the City of Detroit's first comprehensive city-wide air quality monitoring network with real-time reporting
 - Provide high-quality, regulatory data to inform policy
 - Real-time data dashboard
 - Public education through quarterly meetings in each council district



Status

Phase 1

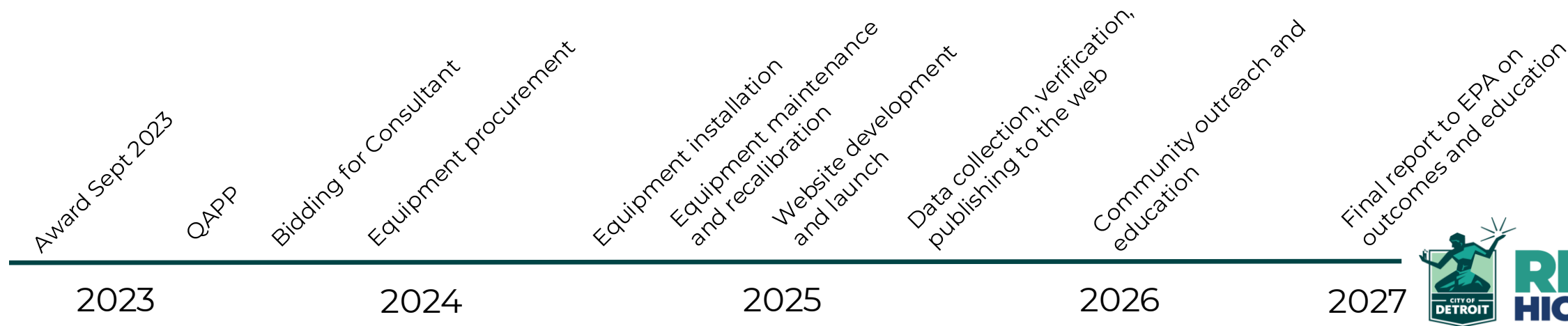
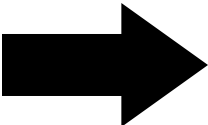
- Air quality monitor installation
- Real-time Dashboard for particulate matter
- Open Data download
- Public website
[Detroitmi.gov/AirQuality](https://detroitmi.gov/AirQuality)
- Partnering with the Office of Sustainability on air quality matters

☒ **Complete**

Phase 2

- ☒ Expanded monitoring to include select VOCs & metals
- ☒ Web map featuring state monitors
- ☒ Quarterly community meetings with GDI
- ☒ Partner with our new Chief Public Health Officer to support city-wide “health in all policies” approach

