

AGENDA: 4

Combating Medical Racism and Air Pollution

By Jeff Ritterman, M.D.

Dr. Jeff Ritterman

- Retired Chief of Cardiology of the Kaiser Richmond Medical Center
- Served on the Richmond City Council
 - Proposed the first municipal soda tax. Although the measure failed, worked to help pass a similar measure in Berkeley and one in Mexico
- Active Board member of the San Francisco Physicians for Social Responsibility and the Richmond Human Rights Commission
- Air District Community Advisory Council Member



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SOCIAL RESPONSIBILITY
SAN FRANCISCO BAY CHAPTER



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Demanding Justice.**

SF Bay PSR combines the power of community activism with the knowledge and credibility of health professionals to promote public policies that support: environmental health, social and racial justice, climate change, and nuclear weapons abolition.

FIND this and more on our website: **SFBayPSR.org**

PSR's Focus

- Abolishing Nuclear Weapons
- Combatting Climate Change and Fighting Pollution
- Uprooting Medical Racism

Fighting Air Pollution

- PSR thanks BAAMQD for adopting a zero emissions standard on all new furnaces (“Rule 9-4”), boilers and water heaters (“Rule 9-6”).
- PSR has also been working in this area and reminds BAAQMD that this change will save 85 lives/year and prevent 110 new cases of asthma/year
- These changes will benefit frontline communities and people of color the most, making these rules an important way to advance Environmental Justice

Uprooting Medical Racism

- Pain Management
- Tuskegee syphilis study
- Lessons for today

Discrimination in Pain Management

- Black children with long bone fractures and appendicitis receive significantly less pain medication in ER visits than white patients
- Sickle cell anemia patients wait longer in Emergency Rooms than other pain patients before treatment
- Authors of a study on this phenomenon concluded that: “The African American race of the SCD patients, and their status as having SCD itself, both appear to contribute to longer wait times for these patients. These data confirm patient anecdotal reports.

Discrimination in Pain Management

The anecdotal reports are striking: “Every time, it’s a battle,” one patient said about her ER experiences. She complained that staff members suspect her of faking her condition in order to score opiates and view her as a non-emergency because she only has pain. “I always dress professionally,” said a retired school administrator. “Nice shoes, interesting earrings, every hair in place, and Vogue-worthy makeup. It’s crazy that you, as an African-American, have to do this so you aren’t treated like a drug addict.”

Discrimination in Pain Management

- More than half of medical students and medical residents tested believed that black patients were less sensitive to pain than white patients and would have undertreated them in a clinical situation
- Those tested believed that black patients had thicker skin and less sensitive nerve fibers than white patients
- Both of these beliefs are untrue

Tuskegee Syphilis Study

- 600 sick desperately poor sharecroppers from Macon County, Alabama with syphilis were recruited
- Patients were told they were being treated but treatment was withheld
- They were given aspirin and vitamins instead of syphilis therapy
- Real reason for the study was to follow the men until death from syphilis and then autopsy them
- Patients were subjected to spinal taps
- Study was conducted by the USPHS and lasted from 1932-1972

Tuskegee Syphilis Study Continued

- Military doctors were instructed not to treat the men
- Men were exempted from draft during World War II to prevent them getting treated
- 40 wives were infected and 19 children were born with congenital syphilis
- Penicillin was available beginning in 1943 and other therapies prior
- Senator Ted Kennedy held hearings in 1972
- This loss of trust underlies some of the vaccine reluctance we see today

