How to Guide Toolkit

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HOW TO TOOLS

PARTNERSHIP AGREEMENT TEMPLATE

Draft Community Partnership Agreement for the
Sustainable Transportation and Communities Research Engagement Project
(STCREP)
2023-2025

I. Introduction

This agreement establishes a partnership among the California Air Resources Board's (CARB) Sustainable Transportation & Communities Division (STCD), the University of Berkeley's Institute of Urban Regional Development, Just Cities LLC, and the Community Engagement Research Advisory Committee (CERAC).

II. Background

State-level policies and research projects can often lack the local grounding and nuance necessary to meet the needs and priorities of low-income communities of color. Community-engaged research is necessary to co-develop solutions that center the lived experiences of those who have been harmed by past and present policies and practices. This Project will provide CARB's STCD with guidance on the appropriate tools, methodology, and engagement methods to meaningfully engage low-income communities of color in research planning; and identify specific community-identified research topics and priorities that can better address diverse resident concerns and needs.

III. Purpose

This project will provide CARB's STCD with community-identified research priorities that can help provide the tools and methods necessary for meaningful community engagement and repairing past practices that have resulted in harm.

IV. Goals and Objectives

This two-part project will:

1) provide STCD with guidance on the appropriate tools, methodology, and engagement methods to meaningfully engage low-income communities of color in research planning; and
2) implement this method to uplift specific community-identified research topics and priorities related to land use planning, housing, and transportation that can better address diverse resident concerns and needs.

V. Roles and Responsibilities

The Community Engagement Research Advisory Committee will:

- Act as an advisory committee to identify community research priorities for CARB's Sustainable Transportation & Communities Division
- Review CERAC material beforehand to better prepare for CERAC Monthly Meetings
- Actively participate in 2-hour CERAC Monthly Virtual Meetings
- Receive training on Community-Based Participatory Action Research Training
- Co-develop community and partnership principles (Community Partnership Agreement)

- Draft and finalize the research instrument/tool
- Help identify the most effective ways to conduct meaningful community engagement
- Co-develop and review the Community Engagement Plan including an outreach toolkit
- Engage and recruit 9 community members to participate in a 90-minute focus group
- Co-conduct Focus Groups to help identify community research priorities with UCB's IURD Research Team
- Share best practices and lessons learned from focus groups with each other
- Review and give feedback on the literature and practice review
- Review and provide feedback on the Final Report to be sent to CARB (2 hours)
- Potentially host 3 site visits for focus groups, environmental tours, or community building
- Contribute to co-authoring potential publications
- Share expertise and community-specific insights that highlight the uniqueness of different contexts
- Explore opportunities for project dissemination and continued collaboration.

VI. UCB Institute of Urban Regional Development will:

- Work with community scholar to recruit and create the Community Engagement Research Advisory Committee (CERAC) with current environmental justice partners that represent different geographic regions, diverse demographic groups, and EJ priorities across the State
- Develop a Literature Review with the goal of better understanding how community engagement and community-led research can improve land use planning, housing, and transportation research and dismantle structures that perpetuate racial inequality within research and practice
- Develop a Practice Review through practitioner interviews with the goal of supplementing the literature review with a better understanding of current practices with respect to how communities are and have been engaged by CARB's STCD and other local and state agencies in the process of identifying research, participating in research activities, and how research findings are disseminated and have impacted communities
- Apply transformative research planning methods to address both historic and current harms that have occurred from research and planning injustices that have excluded or tokenized the experiences and realities of low-income communities of color
- Identify the role of community-engaged research methods in advancing CARB goals, such as community-based participatory action research, and related good and promising practices
- Train the CERAC on community-engaged research practices such as CBPAR through 3 sessions to help inform and co-develop the research instrument or tool for the focus groups
- Support the CERAC in developing a community engagement plan to meaningfully engage low-income communities of color and Tribal communities in order to identify research topics of interest to these communities specific to land use planning, housing, and transportation that CARB STCD could fund
- Co-conduct 10 90-minute focus groups with CERAC members and community residents and one focus group consisting of 8 government practitioners

- Collect and summarize data gathered from outreach and engagement activities
- Draft a final report including a prioritized list of research topics and how they align with existing land use planning, housing, and transportation impacts; focus areas; identified gaps and needs; as well as assets.

VII. CARB STCD will:

- Co-develop community-engaged research and solutions that center the lived experiences of those who have been harmed by past and present policies and practices
- Receive guidance on the appropriate tools, methodology, and engagement methods to meaningfully engage low-income communities of color in research planning; and identify specific community-identified research topics and priorities that can better address diverse resident concerns and needs
- Conceptualize, define, and solicit future research studies to support policy and programmatic efforts at the nexus of equitable land use planning, housing, transportation, and climate policy that can result in actionable change benefitting impacted communities
- Review and provide feedback on the draft engagement plan and engagement materials before implementation and dissemination.
- Attend and participate in CERAC meetings and potentially focus groups
- Provide timely feedback on interview draft instruments, focus group instruments or tools, and draft reports
- Make the final report and work products publicly available on the CARB website.
- Continue to engage with communities utilizing the guidance developed through this project while also following CARB's Community Engagement Model[1] and the California Environmental Protection Agency's Community Science Model[2]to continue incorporating community-identified research ideas in future STCD research planning efforts.

VIII. Just Cities LLC will:

- Work directly with UCB to operationalize the STCREP
- Support administrative duties and operations of the project
- Document and Track Attendance for compensation processing
- Compensate participants in a timely manner

IX. Points of Unity

- People-Centered Human Rights
    - centering + amplifying uncentered voices
    - learn from lived experiences, through stories
    - Truth Telling
- Listening to Understand
- Self Determination
- Anti-Patriarchy

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[1] Currently under development. More info at https://ww2.arb.ca.gov/community-engagement-model.
[2] Currently under development. More info at https://calepa.ca.gov/envjustice/

- We are Connected to the Environment
- Our Differences Make Us More Powerful
- Language clarity
- Doing no harm with current and future research

X. Principles of Collaboration

- Mutual respect and value for each partner's contribution
- Transparent data, research, and resource sharing (except where prevented by human subjects protocols and the Belmont Report)
- Commitment to not replicating past efforts but building upon them
- Shared leadership and participatory decision-making
- Commitment to equity and social justice
- Community/Resident Voice-Centered
- Consistent and shared accountability
- Collectively plan actionable change
- Pathways to Participation and Leadership
- Partnership not Token Engagement
- Deep Listening
- Diversity of Perspectives
- Responsive Facilitation
- Co-ownership of any intellectual property produced by the project

XI. Decision-Making

- Decisions will be made collaboratively, with each partner having an equal vote when alternatives are presented.
- IURD commits to accepting the vote of the majority when decisions are to be made.

XII. Conflict Resolution

- Any conflicts will be addressed through mediation, prioritizing open communication and mutual understanding.
- IURD and CBO participants agree to utilize a trained third-party mediator with conflict resolution expertise, such as Darrell Jones III of Just Cities, if a conflict should arise.

XIII. Meetings and Communication

- 2-hour CERAC Monthly Virtual Meetings
- 1-hour Ad hoc Meetings as needed
- 20 hours of Community Engagement
- 90-minute focus group with community residents

XII. Signatures

CPBAR TRAINING SLIDES

Community Based Participatory ACTION Research (CBPAR) Training 1: Grounding

45 min

- **Overview of 3 CBPAR Sessions**

  1: Grounding

  2: How to Steps

  3: Application to Project Focus Groups
- **CERAC Members Experiences,** 15 min
- **Grounding: History, Context, Examples,** 15 min
- **Grounding Discussion: Challenges & Strategies,** 15 min

CBPAR GROUNDING: Drawing from CERAC Experiences

7 min pair/share in breakout room
8 min large group

1. Consider the ways in which **you have organized/assembled knowledge** to advance environmental justice in your communities.
2. **What** and **Who** were the **sources** of that knowledge?
3. What entities/institutions and Who were the **recipients** of that knowledge?
4. Was that knowledge **well received**? If so why? If not, what were the **challenges and possible strategies** to address those challenges?

CBPAR Grounding

–Origin Story

–Application Examples

–Differences with Traditional Research

15 min

Overview of Development of CB(PA)R

- As part of 1950s & 60s civil rights & human rights movements, many researchers throughout the world resisted mainstream research ideology & began to develop participatory, emancipatory, community based research methods
- Important Father/Mentor: Paulo Freire - Pedagogy of the Oppressed & foundation for Popular Education movement
- Has developed in US in recent years:
  - Public Health
  - Education
  - Urban Planning & Public Policy are getting there
- Continues to be a contested field and slow to be taken up due to structural dynamics

CBPAR is one tool of Research Justice

Research for Healing Our Ruptures, For Beginning a New Fire

Modern Innovation by the Data Center, Racial & Social Justice Movement Researchers

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"Research Justice is a strategic framework and methodological intervention that seeks to transform structural inequities in research. Research Justice centralizes community voices and leadership in an effort to facilitate genuine, lasting social change, and seeks to foster critical engagement with communities of color, indigenous peoples, and other marginalized groups to use research as an empowering intervention and active disruption of colonial policies and institutional practices that contribute to the (re)production of social inequalities in research and public policy."

Professor Andrew Jolivette, Research Justice Methodologies for Social Change

https://www.youtube.com/watch?v=-0VBjW3knWM

Research Justice Framework

Can give us the “ceremony” for us to “return to our knowledge systems” and to heal the “ruptures that create soul wounds”

From Prof Andrew Jolivette’s poem

Professor Andrew Jolivette, Research Justice Methodologies for Social Change
https://www.youtube.com/watch?v=-0VBjW3knWM

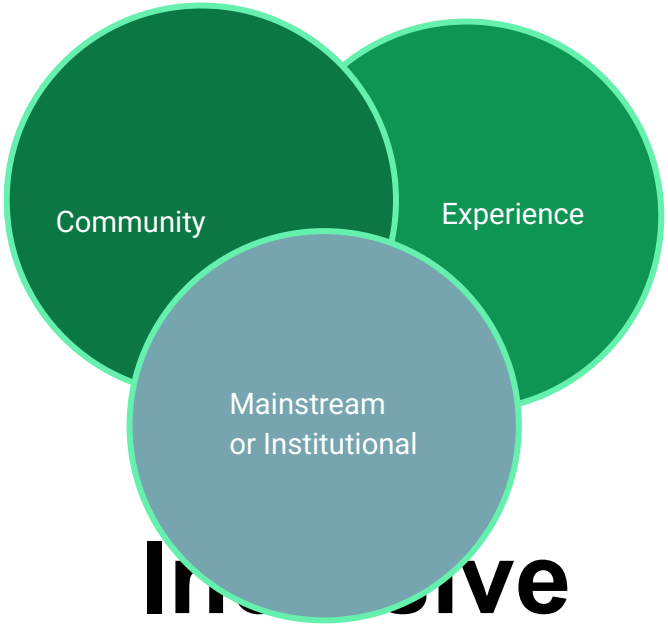
1. Recognition of **community as experts** (someone who is seen as having knowledge that is essential to problem-solving; and is recognized as such widely)

2. **Equitable access** to information that impact the community

3. **Community Control** over information

4. **Capacity to produce knowledge** that reflect the community’s experiences

5. Capacity to use all forms of community knowledge to **effectively advance community agenda**



Interactive Sources of Knowledge

“Information” is made of three sets of knowledge

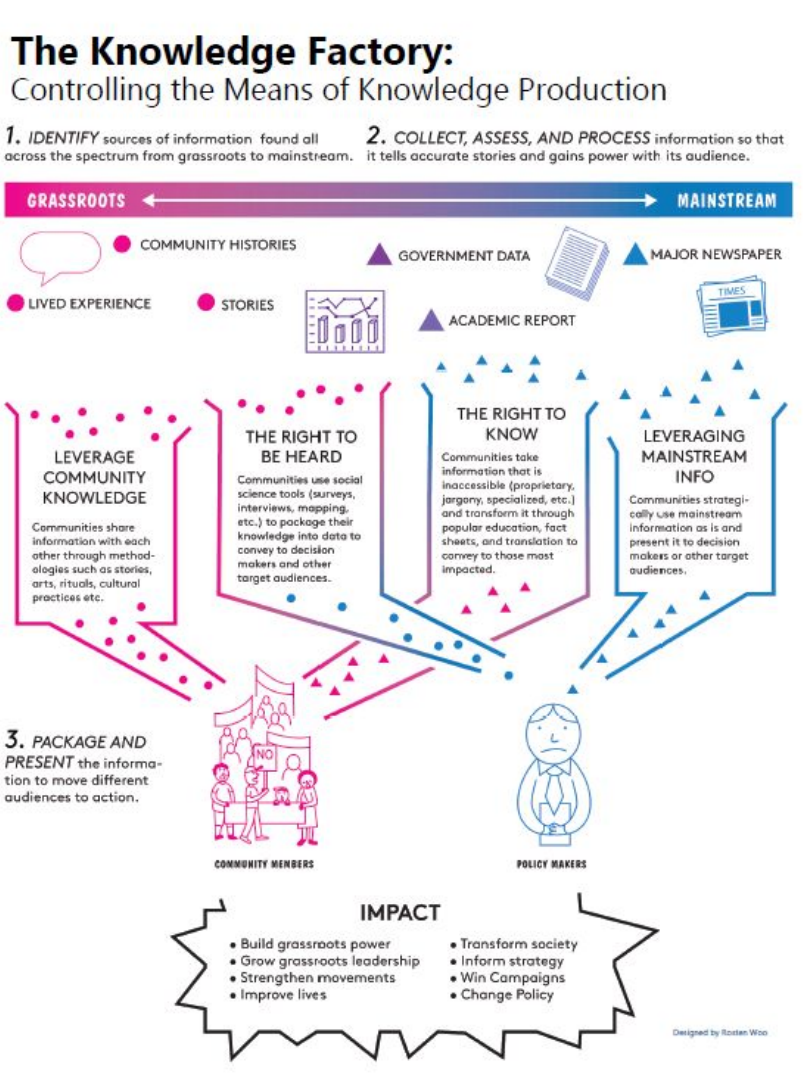
Community Knowledge—cultural practices and wisdom passed down from our community (elders, neighbors, friends, etc.).

