



Fiscal Year 2026-2027 Research Solicitation Public Meeting

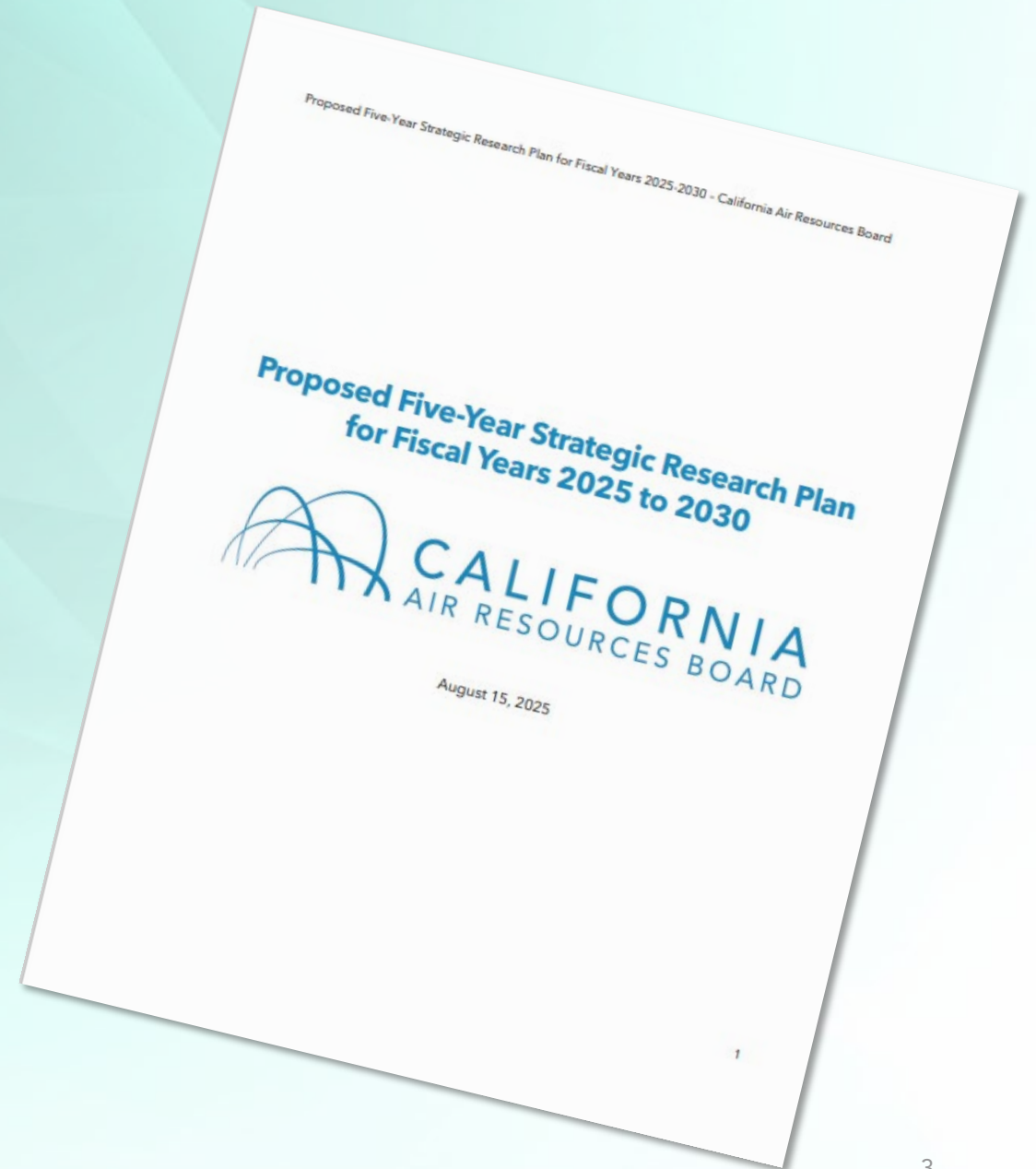
June 23, 2026

CARB Research Project Priorities



Strategic Research Plans

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



Projects included in FY26-27 solicitation

- Advancing The Application of Real-time Toxic Air Contaminant /Hazardous Air Pollutant (TAC/HAP) Measurement Technologies Through Long-term Monitoring
 - \$900,000
- Commercial Cooking Activity in California
 - \$600,000
- Community-driven Assessment of Warehouse Activities and Impacts
 - \$700,000
- Cumulative Health Impacts from Air Pollution in California
 - \$1,200,000

Important Dates

Milestone	TAC/HAP	Cooking Activities	Warehouse Project	Cumulative Impacts
Letters of interest requested – email to research@arb.ca.gov	June 30, 2026, 5 PM	June 30, 2026, 5 PM	June 30, 2026, 5 PM	July 10, 2026, 5 PM
Pre-proposals due – email to research@arb.ca.gov	July 21, 2026, 5 PM	July 21, 2026, 5 PM	July 31, 2026, 5 PM	August 14, 2026, 5 PM
All pre-proposal submitters notified of the status of their application	August 24, 2026	August 24, 2026	August 24, 2026	September 4, 2026
Full proposals due	September 8, 2026	September 8, 2026	September 8, 2026	September 28, 2026
Kickoff executed contracts	March-September 2027	March-September 2027	March-September 2027	March-September 2027

