

Advancing Equitable Community-based Transportation Planning

An Evaluation of the Sustainable Transportation Equity Project & Clean Mobility Options Programs



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The Othering & Belonging Institute at the University of California, Berkeley, advances groundbreaking research, policy, and ideas that examine and remediate the processes of exclusion, marginalization, and structural inequality—what we call othering—to build a world based on inclusion, fairness, justice, and care for the earth—what we call belonging.

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Contents

Disclaimer	i
Abstract	1
Introduction	2
Project Overview	4
Research Process and Methods	6
Literature Review	14
Primary Document Review: Phase 1	29
Preliminary Findings for Further Evaluation	40
Stakeholder Interviews	53
Interview Findings	54
Recommendations	91
References	104
Appendix A: Primary Document Review Detailed Methods and Findings	112
Appendix B: Interview Guides	130

Abstract

IN RESPONSE TO THE NEED to reduce greenhouse gas emissions while reducing transportation inequities, the California Air Resources Board launched two clean mobility grant programs that fund community transportation needs assessments, planning, and project implementation in disadvantaged communities. This report details an evaluation of these programs based on a review of primary grant documents, participant observation during technical assistance with grantees, and interviews with 55 stakeholders, including state agency staff, grant awardees, grant applicants who were not awarded funding, and transportation equity advocates and leaders. The evaluation identified program successes, including meaningful steps to build equity into transportation planning and implementation, and opportunities to develop innovative transportation solutions not ordinarily funded through usual pathways. The evaluation also identified a number of challenges and barriers to success, including the need to overcome a legacy of distrust between state government and equity-seeking communities, limited organizational capacity to apply for grants and execute grant program requirements, a perception of inequitable selection processes, and bureaucratic hurdles in paying for effective community engagement. The programs are also limited in their ability to address the basic infrastructure needs in many disadvantaged communities, which is a precursor to deploying successful innovative transportation solutions. The report offers recommendations intended to address programmatic issues, equity concerns, and questions raised throughout the project research activities to support improved institutional and community capacities for equitable transportation. Importantly, recommendations include the need to establish an accountability plan that communicates programmatic changes, or limitations to those changes, and responds to community equity concerns.

Introduction

TRANSPORTATION HAS BEEN A CATALYST for social injustice and justice across history. From the freeways that cut off African American neighborhoods, to the train tracks that facilitated land grabs by colonial settlers, to the Underground Railroad and other community networks that opened pathways to greater freedom, the history of social equity is shaped by transportation. Today, transportation continues to be critical for mobility but has the added importance of being a linchpin to solutions to the climate crisis. As the sector that generates the greatest amount of greenhouse gasses (GHGs), transportation must also be transformed to reduce carbon emissions. Transportation planning has the potential to transform transportation to facilitate equitable mobility, be responsive to marginalized communities, and achieve solutions to the climate crisis.

California has adopted various laws and programs intended to address the climate crisis in ways that address the particular challenges and inequities faced by marginalized communities. In 2012, the Legislature passed, and Governor Edmund G. “Jerry” Brown signed into law, Assembly Bill (AB) 1532 (Pérez, Chapter 807, Statutes of 2012), authorizing the state’s cap-and-trade program, and Senate Bill (SB) 535 (De León, Chapter 830, Statutes of 2012), followed in 2016 by AB 1550 (Gomez, Chapter 369, Statutes of 2016). SB 535 and AB 1550 provide direction for how cap-and-trade auction proceeds must be invested to benefit disadvantaged communities.

The California Air and Resource Board (CARB) categorizes the programs it develops for disadvantaged and low-income communities as equity programs. CARB’s programs that are aimed primarily at producing socioeconomic benefits receive Cap-and-Trade Program funding but do not have GHG reduction as their primary goal. A February 2021 report by the State Auditor audited CARB transportation programs intended to reduce GHG emissions and determined that CARB must do more to help the state

work strategically toward its climate change goals.¹ The report also found that CARB does not evaluate programs to determine whether they achieve intended socioeconomic benefits.

In this context, CARB launched the Clean Mobility Options (CMO) Voucher Pilot Program and Sustainable Transportation Equity Project (STEP)—two initiatives providing funding to local public and nonprofit agencies involved in transportation planning. These programs are incentive projects that are part of a broader, layered set of processes involved in the funding, regulating, planning, and implementation of transportation systems—with important dynamics at play from the neighborhood level to transnational geopolitics and markets. Racism and social inequities have proven to be remarkably fluid and resilient over time, reproducing marginalization in new ways that adapt to attempts to achieve justice.² Whether the CMO and STEP programs achieve their intended outcomes depends on how the projects they support fit into these complex sets of actors and historic processes, and that they are sustained with sufficient funding.

This report is the result of an evaluation analyzing how well community transportation needs assessments carried out through the CMO and STEP programs facilitate equitable transportation planning, and identifying opportunities for improving program accessibility and delivery. Part 1 documents the early stages of research carried out for the evaluation, including a review of academic and professional literature, agency documents, and related public comments and advocacy; direct observation during technical assistance (TA) activities; and input from community leaders through community accountability sessions. Part 2 reports findings from in-depth interviews with stakeholders as well as a second phase of reviewing documents, and additional community accountability sessions.

1 California Air Resources Board Report, *Improved Program Measurement Would Help California Work More Strategically to Meet Its Climate Change Goals* (California State Auditor, February 2021), 2020–114.

2 See for instance the Racial Disparities Dashboard, <https://belonging.berkeley.edu/racial-disparities>, which compares conditions of Black and White households in the US between 1970 and 2020 across various domains.

Project Overview

THE OTHERING & BELONGING INSTITUTE (OBI) at the University of California, Berkeley, has carried out a multi-year project sponsored by CARB to:

1. provide technical assistance (TA) to STEP Planning and Capacity Building grantees to advance STEP program objectives;
2. identify and implement effective methods to evaluate existing community transportation needs assessment (CTNA) approaches and resources;
3. develop strategies and resources and recommended policies for the inclusion and centering of people who have been traditionally left out of, excluded from, and marginalized in community-based transportation planning;
4. develop recommendations to improve CTNA approaches and processes so they have broader impact beyond CARB's investments; and
5. facilitate stakeholder and interagency coordination to identify and address barriers in grant application processes and to design more equitable programs.³

OBI has collaborated with the Institute for Transportation Studies and the Center for Regional Change at the University of California, Davis, to carry out the evaluation process. As research entities independent of CARB, we seek to provide critical review of pilot programs that constructively informs the planning for future investments in programs. The evaluation focuses on five interrelated questions:

- Application and Selection Process: How equitable is current CMO and STEP program design with respect to CTNA funding?

³ This project falls under contract 20MSC007, which covers the period of June 1, 2021, through January 31, 2024, for a total amount of \$1,024,328.

- CTNA Implementation: What are the strengths and weaknesses of the approaches used to identify community transportation needs?
- CTNA Outcomes: How well do CTNAs lead to the implementation of solutions?
- TA and Capacity Building: What are the key capacities that are associated with a successful CTNA?
- Program Design and Practice for Effective CTNAs: How can programs support greater, more equitable impacts for CTNAs?

The project is grounded in an overarching Community Accountability Process that ensures research is anchored in reciprocal and accountable collaboration with members of communities directly impacted by transportation inequities. The research outcomes will reflect the perspectives expressed by community advocates and practitioners working on these issues. This process is characterized by iterative phases of data collection, analysis and synthesis, and collaborative learning with a network of community advocates and practitioners.

Research Process and Methods

THE EVALUATION IS A MIXED-METHODS STUDY with several stages of data analysis and various points for community stakeholders to engage in the process.

The evaluation was carried out through the following methods of research and engagement:

- **Primary Document Review:** A review of background documents such as CARB-issued program materials and public feedback related to the CMO and STEP programs to gain insights into the context, design, and implementation process for CMO CTNAs and STEP Planning and Capacity Building grants.
- **Literature Review:** A systematic review of academic and professional writing related to equitable community-based transportation planning.
- **Participant Observation during TA for STEP Grantees:** OBI has engaged in extensive observation through the team's involvement in providing TA to eight STEP Planning and Capacity Building grants in Anaheim, Bakersfield, Isla Vista, Oakland, San Bernardino, San Diego, Solano County, and South El Monte, in California.
- **Community Accountability Process:** A process for community stakeholder collaboration on the interpretation of findings and research planning to iterate the process and outcomes throughout the project.
- **Interviews of Stakeholders:** Semi-structured interviews conducted with state agency staff, CMO and STEP grantees, applicants not awarded funding, and community leaders involved in equitable transportation advocacy.

Each of these methods is described in more detail below. Table 1 shows the phases of the evaluation process and the key activities in each phase.

TABLE 1

Evaluation process and key activities

	PHASE	KEY ACTIVITIES
1	Background Research	Background Interviews and scoping Literature Review Primary document review (Phase 1)
2	Preliminary Discovery Report	Community accountability sessionsw Written synthesis
3	Key Informant Interviews	Community accountability sessions Update list of contacts to be interviewed Primary document review (Phase 2) to inform interviews Conduct interviews
4	Evaluation Findings Workshop	Analyzing data Drafting findings Community accountability sessions Update draft findings
5	Research Report	Draft recommendations Community accountability sessions Update recommendations Public comment period Final edits and design of report
6	Report Distribution	Publish final report Distribute Evaluation

Community Accountability Process

At each stage of the research process, we organized sessions for community partners to identify key needs of historically underserved communities that would be impacted by the work of this contract. This process entailed a series of feedback loops where the research team presented and listened to leaders of communities impacted by transportation injustices. This input shaped new questions, sharpened reflections, and surfaced new findings that guided the next phase of research.