Knowledge from experience— Our lived, day-to-day experience; what we learn and know from living and doing it.

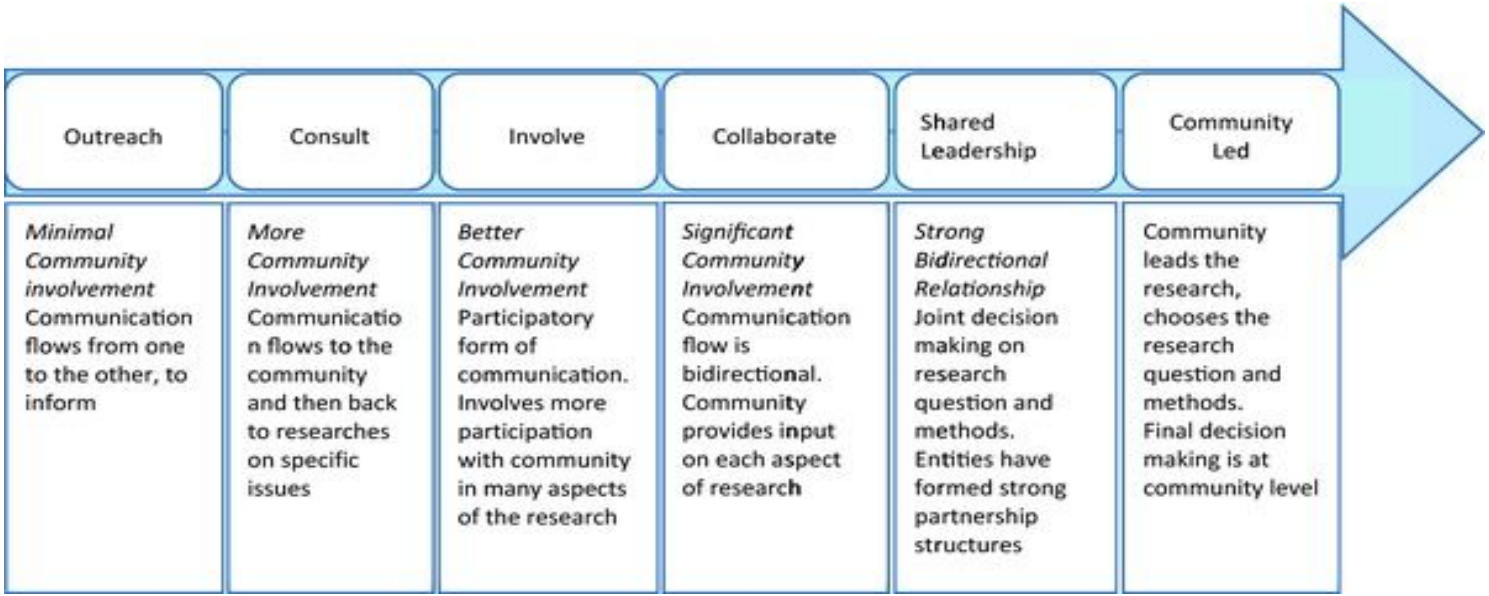
Mainstream/Institutional Knowledge—published facts & data produced by research “professionals” usually from outside of the community.

All three sets of knowledge form the entirety of information about an issue. Depending on your goals and who you are trying to educate, one or more forms of knowledge may be more convincing than another. **But all three are necessary to shift public opinion and make community-based social change.**

CB/PAR in Practice



Continuum of Community Involvement in Research



Community Engagement Continuum, adapted from Collman, GW. Community-based approaches to environmental health research around the globe. *Reviews on Environmental Health* 29(2) 125–128. March 2014. And Principles of Community Engagement – Second Edition.

Community Engaged Research vs CB/PAR

These are important forms of community engagement in research. CBPAR goes beyond these to fully collaborate and partner with communities in research design, data collection and ownership, analysis for knowledge co-production, dissemination and action.

1. Recognizes the community as a unit of identity
2. Builds on strengths and resources within the community
3. Facilitates a collaborative, equitable partnership in all phases of the research
4. Fosters co-learning and capacity building among all partners
5. Balances knowledge and action for the mutual benefit of all partners
6. Addresses locally-relevant problems and considers multiple determinants of outcomes of interest
7. Occurs in a cyclical and iterative process that includes ongoing evaluation of successes and obstacles
8. Disseminates findings and knowledge gained to all partners
9. Involves a long-term process and commitment to sustainability

Principles of CBPR

*note - Action includes more…

***Adopted from Principles of CBPR (Israel *et al.*, 1998)**

Examples of CBPAR: ACTION in Community Development & Public Policy Change Campaigns

Youth Uprising Center in Oakland, CA: Youth Together with OUSD, UCB, City of Oakland, Alameda County

National model defaulted & foreclosed properties ordinance: City of Oakland with ACCE, Faith in Action, Alameda County Public Health Dept

Unhoused Rights Policies with The Village, East Oakland Collective, Just Cities

Research Process Comparison: Problem Definition

Traditional Research	CBPR / PAR
Researcher defines the problem or research question	Community defines problem or works with researcher to identify problem or research question
Based on factors that can be external to communities (e.g., data availability, funding priorities)	Full participation of community in identifying issues of greatest importance

Source: Duke Center for Community and Population Health Improvement and Research Institute (OCTRI)

Research Process Comparison: Who Does What? (Study Design)

	Traditional Research	CBPR / PAR
Study Design and Recruitment Method	Based on feasibility, scientific rigor, best guesses at how to reach community members	Community intimately involved in creating study design to ensure it's relevant and useful Community representatives provide guidance and aid in recruitment
Instrument Design (surveys, interview questions)	Adopted from other studies (standard question batteries)	Developed with community input

Source: Duke Center for Community and Population Health Improvement and Research Institute (OCTRI)

Research Process Comparison: Data Collection

Traditional Research	CBPR / PAR
Community members as research subjects or data collection conducted by researchers. Community organizations may assist	Community members as participants and collaborators. Conducted by members of community, based on training and skill sets. Community organizations are equal partners with researchers

Source: Duke Center for Community and Population Health Improvement

Research Process Comparison: Findings

	Traditional Research	CBPR / PAR
Control	Researchers control: - Process - Resources - Data - Interpretation of findings - Dissemination / use of findings	Researchers and community share control equally; data is shared. Researchers and community decide on use and dissemination.
Dissemination	Peer-reviewed academic journals with researchers as authors Sometimes media	Public meetings Community forums Peer-reviewed academic journals with researchers and community members as authors Engaging with frontline decision makers
Who Gains What	Researchers gain skills, knowledge, and often professional accolades	Researchers and community work together to help build community capacity

Source: Duke Center for Community and Population Health Improvement

Discussion questions

- Any questions, reactions (we can also respond in the next session)
- What do you think may be some challenges for us to utilize CBPAR in this project?
- What do you think are some problem solving strategies?

15 min

Proposed Next Meeting Agenda:

CBPAR 2: How to Steps

PREPARATION: How would you describe the problem(s) that this project is trying to address?

Closing Reflections

In a few words, share how you are feeling as we close out this meeting?

Community Based Participatory ACTION Research (CBPAR) Training 2:

- **Overview of 3 CBPAR Sessions**

  1: Grounding

  2: How to Steps

  3: Application to Project Focus Groups

CB/PAR in Practice Today:

–Some more Context (10 min)

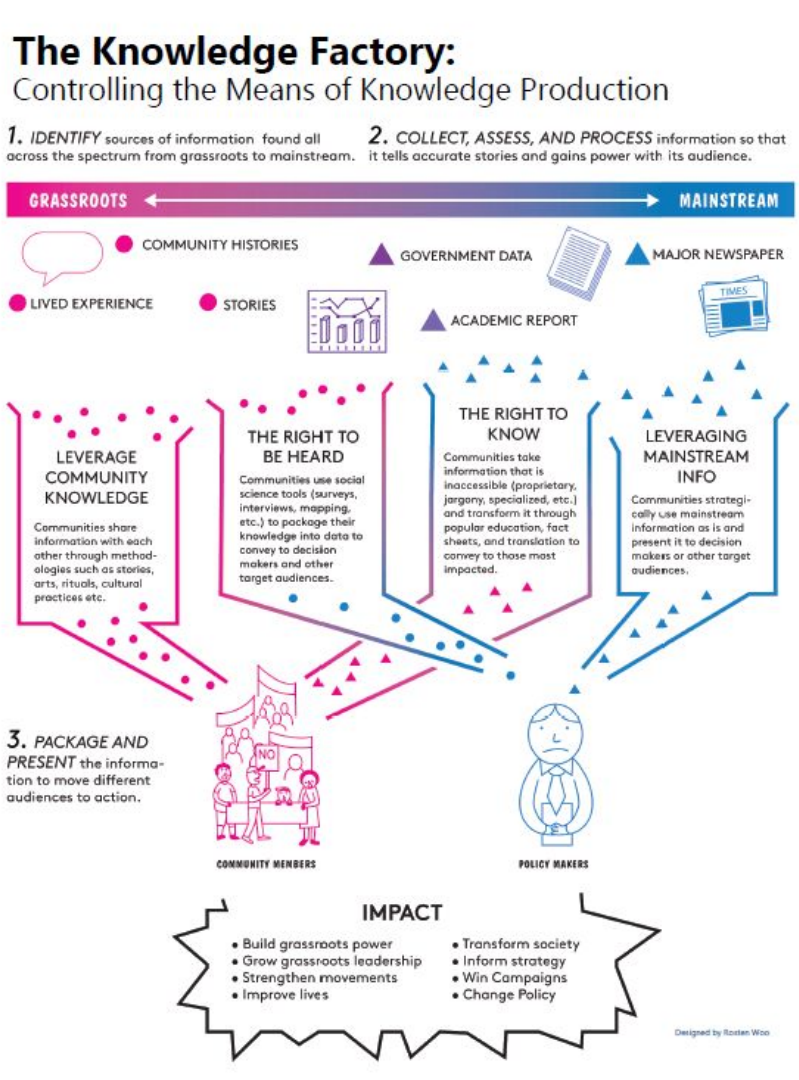
–Communicate Purpose (20 min)

BIO/STRETCH BREAK (5 min)

–Community Building Strategies (20 min)

–Problem Definition (15 min)

–Prep for Training 3 (5 min)



Some More Foundation Laying

Project Origin Story & Opportunities for Change

–Questions & Feedback

5 min

- The Letter from Concerned Black Employees at CARB, CARB's Racial Equity Framework and Board Resolution 20-33, led CARB Divisions to begin changes to research planning, solicitation, implementation and outreach.

- NOW, THEREFORE, BE IT RESOLVED that CARB condemns racism and racial bias in all forms and in all spaces, and welcomes the opportunity to establish and enhance proactive measures to ensure racial equity permeates all of CARB's activities both internal and external.

- BE IT FURTHER RESOLVED, that the Executive Officer and staff continue identifying and implementing best practices for community engagement, especially in communities suffering environmental injustice and racial discrimination, and to apply these practices throughout all of CARB's activities.