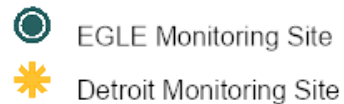
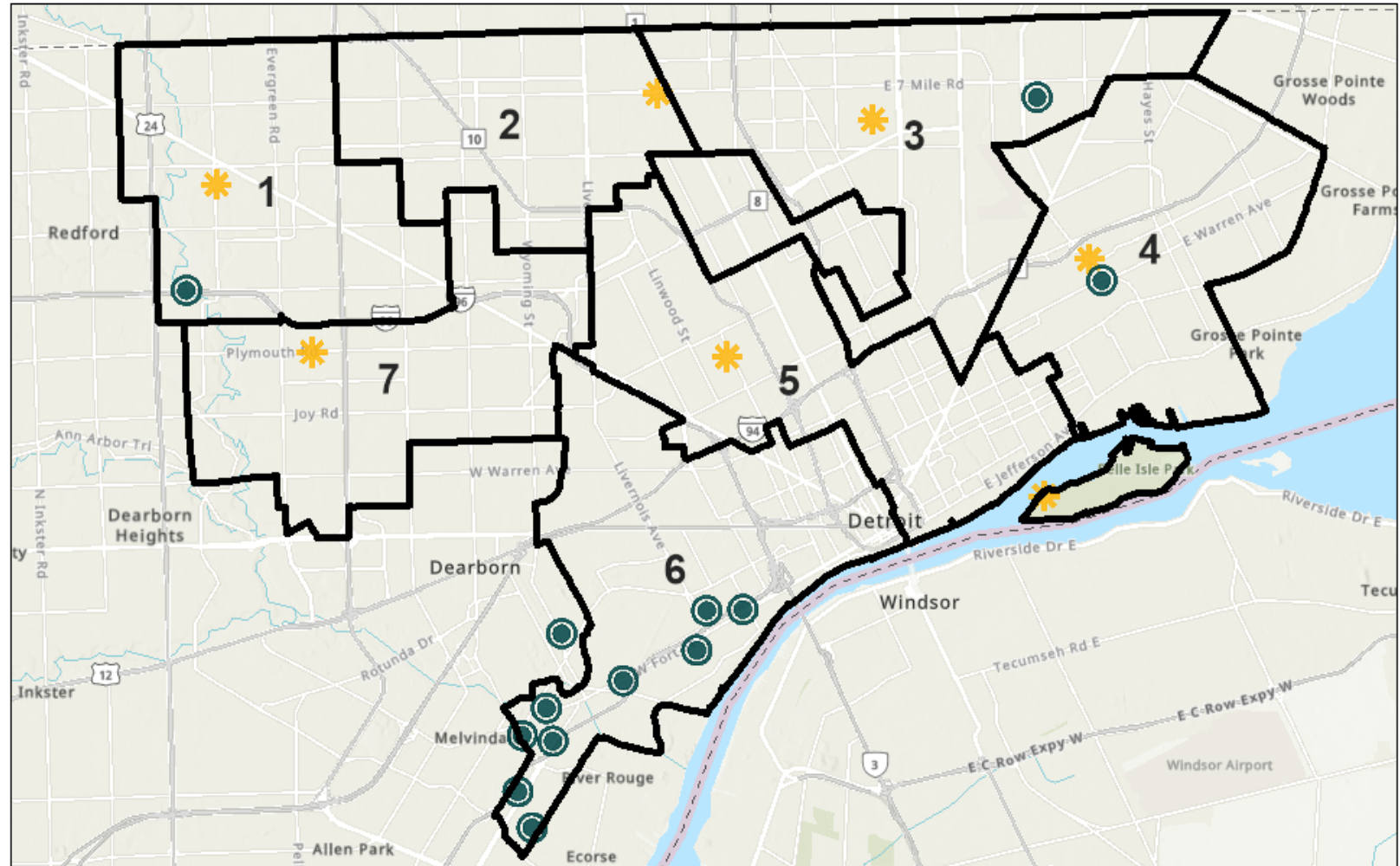
☒ **Complete and ongoing**



Detroit & EGLE Monitoring Sites

City of Detroit Monitors

- Chandler Park Service Yard
- Joseph Walker Williams Recreation Center
- Crowell Recreation Center
- Detroit Police Department, Sixth Precinct
- Detroit Police Department, Harbor Master
- Detroit Police Department, Twelfth Precinct
- Detroit Police Department Eleventh Precinct