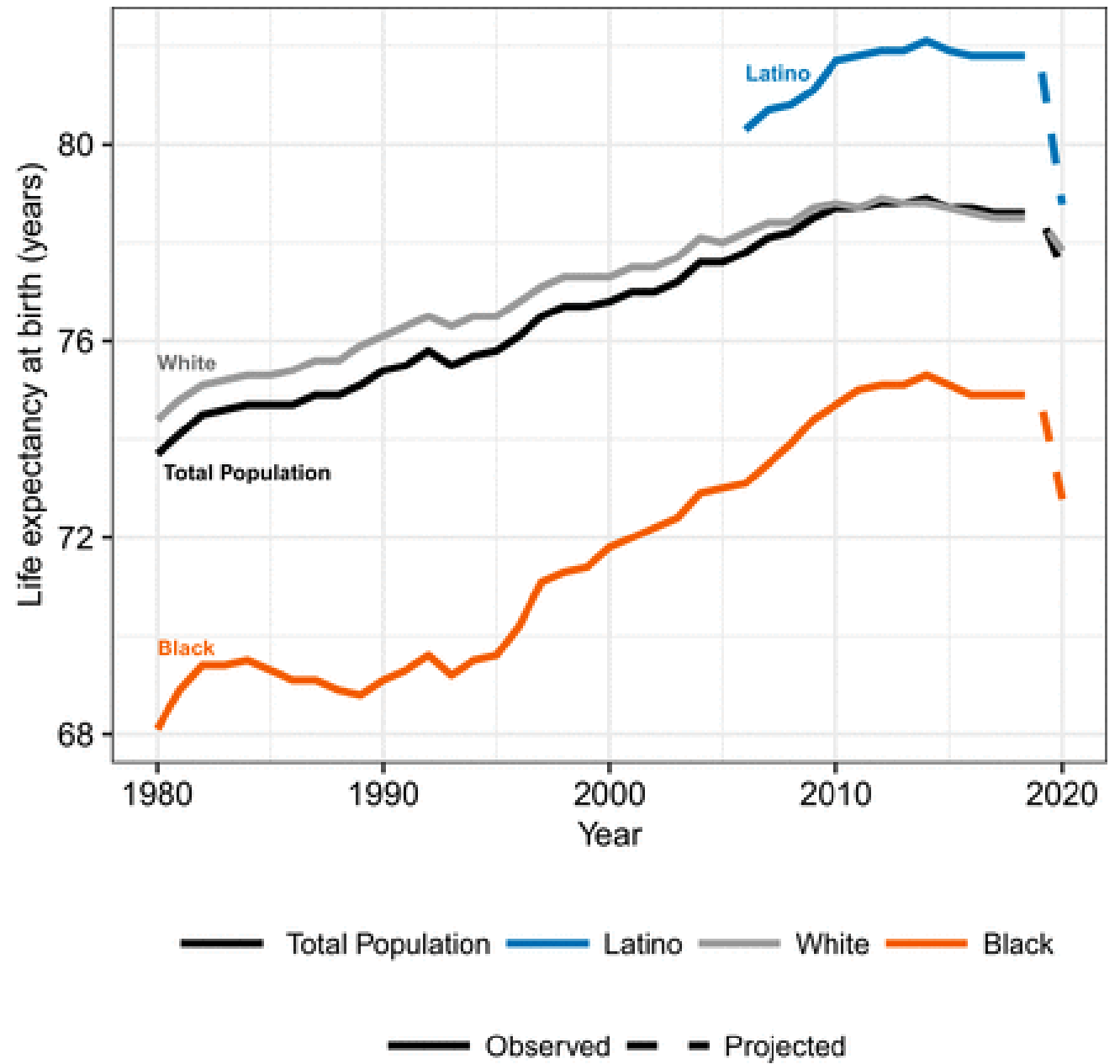
How Does Racism Become Biology?

- Everyday discrimination such as being treated disrespectfully (known as microaggressions) causes the sympathetic nervous system to be turned on. This fight or flight mode causes constant vigilance. Scientists call this wear and tear weathering.
- At the cellular level this can be seen by shortening of the telomere length. The cells are aging prematurely from the discrimination.
- The usual BP dipping which occurs during sleep does not happen. The person is literally always on guard, always vigilant. There is no respite.

- Patient-Physician Racial Concordance and the Perceived Quality and Use of Health Care
- Our findings confirm the importance of racial and cultural factors in the patient-physician relationship and reaffirm the role of black and Hispanic physicians in caring for black and Hispanic patients.