The following principles guided the design, implementation, and iteration of the Community Accountability Process:

- Cocreation of knowledge and solutions with members of low-income communities of color and transportation equity advocates
- Reciprocal relationships that orient the project to serve the needs and interests of impacted community members
- Action-oriented planning that functions to identify and advance solutions for more equitable transportation planning
- Generative process that allows community members to envision and articulate their analysis of problems and solutions
- Transparency and accountability in the research, planning, and communications carried out by the research team

During each stage of the research process, there was an opportunity for community members to provide insight and direction on next steps. Across the process, the research team facilitated collaboration with community leaders convened as a cohort of Leaders in Residence, and through Community Accountability Sessions for which invitations were sent to various networks and stakeholder contacts.

- **Leaders in Residence (LIR):** The LIR is a cohort convened by this project and made up of individuals who have deep experience working in and with equity-seeking communities, including low-income, immigrant, and communities of color, to develop and advance strategies related to equitable transportation. The LIR were supported to cocreate strategic interventions that would serve as tools for disadvantaged communities to engage more powerfully and effectively in equitable transportation planning. In addition to the cocreation of tools and resources, the LIR provided their expertise by creating a set of recommendations to serve as guidance in equitable transportation planning.
- **Community Accountability Sessions:** The research team held three community accountability sessions during the evaluation process (on 11/29/22, 5/5/23, and 10/13/23). During each session, participants actively discussed the research process, preliminary findings, and additional issues and planning steps to be considered.

Primary Document Review

The purpose of this initial document review was to identify key program goals, requirements, guiding principles and frameworks, and themes of stakeholder feedback to inform the research questions for subsequent evaluation activities. The background document review focused on program-specific materials, either publicly available or provided to the research team by CARB, including:

- program solicitation documents and funding guidelines;
- application templates and grant agreement templates;
- public outreach materials including presentations, websites, and fact sheets; and
- CARB notes and transcripts of comments from public meetings, and copies of attendee survey responses, questions, and other written correspondence.

Researchers requested all relevant program materials from CARB and reviewed the CMO and STEP websites to identify additional documents. Then, researchers separated the document review into two parts: a review of materials issued by CARB and its contractors (categorized as “Formal Program Materials”) and a review of materials created by or containing input from external organizations and individuals such as prospective applicants, government agencies, and other members of the public (categorized as “Public Feedback Materials”). A more detailed description of the review methodology and results can be found in appendix A.

Participant Observation in Engagement with STEP Planning Grantees

Over the last year, OBI staff has provided individualized TA for eight grantees awarded a STEP Planning and Capacity Building grant. The TA process and activities entailed the following:

- **Listening Sessions:** To initiate the relationship-building process with grantees, OBI staff coordinated listening sessions with each grantee, their project team, the CARB project liaison, and the OBI staff. Listening sessions were an hour-long and semistructured with questions covering topics such as goals and objectives for the project, partnership structure and governance, intended project outcomes, and TA expectations. Based

on the listening sessions, documentation review of the grantees' grant agreements, and meetings with CARB staff, OBI cocreated individualized TA service plans to best implement equity strategies in the hopes of prioritizing the needs of the most impacted communities.

- **One-on-One Thought Partnership:** Scheduled, as necessary, between the lead TA staff and the project team, these meetings were used to troubleshoot feedback presented in at-large team meetings, present equity tools, and codevelop agendas for upcoming programming.
- **Project Team Meetings:** The lead TA service provider attended, as requested, project team meetings scheduled by the project team. During these project team meetings, the OBI TA service provider attended in a listening capacity unless otherwise instructed by the project team.
- **CARB Coordination Meetings:** Scheduled monthly between OBI staff and the CARB project liaisons, these meetings allowed for the entire team to discuss major project updates, be a sounding board for any proposed ideas or strategies for a specific project, and create an environment for exchange of ideas.
- **Office Hours:** Hosted weekly in two-hour time frames, office hours are a space for grantees and their community partners to drop by and ask questions or troubleshoot any ideas or strategies that might require additional thought partnership. Office hours were conducted through the first three quarters of the contract with minimal attendance. Office hours have been suspended until further notice.
- **Competencies for Equity in Transportation Planning:** In collaboration and partnership with Pueblo Planning, OBI codeveloped and hosted a three-part interactive workshop series on Relationships, Reciprocity & Respect. The workshop series is based upon Pueblo Planning's philosophy on justice-centered planning with the goal of repair.

Literature Review

The purpose of the literature review was to identify key themes from the academic and professional literature on community-based needs assessments. The research team identified academic research on needs assessments from a range of fields, including transportation, public health, education, and evaluation methods. The review includes research on community-centered planning processes and research methods. Several examples of community-based needs assessments in practice were included to contextualize the academic research.

Stakeholder Interviews

The purpose of the interviews was to understand experiences and viewpoints of the key informants in various positions related to the programs, including state agency staff, grantees, applicants denied, and stakeholders in communities highly impacted by transportation inequities. The interviews sought to document the motivation and beliefs of people with diverse backgrounds, opinions on relevant issues, and recommendations for improving programs and processes. This process has yielded data to support the development of a rigorous evaluation that analyzes processes and expected outcomes related to the specific procedures of the equity pilot programs. This brief presents findings and recommendations that surfaced through the interview process.

Researchers interviewed individuals from four categories, and this report refers to them as Categories 1, 2, 3, and 4:

Category 1: State agency staff from CARB, Caltrans, and the California Energy Commission and consultants contracted to provide technical assistance (TA) or other services related to the programs (fifteen interviewees)

Category 2: Staff from STEP and CMO grantees/awardees, including local transportation agencies and nonprofit organizations that have received funding through the CMO and STEP programs for needs assessments, Planning and Capacity Building grants (as well as subsequent CMO mobility vouchers or STEP Implementation Grants in some cases) (twelve interviews)

Category 3: Transportation equity advocates and community leaders in areas highly impacted by transportation inequities (seventeen interviews)

Category 4: People engaged in equitable transportation planning not supported by the state programs, including those who were applicants but were not awarded grants (eleven interviews)

The research team interviewed fifty-five people across the four categories. Interviewees were selected to represent a variety of areas in California; excluding Category 1 participants, about 30% were from the Bay Area, about 30% were from Southern California (including Los Angeles, San Diego, and the Inland Empire), and about 40% were from the Central Valley (including Sacramento). Interviews were conducted via Zoom and lasted between thirty and sixty minutes. Interviews were recorded and transcribed by Zoom's automated transcription service. The research team then proofread the

transcriptions and systematically categorized portions of the text with tags called codes that help summarize and prepare the interviews for analysis. The research team developed an initial set of codes as they analyzed the first few transcripts, then met to discuss these observations to generate a common set of codes that they used to analyze the remainder, with some variations to account for different perspectives across the four categories of interviewees. The team then consolidated the findings into a set of themes within each interview category.

Once the initial analysis was completed, the research team presented those findings to a group of community-based transportation equity experts. This group included several people who work professionally in transportation equity advocacy: former members of the Transportation Equity and Environmental Justice Advisory Group convened by the University of California, Davis; individuals who have served as equity advisors on research projects; and participants in the Environmental Justice Leaders program housed at the UC Davis Institute of Transportation Studies. Most importantly, all participants had lived expertise in dealing with transportation inequities. Based on further analysis and feedback from the equity experts, the research team then consolidated the themes across the four categories presented in this report. The evaluation that follows represents a cohesive set of findings that reflect prominent observations about the pilot programs from individuals knowledgeable about them. Quotes are identified by interview category and interview number to protect anonymity.

Iterative Research Design

The initial scope of the evaluation component of this project aimed to evaluate the CTNAs funded by CMO and STEP by developing quantitative metrics of effectiveness, engagement, and execution processes and through qualitative analysis of interviews with grant recipients. The purpose of this scope was to understand the strengths and limitations of CTNAs and to develop recommendations to ensure that CTNAs supported equitable outcomes and funding opportunities.

During initial data gathering and background interviews, the research team, in consultation with CARB staff, deemed it necessary to broaden the scope of the evaluation. In this discovery phase, discussions with individuals knowledgeable with the grant programs identified, among other issues, challenges that grantees faced in implementing the CTNAs that pointed to more systemic issues. These initial interviews also raised questions about why certain organizations were selected for CTNA funding and why others were unsuccessful.

Thus, to understand fully the effectiveness of CTNAs, it was necessary to gain a holistic view of how organizations engaged with collaborators and CARB in the granting process, barriers to success in obtaining funding and executing programs, and larger questions related to the design of the CMO and STEP programs and their potential for advancing transportation equity. This led to a need to interview both recipients and non-recipients of funding, which prompted the research team to explore a larger set of questions not solely focused on CTNAs. While the interviewers included several questions about the use and implementation of CTNAs (see appendix), all interviewees engaged in a much broader discussion with passages about CTNAs specifically making up a small proportion of the interview data. The analysis that follows reflects this shift in scope from a central focus on CTNAs to a broader program evaluation that came about during the research process.