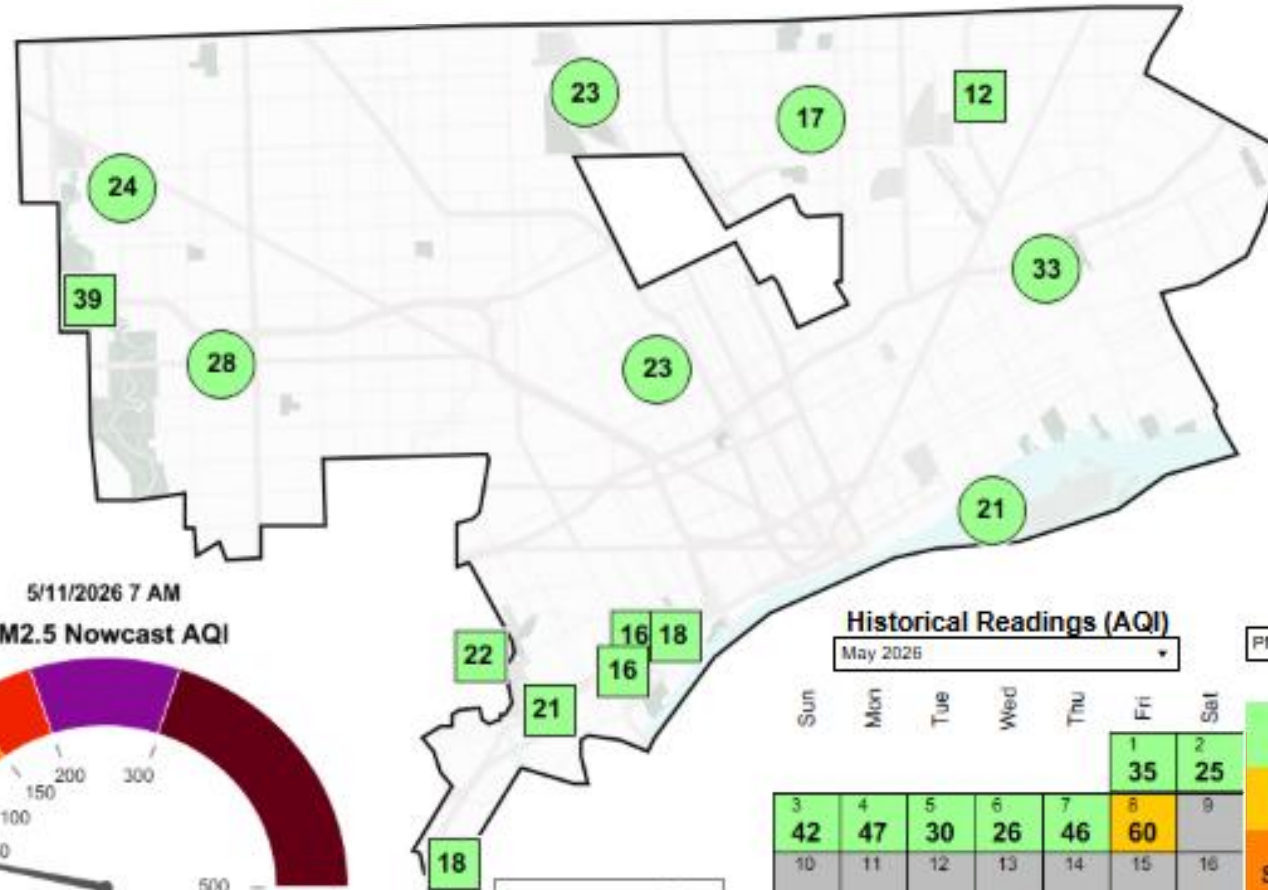


City of Detroit Air Quality Dashboard

Hover over elements for more details. Select a monitor location to filter the dashboard.
All data (AQI unless otherwise noted) are preliminary and subject to change following monthly QA/QC.



11



Good
Air quality is satisfactory, and air pollution poses little or no risk.

City Monitor

EGLE Monitor

Historical Readings (AQI)

May 2026

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1 35	2 25
3 42	4 47	5 30	6 26	7 46	8 60	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

Pollutant

PM2.5

Good
Moderate
Unhealthy for Sensitive Groups
Unhealthy
Very Unhealthy
Hazardous



**RISE
HIGHER**

Community Leadership



TEPFIRAH HANA RUSHDAN

Director, Office of Sustainability

Tepfirah Hana Rushdan is Director of Sustainability for the City of Detroit, where she leads efforts to create a more resilient, equitable, and sustainable city. Before joining local government, Tepfirah has spent nearly 20 years rooted in Detroit's community-driven environmental movement. Her work bridges grassroots action with citywide policy, centering resilient neighborhoods, collective care, and environmental justice.



THERESA LANDRUM

Community organizer and activist

Theresa Landrum is a community organizer and activist that has been fighting environmental injustices for decades. A life-long Detroit, Ms. Landrum is one of Southwest Detroit 48217's (an area deemed as the most polluted zip code in Michigan) most outspoken community activists. Landrum serves on two committees under Governor Gretchen Whitmer; the Michigan PFAS Action Response Team Citizens' Advisory Work Group (MPART CAWG); scrutinizing policy and standards for PFAS in Michigan's water and the Michigan Advisory Council on Environmental Justice (MAC-EJ) helping to develop policy to address Environmental Justice in Michigan.

Landrum serves on several local organizational boards, coalitions and steering committees; Clear The Air, the Air Quality Sensor Collaborative, the Michigan Environmental Justice Coalition and two national boards the Evergreen Collaborative and FracTracker Alliance as a community representative for her frontline community and is the president of the Original United Citizens of Southwest Detroit. Her mission is to fight for strong, actionable policies to reduce climate pollution to arrest Climate Change.





RISE
HIGHER

Community Conversation



COMMUNITY CONVERSATION

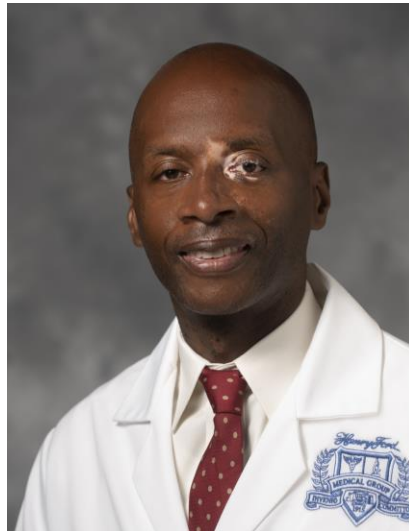
MODERATOR



Vice Provost Shalanda H. Baker

Vice Provost for Sustainability and Climate Action, Professor of Environment and Sustainability, University of Michigan

SPEAKERS



Dr. Ikenna Okereke, M.D.