Pre-Proposal Requirements

(NOT APPLICABLE to Cumulative Health Impacts from Air Pollution in California)

- 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

Budget Category	TOTAL
DIRECT COSTS	\$0
PERSONNEL (Salary and Fringe Benefits)	\$0
TRAVEL	\$0
MATERIALS & SUPPLIES	\$0
EQUIPMENT	\$0
CONSULTANT	\$0
SUBAWARDEE(S) (CONSORTIUM/SUBRECIPEINT)	\$0
OTHER DIRECT COSTS (ODC)	\$0
(Subject to IDC Cal? Y/N)	
TOTAL DIRECT COST	\$0
(sum of All Direct Costs)	
INDIRECT (F&A) COSTS (BASE)*	\$0
Overhead (Rate: 27%)	\$0
TOTAL F&A COSTS	\$0
(Indirect Costs Base times overhead rate)	
TOTAL PROJECT COST	\$0
(Total Direct Costs Base times Total F&A Costs)	

Equity Deliverables

- Common to all projects
 - Racial equity training (implicit bias training or similar) within first few months of contract execution
 - 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

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 Body Transparency Rules
 - No members (or alternatives to the advisory body members who are appointed by the Board) of CARB advisory bodies 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 Bodies affected
 - AB32 Environmental Justice Advisory Committee
 - AB 617 Consultation Group
 - Scientific Toxic Review Panel
 - Research Screening Committee
 - Natural and Working Lands Expert Advisory Committee (Under AB 1757)

Project Descriptions

Advancing The Application of Real-time Toxic Air Contaminant/Hazardous Air Pollutant (TAC/HAP) Measurement Technologies Through Long-term Monitoring (\$900k)

- **Objectives:**
 - Evaluate the feasibility of, and facilitate, the long-term deployment of advanced real-time mass spectrometry-based techniques to address key gaps in current air toxics and VOC monitoring data and methods, and improve source characterization
- **Desired Outcomes:**
 - **Plan Field Study:** In collaboration with CARB and SCAQMD, deploy and operate advanced mass spectrometry technologies (PTR-ToF-MS, CIMS) at a selected site in Wilmington, an AB617 and SB535 community, chosen for its proximity to diverse air toxic sources and existing infrastructure to maximize scientific outcomes while minimizing deployment risks
 - **Conduct Field Measurements:** Conduct long-term PTR-ToF-MS and seasonal CIMS measurements to acquire a broad range of air toxics and VOC datasets, complemented by offline sampling for intercomparison and novel OH reactivity measurements
 - **Data Analysis:** Perform data analysis to identify and quantify a suite of air toxics and VOCs, assess their trends and contribution to secondary pollutant formation, and apply the positive matrix factorization model for source characterization
- **Contact for questions:** Chinmoy Sarkar (Chinmoy.Sarkar@arb.ca.gov)

Commercial Cooking Activity in California (\$600k)

- **Objective**
 - This project will support statewide inventory estimates of commercial cooking activity
- **Desired outcomes**
 - **Literature Review:** A review of existing literature and data sources
 - **Survey:** Develop and implement a statewide survey of commercial cooking activity
 - **External Data:** Integrate survey results with supplementary datasets
 - **Analysis and Modeling:** Develop a statewide modeling framework of commercial cooking activity
- **Contact for questions**
 - Collin Weigel (Collin.Weigel@arb.ca.gov)

Project Description Community-driven Assessment of Warehouse Activities

Objective

- Characterize patterns of truck activities associated with warehouse operations
- Synthesize the findings to recommend an efficient, transferable analytical framework for characterizing warehouse activities statewide

Method Summary

- Develop a community engagement strategy
- Collaboratively develop methods to quantify warehouse-related activities, and other metrics of interest to communities as applicable
 - Develop a methodology that can be replicated in other locations with future opportunities
- Select locations of study that cover important variables
 - Three or more locations

Tasks

- Task 1 – Design a community outreach, communication, engagement and evaluation plan
 - Outreach
 - Communication
 - Engagement
 - Evaluation
 - **Deliverable:** Detailed community engagement plan
- Task 2 – Literature Review and Assessment of Data Needs
 - **Deliverable:** Synthesize relevant technical information with plain-language summary and recommendations on data collection methods and research gaps

Tasks (Continued)

- Task 3 – Implementation of Task 1 to Design Activity Data Collection and Analysis Plan
 - Perform engagement
 - Co-create study design
 - **Deliverable:** Draft community-informed research plan
- Task 4 - Train Community Members in Data Collection and Analysis
 - **Deliverable:** Evaluation
- Task 5 – Collect and Analyze Warehouse-Related Activity Data Gathered Throughout this Contract
 - At three or more distinct locations
 - **Deliverable:** After each location, synthesize data collection effort, preliminary report out, next steps

Tasks (Continued)

