



Fiscal Year 2024-2025 Research Solicitation Public Meeting

July 11, 2024

CARB Research Project Priorities



Strategic Research Plans

- Public process
- Priorities
- Strategic
- Project selection
- Racial equity and environmental justice
- Planning
- 5 Year Plan – 2025-2030



5-Year Plan – Engagement Opportunities

- April 16
 - Comment/concept survey closed
- Summer 2024
 - Individual topical meetings: Reach out if interested research@arb.ca.gov
- Fall 2024
 - Public meeting: Proposed research initiatives presented
- Winter 2024-2025
 - Full Draft Plan available to the public, 30-day comment period
 - Submit comments through public docket
- Early 2025
 - Tune into Board hearing on Plan

Projects included in FY24-25 solicitation

- Empowering Vulnerable Communities with Low-Cost Sensors and Air Filtration Devices - \$850,000
- Quantifying health benefits, ecosystem service benefits, and other impacts of California's urban green spaces - \$700,000
- Impacts of non-exhaust particles in vulnerable communities exposed to higher traffic emissions: Exposure Assessment and Health Risks - \$850,000

Important Dates

Date	Milestone
Monday July 15	Letters of interest requested – email to research@arb.ca.gov
Monday August 12	Pre-proposals due – email to research@arb.ca.gov
Monday September 2	All pre-proposal submitters notified of the status of their application
Monday September 23	Full proposals due – email to research@arb.ca.gov
March-June, 2025	Kickoff executed contracts

Pre-Proposal Requirements

- Use template provided on solicitation landing page
- Pre-proposal
 - Not to exceed 5 pages
 - Include approach for conducting research
 - Tip: check scoring criteria
 - Tip: Do not copy solicitation text
- CV or Statement of Qualifications for entire project team
- Describe relevant experience
- Preliminary Budget
- Equity components
 - Differs by project

Line Item Number	Line Item Description	Cost
	Direct Costs	
1	Labor & Employee Fringe Benefits	\$0
2	Subcontractor(s)/Consultant(s)	\$0
3	Equipment	\$0
4	Travel & Subsistence	\$0
5	Electronic Data Processing	\$0
6	Photocopying & Printing	\$0
7	Mail, Telephone, and Fax	\$0
8	Materials & Supplies	\$0
9	Analyses	\$0
10	Miscellaneous	\$0
	Total Direct Cost	\$0
11	Indirect Cost (Overhead: Rate 27%)	\$0
	Total Indirect Cost	\$0
	Total Direct and Indirect Cost	\$0

Equity Deliverables

- Common to all projects
 - Racial equity training (implicit bias training or similar) within first few months of contract execution
 - Plain-language outreach materials
 - Quarterly updates for website
 - Equity implications, plain-language summary in final report
 - If equity analysis is required, an equity expert should be part of team
 - Publicly available peer-reviewed articles
 - Final seminar geared toward a wide audience
- Additional Deliverables (Check requirements by project in SOW)
 - Cultural competency statement
 - Community engagement plan

Contracting

- Contracts – not grants
- Required by H&S code to look for expertise in UC/CSUs
 - Inter-agency agreement with UC/CSU
 - 27% overhead rate (see FAQ for details)
 - Sub-contractors can come from any other university, private research institution or firm, community-based organization, etc.
 - Sub-contractors can receive up to 25% of budget
 - Up to 50% if it can be demonstrated that no expertise exists within the UC/CSU and the contract requirements call for it

Contracting (Continued)

- Advisory Board Transparency Rules
 - No members (or alternatives to the advisory body members who are appointed by the Board) of CARB advisory groups can be signatories to the contract or communicate with CARB regarding CARB's decision on the contracts without significant legal risk per government code 87104.
- Advisory Boards affected
 - AB32 Environmental Justice Advisory Committee
 - AB 617 Consultation Group
 - Scientific Toxic Review Panel
 - Research Screening Committee
 - Natural and Working Lands Expert Advisory Committee (new, under AB 1757)

Project Descriptions

Empowering Vulnerable Communities with Low-Cost Sensors and Air Filtration Devices \$850k

- Objective
 - Investigate the air quality and health impacts of deploying portable air cleaners and air quality sensors at homes in the Bayview Hunter's Point (BVHP) community.
- Desired Approaches and Outcomes
 - Community engagement and forming community advisory board
 - Literature review
 - PM2.5 baseline established over a 30 to 60-day period where residents are provided with indoor and outdoor low-cost indoor sensors.
 - PM2.5 monitoring during intervention period where BVHP residents are provided with high efficiency portable air cleaners
 - Surveys to qualitatively assess health impacts of filtration
- Additional Tasks (optional)
 - Expand health data collection. Investigate respiratory disease and CV disease
 - Interventions to improve filtration efficacy (e.g. training for the use of the equipment, health education, improve ventilation, active messaging)
 - Comparison of air quality for BVHP versus non-EJ communities
- Contact for Questions: Jeff Williams - jeffery.williams@arb.ca.gov

Quantifying health benefits, ecosystem service benefits, and other impacts of California's urban green spaces \$700k

- Objective
 - The project will develop methodologies for both current levels of urban greenness and future projections of urban greening under climate action scenarios to assess the health benefits and ecosystem service benefits at the state, regional, and local level.
- Desired Approaches and Outcomes
 - The methods will enable CARB to evaluate the health impacts and develop dose-response functions for mortality and other health endpoints, assess ecosystem service benefits, such as increased urban cooling and reduced air pollution, and evaluate economic impacts of California's greenness programs.
 - This study will support programs in CARB's Nature-Based Strategies to increase green space in California communities, through street, neighborhood, and schoolyard greening efforts.
 - The study will assess the levels of greenness statewide, disparities in greenness between communities, and help prioritize and promote equity in greenness in California communities.
- Contact for Questions: Nargis Jareen - Nargis.Jareen@arb.ca.gov

Exposure and health impacts of non-exhaust particles in a region with vulnerable communities exposed to higher traffic emissions \$850k

- Objective
 - The objective of this CARB funded study is to assess non-exhaust emission (NEE) exposure and health risk focused on a region of the state with overburdened communities possibly the San Joaquin Valley, with high exposures to NEE, specifically brake and tire wear.
- Desired Approaches and Outcomes
 - An exposure sampling campaign will be used to measure NEE, specifically brake and tire wear components to inform the methodology and to model ambient exposures to NEE in region.
 - The project will be informed by methodology used in prior and ongoing studies funded by CARB and other organizations on brake and tire wear.
 - The exposure profile developed for the study will be used with preexisting health databases to measure the potential health impacts of NEE.
 - The results will help CARB to understand the impacts of brake and tire wear emissions on health, particle toxicity and exposure disparities for communities exposed to higher levels of NEE.
- Contact for Questions: Nargis Jareen: Nargis.Jareen@arb.ca.gov