- CARB evaluation of Research Division findings: Only 8.5% of funded research was "equity-centered" and they all received less funding than the non-equity centered projects
    - **Type 1- Equity- centric:** Primary concern was equity or EJ issues and research that was conducted with priority communities
    - **Type 2- Equity-engaged:** Mentioned equity/EJ impacts or provide evidence for potential emission reduction in EJ communities
    - **Type 3- General Benefit:** Lacking specific equity or environmental justice considerations

Application to this Project

5 min

1. One of the project deliverables is a Research Community Engagement Plan that will include CERAC and Focus Group recommendations for how CARB's Sustainable Transportation & Communities Division (STCD) defines and solicits future research studies. This could include identifying research priorities at the intersection of land use planning, housing, and transportation. This could also include guidance on what engagement methods enable researchers to meaningfully engage with low-income communities.

2. Some examples of recommendations we heard in past CERAC meetings include:
   - Fund a research project on how jurisdictions are implementing SB1000 requirements in local plans and involving EJ leaders.
   - Fund research that will create data/evidence that local communities need in their local organizing efforts to improve air quality which engages EJ grassroots leaders.

3. The Research Team is committed to including ALL CERAC and Focus Group ideas and recommendations in our Reports to CARB.

I. Foundation for All Research & Other Work that Advances Change–Clear Purpose

- Clarity on OUR WHY
  - Individual motivations/origin stories
  - Collective motivations/origin story

- Clarity and agreement on the purpose of the project
  - Who's being and been harmed by the status quo
  - Who's benefiting and benefitted from the status quo
  - Who has the power to make the change
  - How do we fit in to help make the change

Research Process Comparison: Purpose

Traditional Research	CBPR / PAR
Funder and/or researcher defines the purpose	Opportunities for community participants to help shape the project purpose

APPLICATION: Purpose

- How would you describe this Project's purpose to the people you would want to recruit for your focus group?

- How would you describe your purpose for being part of this Project to your people?

- What information/support/resources do you need from the research team or CARB to help you communicate the Project purpose? I.e, do you need more information about CARB STCD?

Worksheet

20 min: 10 min pair/share; 10 min large group

BIO/STRETCH BREAK

5 min

II. Research Process Comparison: Community Building

Traditional Research	CBPR / PAR
Researcher tends not to have critical self-examination of how process details can be extractive, exploitative, and potentially dehumanizing (research subject vs research partner)	Researcher understands the critical nature of non-extractive & authentic research
Researcher tends to launch into asking questions without building a genuine human relationship	Researcher moves at the speed of trust

APPLICATION: Community Building

- What would be the takeaways you would want to achieve from the focus group you're organizing?
  - Feelings
  - Knowledge
  - What else

- How would you go about creating a focus group environment that allows the people in the focus group to leave with those takeaways?

15 min: 5 min pair/share; 10 min large group

III. Research Process Comparison: Problem Definition

Traditional Research	CBPR / PAR
Researcher defines the problem or research question	Community defines problem or works with researcher to identify problem or research question
Based on factors that can be external to communities (e.g., data availability, funding priorities)	Full participation of community in identifying issues of greatest importance

Source: Duke Center for Community and Population Health Improvement and Research Institute (OCTRI)

APPLICATION: Problem Definition

- How would you describe the problem that this Project is trying to address?
- What specific questions would you ask the people you would organize to attend your focus group in order for them to participate in defining the problem?

15 min: 5 min pair/share; 10 min large group

Prep for CBPAR Training 3:

–Review & adapt preliminary focus group interview questions (to be emailed)

–Consider **how to ask** questions in ways that enable participants to **fully express** their point of view without being influenced by our point of view

3 min

Research Process Comparison: Who Does What? (Study Design)

	Traditional Research	CBPR / PAR
Study Design and Recruitment Method	Based on feasibility, scientific rigor, best guesses at how to reach community members	Community intimately involved in creating study design to ensure it's relevant and useful Community representatives provide guidance and aid in recruitment
Instrument Design (surveys, interview questions)	Adopted from other studies (standard question batteries)	Developed with community input

END RECORDING

Proposed Next Meeting Agenda:

Partnership Agreement

CBPAR 3 & Your Focus Groups

Public Meeting

Closing Reflections

In a few words, share how you are feeling as we close out this meeting?

Community Based Participatory ACTION Research (CBPAR) Training 3:

- **Overview of 3 CBPAR Sessions**

  1: Grounding

  2: How to Steps

  3: Application to Project Focus Groups

2 short CBPAR trainings to prepare CERAC leaders to organize focus groups:

1. Project purpose
2. Focus group questions

Format based upon CERAC invaluable information:

- 10-15 min Knowledge Sharing
- 15-20 min Doing & Group Sharing
- Breaks!

CBPAR 3, Module 1

Based upon CERAC feedback, providing project recap to help CERAC members describe this project

- The Sustainable Transportation and Communities Research Engagement project follows recent State efforts to **acknowledge and remedy past harms in public policies and planning.**
- State-level policies and research projects often need more local grounding and nuance to meet the needs and priorities of low-income communities of color.
- **Community-engaged research is imperative to the co-development of solutions that center the lived experiences** of those whom past and present policies and practices have harmed. There is mounting evidence that when communities define the problem to be explored, the quality and outcomes of research are greatly improved.

CBPAR 3, Module 1
Recap of this Project

The Sustainable Transportation and Communities Research Community Engagement Plan (STCRCEP) will be based on:

- Community Engagement Research Advisory Committee (CERAC)
- Conduct Literature Review & Practice Review vetted by CERAC
- Conduct Interviews conducted by the Research team and Focus Groups by CERAC members
- Create Community Engagement plan
- Knowledge Transfer to CARB Staff

CBPAR 3, Module 1
Recap of this Project

Application to this Project/Focus Groups

1. One of the project deliverables is a Research Community Engagement Plan that will include CERAC and Focus Group recommendations for how CARB's Sustainable Transportation & Communities Division (STCD) defines and solicits future research studies. This could include identifying research priorities at the intersection of land use planning, housing, and transportation. This could also include guidance on what engagement methods enable researchers to meaningfully engage with low-income communities.

2. Some examples of recommendations we heard in past CERAC meetings include:
   - Fund a research project on how jurisdictions are implementing SB1000 requirements in local plans and involving EJ leaders.
   - Fund research that will create data/evidence that local communities need in their local organizing efforts to improve air quality which engages EJ grassroots leaders.

3. The Research Team is committed to including ALL CERAC and Focus Group ideas and recommendations in our Reports to CARB.

APPLICATION: Purpose

- How would you describe this Project's purpose to the people you would want to recruit for your focus group?

- What information/support/resources do you need from the research team or CARB to help you communicate the Project purpose? I.e, do you need more information about CARB STCD?

Worksheet

20 min: 10 min pair/share; 10 min large group

BIO/STRETCH BREAK

5 min

CBPAR 3, Module 2
Gathering Evidence

Key Elements of Designing Rigorous Research
Focus Group Questions

Ask Questions that…

1. Align with research objectives and will be directly used.
2. Are clear, concise, and unambiguous. Ask single questions one at a time to avoid confusion.
3. Are open-ended and allow for different responses. Follow up questions may also be used to engage in deeper inquiry.
4. Are not “leading” people to respond in a particular way and use “neutral” language.
5. Are “ethical” and follow the IRB (Institute of Research Board) standards, i.e.
    a. Informed & Affirmative Consent (people know the purpose of the research and how their information will be used; their right to confidentiality of private information; their right to ask for clarification, more information, or stop their participation at any point)
    b. Any private information will not be disclosed and information will be anonymized unless the participant affirmatively states that they want to be directly quoted.

Tips & Examples

CBPAR 3, Module 2

Gathering Evidence

Avoid Leading Questions

Examples to avoid:

- "You believe that environmental regulations are disproportionately affecting low-income communities, don’t you?" (This assumes an opinion.)

- "Wouldn’t you agree that the local community’s health concerns should take priority over industrial growth?" (This leads to a yes/no answer.)

Instead, ask: "How do you see the role of environmental regulations in balancing economic development and community well-being?"

CBPAR 3, Module 2
Gathering Evidence

Review of Preliminary Focus Group Questions

- Small Group Review
  - Review all the preliminary specific focus group questions, 5 min
  - See if there are any any missing questions, 10 min
  - Then assess the 1-2 questions assigned to your pair/share using the assigned questions, 10 min

- Large Group Sharing, 10 min

Some questions to consider as part of your small group review:

1. Are the questions clear and easy to understand?
2. Do the questions allow people to respond according to their respective experiences and knowledge?
3. Are the questions worded in ways that honor and respect community knowledge?
4. Are we missing any questions that would be important to ask?
5. What else comes up for you in reviewing the questions?

FYI–Logistical Aspects of Conducting Focus Groups

The Research Team will project manage these details.

FOCUS GROUP NEXT STEPS

- Focus Group Organizing Model and Menu

Who wants to share their ideas at the next CERAC meeting?

END RECORDING

On the Horizon/Proposed Next Meeting Agenda:

1. Email: Notes, Survey, make up meeting
2. Next Meeting:
    a. Community Agreement
    b. Planning Focus Groups: *Theme, Where, When, Who? Does it already exist? Do you need to create something new?*
3. Public meeting (Early February most likely)

Closing Reflections

In a few words, share how you are feeling as we close out this meeting?

GOVERNMENT SPEAK TRANSLATED INTO COMMUNITY LANGUAGE

GOVERNMENT SPEAK TRANSLATED INTO COMMUNITY LANGUAGE

First Meeting to Discuss

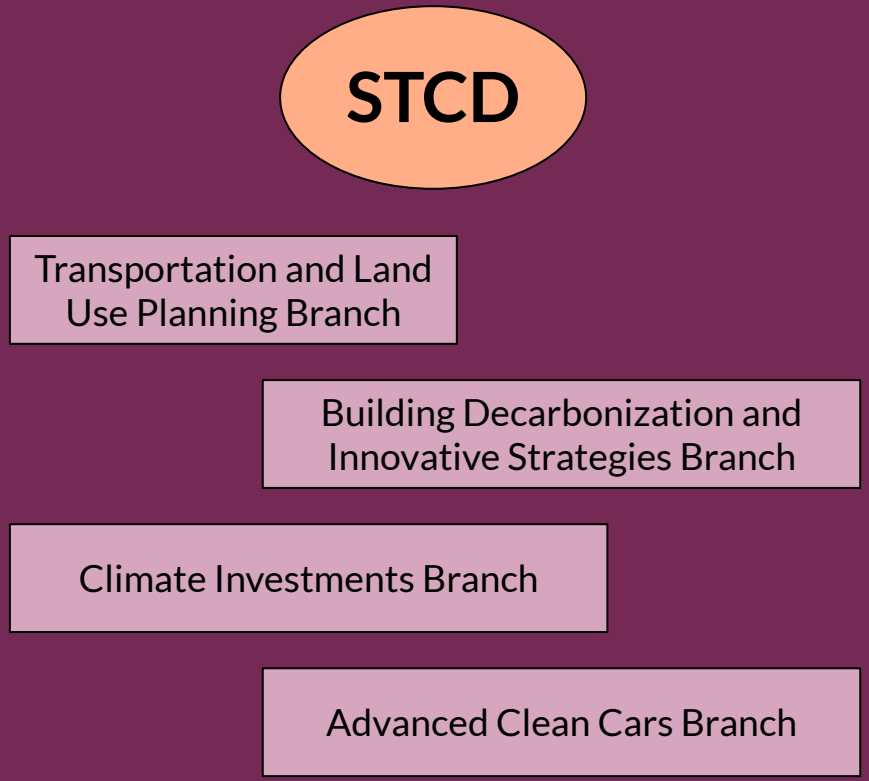
STCD Funded Research Projects

Summary of CARB STCD (and some Research Division) Research Contracts

Fiscal Year 2015-2016 to 2022-2023

More about CARB's Sustainable Transportation and Communities Division (STCD)

And would your organization be interested in more information about potential grant opportunities from the different CARB divisions?



Past CARB Sustainable Transportation & Communities Division Research & Select Research Division Projects

Period	Projects funded	Total Funding Amt*	BIPOC PI/Co-PI	Advisory Committee**
2015-16	1	$149,485	1/1	0/1
2016-17	1	N/A	0/1	0/1
2018-19	2	$249,371	1/2	0/2
2019-20	3	$1,124,697	0/4	0/3
2020-21	4	$1,549,410	1/4	2/4
2021-22	13	$2,892,562	3/14	2/13
2022-23	9	$3,151,403	3/11	5/11

*Estimate, as research funding is over several years, and list is not inclusive of all Research Division projects
**Need more information if EJ grassroots leaders were included in advisory committees.
We currently don't have information on what specific outcomes resulted from the funded projects.