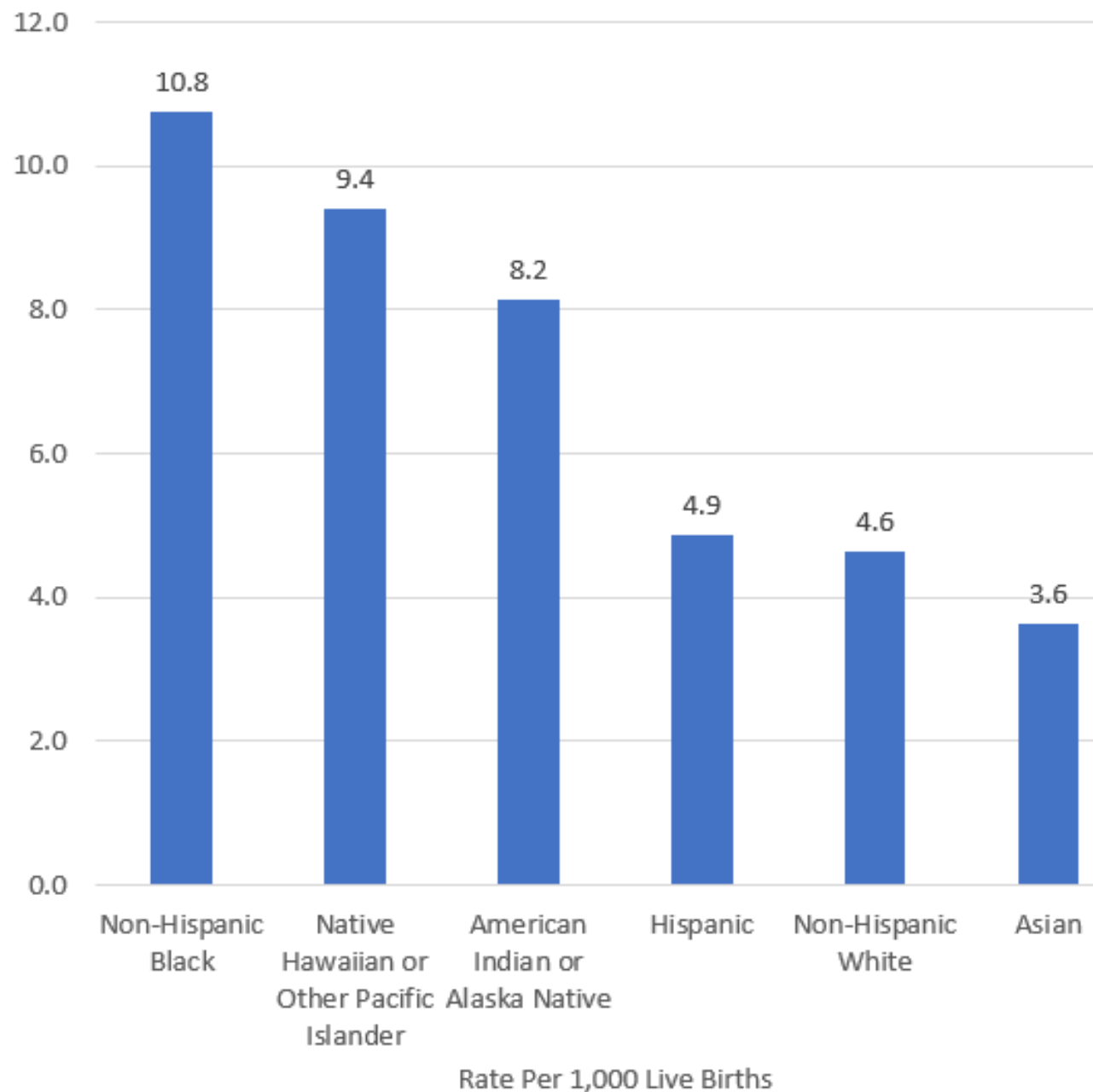


Life Expectancy by Race





Infant Mortality Rates by Race and Ethnicity, 2018



Similarities Between our Work with the Air Board and Combating Medical Racism

- In each case it is the underserved and people of color who are negatively impacted
- Given the above our focus must be on working to eliminate the negative impacts on these communities both by improving their air quality and by eliminating medical racism

How to Become an Antiracist:

- There is no neutrality in the racism struggle. The opposite of “racist” isn’t “not racist.” It is antiracist...One endorses either the idea of a racial hierarchy as a racist, or racial equity as an antiracist...There is no in-between safe space of “not racist.”
- The only way to undo racism is to consistently identify and describe it—and then dismantle it.

Dr. Kendi's Prescription:

- Saturate the body politic with the chemotherapy or immunotherapy of antiracist policies that shrink the tumors of racial inequities, that kill undetectable cancer cells. Remove any remaining racist policies, the way surgeons remove the tumors. Ensure there are clear margins, meaning no cancer cells of inequity left in the body politic, only the healthy cells of equity...Detect and treat a recurrence early, before it can grow and threaten the body politic.

Isabel Wilkerson's Prescription:

- Radical Empathy:
 - Each time a person reaches across caste and makes a connection it helps break the back of caste...multiplied by millions in a given day it becomes the flap of the butterfly wing that shifts the air and builds to a hurricane across an ocean.