Literature Review

Introduction

Needs assessments are one of the first phases of the transportation planning process, as planning agencies go from inventorying the existing conditions to executing the plan by implementing identified projects. They help identify where there is demand for transportation infrastructure or services and guide the agency in plans to meet that demand. Needs assessments are typically led by transportation agencies responsible for developing the plan and involve some level of community input. In some cases, the assessments could be led by the communities themselves as part of the planning process or to advocate for investment. One description of the transportation needs assessment requires evaluators to conduct a demographic analysis, compare existing conditions with peer agencies or locations, and engage the community in data collection about needs (Stoddard et al. 2012).

Needs assessments are common in other fields, particularly organizational, community, and educational development, and much of the theory about conducting needs assessments comes from those fields. This literature review examines the background and theory of needs assessments in transportation and other fields, how equity is defined and applied in needs assessments, metrics used to measure equity in needs assessments, and community engagement and leadership in needs assessments. The background in this section contextualizes the remainder of the report and provided a framework for the subsequent phases of the evaluation.

Needs Assessments in Transportation and Beyond

Definitions

Needs assessments are structured means for individuals, organizations, communities, or societies to understand gaps in existing conditions. They require evaluators to judge needs, as opposed to wants or desires, and determine what deficiencies in outcomes or outputs exist and how to address them (Watkins, Meiers, and Visser 2012). They can concentrate on strategic needs that focus on long-term success, tactical needs that focus on short-term organizational or community deficiencies, individual performance needs that focus on personal accomplishments, and learning needs that address gaps in skill and knowledge (Sleezer, Russ-Eft, and Gupta 2014). Different models for needs assessment exist, and different methods can be used depending on the audience of the assessment, what component of needs the assessment will address, and the criteria for evaluation (Watkins et al. 1998).

Despite the variety in focus and purpose of needs assessments, they tend to follow a common three-phase framework (Altschuld and Watkins 2014; Watkins, Meiers, and Visser 2012). The first phase of preassessment identifies the needs, using secondary data sources to determine whether there are gaps in critical outcomes. In transportation, this preassessment would include analysis of US Census data, transportation services and infrastructure, community resources, and other data sources that yield insights into access gaps. The second phase of assessment analyzes the needs, often collecting original data from surveys and interviews to conduct a causal analysis of the gaps. For transportation purposes, these sources might yield both quantitative and qualitative information on the barriers to access. The final phase of postassessment is meant to decide on solutions to the identified needs and evaluate the needs assessment process. Successful needs assessments engage multiple and diverse stakeholders early and throughout the process who are empowered to meaningfully advise, review, and contribute to the assessment. The literature on needs assessments emphasizes that identifying the gaps between “the way things are and the way things could be” helps open up potential solutions for addressing needs rather than pre-identifying solutions that address only inputs (Watkins, Meiers, and Visser 2012, 16).

Actors and Actions in Needs Assessments

Transportation needs assessments should identify gaps in mobility and access. At the regional or municipal level, these assessments might be realized as the precursor to long-range transportation plans or transportation elements of general plans. Plans express a desired future with respect to environmental, economic, livability, equity, and other goals and the means to achieve those goals. At a neighborhood level, needs assessments might focus on more tactical gaps, examining barriers to specific modes of transportation or access to particular destinations.

While many transportation needs assessments are likely to be conducted by professional planners and staff, community members are typically in the best position to provide insight into the mobility and access barriers they face daily (Untokening Collective 2017). Community-based transportation needs assessments engage community members to identify and address mobility and access needs and perceptions of needs. These assessments might involve community members leading the evaluation by conducting outreach, designing questions, and analyzing data. They may be led by research institutions, government agencies, or community-based organizations and often involve analyzing demographic characteristics, conducting surveys of the population, and gathering qualitative information via focus groups or interviews. While the general framework of conducting needs assessments is likely to be the same no matter where they are done, the contours of the process must be adapted to ensure it is relevant to the community members participating (Creger, Espino, and Sanchez 2018; TransForm 2020). Community-based transportation needs assessments can form the foundation of a transportation decision-making process rooted in justice and equity (Creger, Espino, and Sanchez 2018; California Mobility Justice Advocates 2021).

Methods and Examples

A detailed guide to conducting transportation needs assessments based on principles of transportation equity outlines a three-step process, similar to that identified in the introduction of this literature review: locate and profile communities of concern, inventory and assess mobility needs, and involve the community in the process (Williams et al. 2021). Communities of concern may be defined in ways specific to the region or city in which the assessment is conducted; current practice typically includes identifying the relative concentrations of people of color and low-income people and may include locally relevant characteristics associated with transportation vulnerability (Ezike, Tatian, and Velasco 2020). Inventorying mobility needs requires extensive

data collection from secondary sources, like US Census data, land use maps, travel demand models, and primary data sources, like field observations, surveys, interviews, and focus groups. Analytical methods include geographic information systems overlays of transportation and land use assets on communities of concern, sketch mapping, and coding and synthesizing qualitative data. Community engagement in the process is not saved for the end of the evaluation to share and critique results, but should be started at the beginning of the exercise to ensure cocreation in the evaluation process. Community-based transportation needs assessments prioritize the community engagement aspect of the work, with community leaders as individuals or community-based organizations conducting the assessments themselves or codesigning the evaluation with professional staff. Community-led needs assessments presume the organizations have internal capacity to conduct the work and resources to support them.

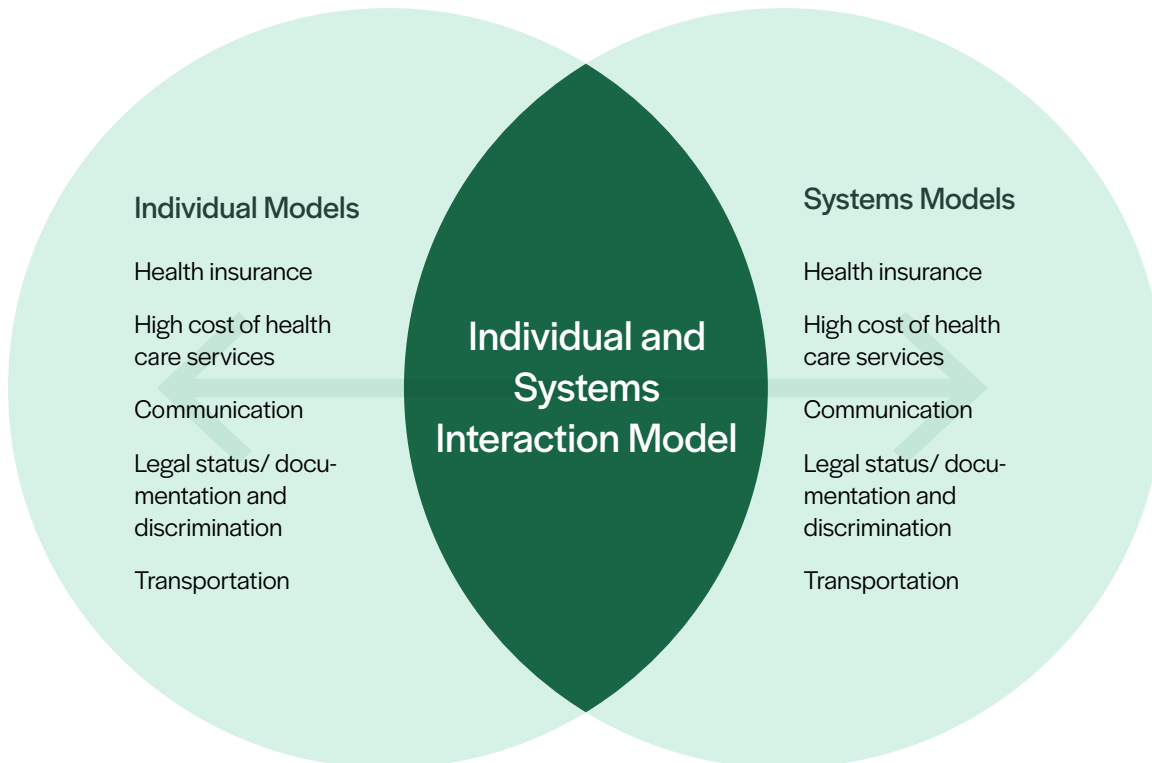
While there are few examples of community-based transportation needs assessments in academic literature, several reports document how universities, community members, and nongovernmental organizations (NGO) have worked together to conduct them. Researchers at Portland State University collaborated with OPAL Environmental Justice Oregon, an environmental justice NGO, to lead a community-based needs assessment for smart transportation technologies in disadvantaged communities in East Portland, Oregon (Golub et al. 2018). The researchers conducted two focus groups to understand challenges and barriers to shared mobility in neighborhoods of color in the city. They then conducted in-person and online surveys of transit riders at public events in East Portland to gather more data on basic transportation access; new transportation technologies; access to internet, banking, and mobile apps; access to electric vehicle (EV) charging; and suggestions for policy. The study found multimodal travel behavior was common among low-income groups and people of color and that they would respond favorably to smart technologies. However, there were disparities in access to banks and credit, making the use of shared, smart transportation technologies more difficult.