Vice Chairman, Department of Surgery System Director, Thoracic Surgery; Professor of Surgery, Michigan State University, Henry Ford Health System



Maria Harris

Senior Scientist, Clean Air, Environmental Defense Fund



Morgan Locke

Air Quality Program Manager, Green Door Initiative



Salam Beydoun, MSW

Environmental Justice Organizer, Ecology Center

VICE PROVOST SHALANDA H. BAKER

Vice Provost for Sustainability and Climate Action, Professor of Environment and Sustainability, University of Michigan

Shalanda H. Baker is the inaugural Vice Provost for Sustainability and Climate Action at the University of Michigan. She joined the university after serving as the Senate-confirmed Director of the Office of Energy Justice and Equity, Secretarial Advisor on Equity, and Chief Diversity Officer at the United States Department of Energy. Prior to that, she served in the Biden-Harris Administration as the nation's first Deputy Director for Energy Justice.

Before her appointment, she was a Professor of Law, Public Policy, and Urban Affairs at Northeastern University; an associate professor of law at the University of Hawai'i William S. Richardson School of Law; and on the faculty at the University of San Francisco School of Law. Shalanda holds a Bachelor of Science degree in Political Science from the United States Air Force Academy, a Juris Doctor from Northeastern University School of Law, and an LLM from the University of Wisconsin School of Law. Her book, *Revolutionary Power: An Activist's Guide to the Energy Transition*, argues that energy policy is the next domain to advance civil rights (Island Press 2021).

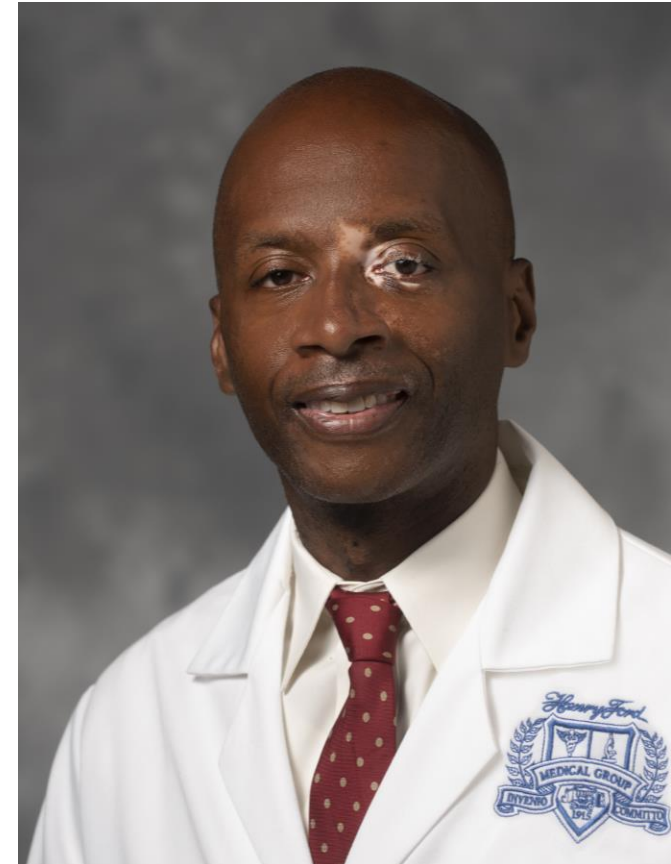


DR. IKENNA OKEREKE, M.D

Vice Chairman, Department of Surgery System Director, Thoracic Surgery;
Professor of Surgery, Michigan State University, Henry Ford Health System

Dr. Okereke was raised in Detroit, Michigan and attended Johns Hopkins University. He attended Washington University School of Medicine in St. Louis. He did his general surgery residency at the Cleveland Clinic Foundation and his cardiothoracic residency at Beth Israel Deaconess Medical Center in Boston.

Dr. Okereke is the current Vice Chairman of the Department of Surgery and Chief of the Division of Thoracic Surgery at Henry Ford Health. He is active in basic and outcomes research and has been awarded numerous NIH grants, with over 135 peer-reviewed publications. His research focuses on air quality, its impact on lung disease and the disparities that underrepresented communities face with environmental injustice. He went to Haiti for disaster relief 1 week after the devastating earthquake which killed over 300,000 people in that country. Inspired by this trip, he established the Okereke Foundation in 2013. He also mentors underrepresented high school students and began a summer internship program for these students in 2016.