Resources

- Caste: The origins of our discontents by Isabel Wilkerson
- Medical Apartheid: The dark history of medical experimentation on Black Americans from colonial times to the present by Harriet A. Washington
- How to be an Antiracist by Ibram X. Kendi
- Dying of Whiteness: How the politics of racial resentment is killing America's heartland by Jonathan M. Metz
- Medical Bondage: Race, gender, and the origins of American gynecology by Dierdre Cooper Owens

Thank you





BAY AREA
AIR QUALITY
MANAGEMENT
DISTRICT

AGENDA: 5

Bay Air Center: Technical Support for Air Quality Projects

**Community Equity, Health and Justice
Committee Meeting
September 20, 2023**

**Michael Flagg
Principal Air Quality Specialist
Meteorology and Measurement Division
mflagg@baaqmd.gov**

Actions Requested



- None – Informational item only.

Presentation Outline

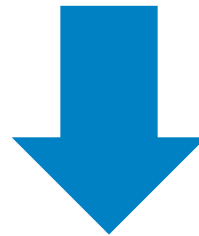


- Needs assessment and guiding principles
- Matching support to community needs
- Types of clients
- Accomplishments
 - Program infrastructure
 - Project spotlights
 - Community-based projects
- Next steps

Needs Assessment



- Availability in sensor technology
- Increased community-led data collection
- Growing interest in air quality data



More requests for support and need for a flexible mechanism to be responsive to changing needs and provide meaningful support to Bay Area communities

Guiding Principles



- **Support communities** with technical guidance, training, and relevant resources.
- Ensure guidance and support are **technically and scientifically sound** and are responsive to community specific needs.
- Work closely with communities to ensure the Bay Air Center provides **valued services**.
- Use **clear and transparent** processes and criteria to prioritize projects to maximize benefit to community groups.
- Operate **efficiently and adapt** to changing needs of communities and the Air District.
- Track new technologies and methods, share updates, and promote **knowledge sharing** across communities.

Current Contractors



Selected through a RFQ in 2019



Matching Support to Community Needs



- Bay Air Center provides services that enables Air District to be responsive to increased requests and meet community-specific needs

| Topics | Level of Support | Type of Services |
|---|--|---|
| <ul style="list-style-type: none">• Air Pollution Foundations• Community Scale Monitoring• Understanding Air Quality Data | <ul style="list-style-type: none">• Low• Med• High | <ul style="list-style-type: none">• Resource Library• Training• Hands-on Assistance• Sensor Quality Assurance• Software & Tools |

Matching Support to Community Needs (cont.)



- Receive questions about sensor technology.
- Provide 1-hour call with Bay Air Center experts.

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|--|--|---|
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Matching Support to Community Needs (cont.)



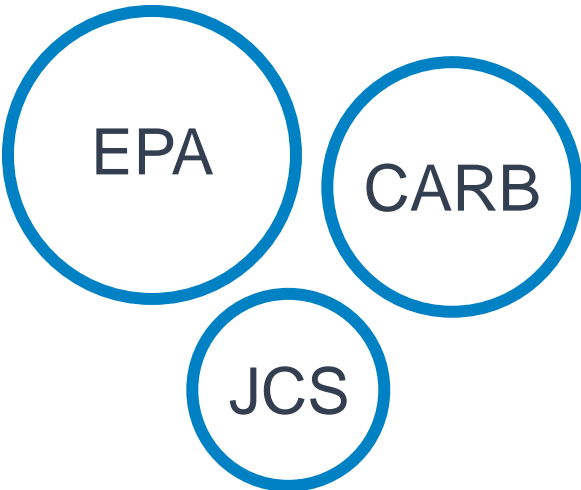
- Need for assistance with community-led training and outreach.
- Provide facilitation, translation, and presentation materials on air quality topics.

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Types of Clients: Overburdened Communities



Community-based organizations with grant funding



*EPA: Environmental Protection Agency
CARB: California Air Resources Board
JCS: James Carey Smith*

AB617 Community Steering Committees



*CERP: Community Emissions Reduction Plan
CAMP: Community Air Monitoring Plan*

Organizations or individuals working with overburdened communities

Types of Clients (cont.)