TransForm, a transportation and housing equity NGO, led a community-based transportation needs assessment in partnership with Shared-Use Mobility Center, a public-interest nonprofit, and the Metropolitan Planning Commission of San Francisco Bay Area. The needs assessment supported the implementation of three mobility hubs in the region meant to improve access and reduce GHG emissions for low-income housing residents (TransForm 2020). The researchers collected data via focus groups and surveys. They found that residents relied on public transportation primarily and would

prefer to receive transit-related benefits such as transit passes and cash over other kinds of transportation benefits like bike and e-scooter sharing. Residents also indicated they were interested in car sharing, but many did not have a driver's license. Like the East Portland residents, study participants were mostly unbanked or underbanked, preventing the use of many shared mobility options that rely on having access to a bank account or credit card.

Some examples of needs assessments stop at the pre-assessment phase—identifying the community context—yet still identify significant gaps in transportation access. A coalition of special needs transportation partners, the King County Mobility Coalition, conducted a needs assessment for disadvantaged populations in King County, Washington, using a literature review focused on emerging trends and recurring needs (King County Mobility Coalition 2021). The literature review was supplemented and validated by the professional knowledge and experience of the coalition partners. The review covered reports, surveys, project findings, and event summaries focused on King County communities but did not examine academic literature. Specific needs and locations within the service areas were identified. The top five needs included better rural and suburban access to employment and medical centers, better within-neighborhood access in rural and suburban areas, removing barriers to specialized transportation services for populations who speak limited English, better information about specialized transportation options, and off-peak access to employment. The report did not identify solutions (postassessment); rather, it was framed as a foundation for future actions.

While transportation needs assessments focus on gaps in access to mobility broadly, needs assessments in other fields may identify transportation as one of several barriers or gaps in access to their specific domain. Public health research, in particular, often identifies transportation as a major need to be addressed with respect to health-care access by low-income, disadvantaged, or marginalized individuals. For example, a coalition of researchers and community partners conducted a health needs assessment in a rural Hispanic community in Texas (Cristancho et al. 2008). They used a method they called community-based participatory action research, a combination of community-based participatory research and participatory action research (described in more detail in the Community-Based Participatory Research section), where they aimed to empower communities by both teaching and learning from them about how to address major health concerns through community partnerships. The researchers conducted focused, small group discussions to collect data on perceived barriers to health care, including transportation. The findings were guided by a vulnerability model of perceived access barriers identifying the interaction between individual and

FIGURE 1**Interaction of individual and system-level barriers to health care**

Source: Cristancho et al. (2008).

systems-level barriers that prevented access to health care, including health insurance, the high cost of health-care services, communication, legal residency status, and transportation (figure 1).

Systems-Level Analysis; Power and Transformation

Most examples of needs assessments examined for this review yield solutions for a particular, identified need, such as improving destination accessibility by implementing a car-sharing service available for unbanked users or eliminating last-mile barriers to transit. They tend not to address the upstream, systems-level change often needed to effectuate equity-based solutions. Likewise, early theoretical criticism of needs assessments brought to light their excessive focus on deficit models of access to resources (Altschuld and Watkins 2014). This focus ignores the systemic issues that have caused the gaps in equity-seeking communities in the first place, such as historic disinvestment and lack of access to power. However, employing techniques such as root cause analysis, fault tree analysis, and concept mapping while conducting a needs assessment can help identify systems-level causes for the gaps between inputs and outcomes (Watkins, Meiers, and Visser 2012).

General approaches to equity-based and justice-oriented transportation planning apply in the narrower case of transportation needs assessments as well. Scholars have argued that traditional approaches to equity analyses based on interpretation of environmental justice standards are insufficient to advance equity because they perpetuate the status quo and are not attentive to the root causes of inequities (Sanchez, Stolz, and Ma 2003; Marcantonio et al. 2017). Agencies are often hesitant to implement affirmative equity approaches when they lack the training, understanding, or guidance about how to do so (Barajas et al. 2022). However, legal frameworks like Title VI of the Civil Rights Act allow for agencies to correct historic neglect and disinvestment in communities of color by adopting a standard of restorative justice for their planning and programming (Martens and Golub 2021). Others have argued that the progressive transfer of decision-making power to communities is a necessary precondition for moving from an equity perspective to a justice perspective because government actors are limited in what they can achieve (Karner et al. 2020).

Nevertheless, some transportation agencies have adopted a stakeholder power analysis in their equity-focused work. For example, the City of Portland's Bureau of Planning and Sustainability published a decision support tool guiding implementation of their equity framework calling for attentiveness to stakeholders with less power to influence the scoping, design, implementation, and evaluation phases of transportation projects (City of Portland Bureau of Planning and Sustainability 2014). The tool kit has helped shift policy goals to better meet community needs. In a public transit plan, for example, the city shifted priorities to focus on safety and affordability rather than assuming that increased supply would yield higher ridership as a result of feedback from disadvantaged community residents (Fitzgerald 2022). The Oregon Department of Transportation published a "Social Equity White Paper" in which they commit to shifting power to historically excluded and underserved groups in their work (Malik, Butler, and Yap 2021). The Southern California Association of Governments referenced this work when developing their racial equity action plan, calling for a strategy of engagement and copowering community groups (Southern California Association of Governments 2021).

Similar to power analyses, a transformative approach to needs assessment demands attention to how reality is socially constructed and how power differentials typically define directions of research and evaluation (Mertens 2007). These approaches can lift up the expertise of communities as a critical input to the gap analysis. As an example, researchers evaluated a needs assessment through the lens of the transformative approach to identify

social determinants of health and well-being in a predominantly Latino community (Jackson et al. 2018). Key to the evaluation was understanding who had been previously left out of assessments and how power dynamics operate to create the public health impacts and gaps identified.

Findings from the evaluation showed that a successful needs assessment included flexible mixed methods in data collection, diversity in leadership with the inclusion of individuals who could span the boundary between evaluators and community, strong relationships among team members and community, a welcoming culture in the funding organization, and a call to action resulting from the findings. In many ways, community-based needs assessments in which community members lead the assessment process embody the transformative paradigm by transferring the power of data collection and gap analysis to those most affected by transportation deficiencies.

Equity and Public Participation in Decision-Making

Community-based transportation needs assessments require significant engagement with and transfer of power to the public. Decades of theory about the process of public participation has shown it to be at once necessary and deficient. Over half a century ago, Sherry Arnstein (1969) created a typology of community participation that describes processes along the degrees of power reserved to the public. Public engagement processes could be non-participatory, serving as education or manipulation; token processes, which offer the illusion of full participation in what is really a one-way information sharing process; or empowering, with partnerships, delegation, or full control of the decision-making.

While the escalating categorization of public participation identifies full citizen control at the top of the scale, implicitly as an ideal to be achieved, some have argued that not all forms of participation should be valued or pursued (Day 1997; Irvin and Stansbury 2004). For example, legally required processes of participation, such as formal public hearings or comment periods, do not achieve genuine participation because they are at most two one-way monologues about a plan or project and do not promote dialogue between parties (Innes and Booher 2004). Instead, processes that foster genuine participation must be collaborative, multiway interactions that encompass both formal means of communication and informal ways of acting together to influence the outcomes of a public process. Similarly, genuine participation in shaping analytical methods in transportation planning can yield more

equitable outcomes than those that follow the legally mandated minimum requirements (Karner and Niemeier 2013; Karner and Marcantonio 2018). Equity planning emphasizes collaborative dialogues and multidisciplinary perspectives, prioritizing topics that matter to disadvantaged communities and communities of color, and creating shared goals between public agencies and local communities (Krumholz 1982; Zapata and Bates 2015; Reece 2018).

A promising model of genuine public power and enhancing equity is participatory budgeting (PB). PB was developed in Porto Alegre, Brazil, in the 1980s, after the Brazilian Workers' Party came to power and desired a way to extend further democratic power to the public (Calisto Friant 2019). PB is a process by which the public has authority over how a government's or organization's budget, in full or in part, is spent. An evaluation of the PB outcomes in Porto Alegre showed that until 2004, when the Brazilian Workers' Party left power, a minimum of 68% of projects selected under PB had been completed, with the average in the early years closer to 97% (Calisto Friant 2019). PB spread throughout Brazil and eventually made its way to North America, where it was first implemented to prioritize one ward's budget in Chicago in 2007 (Lerner 2014). Like all public engagement processes, the potential impacts of PB are as weak or strong as guiding frameworks and delegation of authority allow it to be. Scholar-practitioners have argued that an equity-focused model of PB would fund priorities for low-income people, empower marginalized community members to design and lead the process, reduce obstacles to participation, target deliberate outreach to underrepresented populations, and ensure that resources are distributed to individuals with the greatest need (Lerner and Secondo 2012; Hagelskamp et al. 2018). In practice, however, PB may not bring out the most diverse set of individuals; those who already have a voice in community-engaged processes are most likely to participate in PB as well (Lerner and Secondo 2012).