Past Research Projects Funded

Thematic Focus	Projects funded
Housing/Vehicle Miles Traveled	10
Land Use	7
Climate Investment	2
Local Government	4
Equity/Community Engagement	7
Zero Emission Vehicles	4
Transportation	4
Emerging Mobility	1
Travel Behavior	2
Vehicle Miles Traveled	3

What specific information do you want to know about these funded research projects?

Do you have any preliminary thoughts, responses, etc?

CERAC Discussion

GOVERNMENT SPEAK TRANSLATED INTO COMMUNITY LANGUAGE

Second Meeting to Discuss

STCD Funded Research Projects

Q&A w/CARB

STCD's mission:

To help meet federal air quality standards and the State's climate goals, STCD focuses its work on four key building blocks of communities – transportation, buildings, natural and working lands, and jobs and the necessary workforce to support them.

These four building blocks will accelerate the transition to zero-emission technologies, reduce vehicle miles traveled, support carbon sequestration, promote community resiliency, and increase access to opportunity, with a strong focus on fostering more equitable outcomes for the State's low-income and disadvantaged communities.

Q&A w/CARB

- (Would CARB/STCD) fund a research project on how jurisdictions are implementing SB1000 requirements in local plans and involving EJ leaders? OR would this fall under CARB Research Division OR another State agency?
- (Would CARB/STCD) fund research that will create data/evidence that local communities need in their local organizing efforts to improve air quality which engages EJ grassroots leaders? OR would this fall under CARB Research Division OR another State agency?

Q&A w/CARB

Topics of contracts that STCD manages range from zero-emission vehicles, to workforce development, natural and working land issues, investment impacts, building decarbonization and VMT reduction.

Contracts are used for several key purposes including but not limited to:

1. Supporting evidence-backed policy or strategy prioritization by responding to a data or knowledge gap
2. Developing a specific tool, quantification methodology, or resource to meet a programmatic need
3. Evaluating investment impact or policy effectiveness

Contract Example

Official title: Ground Truth Building Stock and Attribute Data in Disadvantaged and Low-Income Communities

Re-framing to avoid technical jargon: "Verifying Accuracy of Building Data in Disadvantaged and Low-Income Communities"

Project Summary: The goal of this project is to work with local groups and people to verify whether statewide data on buildings is accurate and reflects on-the-ground realities.

Categories of data to be examined include: review of the types of buildings in a specific area (residential, commercial, industrial, and public buildings), building characteristics (including year of construction, history of major retrofits, architectural style, size, etc.), development trends, and construction practices (for example material transportation, waste management, dust reduction practices, etc.) in-low income and disadvantaged communities.

This contract would be used to identify and support community-based groups in organizing events to verify statewide data on residential and commercial buildings. This effort will support CARB's effort to identify and address environmental justice issues that may not otherwise be recognized during the State's efforts to reduce building embodied carbon in residential and commercial structures. Community expertise and additional data will be collected through consultation with residents and community members who can provide direct observation of local conditions (i.e., ground truthing), to ensure data and methodologies adopted by the program are sufficiently representative of California communities.

Handout for CERAC Members

All Offices and Divisions within the California Air Resources Board (CARB)

- Chair's Office
- Executive Office
- Administrative Services Division
- Air Quality Planning and Science Division
- Emissions Certification and Compliance Division
- Enforcement Division
- Industrial Strategies Division
- Mobile Source Control Division
- Mobile Source Laboratory Division
- Monitoring and Laboratory Division
- Office of Community Air Protection
- Office of Information Services
- Research Division
- **Sustainable Transportation and Communities Division**
- Transportation and Toxics Division

Sustainable Transportation and Communities Division

STCD's mission: STCD uses multi-disciplinary teams to integrate research, transportation and land use planning, regulations, and incentives to foster sustainable communities that provide a range of affordable housing and transportation options that drive electrification, reduce vehicle miles traveled (VMT), support carbon sequestration, and meet community needs in a manner that promotes equity, access to opportunity, and community resiliency.

STCD's focus:

To help meet federal air quality standards and the State's climate goals, STCD focuses its work on four key building blocks of communities – transportation, buildings, natural and working lands, and jobs and the necessary workforce to support them. – Focus on these four building blocks will accelerate the transition to zero-emission technologies, reduce vehicle miles traveled, support carbon sequestration, promote community resiliency, and increase access to opportunity, with a strong focus on fostering more equitable outcomes for the State's low-income and disadvantaged communities.

At CARB, all Divisions have Branches; those Branches have sections. STCD as a division has approximately 120 employees. Here are the four Branches within STCD.

Research within STCD

The following two sections show STCD's recently completed and currently active contracts as well as new research solicitations for 2024.

The variety of contracts demonstrates the many facets of STCD's work; from zero-emission vehicles, to workforce development, natural and working land issues, investment impacts, building decarbonization and VMT reduction.

Contracts are used for several key purposes including but not limited to:

1. Supporting evidence-backed policy or strategy prioritization by responding to a data or knowledge gap
2. Developing a specific tool, quantification methodology, or resource to meet a programmatic need
3. Evaluating investment impact or policy effectiveness

These contracts typically have term lengths between 1 and 3 years, and the deliverables are commonly a final seminar presentation, white paper, and/or report.

New research solicitations for 2024

Earlier this year, STCD requested proposals for 12 research projects to fill important data, information, and research gaps to support the division's programs related to sustainable transportation, land use, housing, and buildings.

CARB is committed to increasing the equitable impact of our efforts agencywide, and as such, this solicitation contains several projects that will explore, address, and embody racial equity

components. The goal of increasing the equity elements of projects, awareness of project opportunities, and diverse collaboration between academics of various backgrounds is to achieve equitable and healthy sustainable transportation and community strategies that meet California's climate goals.

List of Projects

1. **Developing an Auto Operating Cost Methodology by Incorporating Alternative Fuel Technologies** | up to $350,000 | Detailed Statement of Work
2. **Assess the Effectiveness of California's Parking Cash-Out Program** | up to $300,000 | Detailed Statement of Work
3. **Opportunities and Costs for Small-Diameter Forestry Residue and Slash in Manufactured Wood Products** | up to $250,000 | Detailed Statement of Work
4. **Ground Truth Building Stock and Attribute Data in Disadvantaged and Low-Income Communities** | up to $550,000 | Detailed Statement of Work
5. **Costs and GHG Emissions Reduction Opportunities for Building Materials** | up to $500,000 | Detailed Statement of Work
6. **Consultant and Engagement Administrator for California Climate Investment Quantification Methodologies** | up to $450,000 | Detailed Statement of Work
7. **Strategies to Uplift Job Quality in California Climate Investments** | up to $375,000 | Detailed Statement of Work
8. **California Climate Investments Outcomes Evaluation Framework and Implementation** | up to $350,000 | Detailed Statement of Work
9. **Assessing and Calibrating Data Sources for the California Climate Investments Quantification Methodology for Forest Restoration & Management** | $450,000 | Detailed Statement of Work
10. **Incorporating Delayed Forest Reestablishment into Forest Restoration Quantification Methodologies** | up to $700,000 | Detailed Statement of Work
11. **Quantification Methodology for Estimating the Benefits of Residential Building Decarbonization Projects** | up to $200,000 | Detailed Statement of Work
12. **Project Attributes of Non-Residential Projects Consistent with the Scoping Plan** | up to $150,000 | Detailed Statement of Work

There is also an FAQ page which provides information on several categories, including Proposal Selection and General Questions, Budget and Contracting, Project Teams, and Pre-proposal requirements.

Past and Active Contracts within STCD

Project titles, abstracts, and summary results where available provided below. Extracted from the full spreadsheet previously shared added to the CERAC folder.

Monitoring New Developments and Recent Changes Relevant to Sustainable Community Strategies	One critical step in achieving SB375 reduction of greenhouse gas (GHG) emission is monitoring real-world changes in the urban spatial structure that relevant to the implementation of adopted Sustainable Community Strategies (SCS), particularly those associated with reducing VMT (vehicle miles traveled). This project is designed to establish a foundation for a future statewide SCS monitoring system by identifying, evaluating, and selecting indicators, indices, and data sources. First, the project includes a review of academic and professional publications, case studies of SCS elements in selected general plans, and consultation with and collection of information from key stakeholders. Second, the project assesses the relevance of data sets in constructing land-use indicators, accessibility indices, and travel behavior. Input will be provided through an advisory committee comprised of representatives from state agencies, metropolitan planning organizations (MPOs), experts, and other stakeholders. The final product is a set of recommendations regarding the data and information that can be incorporated into a future statewide SCS monitoring system. **Results**: Lack of consistency in data availability for all regions, large data costs, mixed results in progress toward SB375 goals based on Los Angeles prototype, difficult to interpret where new housing was being located, difficult to interpret changes in jobs and retail, MPOs conduct limited assessment of recent changes to land use activities and the built environment, relative to their SCSs. A workable statewide monitoring system should be developed. Final Report
Post-COVID Transportation Scenarios: Evaluating the Impact of Policies	CARB seeks to understand the net impact of potential policies to inform California's response to the COVID pandemic in order to optimize climate progress, public health outcomes, and improve equity. Statewide (preferably) or regional (if greater focus on equity) post-COVID transportation scenarios will be developed that consider various factors that influence vehicle miles traveled (VMT) and travel behavior in order to test different policy responses. Final Report
Assessing the Travel Demand and Co-Benefit Impacts of Affordable Transit Oriented Developments	This study assessed the travel patterns of low-income households in order to estimate the impact of affordable transit-oriented developments (TODs) on vehicle miles traveled (VMT) using a multi-method research design. Data were collected, assembled, and analyzed for 292 tenants living in subsidized units both near and far from high quality transit to provide a robust picture of trip frequency, length, mode, purpose, and vehicle ownership as a function of development characteristics, household demographics, and urban setting. Results showed a significant association between affordable TOD and vehicle trip frequency, but not VMT. These mixed findings align with the mixed results found for other populations and settings. Qualitative results highlight the many benefits of living in affordable TODs, especially those in highly accessible areas and in close proximity to many services and opportunities.
Screening Method and Map for Evaluating	In replacing household gasoline miles with electric miles, the results of this study suggest a significant differentiation of this driving behavior according to vehicle range and battery size. While we cannot say that this driving behavior is directly influenced by vehicle characteristics

Transportation Access Disparities and Other Built Environment-Related Determinants of Health	such as range, size, and performance, we can, however, observe the trends in driving behavior of participants who own vehicles with the same characteristics. For example, it is important to note that longer-range PHEV users in this study had the tendency to plug in their vehicle more and achieve higher electric vehicle miles traveled (eVMT). It is also plausible that similarities in driving behavior of users who own similar vehicles are coincidental, as infrastructure availability and other variables outside of vehicle characteristics could be the main factor in the performance of the vehicles. **Results:** CARB should actively promote data usage, conduct additional analyses and research to build upon work that improves the lives of people of lower income and communities of color, update and refine accessibility indicators, explicitly address racial disparities in transportation. Final Report – Mapping Tool
Evaluating the Potential for Housing Development in Transportation-Efficient and Healthy, High-Opportunity Areas in California	CARB seeks to understand how California's current and future housing needs can be met in a way that simultaneously reduces emissions and advances social and racial equity. The objective of this research project is to determine how these three goals can be pursued by examining opportunities for housing development in places that have or may achieve (with state policies or investments) high levels of transportation efficiency and healthy, high opportunity neighborhoods. The research team should approach this objective by: (1) defining and characterizing transportation-efficient and healthy, high opportunity areas; (2) identifying these areas throughout the state under "existing conditions"; (3) identifying state policies and investments that can elevate areas of the state into more transportation-efficient and higher opportunity classifications; (4) estimating the impact of the aforementioned policies and investments on expanding housing potential; and (5) assessing outcomes related to climate and social and racial equity goals.
Estimating Induced Travel from Capacity Expansions on Congested Corridors	This project uses Caltrans Performance Measurement System (PeMS) data from four study sites to estimate the effects of non-general purpose lane capacity expansions on traffic flows. These effects, often referred to as "induced travel," are critical in determining the environmental impacts of transportation infrastructure projects and forecasting regional changes in vehicle miles traveled (VMT). While a number of studies estimate correlations between aggregate miles of roadways and total VMT, these results are not directly applicable to most current and future California roadway capacity projects, since non-general purpose lane expansions including high-occupancy vehicle (HOV) and high-occupancy toll (HOT) lanes are becoming an increasingly common strategy for expanding capacity on congested freeways. The results indicate statistically significant increases in average speeds and traffic flows at all four study sites. The increases tend to be larger during peak hours, though increases are documented in most cases during both peak-and off-peak hours. The report also presents results from a set of "placebo tests" using data from locations without lane expansions for comparison purposes. These estimates reflect short-run local impacts and do not speak to medium-or long-run effects, spillovers to arterial street networks, regional impacts, or land use changes. **Results:** HOV and HOT lanes differ from general purpose lanes because they create an incentive for carpooling. This incentive potentially mitigates the traditional induced travel effect by increasing vehicle occupancy. Nevertheless, we find that induced travel is more than sufficient