Local government Agencies



Schools



Members of the public



Program Infrastructure: Website



Request Support

Resource Library

<https://bayaircenter.org/>

**Launched
May 2023!**

Program Infrastructure: Sensor Verification System

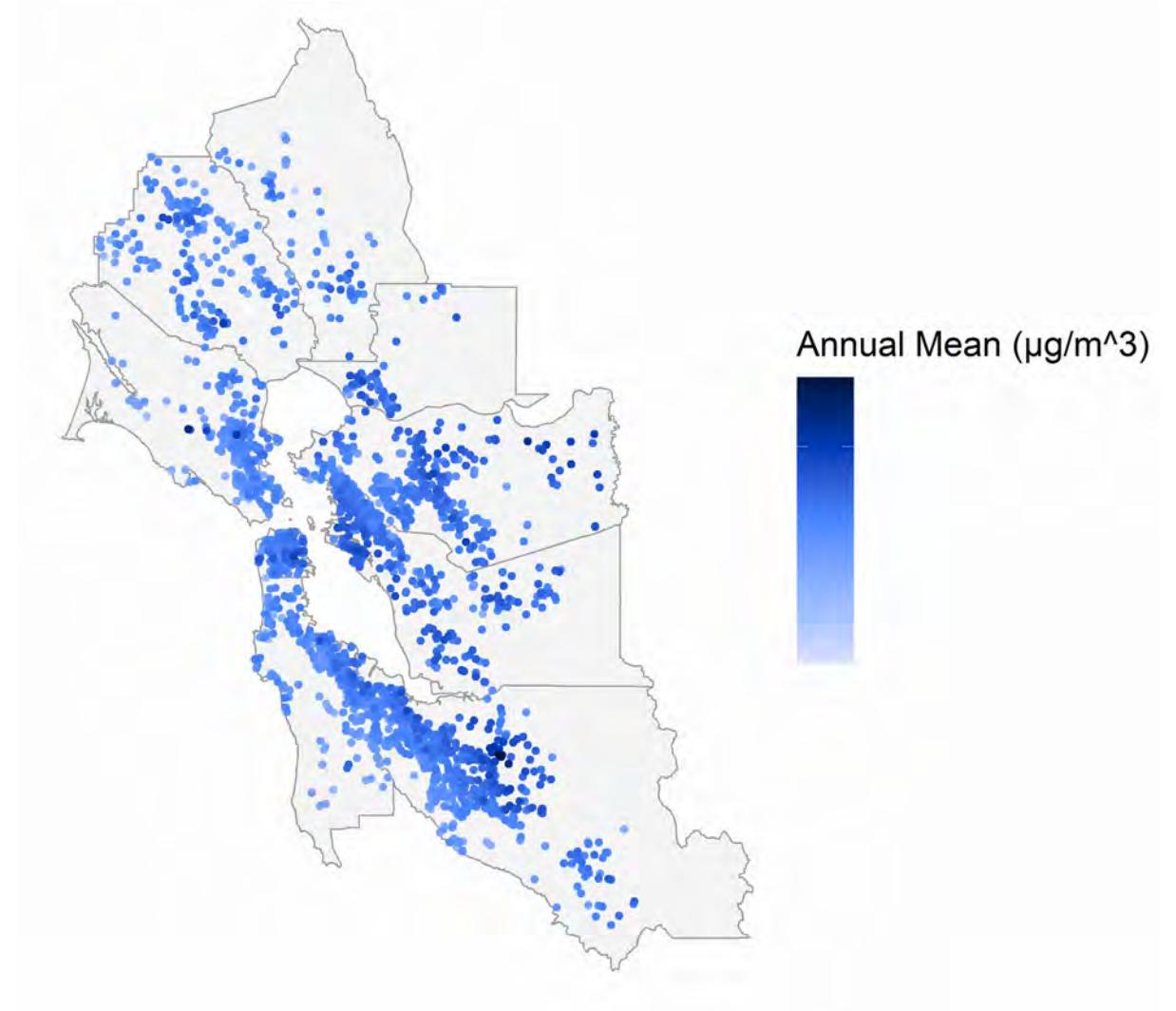


- Developed a portable monitoring module.
- PM₁₀, PM_{2.5}, Black Carbon, Nitrogen Dioxide, Ozone, and met parameters.
- Provides in-field side-by-side comparisons to community-based sensors.
- Unique and flexible approach to quality assurance of community-based sensor network data.

Program Infrastructure – Region-Wide Datasets



- Processed data from over 4000 PurpleAir sensors in the Bay Area from 2018 – 2022.
- Data can be used in coordination with communities to better understand local-scale air quality issues.
- Developing process to make these data available.



Project Spotlight: Brightline Defense



brightline
DEFENSE

- Deployed the Sensor Verification System with the Brightline Defense sensors.
- Side-by-side measurements with eight community sensors for one month.
- Allowed for calibration of NO₂ sensors prior to deployment Eastern San Francisco.