The effectiveness of PB in yielding equitable outcomes depends on where equity-seeking groups focus their efforts for change. Many PB processes are outcomes-based, identifying where or to whom investments should be directed (Karner and Marcantonio 2018; Karner et al. 2020; California Mobility Justice Advocates 2021). Karner et al. (2019) examined a PB process in Fresno, California, where \$70 million in funding from the Transformative Climate Communities program was dedicated to climate investments. Budget deliberations were not initially designed to follow a PB process, but environmental justice (EJ) NGOs and community leaders forced the city to adopt a more deliberative process—the result of a long-standing mistrust of political leadership in the city. The funding package designed by the community was ultimately selected, but the process was hampered by a limited operating

budget and little engagement or power outside the traditional political leadership or EJ activists. Because of the lack of diverse representation, the authors concluded that even “improvements to process alone could not have achieved social transformation” without a strong organizing body of diverse community interests (Karner et al. 2019, 251). Others have shown, however, that PB that centers deliberative processes without focusing exclusively on distributive outcomes can yield positive impacts (Su 2017).

Community-Based Planning

Community-based planning could encompass methods ranging from seeking public input on a formal project to social transformation through radical planning methods (Friedmann 1987). Successful implementation of community-based planning assumes that communities guided by bottom-up planning and development processes have capacity to drive change and produce meaningful outcomes. As described earlier, it is also assumed that direct participation and community empowerment can lead to more equitable outcomes. Yet not all kinds of participation are the same; some processes are ineffective because they tokenize participants, and evidence is scant as to the long-term effectiveness of public participation in achieving equitable outcomes (Arnstein 1969; Cleaver 1999).

The success of community-based planning in advancing justice-related outcomes appears to be related to the capacity of communities to lead efforts for change. One sign of capacity is the strength of an organization’s professional and social networks. A study of community-based planning for poverty alleviation in Oaxaca, Mexico, concludes that communities require strong capacity for collective action to be able to remediate the structural causes of poverty (Mason and Beard 2008). Other organizations with weaker social networks—for example, weak ties to the state or to neighboring communities—were less successful in obtaining results from the economic support the government provided. Thus, sustained community-led work may be a stronger determinant of equitable community outcomes that promote community participation in formal planning processes.

Another aspect of capacity is technical knowledge. A community-based participatory research (CBPR) process led by the Environmental Health Coalition in partnership with university researchers aimed to map EJ concerns in Old Town National City and to push the city to mitigate or resolve those concerns through planning and policy efforts. The Environmental Health Coalition was able to get the city council to approve a health and EJ element in its specific plan—the first city in California to do so. The organization was successful

because of its ability to conduct analyses led by in-house experts and its long-standing engagement with community members who are trained in public health promotion (Minkler et al. 2010).

A third aspect of community capacity is the ability to be a leader in fulfilling community needs. In the United States, nonprofit organizations like the Environmental Health Coalition may also act as quasi-political representatives, in place of elected officials, of poor urban neighborhoods rather than mere brokers of resources (Levine 2016). To the extent that they are also representative of the communities in which they work, they may represent an important source of community capacity in which to achieve certain programmatic goals. Organizations often take on multiple roles as a mediator between the city and communities, particularly serving as educators of the city's complex transportation planning and policy processes. They also have important roles as community advocates, pushing against one-size-fits-all approaches for transportation investment and programming that the city prioritizes (Woldeamanuel, Romine, and Olarte 2022).

The well-known example of the Bus Riders Union (BRU) action against the Los Angeles County Metropolitan Transportation Authority (Metro) provides a case of successful advocacy because of its community capacity. Metro planned to invest in rail infrastructure at the expense of bus service in the region. Bus riders were predominantly low-income riders of color, while rail riders were less likely to be people of color compared to the systemwide average; Metro also spent 70% of its budget on the 6% of riders who were rail passengers. Through its political and legal organizing, the BRU was able to get a consent decree published in which Metro rescinded a proposed fare increase and invested in bus service and equipment for low-income riders (Mann 2004). Grengs (2002) argues that the BRU adopted methods of community planning to successfully win a lawsuit against Metro for a bus fare increase that disproportionately burdened low-income riders. The organization's capacity focused on two methods. First, they developed a broad countermethodology that was not focused solely on countering engineering standards, but on gathering community-based data on overcrowding, personal testimonies, legal documentation, and more, which served to broaden the coalition of experts. Second, they fostered a greater sense of ownership in the political process through meaningful participation in their organizing actions. These alternative, community-based planning strategies yielded positive results for transportation justice.

Community-Based Participatory Research

Analogous to community-based planning, CBPR involves researchers collaborating with community members as equal coleaders and coevaluators and with mutual learning and respect. CBPR is common in public and environmental health research and interventions. The CBPR-based interventions follow key principles of community as a unit of identity; draw on strengths and resources of a community; facilitate equitable partnerships; foster colearning and capacity building; balance knowledge generation and intervention; focus on ecological perspectives of problem solving (i.e., problems like public health issues have multiple, interrelated causes and points of intervention); iterate in cyclical processes; and are long-term, sustainable processes (Israel 2013). CBPR can play a critical role in generating knowledge and in developing planning and policy outcomes (Sprague Martinez et al. 2020).

CBPR has been applied to transportation needs assessments done in collaboration with disadvantaged or vulnerable communities. One study describes a CBPR strategy where researchers and a coalition of community partners engaged older adults in a Midwestern community to collectively meet their transportation needs (Dabelko-Schoeny et al. 2020). The team located stops for a senior circulator service, partnered with a ride-hailing service to provide rides to an adult village, provided travel training for public transit use, and supported safe walking routes for older adults through focus groups. Each of the components of the project used several CBPR principles to engage with community members, valued local knowledge, and designed interventions that benefited the community in addition to the researchers.

Another study evaluated a CBPR-based pedestrian and bicycle safety workshop in which university researchers worked with community partners in multiple cities to develop training, identify community needs, foster intracommunity relationships among safety stakeholders, and empower community members to advocate for safety improvements (Barajas et al. 2019). The workshops were successful in meeting these goals in the short term and set the stage for building community capacity to achieve longer term goals. CBPR may also involve establishing community advisory boards for research, project outcomes, or planning efforts (Elefteriadou et al. 2021). Convening an advisory board as part of a CBPR effort is likely to improve the ways the research benefits the community (Hamann et al. 2021).

Defining and Evaluating Equity in Needs Assessments

Equity analyses in transportation planning typically focus on metrics relevant to *distributive equity*; that is, the extent to which different groups of people receive the benefits or bear the costs of transportation. Distributional analysis for equity is based on requirements under Title VI of the Civil Rights Act and the EJ executive order, which require federal agencies to ensure nondiscrimination in the receipt of benefits and to avoid disproportionate impacts on low-income people and people of color (US Department of Transportation 2012). The broad sets of indicators necessary to evaluate equity include a distribution of benefits and burdens across the population, data disaggregated by population group, and indicators that enable comparisons across groups (Di Ciommo and Shiftan 2017). Evaluation metrics used in practice are often simple, such as locations of planned infrastructure projects and service changes, but also may include those generated by travel demand models, such as travel time savings and vehicle miles traveled (VMT) (Karner 2018; Bills and Walker 2017). More recently, evaluation based on destination accessibility has gained some traction, as equity scholars have argued that access, which represents the extent to which people can carry out the functions of a meaningful life, is the primary metric on which distributive equity should be assessed (Pereira, Schwanen, and Banister 2017; Martens 2017; Karner et al. 2020). Guidance from the transportation needs assessment literature suggests indicators such as affordability, safety, access, travel time and distance, congestion, mode share, investment, pollution exposure, or other project-specific metrics should be evaluated across population groups or communities identified as underserved (Williams et al. 2021).

The ways that organizations analyze equity within transportation needs assessments vary considerably. At a minimum, needs assessments will often include a descriptive analysis of demographic indicators that are associated with transportation vulnerability. For example, a Metropolitan Planning Organization's (MPO's) transit needs assessment identified where high concentrations of transit-dependent populations lived by summarizing age, income, and car access characteristics from the American Community Survey (ACS) of the US Census (San Joaquin Council of Governments n.d.). Another included adults with disabilities in its analysis, while another did not specifically calculate population concentrations but instead identified needs for people who use paratransit and other specialized transportation services (Santa Barbara County Association of Governments 2019; Greater Madison MPO 2022).

Other assessments calculate relevant indicators for communities of concern and compare them against other communities. In a transportation needs assessment for traditionally underserved populations, an MPO identified communities of concern using ACS data by calculating where concentrations of low-income, minority, younger, and senior persons exceeded a threshold compared to regional averages. They identified stronger vulnerabilities by identifying communities that met those characteristics and had higher than average zero-car households. The MPO compared investment dollars in the communities of concern to other communities to examine the equity effects of the plan (Rogue Valley Metropolitan Planning Organization 2016). In developing its statement of needs, a municipal department of transportation used the MPO's definition of communities of concern to compare forecast outputs with other communities, examining differences in average commute time, the share of the population with access to high-quality transit, the number of jobs accessible within forty-five minutes on transit, and the number of jobs accessible within thirty minutes by car (ConnectSF 2019).

Finally, some assessments will target vulnerable populations for primary data collection to examine needs without reference to a comparison group. A county community needs assessment surveyed low-income households to identify needs and barriers to transportation and opportunities. One important way the assessment identified needs was through a gap analysis, comparing the importance of certain services with their availability by some demographic characteristics. Those that fell in the quadrant of above-average importance but below-average availability were deemed to be the greatest need (Snohomish County Human Services 2019).

