



Air Quality Monitoring in Madison



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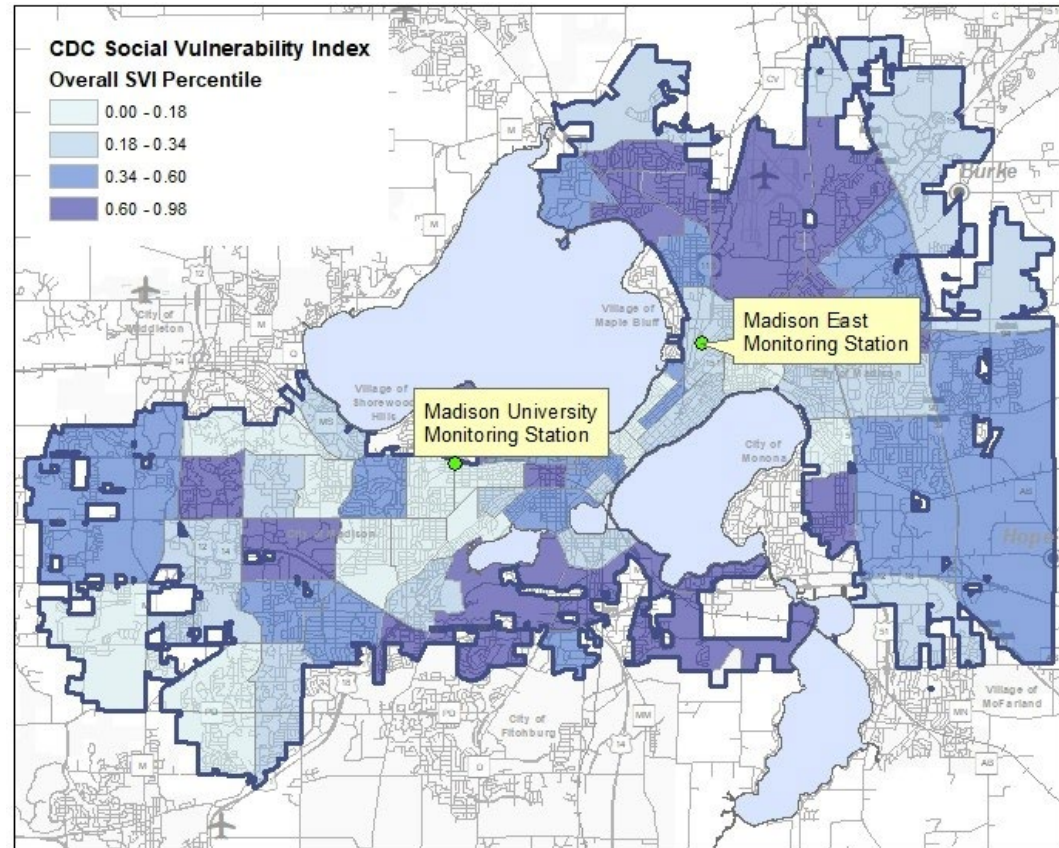
Air Quality Monitoring in Madison

Right now, information on our air quality comes from two sensors.

These sensors tell us that Madison sometimes experiences high levels of particulate matter and other air pollution.

Additional monitors will help us understand:

- how air quality varies across Madison's neighborhoods,
- identify if air quality is worse in some areas
- create strategies to protect community health and improve air quality



What is Particulate Matter?

Particulate matter (PM) is tiny pieces of dust, dirt and other materials in the air we breathe.

Breathing particulate matter can be bad for your heart and lungs.

When there is a lot of it, it can make the air look dirty, hazy, or brown.





Recent Bad Air Quality Days





Particulate matter is bad for our health!

Short term health impacts: eye, nose, throat and lung irritation, coughing, sneezing, shortness of breath