Project Spotlight: Belle Haven and Climate Resilient Communities



- Multi-phase project
- Coordination with Councilwoman Cecilia Taylor on data analysis in Belle Haven neighborhood.
- Connected with Climate Resilient Communities to bring information to the broader community.
- Developed an air quality workshop attended by the Belle Haven, East Palo Alto, and North Fair Oaks CCCTs.

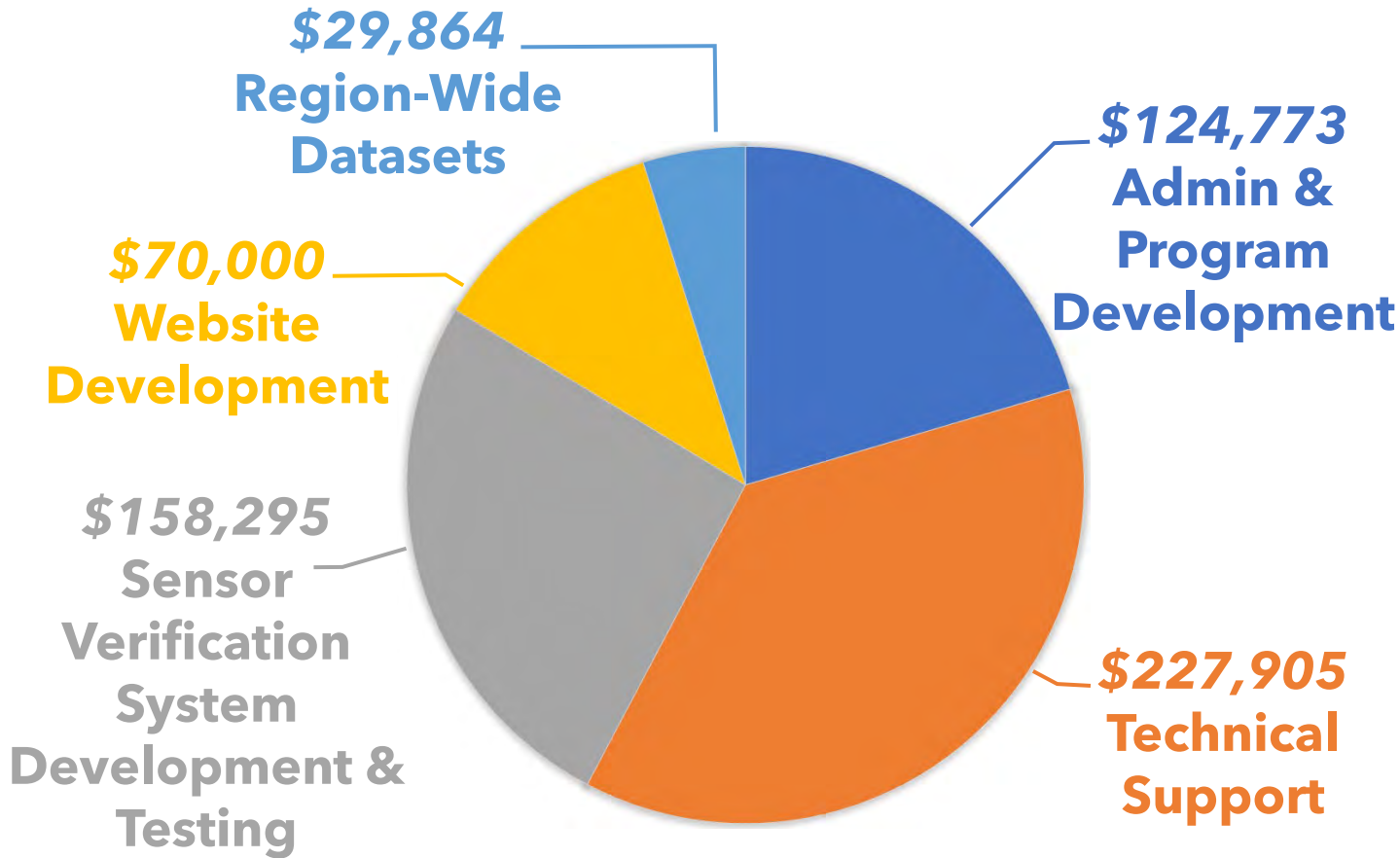
Project Spotlight: Alameda County Library



- Serves over a half million Bay Area residents each year.
- Wanted to expand outreach on air quality issues for Air Quality Awareness week.
- Developed a unique poster with QR codes linking to current air pollution data.