Literature Review Summary

The review of academic literature and technical reports identified key definitions of needs assessments, methods to carry out community-based needs assessments, the application of equity in transportation decision-making, and evaluation of equity in needs assessments. The findings are relevant to the needs assessments carried out under the STEP and CMO programs and give context for the evaluation phase of this research project. A summary of the key findings includes the following:

- Successful needs assessments are iterative; they empower multiple and diverse stakeholders and engage them early and often.
- Community members are typically in the best position to define their needs and should be involved in the design and implementation of

needs assessments; this is an important form of power transfer in data collection and analysis.

- US Census data analysis, surveys, interviews, and focus groups are common methods used to carry out needs assessments.
- Distributive justice principles are often found implicitly in needs assessments. Relevant assessment methods based on distributive justice include comparisons of transportation burdens by socioeconomic status of individuals or neighborhoods, comparisons to a minimum threshold of an outcome measures, and evaluations of changes in destination accessibility.
- Researchers can partner with community organizations using community-based research methods like CBPR and participatory action research to conduct reciprocal learning activities in needs assessments.
- A progressive transfer of decision-making through methods like PB and community-based planning is a precondition to enacting justice-oriented processes and achieving justice-focused outcomes.

These findings lead to several key issues for evaluation, described at the end of this report.

Primary Document Review Phase 1

THIS SECTION REPORTS THE KEY FINDINGS from the CMO and STEP material review. Each section identifies the legislative context for the programs, the goals of the programs, application requirements, selection criteria, implementation of the programs, and issues uncovered in the analysis of comments from public meetings. The document review analysis draws comparisons between original and updated program characteristics, where applicable, to convey the context of current requirements and understand administrative responses to program feedback thus far. The section concludes with a summary of key findings and suggestions for program revisions. The findings from this document review are preliminary and are primarily intended to provide context for upcoming research efforts and recommendations. Additional details regarding the method and findings from the Primary Document Review (Phase 1) can be found in appendix A.

CMO and STEP Policy Reference Comparison

Table 2 lists pieces of legislation referenced within the reviewed CMO and STEP program materials and indicates whether the legislation appears within either the STEP solicitation or Guiding Legislation document, or the *Implementation Manual for the Clean Mobility Options Voucher Pilot Program (CMO)*. Six of these policies (AB 1532, AB 1550, SB 1275, SB 32, SB 535, and SB 350) are referenced in materials for both programs, while another six policies appear in the materials for one program but not the other. One reason that SB 150 and SB 375 appear within STEP materials and not CMO materials may be that these policies both relate to comprehensive sustainable planning practices with intersections between transportation, housing, and land use, while CMO is designed with a more specific focus on low-carbon and zero-carbon mobility pilots. Regarding AB 8 and AB 118, the CMO implementation manual references these pieces of legislation when describing the history of the Air Quality Improvement Program and Clean Transportation Program, which facilitated the funding of alternative and

renewable fuel transportation projects. Finally, SB 1018 relates to the creation of a budget and fiscal review committee for cap-and-trade proceeds, and AB 398 prioritizes initiatives such as low-carbon transportation, both of which are relevant to CMO and STEP.

A limitation of this policy analysis is that the CMO implementation manual provides a more detailed legislative history than the STEP program documentation, and this does not necessarily imply that policy references absent from STEP materials are not considered relevant to STEP design or implementation.

Finding: *While CMO and STEP have substantially overlapping legislative foundations, program materials suggest that CARB views STEP as having a broader scope and relevance to a wider range of policy priorities such as those described in SB 375.*

TABLE 2
STEP-CMO policy reference comparison

LEGISLATION	Referenced in STEP Guiding Legislation or Planning and Capacity Building Solicitation	Referenced in CMO Implementation Manual
AB 1532	YES	YES
AB 1550	YES	YES
SB 1275	YES	YES
SB 32	YES	YES
SB 350	YES	YES
SB 535	YES	YES
SB 150	YES	
SB 375	YES	
AB 8		YES
AB 118		YES
AB 398		YES
SB 1018		YES

CMO Formal Program Materials Review Results

This section presents key findings from the review of CMO Formal Program Materials. Additional context and information related to these findings can be found in appendix A.

- **Community-Based Organization (CBO) Involvement:** According to the definition of CBO in the 2022 CMO implementation manual, any organization that has provided services in an area for a year or more and has employees living in the area would be considered a CBO. If the CTNA applicant is not a CBO, the applicant must identify a CBO that supports the project and include a letter of support from this organization with the application.
- **Prioritization of Unselected Applicants:** The December 2022 CMO implementation manual notes that unawarded applicants may be prioritized in future funding windows. However, there are no details about how this prioritization may be structured in the event that additional funding windows become available.
- **Timing of Pilot Preparation Activities:** According to the CMO implementation manual, applicants must include mobility pilot preparation activities in their CTNA budget proposal before the CTNA is approved for funding or CTNA activities are conducted if they plan to use the funding for this purpose. It is not clear how communities would identify the need for specific pilot preparation activities and include these in their CTNA budget proposal if they have not yet conducted a needs assessment.

STEP Formal Program Materials Review Results

This section presents key findings from the review of STEP Formal Program Materials. Additional context and information related to these findings can be found in appendix A.

- **CBO Definition:** According to the STEP solicitation, the CBO definition varies somewhat from the definition specified in CMO documents. The STEP solicitation requires CBOs to meet three criteria, whereas in CMO, a CBO would still be considered eligible by meeting two of three similar criteria.
- **Community Engagement Requirements:** The STEP project requirements and criteria document notes that STEP proposals must clearly identify

their proposed STEP Planning and Capacity Building project and include information about how this project was identified within the community. However, the Proposal Flowchart also states that STEP Planning and Capacity Building grants are intended for disadvantaged and low-income communities whose CBOs and other prospective applicants have conducted little to no community engagement. Thus, a comparison between the solicitation and flowchart creates some uncertainty regarding the specific amount of community engagement that is required of communities prior to applying for STEP Planning and Capacity Building grants.

- **Proposal Scoring Structure:** In addition to the scoring structure outlined in the STEP solicitation, the Draft Project Requirements and Criteria document issued in February 2020 also notes two other potential extra points categories for (1) projects in communities with high VMT per capita, and (2) projects in communities that lack clean transportation options. However, it appears that these categories were not adopted for the final solicitation. As discussed below in the Public Feedback Materials review section, stakeholders provided varied suggestions on the types of bonus points categories that CARB should consider for STEP scoring.

CMO Public Feedback Materials Results

Eligibility Suggestions

Several comments received during work groups in 2019–2022 related to the eligibility requirements for CMO. Some comments related to clarifications about program requirements, while others pointed to potential changes in the program structure. Examples of the latter type of comment included the following:

- Two participants from Work Group Meeting #4 suggested lowering barriers to funding access by expanding eligibility to include a greater number of communities, rather than relying on census tract designations. Additionally, the Pueblo Planning Stories from the Field presentation described one case where an applicant was not eligible for funding because their project involved transportation from a school to tribal lands, but the school itself was in a nontribal lands AB 1550 census tract.
- A participant from Work Group Meeting #1 suggested removing the limit of one application per lead applicant.

- A participant from the 2021 Implementation Manual Update Work Group Meeting suggested supporting applicants who completed CTNAs by prescreening them as eligible for mobility pilot voucher funding rather than having them go through the entire application process.

Comments on the First-Come-First-Served Selection Process

The application selection process was a topic commonly introduced and discussed by CARB during work group meetings, and attendees have continually asked questions and provided feedback on this approach over time. Examples include the following comments:

- While two separate private mobility operators attending work group meetings expressed support for the first-come-first-served selection approach and addition of the randomization component, more comments received from public agencies, CBOs, or unidentified work group attendees expressed concerns about this selection structure.
- One attendee suggested moving toward using scoring criteria to select awardees, while another suggested using a merit-based approach that considers the level of applicant need and prevents advantages to large organizations.
- During more recent CARB work groups held in 2022, UC Davis Institute of Transportation Studies researchers listening in to the meetings observed that participants continued to cite concerns with the first-come-first-served approach, including providing comments that the added randomization component does not adequately address their concerns. This emphasizes the importance of this issue moving into Window 2 of the program and beyond.

Concerns about the Application Process

Several commenters cited concerns related to the amount of work required to submit a CMO application. Examples include the following comments:

- Applicant comments that the CMO application process was confusing, overly technical, or too resource intensive.
- As the Window 1 solicitation coincided with the onset of the COVID-19 pandemic, some comments pointed out the difficulties applicants had with completing timely applications due to reduced organizational resources.
- In relation to both the application selection process and application

requirements, one work group attendee suggested asking applicants for a letter of intent and assigning them a random number in advance so that they could determine whether to complete a full application.

Comments and Suggestions about the Funding Process

Meeting attendees commented on the timeliness or structure of distributing funds to applicants:

- Some comments suggested strengthening the connection between CTNAs and mobility pilot vouchers, such as having funding set aside or a priority list for CTNA recipients to receive pilot vouchers in the future.
- CARB received comments during Work Group Meeting #1 and Work Group Meeting #4 stating that the reimbursement approach for CMO funding creates challenges for underresourced applicants who may not be able to afford initial capital investments.
- A local government attendee at the 2021 Implementation Manual Update Work Group suggested allowing applicants to receive funding for CTNAs and mobility pilot vouchers in the same funding cycle so that they could continue to pay their community partners throughout the planning and implementation process.