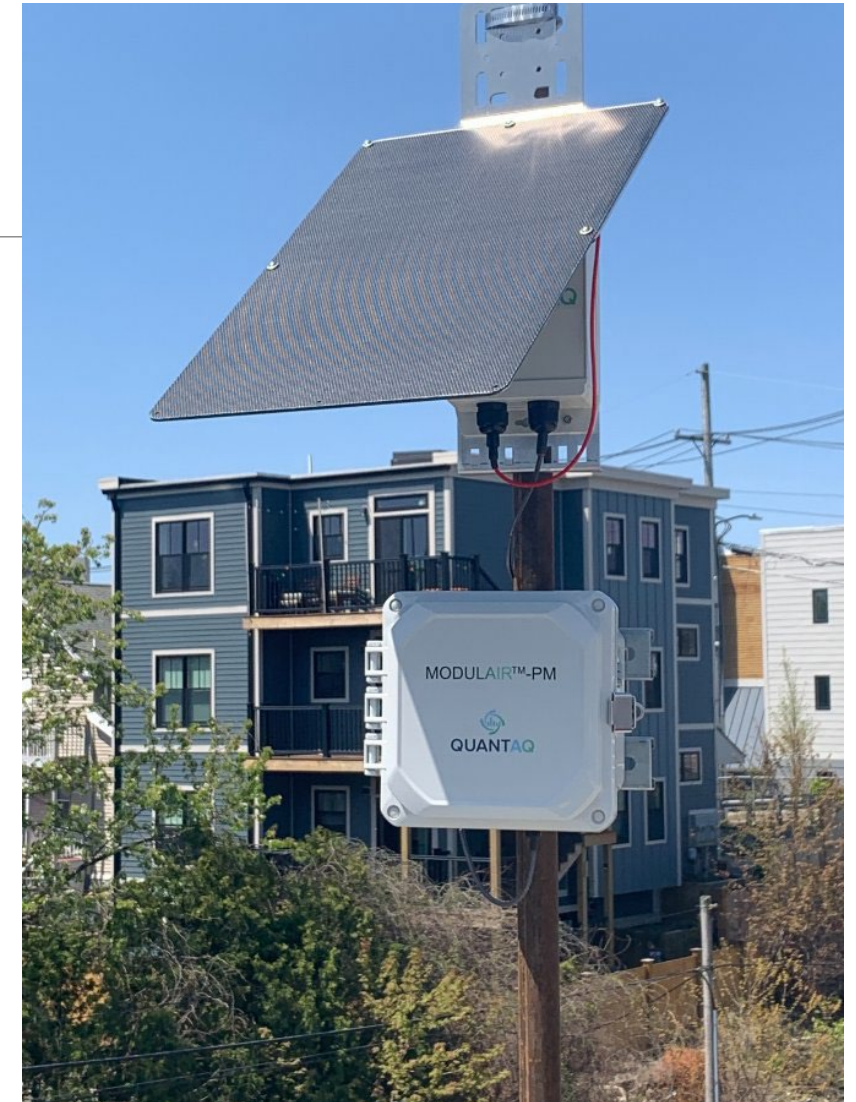
Long term health impacts: worsening lung and heart health, asthma, heart disease

Across the US and in Wisconsin, data shows that BIPOC and low-income communities face greater exposure to particulate matter and higher rates of lung and heart problems.



A City-Wide Network

1. Engage the Madison community to
 - Raise awareness about the connections between air quality and health
 - Get community input on sensor locations
2. Install a city-wide network of air quality monitors
3. Share data on a publicly accessible online map
4. Identify areas experiencing the greatest levels of PM air pollution
5. Begin community outreach, education, and engagement efforts to collaboratively determine community needs and next steps





Community Participation

1. Before monitors are installed – 4 Open House events + 1 Coffee Chat
2. During installation - Community members will be invited to join 3-5 sensor installations
3. After monitors are installed – We will host 3-5 Open House events to:
 - Share findings on air quality with the community
 - Learn about the needs of the communities most impacted by poor air quality
 - Plan next steps for improving air quality and protecting the health of residents

Community partners and PHMDC will also share information about the project and the connections between air quality and health through their networks and communication channels.



Air Quality Monitors

Small air quality monitors made to detect particulate matter of different sizes

Complements and adds to the data we get from the two regulatory sensors

Lower cost means we can install many sensors across the City

UW Professor Tim Bertram and his lab use this technology and will advise on the project.



