



Hillsborough TPO
UNIVERSITY OF SOUTH FLORIDA
EPC
Low Cost Air Quality
Monitoring Pilot Study

Measuring Our Community Air Quality

Why measure air quality here?

- Air pollution is higher near heavy traffic
- Some communities may have higher exposures
- Collecting air quality data will help to design healthier communities

How is air quality measured?

- Look up to find the small community air monitor measuring pollution levels
- Levels are shared on a public website available to everyone

What's the air like right now?



tinyurl.com/usfaq

Community Air Monitoring Network

TPO Committees
April 2024



2

Low-Cost Air Monitoring Pilot Study, 2021-2023



Tested monitors and analyzed data



Engaged community in air monitoring



Established community pilot sites and shared data



Developed methods to establish a community monitoring network

3 Pilot study



Clarity Node-S
(Clarity)

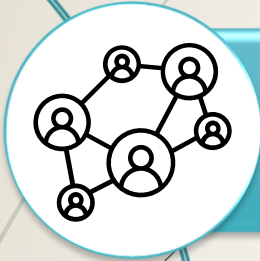


PurpleAir II
(PA)

Project Overview

4

Expanding the Community Air Monitor Network, 2023-2026



Establish community air monitoring network



Identify pollutant concentrations and analyze data over time



Build capacity around air pollution and the built environment

5



Why?



Build community capacity around air pollution



Characterize local air quality near interstates



Inform future planning and decision-making



Improve disparities in exposure to traffic-related air pollutants to equitably improve air quality



Compliment regulatory air monitoring with low-cost air sensors

6

Mar–Nov. 23

- Receive & process grant
- Quality Assurance Project Plan
- Community & Stakeholder Kick-off meeting

June–Nov. 24

- Installation training
- Establish sites
- Annual Summit
- Distribute Guidebook

June–Nov. 25

- Revise outreach materials
- Annual summit
- Site/volunteer training

- Coalition meeting: April 18, 2024
- Public survey
- Identify sites
- Co-locate monitors
- Develop Guidebook
- HCPS Green Teams edu. materials

Dec.–May 24

- Review site criteria
- Identify additional sites
- Establish sites
- Training

Dec.–May 25

- Establish next steps
- Coalition recommendations

Dec.–Mar. 26

Community Collaboration & the Site Selection Process

Identify areas for community air monitoring

Explore potential community sites

Engage with community & stakeholders

Confirm sites & conduct field visits

Sign agreements & install monitors



Community and Site Selection Criteria

Prioritize areas and sites for community air monitoring

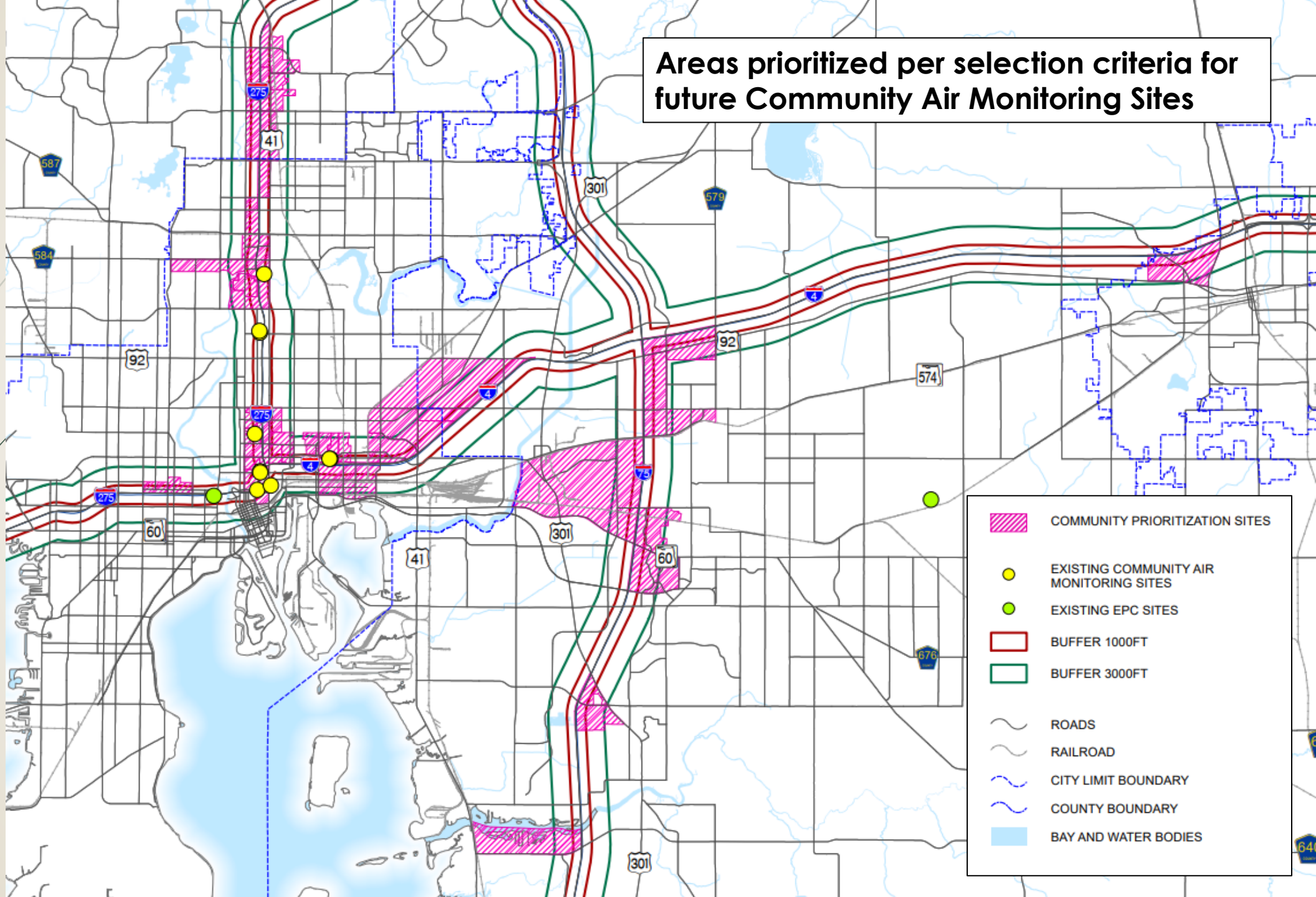
Pt 1. Community Selection Criteria

1. Environmental factor
 - ▶ Proximity to interstate
2. Demographic factors
 - ▶ Low-income populations
 - ▶ Majority people of color
 - ▶ Additional factors:
 - ▶ percent linguistically isolated, percent less than high school education, percent unemployed, and low life expectancy
3. Community access and engagement

Pt. 2 Site Selection Criteria

1. Community access and engagement (e.g. where people congregate)
2. Proximity to the interstate
 - ▶ $\leq 1,000'$ of interstate
 - ▶ $\geq 3,000'$ of interstate (comparison site)
3. Interest in long-term involvement
4. EPA logistical considerations

Areas prioritized per selection criteria for future Community Air Monitoring Sites



Thank you! Questions?

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<https://planhillsborough.org/low-cost-air-quality-monitoring-pilot-study/>