Questions and Suggestions regarding Community-Driven Equity Work

Several attendees of CMO work group meetings expressed the importance of conducting community engagement work properly and either asked questions about how to do this or encouraged CARB to emphasize certain aspects of the community engagement process. For example:

- Participants in Work Group Meeting #1 and Work Group Meeting #4 provided comments emphasizing the importance of directly engaging with the communities represented by applicants and ensuring that communities are engaged in the project rather than applicants taking actions on behalf of the community.
- Participants in Work Group Meeting #2 and Work Group Meeting #4 asked about how the engagement process would work, such as specific types of community engagement events or the number of community members that should be engaged in the CTNA process. One participant also asked about how to conduct community outreach during the COVID-19 pandemic.

STEP Public Feedback Materials Results

Eligibility Questions and Suggestions

Many comments and questions received by CARB in early work group meetings during 2019 were related to whether certain organizations or project areas would be eligible for funding through STEP. This included broad questions about the types of projects that could be identified or funded by a Planning and Capacity Building grant or Implementation Grant, as well as specific questions about individual applicant, community, or transportation mode eligibility. Many of these comments were specific to Implementation Grants, but examples of comments that also related to Planning and Capacity grants included the following:

- **Geographic Eligibility:** Several commenters in early public meetings during 2019 and 2020 noted concerns about how STEP used CalEnviroScreen 3.0 to identify disadvantaged communities, and some public agencies noted that their own local definitions of disadvantaged communities could vary from CalEnviroScreen classifications.
- **Applicant Eligibility:** A few commenters in the various work group meetings provided suggestions for expanding the eligibility of lead applicants. For example, one commenter noted that requiring a lead applicant CBO to be a nonprofit could exclude organizations that have similar goals and structure to nonprofit organizations but have not been able to obtain a nonprofit status. Another commenter requested that STEP align its lead applicant eligibility requirement to align with the Transit and Intercity Rail Capital Program. Other related comments included questions about why applications must have local governments as lead or coapplicants, and concerns about the STEP partnership requirements for applicants due to the long lead time it can take to establish formal relationships and contracts among entities.
- **Planning Grant Activity Eligibility:** Commenters in early public work groups responded to CARB questions about which activities should be eligible for funding through STEP Planning and Capacity Building grants. Commenters provided a wide range of suggestions, including using grant funds to prepare EV readiness plans, code updates, budgeting exercises, transportation plans, community action plans, partnerships between housing and mobility operators, and resident transportation surveys. Several comments generally emphasized the importance

of flexibility in facilitating community success. One commenter also emphasized the importance of ensuring that eligible activities or identified modes under Planning and Capacity Building grants are also eligible for subsequent Implementation Grants.

Concerns about the Application Requirements

Work group attendees responded to questions from CARB about potential application challenges. Example responses included:

- concerns that underresourced applicants would have difficulties meeting the resource contribution requirements (several other comments suggested lowering the contribution requirement for Implementation Grants);
- concerns about applicants having to agree to project components that small disadvantaged communities may not ultimately be able to achieve (e.g., planning for workforce development, displacement avoidance); and
- concerns about the overall complexity of the application and potential confusion among applicants.

Researchers note that in more recent CARB public meetings, such as those related to the Fiscal Year 2022–23 Funding Plan, attendees have continued to express concerns about the complexity, time, and resources required for securing STEP funds.

Suggestions for the Scoring and Selection Process

In work group meetings where CARB presented the proposed STEP application scoring structure, such as Work Group Meeting #4, attendees provided comments and suggestions for how this process should work:

- In response to a CARB question about how to assign bonus points to applications, attendees suggested providing bonus points for a variety of categories. This included bonus points for projects that emphasize particular subject areas, such as climate adaptation, housing, or workforce development; projects that demonstrate alignment with regional transportation plans or state GHG objectives; projects that seek to fill in specific gaps in the community; applicants that exceed minimum resource contribution requirements; and communities that have specific classifications within CalEnviroScreen or AB 617. Several applicants voiced support for bonus points for rural applicants.
- Regarding general scoring procedures, several comments suggested

that CARB reduce application requirements and instead assign bonus points to applicants who meet various preferred criteria.

- Two commenters in public work groups asked questions about how CARB would assess equity in its scoring process, and one suggested including equity experts in the application review panel.

Questions and Suggestions regarding Community-Driven Equity Work

Across the work group sessions, many commenters asked questions and provided suggestions for how STEP should encourage and define successful equity-focused community engagement:

- One nonprofit organization suggested requiring awardees to conduct an equity analysis, such as with the Mobility Equity Framework, to assess mobility options in their community.
- Several commenters emphasized the importance of CARB ensuring that applicant partnerships are clearly defined and that communities and CBOs are directly engaged in projects rather than serving as passive members of the project. Several attendees suggested that STEP increase its focus on community engagement, and three commenters from the 2019 Work Group Meeting #2 suggested increasing the budget limits for community engagement and outreach above 8% of the project budget; minimum or maximum threshold requirements for community engagement was a topic of discussion for that meeting.
- One nonprofit organization stated that the Transformative Climate Communities (TCC) program administered by the Strategic Growth Council sets an industry standard for community-driven programs, and suggested that STEP refer to the TCC structure when setting program guidelines and objectives.

Other Equity-Related Suggestions

One nonprofit provided feedback to CARB suggesting that STEP place equity at the center of each program objective such as GHG reduction and improved mobility. Another commenter suggested including an assessment of an applicant's readiness to conduct equity work as a component of the STEP application. In Work Group Meeting #1 in 2019, CARB asked attendees to provide their own definition of transportation equity, and many comments suggested modifying CARB's existing definition of this term. Commenters also referenced several resources related to equity work that have been

used by other organizations—such as the Greenlining Institute reports [Social Equity in California Climate Change Grants: Making the Promise Real](#) and [Making Equity Real in Climate Adaptation and Community Resilience Policies and Programs: A Guidebook](#), information on [Untokening.org](#), and the US Department of Agriculture’s [Food Access Research Atlas](#)—and suggested that CARB review these when finalizing its program design.

Primary Document Review Summary

Overall, both CMO and STEP received public feedback related to program eligibility, application requirements, the awardee selection processes, and best practices in conducting community-driven equity work. One limitation of this document review is that the types of comments received by CARB are likely influenced by the set of questions that CARB asks during its work group meetings and webinars. Because of this, an apparent emphasis on a particular program component or issue with the recorded public feedback may not necessarily correspond to the level of importance that this topic has to communities and prospective applicants. Additionally, the subset of stakeholders who attend CARB meetings and provide questions and comments may or may not be representative of the larger population of stakeholders, and other methods of obtaining feedback may be needed to gather the full scope of questions and concerns that exist within communities. However, these comments are useful in understanding specific concerns and suggestions that CARB has had the opportunity to consider in its program design, as well as possible topics to explore for future data collection and program analysis.

In addition to identifying common themes and findings that could inform potential research objectives, researchers noted other findings during the document review that suggest possible improvements to the quality or effectiveness of program materials:

- **Language Consistency:** Some English-language program documents hosted on the CARB website are accompanied by a Spanish-language version, while others are not. Consistency in the availability of readily translated versions of publicly posted program documents and recordings would improve accessibility for prospective applicants.
- **Document Access:** Some hyperlinks appearing in program documents lead to invalid web addresses or to online documents with restricted access. As CARB periodically updates and issues new versions of program documents, which may involve changing document web addresses, staff should review, test, and update hyperlinks across documents when these changes are made to maintain accessibility of program-related information.

- **Consistency of Program Information:** The website version of the CMO CTNA application guide states that selected CTNA applicants will receive an invitation to proceed to Phase 2 of the application process, which involves providing detailed information about the project scope and timeline, such as a schedule of milestones, community outreach plan, and additional financial information. It appears that this may be a website error, as Phase 2 is a component of the Mobility Project Voucher component of CMO and is not mentioned for the CTNA component in other program materials, such as the PDF version of the application guide. Staff should review the array of program materials to ensure that they accurately and consistently represent the current structure and requirements of each program component.
- **Volume of Documentation:** The purpose of the review of the Formal Program Materials was to gain a thorough understanding of both CMO and STEP, which may also be an objective of applicants and other stakeholders who are interested in these programs. As CARB has issued a wide range of program information, in the form of manuals, solicitations, checklists, flowcharts, appendices, and other supplemental documents, researchers expect that stakeholders who wish to understand these programs and the differences between them would have to spend a significant amount of time and organizational resources to review these documents and prepare for proposal submission. While thorough information and transparency into program structure and requirements is valuable, public commentary and TA feedback suggest that some current and prospective applicants have been overwhelmed by the time and resources required to submit a successful STEP or CMO application. If CARB takes the opportunity to consider how proposal requirements may be reduced or streamlined for future solicitation windows, it would also be useful to consider whether there are opportunities to condense the content or reduce the number of different program documents that applicants are asked to review. This may be most applicable for information that is repeated within or across multiple documents, or information that is currently held in its own document but that could be combined with another document containing related information.