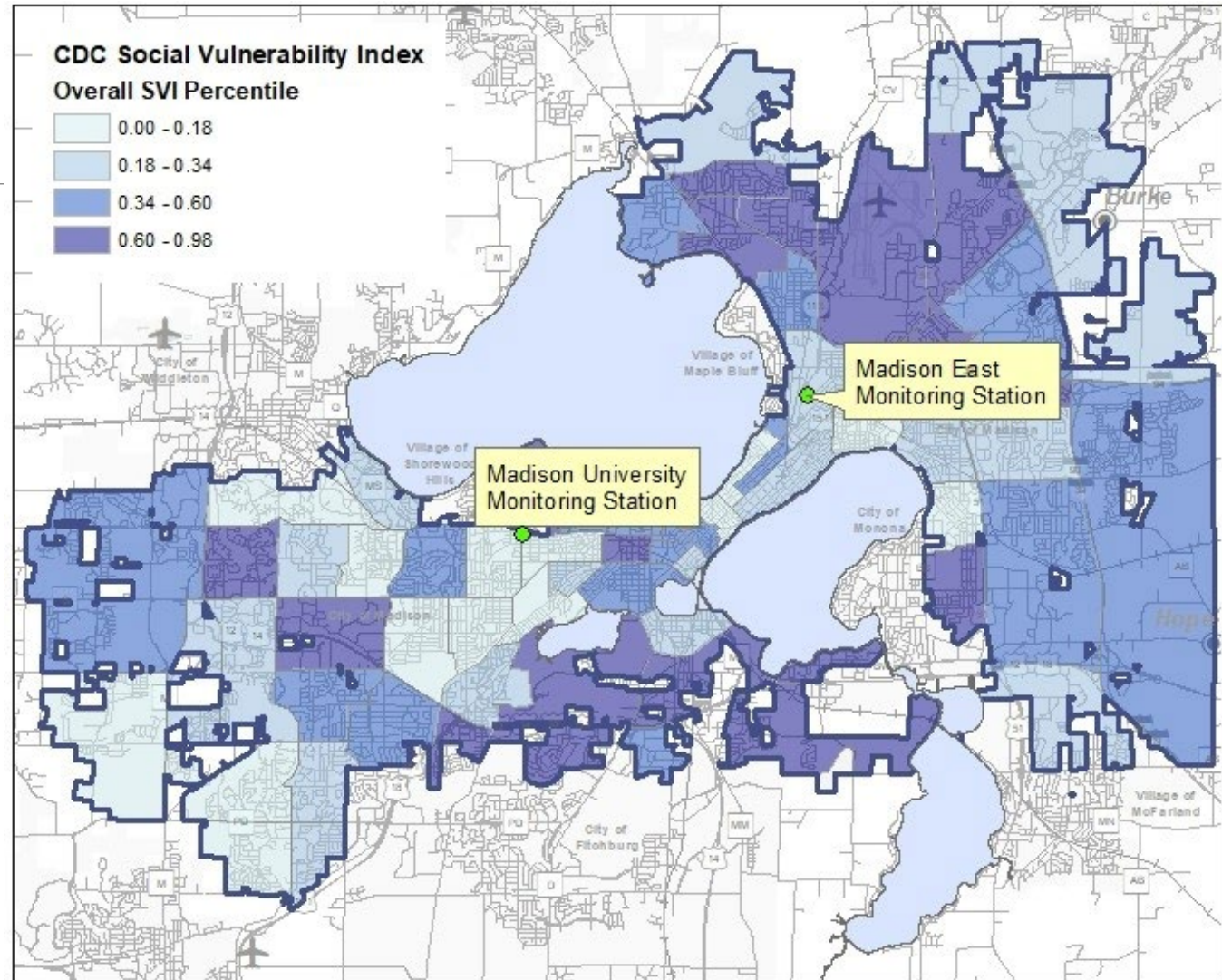
Monitor Locations

70 air quality sensors

- 2 co-located with DNR AQ monitors
- 56 on city-owned light poles
- 4 non-profit partner locations
- 5 at City parks
- 3 back up