	to offset increased vehicle occupancy, resulting in a net increase in traffic flows. In future work it would be interesting to learn more about how these projects change the carbon intensity of travel (i.e. CO2 per passenger-mile traveled). Another top priority for future research is to better understand congestion pricing strategies for HOT lanes. Final Report Link
White Paper on Anti-Displacement Strategy Effectiveness	Research on the impacts of public investment on displacement generally yields mixed findings (see the review in Zuk et al., 2018), with local policies and neighborhood context playing an outsize role in determining whether households can stay in place (Chapple and Loukaitou-Sideris, 2019).1 This raises the question, then, of which anti-displacement strategies work, where, and why? Despite the push to implement anti-displacement policies, there is a dearth of evidence on the effectiveness of such approaches, i.e., their ability to reduce displacement either directly or indirectly. This white paper lays the groundwork to fill this evidence gap. Drawing on a review of more than 150 articles in the academic and gray literature, as well as interviews with 14 practitioners and academics, we summarize the literature on anti-displacement strategies and their effectiveness, specify a research agenda specifically for the State of California, and lay out some sample research designs. In total, we reviewed the literature on 17 distinct policies, summarized in Table 1. For each, based on the previous studies, we determined the potential to prevent displacement (asking by how much? how directly?), the type of market necessary to make it effective, the implementation scale, and the likely timeframe in which it works. **Results**: Recommendations for the State • When designing guidelines for competitive funding programs, encourage jurisdictions to adopt anti-displacement policies, with priority for neighborhood stabilization and tenant protection strategies, due to their direct and immediate impact, and housing preservation programs for naturally occurring affordable housing, due to their potential for large-scale impact. • Use available tools to spur housing production, in particular, the strategic disposition of public lands. • Establish an interagency working group on anti-displacement policies in order to enact consistent policies across agencies. • Conduct a comprehensive inventory of anti-displacement policies and programs by jurisdiction. • Identify opportunities in existing and planned programs to collect data and conduct evaluations of impacts on displacement. Recommendations for Local Governments and Communities • Jointly develop a strategic plan for neighborhood stabilization, including a prioritization scheme for anti-displacement policies in the jurisdiction to incorporate into applications for state and federal funding. Help build capacity in local communities by ongoing education about displacement issues and support for community organizing. White Paper
Examining Entitlement to Inform Policy and Process in California: Advancing Social Equity in Housing	The research will expand the University of California Berkeley (UCB) research team's ongoing work to assess the legal, planning practice, and political barriers to advancing equitable infill development in California in depth by providing insights into greenfield development policy, and a comparative analysis of the impact of specific laws on both infill and greenfield residential entitlement. The research will help answer key questions about the impact of specific laws and regulations intended to implement statewide sustainability goals and reduced greenhouse gas (GHG) emissions and vehicle miles travelled (VMT) on residential entitlement, and to identify policy opportunities to better align housing and climate policy. Entitlement is a key factor to assess because it is often the first step in housing development in cities and counties statewide and allows for analysis of the amount of housing that is proposed and how proposed residential development navigates the approval process. The research will answer questions about the impact of law on entitlement by examining which laws appear to

	impose time lags on development timelines or curtail specific types of housing supply within specific local and regional contexts. The data collection will also permit future research that assess what proposed residential development gets built. **Results**: Local regulation within infill areas we studied appears inadequate to support both climate and fair housing goals. Our urban study cities need to approve more housing. Cities approved few affordable units in higher opportunity areas, which is unsurprising given how little land area they zone for all incomes in those areas. State environmental review did not appear to play a dominant role in incentivizing or constraining either TOD or sprawl. Local law limits the impact of CEQA streamlining or exemptions on approval timelines. Single-family subdivision in exurban areas may also benefit from less intensive review. Litigation rates are low but can add years to overall timeframes. Final Report
Strategies to Improve the Alignment of Planned Transportation Investments with Climate and Equity Goals	The objective of this project is to develop a deep understanding of how Metropolitan Planning Organizations (MPOs) select the projects that appear in their Regional Transportation Plans (RTP) project list and Sustainable Communities Strategies (SCS) implementation. The project will also examine how selection processes has evolved over time and identify how project performance is tracked after implementation. Research results will help to inform future Senate Bill 150 Reports (SB 150, Allen Chapter 646, Statues of 2017). White Paper
Research Study: State of the Zero-Emission Vehicle Secondary Market and Accessibility Impacts in California's Underserved Communities	The objectives of this study are to 1) understand social demographics and motivations of consumers that purchase used ZEVs, 2) understand used ZEV movement across state lines, 3) examine the impact of CARB's light-duty ZEV incentive programs on the used ZEV market, and 4) assess to what extent the secondary ZEV market is increasing access to clean mobility in California's underserved communities. The results of this research study will inform CARB's related light-duty ZEV incentives and regulations with the goal of expanding access to ZEVs in underserved communities.
Barriers to Reducing the Carbon Footprint of Transportation	The key objective of this contract is to inform the California Air Resources Board on the quickly evolving transportation patterns resulting from the deployment and adoption of emerging transportation technologies, and the disruptions associated with the COVID-19 pandemic, and identify opportunities for reduction of vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions from transportation. Specifically, the work included in this contract will provide information useful to support policy making in a number of areas, including the the development of the Clean Miles Standard (CMS) regulation in response to Senate Bill (SB) 1014 and future complementary policies aimed to support CMS, and the identification of the available strategies to reduce VMT and GHG emissions from transportation in California as the state recovers from the impacts of the pandemic and the resulting modifications in individual behaviors and economic activities 3 Part final report linked on this page - Final Seminar

Vehicle Miles Travel Reduction Success and Opportunities to Overcome Remaining Barriers	The Contractor will develop techniques to integrate and analyze various geo-located data sets to put in place a system to collect data on travel behavior and VMT over time. Existing data (including big data) will be analyzed to better elucidate Californians' travel trends at smaller scales and with better statewide coverage than can be achieved with surveys alone. This analysis of VMT and trip purpose will be performed statewide in a six-month period prior to the COVID-19 pandemic (pre-COVID), as well as at small geographic scales before, during, and after the COVID-19 pandemic (post-COVID) Final Report: Please email research@arb.ca.gov to request the Final Report generated by this research contract. Final Seminar - Slides from final presentation
Measuring, Analyzing, and Identifying Small-Area VMT Reduction	The goal of this project is to assess the degree to which on-the-ground changes in selected communities have produced reductions in VMT. A secondary aim is to examine the degree to which local and/or regional policy change brought about the observed on-the-ground changes. This project will complete a minimum of three case studies of local communities that have experienced substantial changes in the transportation system and/or land development patterns to assess the change in VMT that has resulted; the forces contributing to transportation and land use changes, including local and/or regional policy changes, will also be examined. These case studies may provide examples of best practices to achieve SCS goals as well as insights on barriers to successful SCS implementation. **Results**: The project assessed whether changes in VMT occurred over the same period and explored the contribution of local and/or regional policy change and public investments such as transit, bike, and pedestrian infrastructure as well as private development investments to the observed on-the-ground changes. In all three case studies, the cities used innovative local plans, strategic infrastructure investments, private development projects, and support from the local community to bring about significant changes in the built environment over a two-decade period, changes that created the potential for a reduction in driving. Final Report Seminar recording Final presentation slides
Opportunities to Address Past Inequity to Build Healthier, More Sustainable Communities	The objective of this project is to examine public investment policies, along with systemic precedents contributing to the inequitable distribution of resources and resulting disparities across California communities. In addition, the project will identify opportunities and potential resources to address these inequities in public infrastructure investment policies and practices. The project will build upon current state initiatives to advance Affirmatively Furthering Fair Housing goals and regulations by identifying public infrastructure investment strategies that can complement local and state fair housing plans, and thus help to advance implementation of the state's legal mandate that all state programs and investments advance fair housing objectives. CARB is interested in learning about how existing and new public investments can be utilized to yield economic, environmental, and social returns to support healthy and sustainable community development.

Local California Environmental Quality Act (CEQA) Mitigation	White paper # 1: Best Practices for Local Projects as CEQA Mitigation Project Develop a white paper that focuses on identifying real-world local examples and best practices that fulfill the requirements for local Greenhouse Gas (GHG) mitigation measures under CEQA. White paper # 2: Lessons Learned from Air District and Regional Actions on CEQA Mitigation Develop a white paper that identifies how different air districts and other regional entities in California encourage and incentivize local GHG mitigation under CEQA. Long-term Objectives: These white papers will help set CARB up to consider next steps for these and other future strategies and solutions to encourage and support local, off-site GHG mitigation projects. The information from these white papers will also be used to inform development of CARB's 2022 Climate Change Scoping Plan Update. White Paper
White Paper: Sustainable Financing Tools and Strategies for Equitable, Community-Based Mobility and Transportation Solutions	This project will review, identify, and assess existing and possible future financing tools and strategies for creating, supporting, and sustaining projects and programs that provide localized, zero and near-zero emission, and community-scale mobility solutions to residents living in low-income and disadvantaged communities. This white paper fulfills two key objectives: (1) identify and summarize financing tools that have enabled community-scale mobility projects in low-income and disadvantaged communities based on examples of projects that have been financed (at least partially) by funding other than direct grants, and (2) identify and explore opportunities for financing tools and strategies that have not been tested in practice for mobility projects but show promise based on success stories from other sectors or applications in the research or policy literature. The purpose of this white paper is to help CARB, other state agencies, local communities, and community-based organizations identify potential tools and strategies that can fund or supplement state funding for these projects, given the high degree of demonstrated need for them and the limited, uncertain nature of California state funding.
White Paper: Innovative Financing Tools for Infill Housing	This paper will examine the potential housing production, climate, and other benefits of three innovative financing tools for affordable infill housing development: (1) A State loan loss guarantee program, (2) A State pre-development revolving loan fund, and (3) A State employer-assisted housing partnership program. Specifically, the paper will assume leveraging a HYPOTHETICAL $100 million to illustrate potential benefit-cost comparisons.
Assessing the Early Impacts of the Clean Miles Standard on California Ridehailing Drivers	This project will help the California Air Resources Board (CARB) to assess the working and financial conditions of California ridehailing drivers before the Clean Miles Standard (CMS) regulation goes into effect and during the first year of implementation. The main scope of this project is to study the transition of the drivers to zero emission vehicles (ZEVs), and the financial impacts of the CMS regulation on drivers.
Policy Briefs: Effects of Transportation and Land Use Policies and Strategies on Vehicle Use and Greenhouse Gas Emissions	This project will produce a series of policy briefs (containing supporting technical appendices) summarizing and explaining empirical literature that identifies the impacts of various transportation and land use policies and strategies on vehicle miles traveled (VMT), greenhouse gas (GHG) emissions, and other key outcomes and factors. This series will address emerging policies and strategies under consideration at municipal, regional, state, and other levels of government, and this project will also update a subset of policy briefs released in 2013-2015 in

	order to reflect new research and data and capture additional considerations of interest to the California Air Resources Board (CARB).
White Paper and Tool Development: Quantifying Potential Indirect Impacts of Transit Investment	The objective of this project is to summarize current literature on the indirect impacts of transit investment in terms of greenhouse gas (GHG) reductions, vehicle miles traveled (VMT) reductions, medium- and long-term land use changes, and long-term changes in transit ridership resulting from land use changes. The contractor will use this information to develop a white paper and a geographically specific tool granular enough to determine the potential benefits of transit investments at the transit station level. A station or stop area consists of the area within one mile of a transit station or stop.
White Paper: Vehicle Miles Traveled and Emission Impacts of On-Demand Delivery Services	The objective of this white paper is to synthesize current literature to identify: 1) what is known about the vehicle miles traveled (VMT) and greenhouse gas (GHG) and criteria pollutant emissions direct and indirect impacts of light-duty on-demand delivery services within California; 2) changes in travel behavior by consumers because of the use of these services; and 3) equity implications of these services. Additionally, another primary objective of this study is to identify research and data needs to expand our understanding of how on-demand delivery services impact VMT and emissions.
Research Study: Understanding Travel Demand and Built Environment Factors to Optimize Increased ZEV Access in Underserved Communities	The California Air Resources Board (CARB) implements both new vehicle regulations and complementary policies designed to increase ZEV deployments; simultaneously, CARB also administers programs intended to reduce vehicle miles traveled. The objective of this research project is to enhance CARB's understanding of the mobility needs of underserved communities and how ZEVs can cost-effectively meet this need to refine existing program designs or develop new programs to benefit these communities further. Additionally, this research project is intended to inform how additional policy measures may address built environment factors such as housing stock and infrastructure availability that may limit the viability of ZEVs for these communities.
Development of Regional Accessibility Metric for SB 150 Report	The primary objective of this project is to build upon existing measures of accessibility to identify, operationalize, and develop regional accessibility metrics to enable CARB staff to produce annual updates to inform the Senate Bill 150 Progress Report to the Legislature on Sustainable Communities Implementation ("Progress Report"). These metrics should measure accessibility to work and non-work destinations, and for auto and non-auto modes of transportation, with an emphasis on priority populations to understand the spatial equity of access. A secondary objective is to gain a preliminary understanding of best practices for improving regional accessibility, particularly for priority populations.

