

Appendix C – Environmental Justice and Racial Equity in CARB Research

The California Air Resources Board (CARB) is addressing environmental injustices and promoting fair outcomes as part of its mission to protect public health and the environment. Environmental justice and racial equity priorities are integrated in CARB's research efforts, including in the Five-Year Strategic Research Plan (Five-Year Plan). This approach reflects CARB's commitment to reducing health disparities and improving air quality in overburdened communities, while aligning with state policies and directives that call for the inclusion of environmental justice considerations in all aspects of CARB's work. At the core of environmental justice research is working with communities to develop research that addresses local needs, supports efforts to close disparities, and identifies effective solutions to a healthy and secure future.

CARB released a *Community Engagement Model* (Model) in 2025 that offers a consistent approach to building trust and strong community relationships that contribute to more equitable outcomes. The Model was informed by nineteen contracted community experts and nine in-person and virtual meetings with over 300 people, producing over 2,800 comments. The Research Program piloted the Model in the engagement process to incorporate environmental justice into this Five-Year Plan.

To address equal opportunities, the Research Program also encourages external research teams to form community advisory groups for project guidance, engage with communities during the research project, or have community members on the core team in a decision-making role. These, or similar approaches, are used in ongoing projects focused on addressing air pollution-related challenges in communities that face the greatest environmental burdens. The Research Program has begun improving outreach and information sharing by presenting short, plain-language summaries and or findings before and after the project.

Contracts and Partnerships

The Research Program follows three strategies to engage with communities, among others: 1) development of Community Research Roadmaps, 2) implementation of Community-Engaged Research, and 3) Community-Engaged Webinars.

- **Community research roadmaps** are 12- to 18-month funded partnerships between academic researchers, local residents, community-based organizations (CBOs), and Tribes to jointly develop research priorities that reflect community needs while aligning with CARB's goals. Each roadmap will capture the unique social, economic, political, and geographic factors that influence air quality and health in the region. The findings

will help inform CARB's future research priorities and projects. Below are examples of such efforts:

- Contract 21RD013 (Part 1) and 24RD016 (Part 2) - *Imperial Valley Community-Focused Collaborative Research Plan*
San Diego State University-Imperial Valley campus is partnering with Comité Civico del Valle to develop a community-led research roadmap related to health and air quality in the Imperial Valley region. The roadmap will reflect the unique combination of social, economic, political, and geographic factors that influence air quality and health in the region and reflect community research priorities.
- Contract 22RD012 - *Community Engagement and Community Centric Research Roadmap: Focus on Metals-Related Toxic Emissions*
Cal Poly Pomona researchers are working with local community members to create an inventory of the metals-related facilities within the City of Paramount and to better understand community health concerns related to emissions. Community, state, and local air districts will also inform the community-driven research roadmap.
- **Community-engaged research** is a funded, two- to three-year project in which academic researchers subcontract with community-based organizations (CBOs) or Tribes to conduct research aligned with CARB's goals. These projects are often guided by community-identified questions, with researchers selecting appropriate methods to investigate and analyze key questions. Community members may serve as co-investigators, consultants, or participants in advisory or technical advisory committees, helping shape project design, implementation, and interpretation of findings.
 - Contract 21RD009 - *Opportunities to Build Healthier, More Sustainable Communities*
The University of California, Berkeley, Just Cities, and the West Oakland Environmental Indicators Project are investigating the public policies and practices that have contributed to an inequitable distribution of resources. They are also identifying what transportation and land use planning policies may reduce these inequalities while lessening vehicle-miles-traveled (VMT) and greenhouse gas (GHG) emissions.
- **Community-engaged webinar** projects are year-long partnerships between CARB, academic researchers, community-based organizations, Tribes, and residents to jointly design and deliver a series of virtual meetings that share the latest research on community air quality, climate, and health concerns. Through these conversations, academic researchers produce a White Paper summarizing existing research and emerging community concerns.
 - Contract 22RD018 - *Wildfire & Capacity-Building Webinars*

The University of California, Irvine, and Communities for a New California Education Fund created a webinar series on wildfire risks in San Joaquin Valley communities. Through a variety of participatory research methods, they will identify regional concerns and focus efforts on addressing these concerns using approaches that strengthen community resilience.

- Contract 21RD014 - **Salton Sea Community Webinars**
CARB contracted with the University of California, Riverside's Center for Health Disparities Research to better understand the health concerns of people living in the Salton Sea area. They worked with a Planning Committee consisting of local community-based organizations, Tribes, and academic researchers to create a *series of community forums*. The team engaged with residents to share the latest research related to community concerns in the Salton Sea. They also developed areas for future targeted research, which led to a project funded in 2024 to assess the current and future health risks from dust emissions in the Salton Sea area.

To view the complete list of these types of community-centric research projects in a geospatial, interactive format, please visit the [Community-Informed Research](#) website.

Moving Forward

Since 2021, the Research Program has greatly expanded the number of projects working with communities and Tribes as collaborators, advisors, and participants. These approaches create timelines, budgets, and capacity challenges but often yield research projects and outcomes that better align CARB research with community concerns. The next five years may result in more projects that use mixed methods, qualitative methods, or other ways of knowing to complement CARB's current strengths in quantitative research.

Many of the research priorities in this Five-Year Plan emerged from work with CBOs, community members, and the wider public. The priorities in the Five-Year Plan will be further developed into annual projects. There will be comment sessions and public meetings to discuss annual projects and various efforts to work with communities to develop research focused on environmental justice and community engagement. This could include the research roadmaps or webinars noted above, CARB-led efforts to design a project collaboratively, or other methods to involve communities in the planning process.