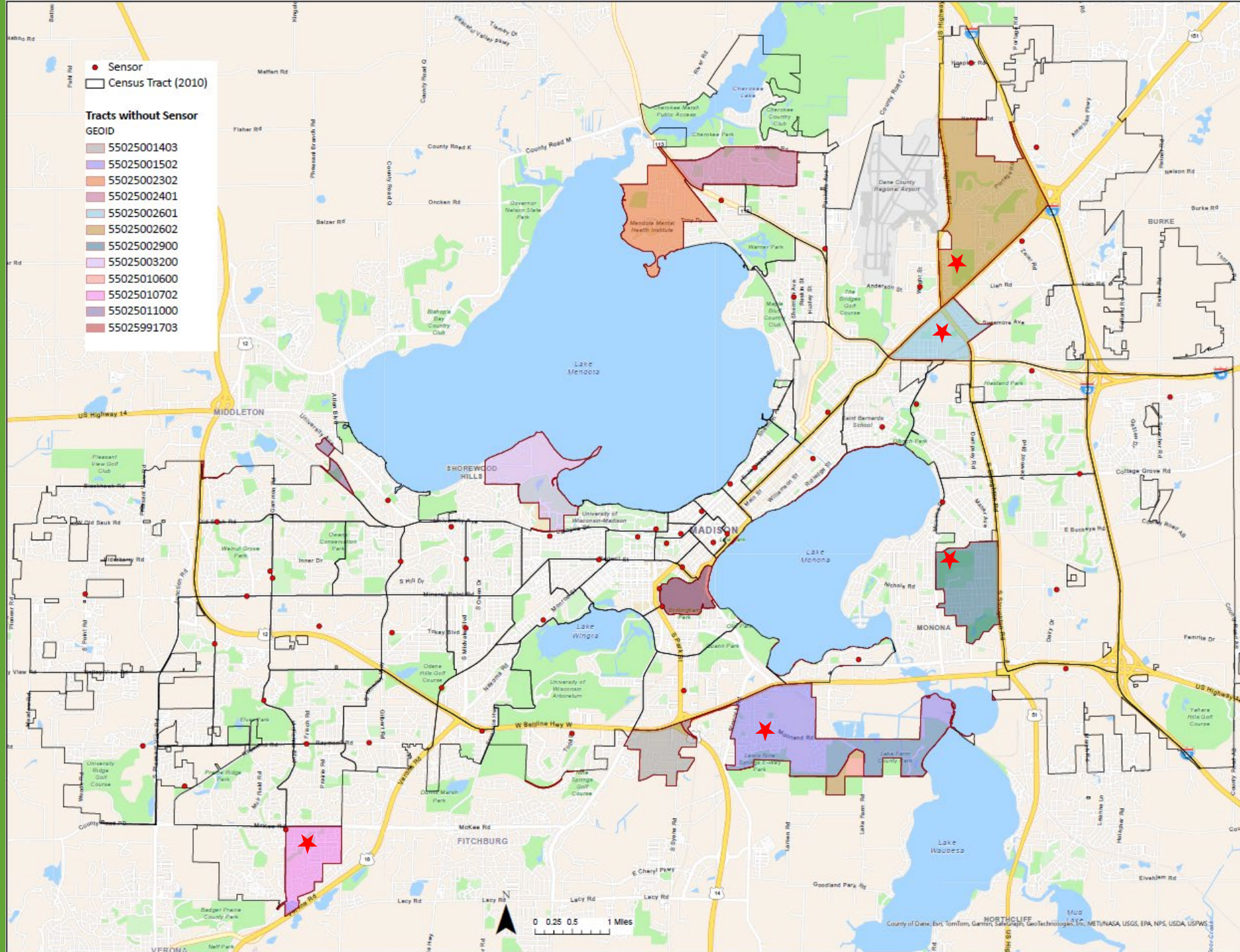
Powered by solar panel

Data shared over the cell network



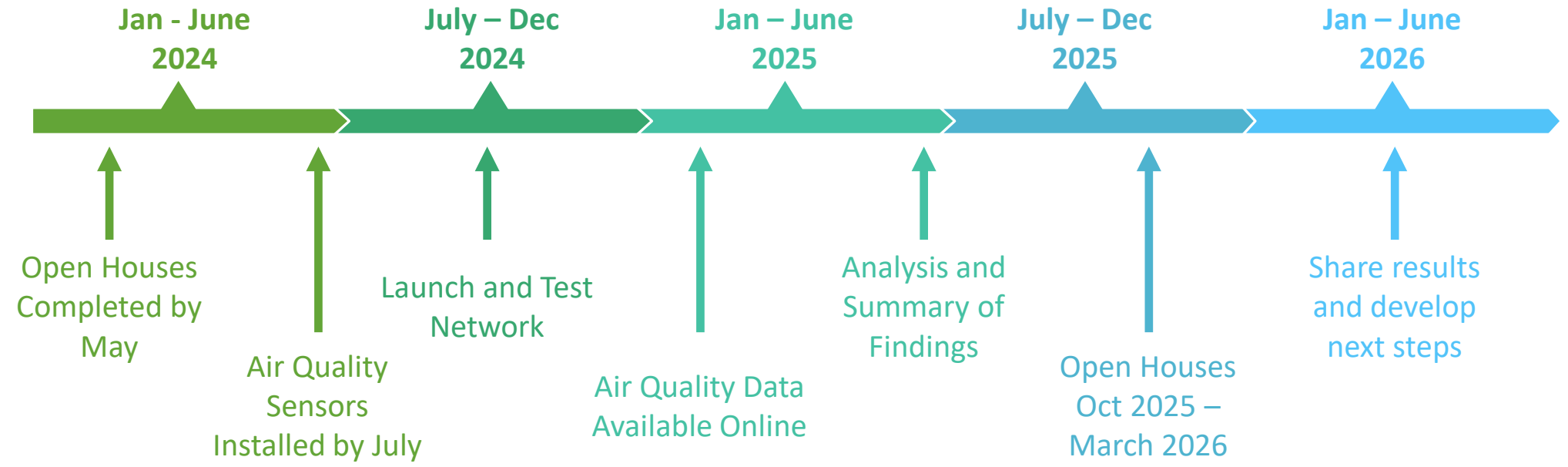
Sensor Locations

- Manchester Park
- Highland Manor Park
- Monona Golf Course
- Brigham Park
- Reindahl Park





Timeline





For More Information

**For project updates, visit our project page on the
City's Sustainability & Resilience website:**

<https://www.cityofmadison.com/sustainability/climate/air-quality>



Thank you!



THE FOUNDATION FOR
BLACK WOMEN'S
WELLNESS

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