MARIA HARRIS

Senior Scientist, Clean Air, Environmental Defense Fund

Maria is a Senior Scientist in the Office of the Chief Scientist, supporting the work of EDF's Global Clean Air initiative to reduce disparities in air pollution exposure and health impacts. Maria leads research on air pollution exposure and associated health burdens. One of her focuses at EDF is collaboration with community-based organizations and other partners to leverage air pollution research findings in support of health-protective policy changes.

Prior to joining EDF, Maria was a postdoctoral researcher at the Center for Environmental Research and Children's Health (CERCH) at UC Berkeley, where her research examined the influence of early life environmental exposures on child health and development. Maria has published on the impacts of prenatal and childhood exposure to air pollution and perfluorinated alkyl substances (PFASs) on child brain development.



MORGAN LOCKE

Air Quality Program Manager, Green Door Initiative

Morgan Locke is working as the Air Quality Program Manager at Green Door Initiative. She has a background in community engagement, community organizing, and public health with experience in communicating environmental health risks and managing air quality intervention projects.

Before joining Green Door Initiative, Locke was working at the Michigan Center on Lifestage Environmental Exposures and Disease on Dr. Amy Schulz team, where she supported research projects on environmental exposures related to air quality and soil.



SALAM BEYDOUN, MSW

Environmental Justice Organizer, Ecology Center

Salam joined the Ecology Center in September 2023 as the Environmental Justice Organizer and has a background in organizing in Detroit and other parts of Southeast Michigan with partner Environmental Justice organizations. Through the Ecology Center and its role as a partner of Clear the Air, Salam collaborates with community members and partner organizations on air quality awareness and education.

Together, they empower people to protect their air from industrial pollution through an Air Quality monitoring network and advocacy. She holds a Masters in Social Work from Wayne

State University, providing her guiding principles and a people-centered framework in how she organizes with frontline communities.



The Influence of Air Quality on Lung Cancer in Never-Smokers Compared to Smokers

Methods

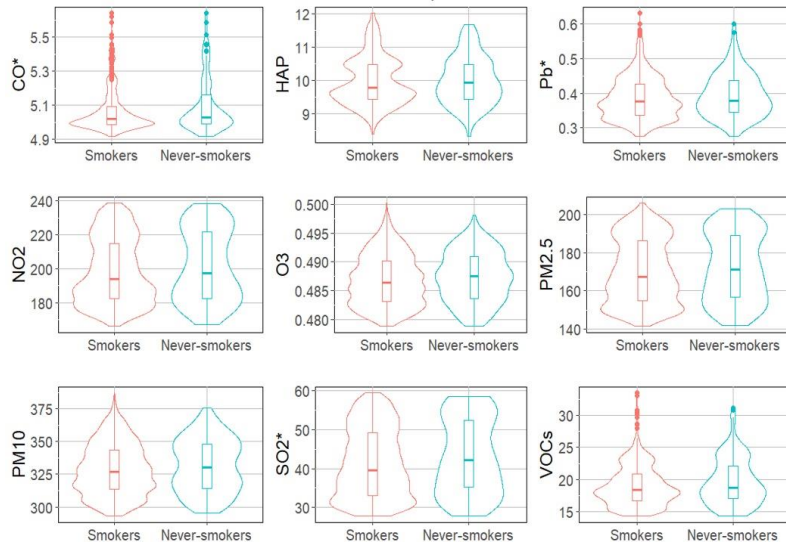


2013-2021: 2,223 patients with a new lung cancer diagnosis at a single institution

1980-2018: Pollutant data using EPA sensors in Wayne County, Michigan

- Bivariate comparison analyses conducted
- Spatial empirical Bayesian approach used to estimate continuous air pollutant levels

Results

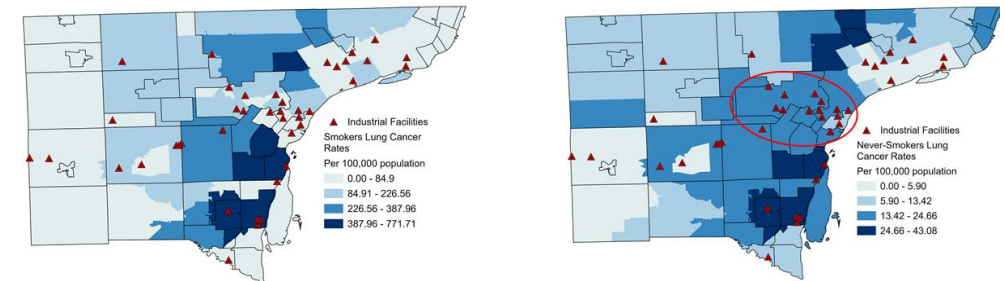


Carbon monoxide (CO), Nitrogen dioxide (NO₂), Sulfur dioxide (SO₂), Ozone (O₃), Particulate matter 2.5 microns (PM_{2.5}), Particulate matter 10 microns (PM₁₀), Lead (Pb), Volatile organic compounds (VOCs), Hazardous air pollutants (HAPs)