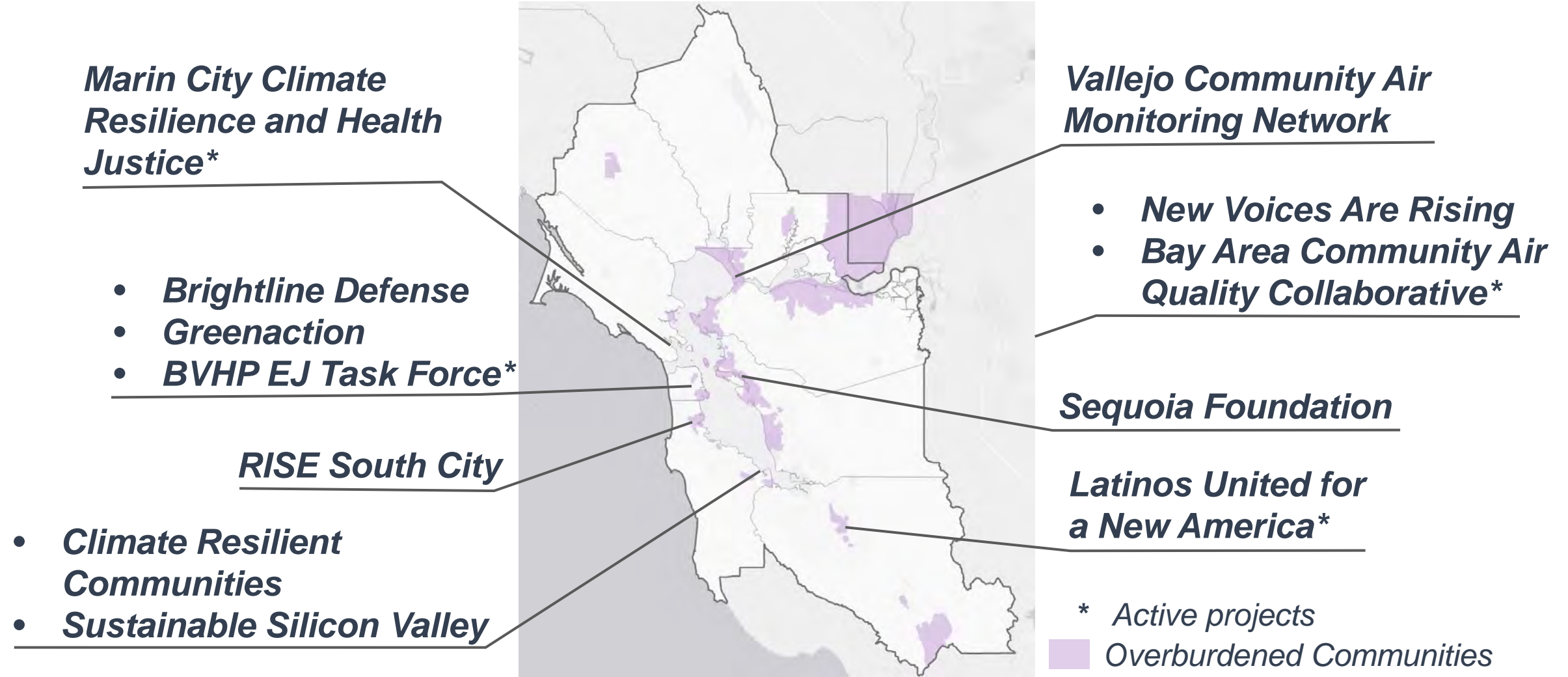


Funding FYE2020-FYE2023

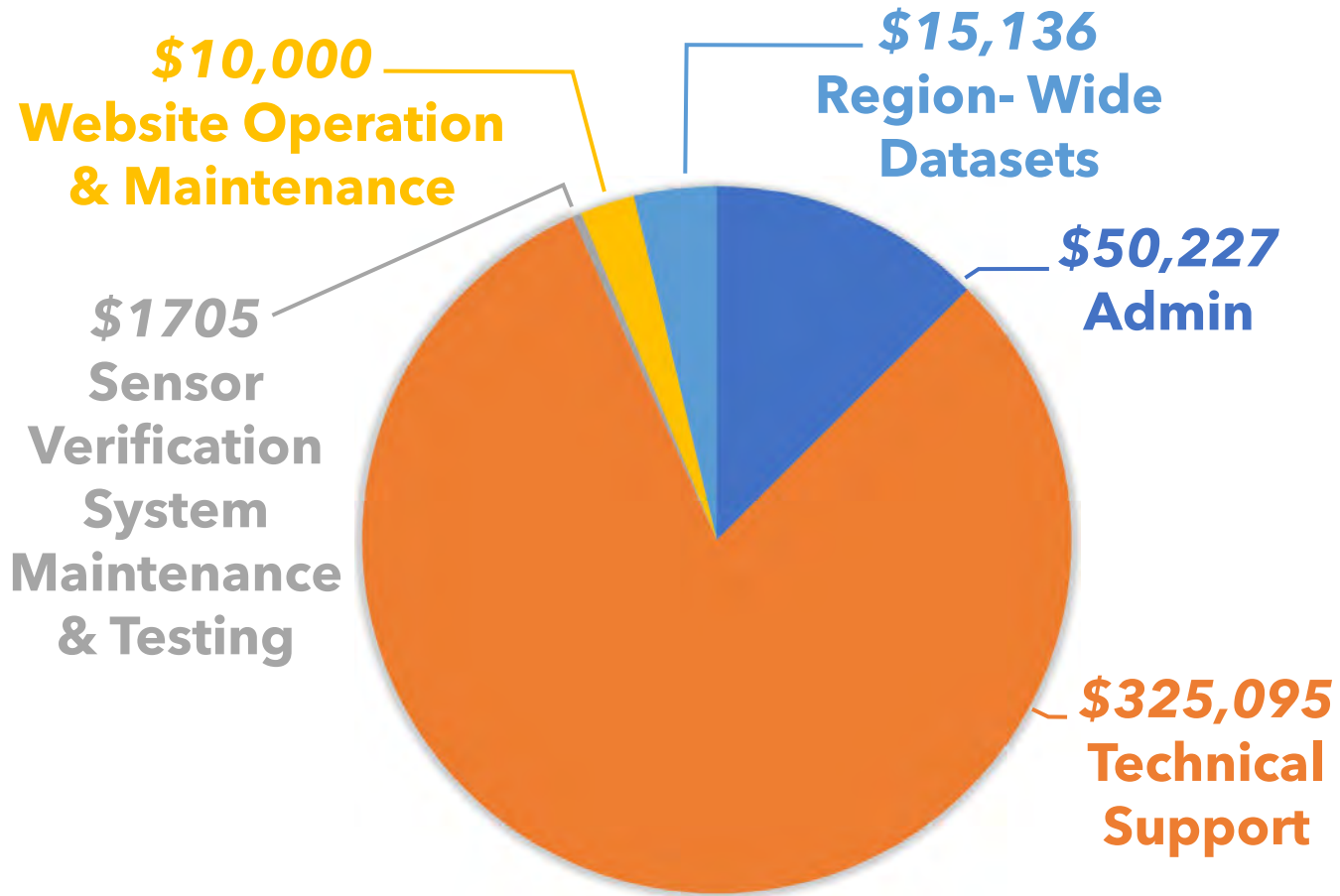


- Developed program infrastructure and initial resources, including outreach to community members.
- Provided technical support to ten different community-based organizations.
- Included assistance for applying to EPA and CARB grants
 - Marin City Climate Resilience and Health Justice (**Awarded!**)
 - Vallejo Community Air Monitoring Network
 - New Voices Are Rising
 - Climate Resilient Communities
 - RISE South City

Technical Support Summary



FYE2024 Implementation



- Continue work with current community partners.
- Future support for community-led projects funded by EPA and CARB grants.
- Support for James Carey Smith grantees.
- Improve framework for onboarding new projects.

Next Steps



Discussion and Feedback



How should the Air District provide technical support for overburdened communities beyond June 2024?

- What types of services should be prioritized for Air District support?
- Who should the Air District prioritize for support?
- What is the appropriate level of funding for this effort?
- How should the Air District partner with communities to determine how the future direction of this technical assistance work should evolve to continue meeting the needs communities have?

Contact Us at the Bay Air Center!



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Contact Us

Please fill out the form below if you have questions about receiving technical support for a grant project or information about materials on our Resources page.

"*" indicates required fields

Name *

First Last

Organization

- Visit our website at <https://bayaircenter.org/>
- Directly email us at bayaircenter@baaqmd.gov