Greenhouse Gas Benefits of Adaptive Reuse of Buildings and Prefabricated Construction for Housing	White paper will examine the potential climate benefits of adaptive reuse of buildings as well as prefabricated construction for housing, estimate how many buildings are likely to go through repurposing in California in the future and how much greenhouse gas (GHG) emissions could be saved as a result, and discuss potential obstacles and necessary policy-level decisions for promoting adaptive reuse in California. **Results**: The results demonstrate that there is utility for policymaking in using a scaled, context-specific approach that incorporates both representative and actual data in assessing the potential benefits of adaptive reuse and modular housing at a regional or county level. In specific regards to adaptive reuse, challenges exist to accomplishing emission reductions due to numerous technical (architectural and structural challenges for converting non-residential space into residential), as well as financial and regulatory barriers that will require a timely policymaking process. To overcome these barriers, cities statewide might be able to speed some projects along by streamlining approvals for adaptive reuse of commercial buildings that have mixed-use floor space for commercial and residential purposes. Generating a dedicated funding stream for adaptive reuse projects that include affordable units and are sited in areas where new housing could yield large social benefits may incentivize new projects where they are needed the most.
Economic and Environmental Benefits Analysis for Off-Site Construction Methods	Terner Center will conduct a detailed assessment of the potential for off-site construction methods to reduce the time and cost required for housing production while reducing environmental impact of construction. To assess the economic component of the analysis, detailed project cost estimates procured through industry partnerships will compare the cost of housing projects built using off-site versus conventional, stick-built methods. For the environmental impact analysis (with our partnering team, led by Arpad Horvath of UCB) looking at the project-scale portion of emissions reductions), we will assess the city-scale effect of off-site methods to encourage and accelerate infill housing development in dense urban cores connected to public transit. The research will incorporate lessons learned by those pursuing off-site construction in both international and domestic contexts, with a specific lens towards insight that might apply to the California housing market. **Results:** To support this sector's growth and success — but also benefit the housing industry at large — state policy and program interventions should: (1) Standardize, align, and streamline financing and permitting procedures for affordable housing to increase predictability in procurement. (2) Improve and expand state factory inspection programming to include more outreach and education for local building officials and mechanisms for panelized system review (3) Consider tracking actual building performance data for new housing to incentivize and measure life cycle costs of quality design and construction.
Best Practices and Capacity Building for Local Government Implementation of Climate Action Policies	The main objectives of this project are to: (1) identify barriers that local governments face in implementing climate action policies and ways in which these barriers can be overcome; (2) identify ways for the California Air Resources Board (CARB) to support local governments and community-based organizations in tackling climate actions at the local level; and (3) conduct capacity-building sessions for local government staff and advocates around implementing priority climate policies, focused on education about state climate goals, resources, and priority policies using existing partnerships and networks. Final Report - Final Seminar - General Plan Mapping Tool - Climate Action Plan Map

Assessing the Quantification Methodology for the Affordable Housing and Sustainable Communities Program	The objective of this project is to investigate and propose updates to the California Climate Investment's quantification methodologies used to evaluate the Affordable Housing and Sustainable Communities (AHSC) program, specifically for calculating vehicle miles travelled (VMT) and associated VMT reductions of proposed housing projects including location-specific VMT, proximity to transit, and project density. This study may include identifying alternatives to the assumptions and data currently used in the calculation of VMT estimates and reductions.
Potential State Roles in Expanding Transfer of Development Rights (TDR) as a Tool for Greenhouse Gas Reduction	This research project will investigate the applicability of a Transfer of Development Rights (TDR) program to local and state greenhouse gas reduction and land conservation efforts, with a focus on leveraging development rights for housing and other community investments that benefit Disadvantaged Communities. Elements of this project include conducting a structured conversation with practitioners and stakeholders about how to adapt to the California context a successful TDR program from King County, Washington; identifying potentially-replicable components of successful TDR programs in California; identifying challenges to TDR success in California and potential tools and strategies to overcome those challenges; and analyses of financial feasibility and potential impacts on greenhouse gas emissions and social equity.
Sustainable Transportation and Communities Research Engagement and Project Development	The primary objective of this project is to meaningfully incorporate community input in setting research priorities for CARB's Sustainable Transportation and Communities Division (STCD), specifically around how to increase equitable outcomes and maximize benefits and avoid unintended consequences for historically underserved communities with respect to housing, transportation, and land use planning. This project will also share the state of the research in these areas with communities and identify knowledge gaps of special interest to stakeholders. Finally, this project will develop guidance on how STCD can co-design research projects with community stakeholders.
California Housing and Transportation Costs: Impacts and Implications	This study seeks to answer several questions about whether, and to what extent, housing and transportation (H&T) costs and burdens experienced by California households—particularly priority population households that are disproportionately burdened by these costs—influence households' home relocation decisions. For example, do California households that live in low-income communities and communities of color experience a higher combined housing plus transportation cost burden? What are the differences in H&T costs between low-, middle-, and high-income households and across different place types? What are the factors influencing these differences? How are these H&T cost burdens impacting where households choose to live?
Regional- and State-Led Strategies to Improve Local Implementation of Sustainable Communities Strategies	This project will identify instances of local government actions that were consistent with an applicable regional Sustainable Communities Strategies (SCS), identify strategies that Metropolitan Planning Organizations (MPO) (or others such as the State) have employed to encourage local implementation of SCSs, as well as understand which strategies have been most effective in improving local implementation of SCSs. Based on these findings, this project will provide policy recommendations for actions that the State and MPOs can take to improve alignment between regional plans and local plans and projects.

Tribal Engagement Strategy	Native peoples of California hold temporal and spatial insights, wisdom, and understandings of California lands and waters and have demonstrated effective strategies for climate adaptation and resiliency. California Tribes and State agencies together can benefit from meaningful partnerships to better design CCI and improve outreach with Tribes to increase program access, leverage, and participation. The Tribal Engagement Strategy outlined in the Scope of Work below will be created in collaboration with California Tribes and reflect a diversity of perspectives, protocols, and consideration on appropriate forms of engagement throughout the State. It will include contexts to understand and respect Tribal sovereignty, and what the State's responsibilities to Tribes are based on agreements, laws, regulations, and policies. The goal is to provide informed guidance and recommendations on how to respectfully and inclusively proceed in this work in ways that recognize the uniqueness of Tribal communities and sensitivities in how to work with Tribes in productive and affirmative ways. Special attention will be given to State agencies' roles and responsibilities associated with CCI and specific needs and concerns that Tribes may hold regarding these responsibilities. Ultimately, the Tribal Engagement Strategy described in the Scope of Work will outline and build strategies and pathways for inclusiveness, collaboration, and trust with California Tribes. This document will assist California State agencies in better understanding systemic and underlying issues and obstacles for Tribal communities related to CCI programs, associated climate and resiliency needs, and how to enhance and expand access to climate-related State funding processes, programs, and opportunities, including identifying barriers for Tribes in accessing incentive funds and implementing adaptive programs to confront the challenges of colonial- and industrial-induced climate-change.
Assessment Report and Development of Resources: Local Government Zero-Emission Vehicle Multi-Modal Ecosystem	The goal of this project is to assess the state of knowledge and practice related to zero-emission vehicle (ZEV) planning and implementation across California communities, as well as develop resources to support local governments in their effort to create equitable, multi-modal ZEV ecosystems. To accomplish this goal, several objectives will be pursued: 1) review and synthesize literature and data related to ZEV readiness across a variety of geographies and contexts; 2) engage with local stakeholders via interviews, surveys, and/or workshops to gain a more nuanced understanding of their successes and barriers to ZEV adoption; 3) explore the creation of a ZEV readiness score that considers technology, infrastructure, and socio-economic factors; and 4) develop a suite of tailored resources that support the creation of equitable ZEV ecosystems and Vehicle Miles Traveled (VMT) reduction strategies across a number of contexts. Ultimately, the significance of this project is that it can catalyze widespread and equitable ZEV adoption by helping local governments evaluate strategies for ZEV acceleration, multi-modal transportation, and VMT reduction from a nuanced and holistic perspective.

GOVERNMENT SPEAK TRANSLATED INTO COMMUNITY LANGUAGE

Third Meeting to Discuss

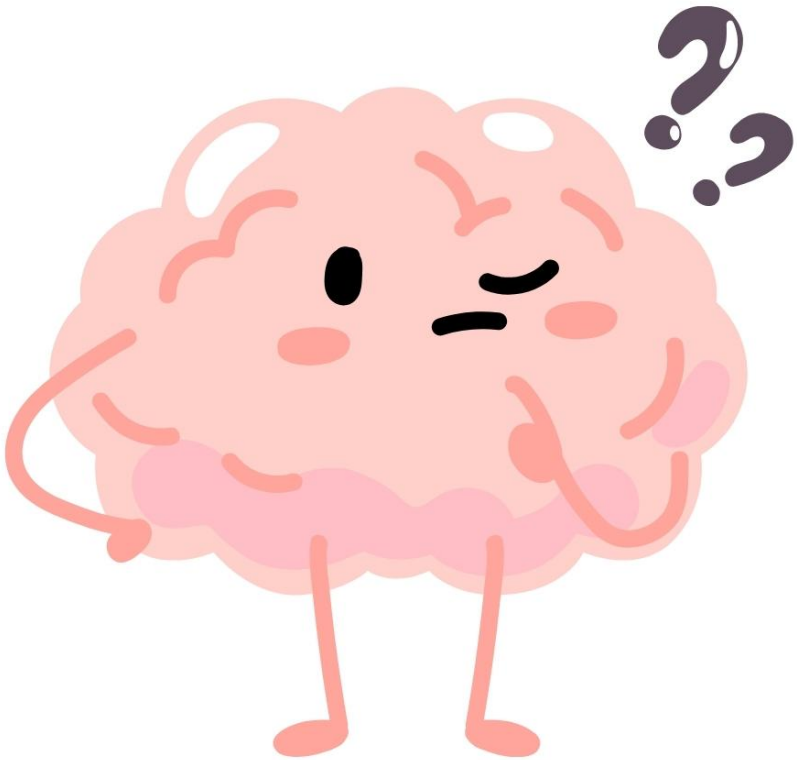
STCD Funded Research Projects

STCD's Mission:

- STCD uses multi-disciplinary teams to integrate research, transportation and land use planning, regulations, and incentives to foster sustainable communities that provide a range of affordable housing and transportation options that drive electrification, reduce vehicle miles traveled (VMT), support carbon sequestration, and meet community needs in a manner that promotes equity, access to opportunity, and community resiliency.

Examples of contracts and programs within STCD's four branches:

- **Contract:** Policy Briefs: Effects of Transportation and Land Use Policies and Strategies on Vehicle Use and Greenhouse Gas (GHG) Emissions
    - **Program:** Setting regional GHG emission reduction targets under SB 375
- **Contract:** Understanding Travel Demand and Built Environment Factors to Optimize Increased ZEV Access in Underserved Communities
    - **Program:** Advanced Clean Cars II (i.e., passenger vehicle emissions regulatory program)
- **Contract:** Consultant and Engagement Administrator for California Climate Investment Quantification Methodologies
- **Contract:** California Climate Investments Outcomes Evaluation Framework and Implementation
    - **Program:** CCI Priority Populations map and CCI Project Profiles Map
- **Contract:** Community Engagement Assessment for the CARB Zero-Emission Appliance Standards Interested Parties Process
    - **Regulation project:** Zero Emission Space and Water Heater Standards



Any questions on STCD, the plan, and where we are headed?