Never-smokers diagnosed with lung cancer experienced significantly higher exposures to carbon monoxide (CO), lead (Pb), and sulfur dioxide (SO₂) than smokers
* p<0.05

Results

Never-smokers diagnosed with lung cancer clustered toward industrial facilities (Red circle)



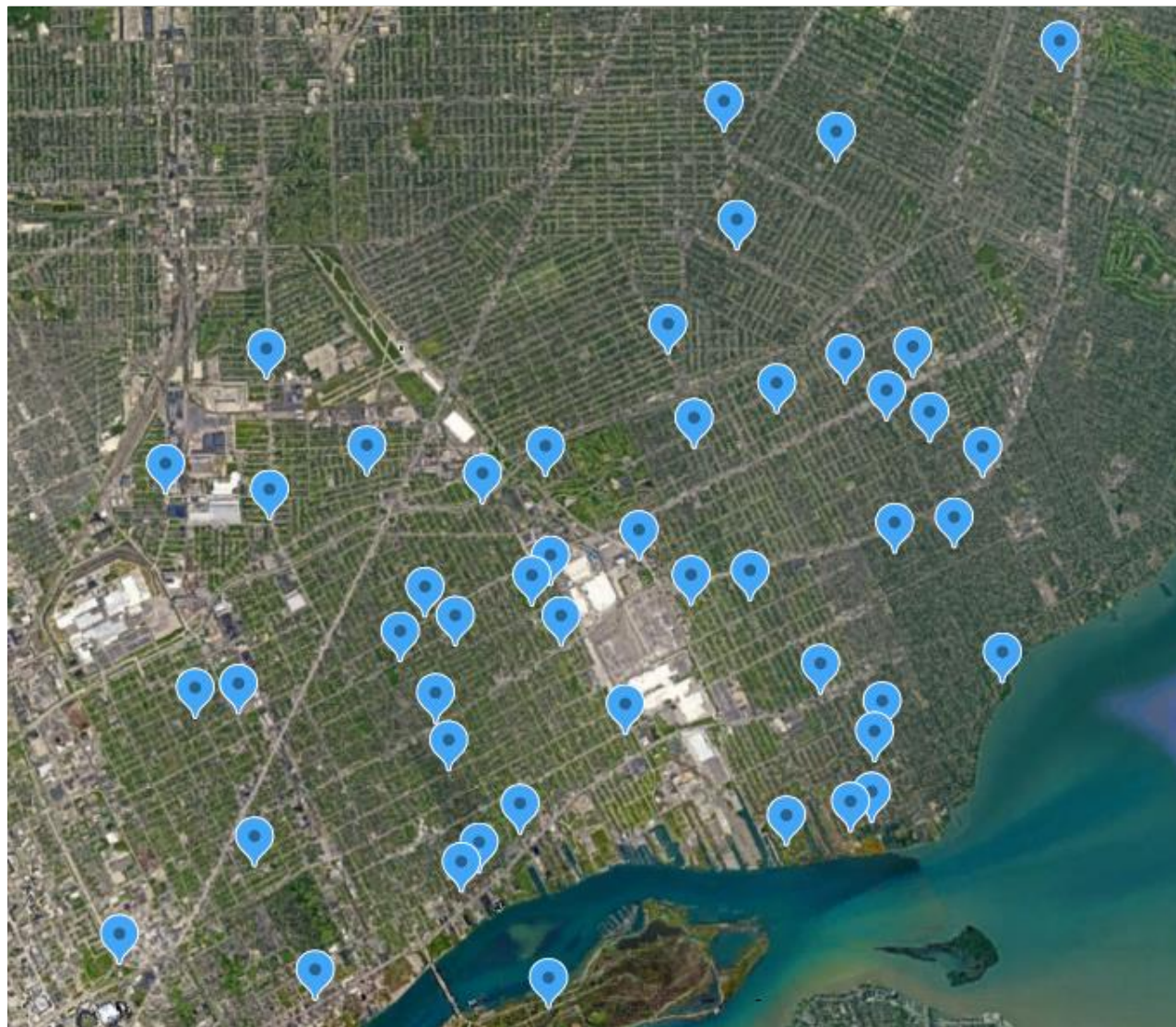
Implications

Never-smokers diagnosed with lung cancer:

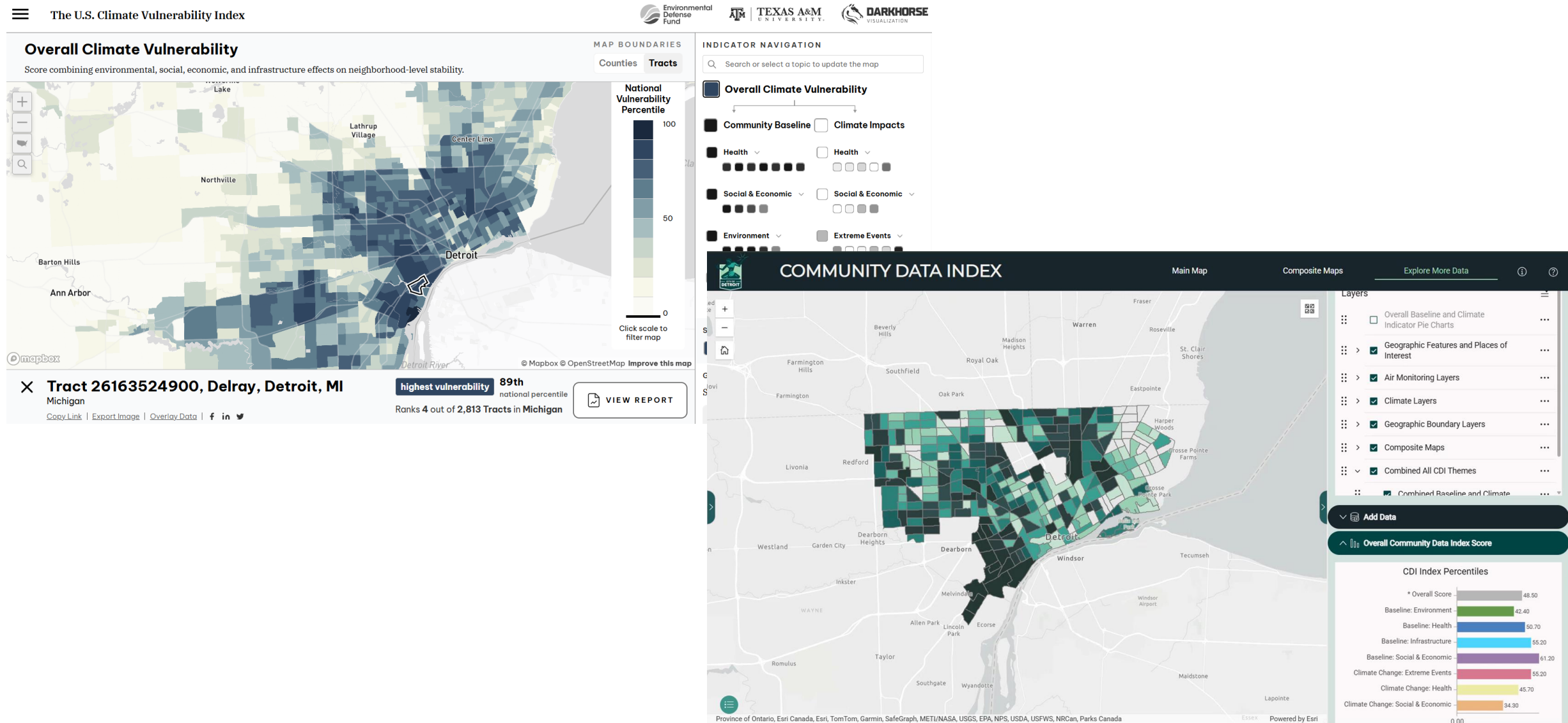
*Higher exposure to specific pollutants (**carbon monoxide, lead, and sulfur dioxide**)