- Task 6 – Review Data and Results
 - Implement QA/QC per Task 3
 - **Deliverable:** Quarterly update meeting
- Task 7 – Summary, Evaluation and Final Report
 - **Final Deliverable:** Draft final report

Ideal Research Team

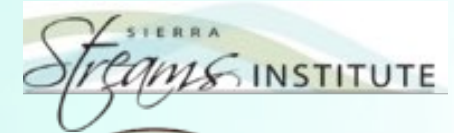
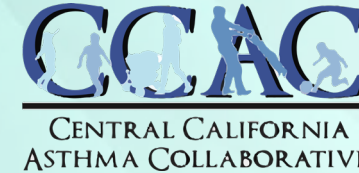
- Community engagement and community science
- Expertise and equipment available to perform remote sensing or other recommended measurement methods to track vehicle activity
- Understanding of heavy-duty vehicle activities and warehouse related activities and issues impacting communities

Desired Outcomes

- Results can improve inputs to inventories or other tools, be scalable and have relevance to other locations
- Results can be leveraged by CARB in its in-house research including satellite, mobile monitoring, and other work
- Results can be used by various interested parties and decision-makers

Additional Resources

- Community Science Practitioner's Guide
 - 3 Tribes and 7 community-based organizations and California Environmental Protection Agency Boards, Departments and Office (CalEPA, BDO)
 - Best practices and case studies for how to co-create community-science projects



Project Description

Cumulative Health Impacts from Air Pollution in California

Project Overview: Cumulative Health Impacts from Air Pollution in California

- Project duration: 36 months
- Total proposed budget: \$1.2 million
 - Pillar I: Statewide multi-criteria pollutant exposures and health outcomes
 - Pillar II: Community-specific health impact assessments of toxic air contaminants
- Contact for questions

Joshua Montefalcon (Joshua.Montefalcon@arb.ca.gov),

Pradeep Prathibha (pradeep.prathibha@arb.ca.gov)

Cumulative Health Impacts from Air Pollution in California (\$1.2 million)

PILLAR I: Statewide multipollutant health assessment (criteria pollutants)

Objective:

Develop statewide multipollutant health impact functions for mortality, cardiovascular and respiratory emergency department visits and hospitalizations, and other endpoints.

Desired Outcomes:

1. Literature review to identify robust methods and tools for health analysis from exposure to multiple criteria pollutants.
2. Obtain health and population data, effect modifiers, and covariates, representative of CA population.
3. Develop health impact functions using existing multipollutant exposure data (PM_{2.5}, NO₂, O₃; others as available) from CARB/other sources.

Deliverables and Use:

Statewide health impact functions from criteria air pollutant exposure (PM_{2.5}, NO₂, O₃ + others) and health outcomes stratified by population characteristics (e.g., race/ethnicity, income) to inform CARB's health impact assessment methodology.

Cumulative Health Impacts from Air Pollution in California (\$1.2 million)

PILLAR II: Community-specific health impacts assessments of toxic air contaminants

Objective:

Conduct 2-3 community-scale mixed methods health impact assessments from exposure to toxic air contaminants.

Desired Outcomes:

1. Form community-specific Community Advisory Groups (CAG: community-based organizations, air districts, other partners) to inform the selection of pollutants, health outcomes, analysis methods, etc.)
2. Select 2-3 communities with elevated burden from exposure to toxic air pollutants (e.g., AB 617 consistently nominated communities) with existing or ongoing air quality monitoring in consultation with CARB staff.
3. With CAG guidance, develop work plan for community-specific health assessments covering target air pollutants, exposure data sources, health endpoints, health and population data sources, etc.
4. Conduct health impact assessments using suitable mixed methods approaches.
5. Disseminate research findings to community stakeholders.

Deliverables and Use:

Quantitative and/or qualitative health impact assessments of community-scale toxic air pollutant exposures, as guided by the CAG(s), to inform CARB's ability to characterize and integrate cumulative impacts into health assessments.

Community Selection Criteria

1. Communities must have existing air quality datasets that provide reliable exposures representative of the region in addition to those from district or other regulatory monitors. Existing datasets must be of high quality and validated using regulatory monitoring data or other best practices. The strength of the existing datasets will be a key factor in pre-proposal scoring.
2. Communities that have demonstrated concern about health impacts of multiple sources of air toxic air pollutants or that have expressed interest to engage in cumulative health impacts research.
3. Communities that are overburdened and face multiple health burdens based on CalEnviroScreen, CalHealthMap, Healthy Places Index, emission inventories, consistently nominated AB 617 communities list, or other screening tools. CARB intends for this solicitation to facilitate new and expanded analyses in communities where health effects of toxic air contaminants are understudied.

Important Dates

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July 10	Letters of interest requested – email to research@arb.ca.gov
August 14	Pre-proposals due – email to research@arb.ca.gov
September 4	All pre-proposal submitters notified of the status of their application
September 28	Full proposals due – email to research@arb.ca.gov
January-April 2027	Kickoff executed contracts

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- CV or Statement of Qualifications for entire project team
- Describe relevant experience
- Preliminary Budget **for each Pillar (i.e., two proposed budgets)**
- Equity components
 - Differs by project

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