FOCUS GROUP FLYER

BERKELEY IURD INSTITUTE OF URBAN AND REGIONAL DEVELOPMENT

CALIFORNIA AIR RESOURCES BOARD

JUST CITIES LLC

Join a focus group on healthier, more sustainable communities!

Your Role as a Community Expert

Just Cities and UC Berkeley, on behalf of the California Air Resources Board (CARB), are developing a Research Engagement Plan to advance equitable research for sustainable transportation and communities.

Think about your daily experiences—how you feel in your neighborhood, what you see, hear, and smell, and how your community talks about shared challenges. Your lived experience makes you an expert, and we want to learn from you.

Purpose

Your voice will shape how CARB engages communities by:

1. Identifying priority communities for funding
2. Advising on relationship-building with CARB researchers
3. Highlighting overlooked community issues
4. Sharing what your community needs for a healthier future

Focus Group Details

What We Ask of You

- 90 minutes of your time
- Respectful discussion
- Consent to use your feedback in STCD's engagement plan

What We Offer in Return

- Transparency in how your input is used
- $75 compensation upon completion of payment forms

Please reach out if you have any questions!

FOCUS GROUP ORGANIZING MATRIX

ASAP – Confirm to Schedule Research Team

- [ ] · Confirm date, time, and location of focus group
- [ ] · Confirm language of the session
- [ ] · Confirm interview questions

2 Weeks Before Focus Group

- [ ] · Complete Workplan
- [ ] · Confirm language of the meeting
- [ ] · Confirm restaurant (if in-person); share details with research team
- [ ] · Send Google Calendar invite / Zoom link; add all participants
- [ ] · Confirm availability of all research team members
- [ ] · Confirm if session will be physical or virtual
- [ ] · Confirm whether the session can be recorded
- [ ] · Create and share Google Form with research team:
- [ ] · - Update on recruitment
- [ ] · - Confidence check: will there be 9 participants?
- [ ] · Finalize interview questions
- [ ] · CERAC: Check if supplies are needed (e.g., pens, sticky notes, etc.)
- [ ] · Schedule 1-hour meeting with research team to go over logistics and questions
- [ ] · Complete Facilitation Guide

10 Days Before – Research Team to Deliver

- [ ] · Draft of presentation materials
- [ ] · Glossary of terms
- [ ] · Note-taking templates
- [ ] · Consent documents and payment method (e.g., physical gift cards)
- [ ] · RMB: Create folders for each CERAC group

Week of Focus Group

- [ ] · Final meeting with research team to review logistics and tech (Toucan), recording
- [ ] · Send reminder to participants with all focus group info
- [ ] · Confirm catering (delivery/order for in-person)

Day of Focus Group

- [ ] · Set-up: space, tech, food, recording
- [ ] · Provide/collect consent forms (if not signed in advance)
- [ ] · Sign-in sheet/form

- [ ] 30-minute debrief with research team after focus group
- [ ] - Team takes notes

After Focus Group

- [ ] Submit to research team:
- [ ] - Notes (if taken by CERAC)
- [ ] - Recording and/or transcript

Next CERAC Meeting

- [ ] Hold group debrief with CERAC members who participated in the focus group

FOCUS GROUP GUIDE

Berkeley UNIVERSITY OF CALIFORNIA Institute of Urban & Regional Development

PIs: Margaretta Lin, JD & Charisma Acey, PhD
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FOCUS GROUP INTRO

Hello. Thank you for taking the time to speak with us today. UC Berkeley researchers are conducting a Sustainable Transportation and Communities Engagement research project for the California Air Resources Board. This research will identify research priorities so that CARB may better understand residents' priorities, visions, and needs for the future of their environments, with a specific focus on land use planning, housing, and transportation research.

We have heard over the years from frontline leaders of housing, environmental, and transportation justice movements that there is a history of public agencies sponsoring research projects or plans whose intended outcomes will bear no real findings of consequence for the communities most in need. Furthermore, American government entities often extract information from residents to measure them without fully understanding the issues communities face. The complexity of health and social problems facing communities and disappointment in past research interventions have led to the growing demand for and interest in community-driven vs. community-placed research. There is mounting evidence that when communities define the problem to be explored, the quality and outcomes of research are greatly improved.

As part of this research, we're speaking with grassroots community leaders and government practitioners to understand their research priorities for CARB and perspectives on the role of community-engaged research. This focus group discussion will take 90 minutes. Focus group conversation will take 90 minutes. Each focus group participant will receive $75 as compensation for their time. Can we record you today for note-taking purposes? We will transcribe this focus group discussion and remove any identifying information from the document. We will also summarize what we hear in these interviews and focus groups by region and topic.

4. Work with the Research Team on Focus Group Consent Forms

5. Facilitate the Discussion

- Assign a skilled moderator to guide the conversation (you & the research team!)
- Establish ground rules (respect, confidentiality, no interruptions)
- Encourage participation from everyone

6. Record & Analyze Data (the research team will help with this)

- Take notes or record the session (with consent)
- Identify key themes, patterns, and insights
- Summarize findings in a report and presentation

TIPS FOR A SUCCESSFUL FOCUS GROUP

⭐ Keep questions clear and unbiased
⭐ Foster a safe and welcoming environment
⭐ Avoid leading participants to specific answers
⭐ Use follow-up questions to dig deeper
⭐ Observe body language and group dynamics

Glossary of Terms

Land Use Policy

- The set of laws, regulations, planning tools, and strategies that govern how land is used and developed within a particular area—whether it's urban, suburban, or rural
- Determines:
    - What can be built where (e.g., residential, commercial, industrial zones)
    - How land is organized and accessed (e.g., street layouts, green space, transportation links)
    - Intensity and density of development (e.g., building height limits, lot sizes, mixed-use development)
    - Environmental considerations (e.g., preserving open space, managing floodplains, reducing emissions)

Housing Policy

- A set of laws, regulations, and government actions designed to influence the availability, affordability, quality, and location of housing within a country, region, or city
- Includes:
    - Affordability programs (e.g., rent subsidies, housing vouchers, low-income housing tax credits)
    - Zoning and land use laws (e.g., what can be built where, like single-family vs. multi-family housing)
    - Homeownership support
    - Tenant protections
- Local and regional Sustainable Communities Strategies plans aim to align housing and job growth within urbanized areas, enhance accessibility to employment and amenities, and invest in expanded transit networks to reach CARB’s greenhouse gas emissions reductions targets

Transportation Policy

- A set of government strategies, laws, regulations, and plans that guide how transportation systems are developed, operated, and maintained. It shapes how people and goods move within and between places—by road, rail, air, sea, bike, or on foot.
- Key elements of transportation policy typically include:
    - Infrastructure investment (e.g., highways, public transit, bike lanes, airports)
    - Mobility and access (e.g., ensuring all populations can get where they need to go affordably and safely)
    - Environmental goals (e.g., reducing greenhouse gas emissions, promoting clean transportation)
    - Safety regulations (e.g., traffic laws, vehicle standards)

    - Land use coordination (e.g., connecting transportation planning with how communities grow)
- CARB's transportation policies aim to greenhouse gas emissions and promote sustainable development

CARB

- Lead agency for climate change and air pollution programs in California to attain health-based air quality standards
- funds this project, the Sustainable Transportation and Communities Research Engaged Project (STCRCEP)
- Mission: to promote and protect public health, welfare, and ecological resources through effective reduction of air pollutants, while recognizing and considering effects on the economy

DAY OF CERAC FOCUS GROUP:

Run of Show

- Research Team: Review Checklist

- CERAC & RT Facilitators:

1. Review presentation/agree on who takes lead on what
2. Start group text for facilitators to communicate
3. Join the session at least 30m (Zoom) to 1 H (in person) early to help set up and mingle
4. Remind people to check their emails and

INTRODUCTION AND RESEARCH PROJECT PURPOSE

Hello, my name is _____ and I'm here with _____who are members of a UC Berkeley research team. Thank you for taking the time to speak with us today. UC Berkeley researchers, Charisma Acey and Margaretta Lin, as well as other research team members, Marisol Cantu, Erica Anjum, Raven Maier Bell, and Courtney Fong, are conducting a Sustainable Transportation and Communities Engagement research project for the California Air Resources Board. This research will identify research priorities so that CARB may better understand residents' priorities, visions, and needs for the future of their environments, with a specific focus on land use planning, housing, and transportation research.

We have heard over the years from frontline leaders of housing, environmental, and transportation justice movements that there is a history of public agencies sponsoring research projects whose outcomes do not directly benefit the communities most in need. In addition, academic research tends to be conducted in ways that do not include the active participation of community members most impacted by the research problems being studied. Growing evidence, however, demonstrates that the active involvement of community members in research projects tend to improve the quality of the research conducted and the outcomes produced.

As part of this research, we're speaking with grassroots community and government leaders to understand your research priorities for future CARB research projects. We also want to know your ideas for how researchers should engage with people on their research projects.

This focus group discussion will take 90 minutes. Focus group conversation will take 90 minutes. Each focus group participant will receive $75 as compensation for their time.

Can we record you today for note-taking purposes? We will transcribe this focus group discussion and remove any information that could identify the speaker. We will also summarize what we hear in the focus groups by region and topic AND will not be providing any names.

We wanted to share with you more information about CARB Sustainable Transportation & Communities Division and an example of the type of research that they have funded.

PAUSE AND SEE IF PEOPLE HAVE ANY QUESTIONS

WHO WE ARE

- **Community Based UC Berkeley Institute of Urban & Regional Development Researchers** – Principal Investigators Charisma Acey and Margaretta Lin are long-time environmental and racial justice community based participatory action research leaders.
- **Just Cities** – A nonprofit partnering with communities to co-create research, policy, and planning for better quality of life.
- **California Air Resources Board (CARB)** – A state agency protecting public health by addressing air pollution.
- **CARB's Sustainable Transportation & Communities Division (STCD)** – Focuses on healthier, more livable cities by reducing greenhouse gas emissions through research and policy.

PAUSE AND SEE IF PEOPLE HAVE ANY QUESTIONS

EXAMPLES OF RESEARCH PROJECTS

1. Land Use (UC Berkeley)

Title: *Potential State Roles in Expanding Transfer of Development Rights (TDR) as a Tool for Greenhouse Gas Reduction*

(*How California Can Support Land Swaps to Reduce Pollution and Protect Open Spaces)*

Explanation: This project looks at how the state can help expand programs that let communities shift where development happens—preserving open land and cutting down on pollution from things like long car commutes.

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2. VMT/Housing Equity (UC Davis)

Title: *California Housing and Transportation Costs: Impacts and Implications*

(*What It Really Costs to Live and Get Around in California—and Why It Matters for Equity)*

Explanation: This research explores how much Californians are spending on housing and transportation, and how those costs affect different communities—especially when it comes to fairness and access.

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3. California Climate Investments/Community Engagement (Cultural Geographics Consulting)

Title: *Tribal Engagement Strategy*

(*Working with California Tribes to Shape Climate Programs that Reflect Their Needs and Priorities)*

Explanation: This project is focused on building better partnerships with Tribal communities so they can help lead the design and implementation of climate investments across the state.

PAUSE AND SEE IF PEOPLE HAVE ANY QUESTIONS

RIGHTS OF PARTICIPANTS

RESEARCH TEAM MEMBER TO STATE THE RIGHTS OF RESEARCH PARTICIPANTS DURING THE FOCUS GROUP AND WHAT ARE THEY CONSENTING TO

1. **If any of the conversation is upsetting to you, you have the right to pause your participation in this focus group and return when you are feeling better.**

2. **You have the right to remove your consent at any time during this focus group conversation and end your involvement.**

3. **You have the right to request more information about the research project or clarify the questions to make sure you fully understand the information.**

4. **You have the right to decline to be audio recorded at any time during the focus group. When you speak, we will turn off the audio recording and take written notes. We will turn back on the audio recording after you speak.**

MEETING GROUND RULES should include

1. **Confidentiality**
   What's shared in the group stays in the group. People's stories and experiences should not be shared outside this space without their explicit permission.

2. **Respect Differences**
   We're here to hear a range of perspectives. All experiences are valid. Let's honor and respect different backgrounds, opinions, and identities.

3. **One Mic at a Time**
   Please allow one person to speak at a time. Let's listen fully to each other without interrupting.