*Lived in more polluted areas and closer to industrial facilities

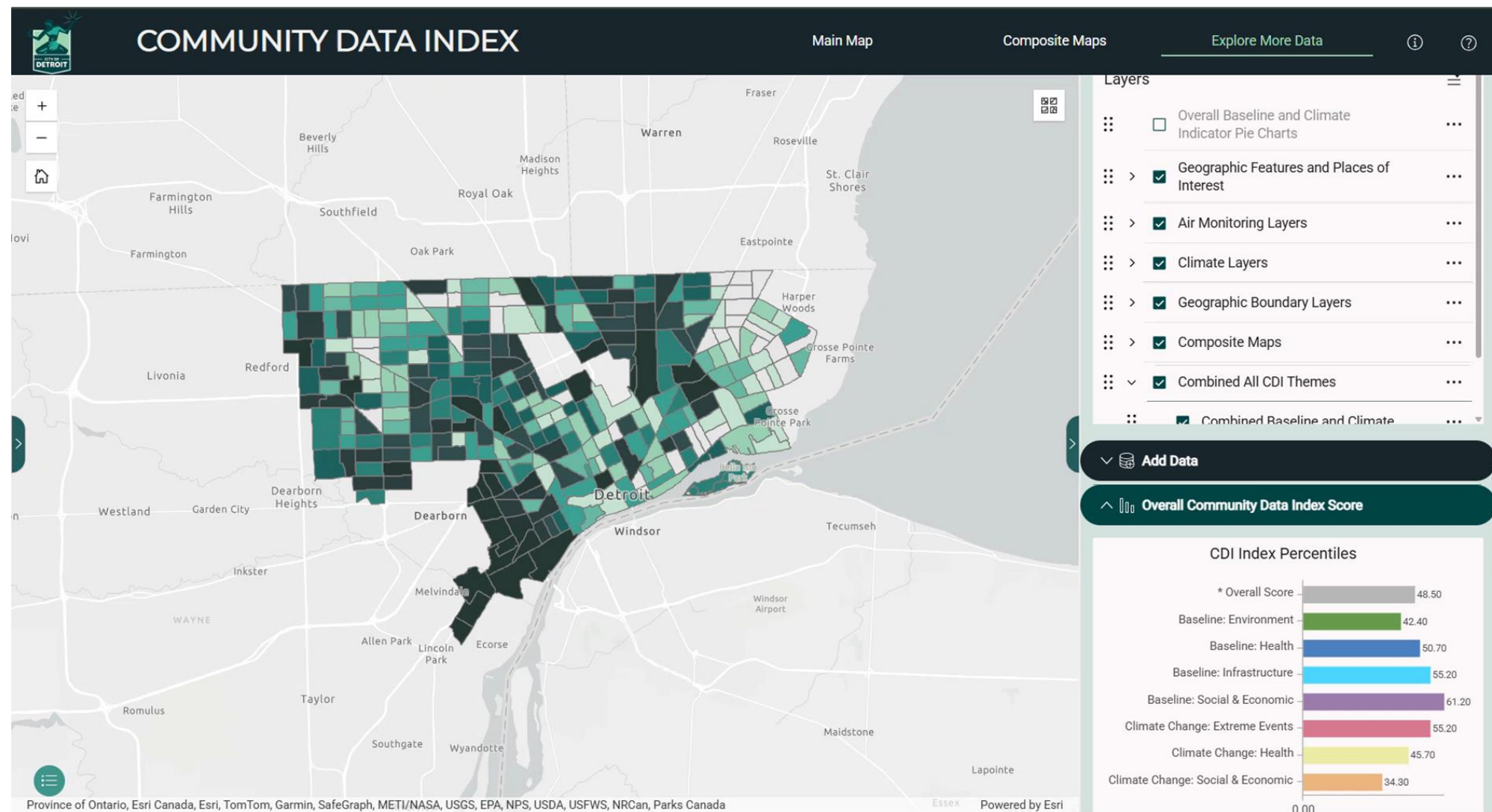
Air Monitoring Sensors Placed Around the Stellantis Plant



Identify high priority areas of city for targeted actions to reduce pollution and improve health



Detroit Community Data Index (CDI)



Closing Remarks



MARIA M. GALARZA, AICP

Deputy Director, Detroit Office of Sustainability

Maria Galarza serves as the Deputy Director for the Office of Sustainability in the City of Detroit. Through her work she has cultivated an in-depth understanding of the city's unique challenges and opportunities. Her work is marked by a steadfast commitment to sustainable urban development, resilience planning, and climate action.

Through various roles in local government, she has played a pivotal part in shaping policies, implementing initiatives, and fostering collaborations that have driven positive change.

Her deep-rooted connection to the city fuels her passion for creating a more sustainable, resilient, and equitable future for Detroit's neighborhoods.



THANK YOU!

**Detroit Community Health Initiative
(CDHI) Gathering Feedback Survey**