4. **Speak from Your Own Experience**
   Use "I" statements and avoid generalizations. Share your truth, not someone else's.

5. **Step Up, Step Back**
   If you tend to speak often, make space for others. If you're more quiet, consider sharing so your voice is heard.

6. **No Judgment**
   This is a space for learning, not judgment. Disagreement is okay, as long as it's respectful.

7. Phones on Silent
   To stay present and focused, please silence your phone and avoid side conversations.

8. Take Care of Yourself
   You are not required to answer every question. Step out if you need a break. Do what you need to feel okay in this space.

9. Ask Questions with Care
   Be curious, not confrontational. If you don't understand something, ask respectfully.

10. Let the Facilitator Guide the Flow
    The facilitator is here to keep us on track and ensure everyone has a chance to speak. Please follow their lead.

FOCUS GROUP QUESTIONS

Berkeley UNIVERSITY OF CALIFORNIA Institute of Urban & Regional Development

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charisma.acey@berkeley.edu
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FOCUS GROUP QUESTIONS (listed in order of priority)

1. **Please share with us how you got started in working to improve your community? (optional and not priority)**

2. **What are some issues in land use, housing, and transportation that are impacting your community in either negative or positive ways that you would want to see researched?**

3. **If a team of researchers funded by the State came into your community to do research on a land use, housing, or transportation issue, how should they engage and communicate about their research project with the community?**

4. **What would you need to know about these researchers to help build trust with you?**

5. **What would you need to know about the research project in order to engage effectively with the project?**

6. **What kind of involvement would you want to have on that research project?**

7. **Would you want a decision-making role on that research project?**

8. **If you would want a decision-making role, what kind of decisions would you want to have influence over? For example, would you want to review that research project's conclusions, recommendations, and report before they go to the State?**

9. **What support or resources would you need in order to participate in that research project?**

10. **If you were part of the research project, would you want to be involved in sharing the results of the research such as co-writing articles or co-presenting with the researchers?**

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11. What outcomes would you like to see from having collaborated with those researchers in land use, housing, or transportation research?

12. Are there other questions you think we should have asked if we had more time?

MORE ACCESSIBLE CONSENT FORMS (ENGLISH & SPANISH)

CONSENT TO PARTICIPATE IN RESEARCH

Principal Investigators: **Margaretta Lin, JD; Charisma Acey, PhD, Institute of Urban & Regional Development**

***Title of Study*: CARB Sustainable Transportation & Communities Research Engagement**

Research Protocol: **IRB00000455 & IRB00005610**

Key Information

You are being invited to participate in a research study. Participation in research is completely voluntary.

The purpose of the study is to understand community priorities on land use, housing, and transportation research for California, as well as how best to engage with California communities historically excluded from State research.

The study will take a total of 90 minutes and you will be asked about 7 questions about your perspectives and experiences.

Risks and/or discomforts may include feelings that come up about past experiences or from hearing the stories of other participants.

The results from the study may include future State research projects that get developed based upon participants' information shared.

Procedures: If you agree to be in this study, you will be asked to be part of a focus group with other community members and asked questions regarding your perspectives and experiences on state-funded research and researchers regarding land use, housing, and transportation policies, projects, and plans.

Participation time: Your participation will take a total of *approximately 90 minutes (1½ hours)*.

Location: The focus group will take place at _____**.**

Benefits: It is hoped that the information gained from the study will help the State California Air Resources Board's Sustainable Transportation and Communities Division fund research projects that improve community benefits.

Risks/Discomforts

- Some of the focus group discussion questions may make you uncomfortable or upset, and you are free to decline to answer any questions you do not wish to, or to leave the group at any time. If you choose

to leave at any time during the focus group, you will still receive compensation to honor your time in showing up to participate.

Breach of confidentiality: As with all research, there is a chance that confidentiality could be compromised; however, we are taking precautions to minimize this risk.

Confidentiality

- We will keep all of the information provided during the focus group as confidential as possible, and we will strongly encourage all participants to do likewise. However, please be aware that we cannot ensure that participants will not disclose any information obtained during a focus group.

- The information you share will be handled as confidentially as possible. If results of this study are published or presented, individual names and other personally identifiable information will not be used.

- To minimize the risks to confidentiality, we will separate people's names from statements made during the focus group. We will also separate people's names from demographic information, such as race/ethnicity, gender, age, and location of the focus group. In addition, only members of the research team who have received training and certification in research ethical protocols will have access to focus group audio recordings and notes.

- During the focus group, we will only use audio recording to help us with note taking. Once we have transcribed the information from the focus group, we will destroy the audio recording. None of the notes will contain people's names attached to statements made.

- If someone in the focus group objects to the use of audio recording, we will stop recording when that person speaks and only take written notes. When the person who does not want to be audio recorded stops speaking, we will begin the audio recording.

- If you had agreed to audio recording before the focus group began and changed your mind, you have the right to do so. At any time during the focus group, you can ask to stop recording when you speak.

- Your personal information may be released if required by law. Authorized representatives from the following organizations may review our research data for purposes such as monitoring or managing the conduct of this study: California Air Resources Board, the University of California.

- ***Retaining research records:*** When the research is completed, we will delete the names of all research participants. However, we may retain research notes and information, separate from people's names, for up to 3 years. After 3 years, we will destroy the research notes and information.

Compensation

In return for your time and effort, you will be paid *$75* for taking part in this study.

Treatment and compensation for injury

It is important that you promptly tell the researcher *Margaretta Lin*, if you believe that you have been injured because of taking part in this study. You can tell the researcher in person or contact her at margarettalin@berkeley.edu.

If you are injured as a result of taking part in this study, University of California will provide necessary medical treatment. The costs of the treatment may be billed to your insurer just like other medical costs, or covered by the University of California or the study sponsor California Air Resources Board, depending upon a number of factors. The University and the study sponsor do not normally provide any other form of compensation for injury. For more information, call OPHS at (510) 642-7461.

Rights

Participation in research is completely voluntary. You have the right to decline to participate or to withdraw at any point in this study without penalty or loss of benefits to which you are otherwise entitled.

Questions

If you have any questions or concerns about this study, you may contact *Principal Investigator Margaretta Lin* at *margarettalin@berkeley.edu*.

If you have any questions or concerns about your rights and treatment as a research subject, you may contact the office of UC Berkeley's Committee for the Protection of Human Subjects, at 510-642-7461 or subjects@berkeley.edu.

****

CONSENT

You will be given a copy of this consent form to keep.

If you wish to participate in this study, please sign and date below.

_____ _____

Participant's Name *(please print)* Date

_____ _____

Participant's Signature Date

_____ _____

Person Obtaining Consent Date

CONSENTIMIENTO PARA PARTICIPAR EN UNA INVESTIGACIÓN

Investigadores principales: **Margaretta Lin, JD; Charisma Acey, PhD, Instituto de Desarrollo Urbano y Regional**

***Título del estudio*: Participación Comunitaria en la Investigación y Transporte Sostenible de la Junta de Recursos del Aire de California (CARB)**

Protocolo de investigación: **IRB00000455 y IRB00005610**

Información clave

Se le invita a participar en un estudio de investigación. La participación en la investigación es completamente voluntaria.

El propósito de este estudio es entender las prioridades de la comunidad en las investigaciones sobre el uso del suelo, la vivienda y el transporte en California, así como la mejor manera de colaborar con las comunidades de California que han sido históricamente excluidas de la investigación estatal. El estudio tomará un total de 90 minutos y se le harán aproximadamente 7 preguntas sobre sus perspectivas y experiencias.

Los riesgos y molestias pueden incluir sentimientos que surjan de experiencias pasadas o al escuchar las historias de otros participantes.

Los resultados de este estudio pueden incluir futuros proyectos de investigación estatal que se desarrollen con base en la información compartida por los participantes.

Procedimientos: si usted acepta participar en este estudio, se le solicitará que forme parte de un grupo de enfoque con otros miembros de la comunidad y se le harán preguntas sobre sus perspectivas y experiencias relacionadas con los investigadores y la investigación con financiamiento estatal sobre las políticas, proyectos y planes relacionados con el uso del suelo, la vivienda y el transporte.

Duración de la participación: su participación tomará *un total aproximado de 90 minutos (una hora y media)*.

Ubicación: el grupo de enfoque se llevará a cabo en _____**.**

Beneficios: se espera que la información obtenida del estudio ayude a la División de Comunidades y Transporte Sostenible de la Junta de Recursos del Aire del Estado de California (California Air Resources Board, CARB) a financiar proyectos de investigación que mejoren los beneficios para la comunidad.

Riesgos y molestias

- Algunas de las preguntas que surgirán durante la conversación del grupo de enfoque podrían causarle incomodidad o molestia, y usted tendrá la libertad de negarse a responder las preguntas que no desee responder y podrá abandonar el grupo en cualquier momento. Si usted decide abandonar el grupo de enfoque en algún momento, de todos modos recibirá una compensación por el tiempo que dedicó para participar.

Violación de la confidencialidad: como en toda investigación, existe la posibilidad de que la confidencialidad esté en riesgo; sin embargo, estamos tomando precauciones para minimizar este riesgo.

Confidencialidad

- Haremos todo lo posible por preservar la confidencialidad de toda la información que se proporcione durante el grupo de enfoque y les recomendamos enfáticamente a todos los participantes hacer lo mismo. No obstante, tenga en cuenta que no podemos garantizar que los participantes no divulguen ninguna información que obtengan durante un grupo de enfoque.

- La información que usted comparta se tratará de la manera más confidencial posible. Si se realiza la publicación o presentación de los resultados de este estudio, no se usarán los nombres de las personas ni otros datos con los que sea posible identificarlas.

- Para minimizar los riesgos relacionados con la confidencialidad, mantendremos separados los nombres de las personas de las declaraciones que realicen durante el grupo de enfoque. También mantendremos separados los nombres de las personas de su información demográfica, por ejemplo, raza o etnia, género, edad y ubicación del grupo de enfoque. Además, solo los miembros del equipo de investigación que hayan recibido la capacitación correspondiente y estén certificados en protocolos éticos de investigación tendrán acceso a las grabaciones de audio y las notas del grupo de enfoque.

- Durante el grupo de enfoque, solo haremos grabaciones de audio para ayudarnos a tomar notas. En cuanto hayamos transcrito la información del grupo de enfoque, destruiremos la grabación de audio. En ninguna de las notas se relacionará el nombre de la persona con la declaración que haya realizado.

- Si alguna persona del grupo de enfoque objeta el uso de las grabaciones de audio, dejaremos de grabar cuando esa persona hable y solo tomaremos notas por escrito. Cuando deje de hablar la persona que no desea ser grabada, reanudaremos la grabación de audio.

- Si usted acepta la grabación de audio antes de que el grupo de enfoque comience, tiene derecho a cambiar de opinión después. En cualquier momento de la reunión del grupo de enfoque, puede solicitar que se deje de grabar mientras usted habla.

- Es posible que su información personal se divulgue, si así lo exige la ley. Los representantes autorizados de las organizaciones a continuación podrían revisar los datos de nuestra investigación con el propósito de

supervisar o dirigir la conducta de este estudio: Junta de Recursos del Aire de California, la Universidad de California.

- ***Conservación de registros de la investigación:*** una vez que concluya la investigación, borraremos los nombres de todos los participantes. Sin embargo, es posible que conservemos notas e información, por separado de los nombres de las personas, por hasta 3 años. Una vez transcurridos 3 años, destruiremos las notas y la información de la investigación.

Compensación

A cambio de su tiempo y esfuerzo, se le pagarán *$75* por participar en este estudio.

Derechos

La participación en la investigación es completamente voluntaria. Usted tiene derecho a negarse a participar o a retirarse de este estudio en cualquier momento sin penalización y sin perder otros beneficios a los que tenga derecho.

Preguntas

Si tiene preguntas o inquietudes sobre este estudio, puede comunicarse con *Margaretta Lin, investigadora principal,* en *margarettalin@berkeley.edu*.

Si tiene preguntas o inquietudes sobre sus derechos y el tratamiento como sujeto de investigación, puede comunicarse con la oficina del Comité para la Protección de Sujetos Humanos de la Universidad de California (UC) en Berkeley al 510-642-7461 o en subjects@berkeley.edu.

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CONSENTIMIENTO

Recibirá una copia de este formulario de consentimiento para que lo conserve.

Si desea participar en este estudio, por favor firme y escriba la fecha a continuación.

_____	_____
Nombre del participante *(letra de molde)*	Fecha
_____	_____
Firma del participante	Fecha
_____	_____
Persona que obtiene el consentimiento	Fecha