The research team will continue to attend public meetings related to CMO and STEP to remain informed of program updates, CARB communications, and additional stakeholder feedback.

Preliminary Findings for Further Evaluation

Program Design and Guidelines

During the Primary Document Review, community accountability meetings, and TA process, the project team observed and received feedback on CMO and STEP guidelines and program design features. Prospective applicants, grantees, and other stakeholders expressed challenges, concerns, questions, and suggestions related to program requirements, goals, and other design characteristics for CTNAs and STEP Planning and Capacity grants. This feedback highlights the need to assess program design in the context of other equity programs and with respect to communities' experiences with CMO and STEP.

Through the review of formal program documents, the project team outlined the purposes and goals of CMO CTNAs and STEP Planning and Capacity Building grants. A key issue in assessing program design is to determine whether program structure and delivery align with intended purposes and goals, and identify any opportunities to modify program design to more effectively lead to the desired short-term and long-term outcomes. Based on program documents, CMO and STEP program priorities include serving underresourced and smaller CBOs and their community residents, providing benefits in the most underserved, disadvantaged, and low-income communities and achieving these benefits through transportation, infrastructure, and land use improvements that are tailored to community needs. In the next phase of the evaluation, the project team plans to gather additional stakeholder input on these priorities and how well the program structures facilitate the stated goals.

Given the variety of desired outcomes of CMO and STEP investments, the project team also plans to consider how these outcomes are currently prioritized, or should be prioritized, when making award selections and approving assessments and implementation projects. CMO and STEP seek to achieve GHG, air pollutant, and VMT reductions while also improving community

mobility and transportation equity and supporting community-driven capacity and change. However, these outcomes are not always correlated and may at times run counter to each other. For example, a project that allows residents to make trips they were previously unable to make may lead to increased VMT and energy use or emissions overall. Projects which maximize GHG reductions may not simultaneously maximize transportation equity, and the current and ideal balance between these stated priorities is a focus for assessing program design.

A key theme in feedback received and observed from project activities to date is that there may be opportunities to modify program eligibility requirements to better facilitate short-term and long-term outcomes. Stakeholders have expressed concerns with how geographic areas, applicants, and projects are deemed eligible within CMO and STEP, suggesting that there may be gaps between who the programs are structurally designed to serve and who the programs are intended to serve. Regarding geographic eligibility, some communities have expressed dissatisfaction with the criteria used to qualify communities by census tract (such as CalEnviroScreen), and others have questioned how project areas should be defined in the eligibility or award determination process. For applicant eligibility, the project team has also heard concerns that the programs may not be clearly verifying which applicants have robust CBO and community involvement rather than a more superficial level of involvement.

The project team plans to further assess these potential issues through key informant interviews to identify possible practices and tools that reduce gaps between program theories and intentions and current design characteristics. For example, there may be opportunities to modify the eligibility criteria or selection process to more directly prioritize particularly underserved communities and underresourced CBO applicants. Opportunities for improved engagement or selection will be a topic of discussion for the upcoming informant interview phase of the project.

Another program design topic for the remainder of the evaluation relates to the administrative structures in place for managing and delivering the CTNA and Planning and Capacity Building components of CMO and STEP, and whether the current structures align with best practices for equity-focused programs. Programs like CMO and STEP should be equipped with an appropriate level of subject-matter expertise, including equity expertise, and should have the flexibility to respond to community needs and lessons learned. Some stakeholder feedback received through public commentary suggests that there may be a need to increase the level of equity expertise within CARB and within the programs' administrative structures and that

equity expertise should be a foundational aspect of every stage of the program design and delivery process.

Regarding flexibility and ability to respond to changing needs, the project team understands that these programs may have certain limitations of change due to the multiple levels of decision-making involved in their design (e.g., within CARB, in relation to existing legislation, in the context of gaining legislative approval for certain changes). The evaluation will consider where there may be opportunities to incorporate equity expertise into program design and delivery, where barriers to change may exist, and how program improvements may be implemented at the different levels of the administrative structures.

Grant Application and Selection Process

The [2020 CMO applicants](#) were diverse in their organization size, type, and geographic location. This review of application materials identified several awarded applicants of projects to be led by CBOs, while the second-largest awarded group were government entities (e.g., Department of Transportation, agencies). Both of these groups also represented the largest and second-largest type of unawarded applicants. There was a specific amount of funds earmarked for tribal governments, which also had a few successful applications. Other applicant types included school districts and NGOs.

Community Transportation Needs Assessment Applicants

The review of 2020 CTNA applicants identified several applications that included a consulting group or firm as a subapplicant. A total of seven successful applications included a consulting firm as a subapplicant, while only two unsuccessful applicants included a consulting firm as a subapplicant. One specific consulting firm/group served as a subcontractor on multiple applications applying for distinct geographic locations.

Based on the application materials reviewed, the location of projects (e.g., Project Area) could be a determining factor for applicants to be unsuccessful. This review identified instances in which an application was unsuccessful “... due to another application in the same project area.” CARB staff provided clarifying language regarding a Project Area and what may constitute an overlap in Project Area and result in an application being unsuccessful.

Based on CARB’s response, the Project Area has no technical delineations (i.e., census tract or block group) but rather is the geographic area where

community residents live and most infrastructure related to the project will be installed. Thus, if the Project Area and the target community a project is intended to serve are the same for two projects, then the first eligible application received could be approved, and the second is unsuccessful.

The first-come-first-served approach for the CMO selection process encountered several challenges. This approach may have produced inequitable parameters, as less-resourced groups often struggle with limited personnel and capacity to meet immediate deadlines. Additionally, the first-come-first-served approach resulted in a high volume of applications submitted in the first few minutes after the application window opened. Consequently, these applications and their requested amounts quickly matched the budget for the application window. Once amounts matched the available budget, applications continued to be accepted but received an automatic reply that indicated, “All award funds had been reserved” or “All award funds had been exhausted.”

Overall, comments from prospective applicants and those that applied have pointed to the resource and time-intensive process of this application as a major challenge. Applicants indicated that some state and philanthropic funding sources have shifted to a more streamlined application process, often reducing the volume of requested material and supporting documents until the project has been approved for funding. The CTNA grant will remain as a one-step application process.

Mobility Project Voucher Applicants

The Mobility Project Voucher (MPV) is a funding opportunity that supports innovative transit solutions such as ride-on-demand, traditional fixed-route transit services, shared micromobility, carpooling, and EV car-sharing programs. In its inaugural year (2020), the MPV program received thirty-three applications and awarded twenty projects. Overall, the program awarded \$18 million to eligible underresourced communities and \$2 million to Native American tribal governments.

In the first window, ten applications led by government entities were successful in securing an MPV. There were eight successful nonprofit group applicants, including minority economic development groups, a housing authority, and an academic research group. Native American tribal governments had two successful MPV applications. Unawarded applicants were in their majority nonprofit organization (seven), while only a few (four) government entities were unsuccessful applicants. There were no applications in the unawarded category from Native American tribal government.

MPV project types were evenly distributed between EV car sharing, micro-transit shuttle services, and shared micromobility. Most of the shared EV projects (seven) included a component to install EV charging infrastructure in the project area. Applications that focused on microtransit or shuttle services (seven) tended to be population-specific efforts (e.g., seniors, students) or efforts to build greater connectivity to a key destination hub (e.g., downtown). Awarded applicants that focused on shared micromobility aim to either establish or expand shared e-bicycle programs. There were two applicants that included both shuttle service and deploying micromobility services.

For the most recent application window (2023), CARB has transitioned to a two-step process for the MPV. This will include a less burdensome application in Phase 1, where applications are reviewed for completeness and minimum eligibility. Approved applicants will be informed and subsequently asked to submit the full Phase 2 application.

STEP Applicants

The [STEP](#) applications were divided into two groups, those requesting Planning and Capacity Building grants and those requesting Implementation Grants. Based on a review of application materials, there were a total of twenty applications for a Planning and Capacity Building grant; however, only nineteen moved to the scoring phase. There were a total of fourteen applications for Implementation Grants, and only ten of these moved forward to the scoring phase. Applications that were unscored were either disqualified for not meeting the eligibility requirements or submitted after the deadline. There were no applicants from tribal governments for STEP grants.

A total of eight STEP Planning and Capacity Building grants were awarded. These were largely awarded to local government entities (i.e., Department of Transportation). Local government applicants also comprised the largest group of unawarded applicants, while applications led by CBOs were equally awarded (two) and unawarded (two) grants. The total requested amount for Planning and Capacity Building grants was approximately \$1.7 million.

All three of the STEP Implementation Grants were awarded to government entities, which included a municipality, local department of transportation, and a council of governments. Unawarded applicants were also majority government entities with the exception of one application from a CBO. The total requested amount for all three awarded Implementation Grants was just under \$17 million.

STEP Scoring

The STEP grants differed from the CMO application as these required a thorough review and scoring process. The rubric used to score applications focused on the Grant Framework, Applicant and Partnership Structure, Proposal Thresholds and Criteria, Project-Specific Thresholds and Criteria, and Proposal Implementation Plan (table 3).

Each of these sections included subsections with individual tasks. Points were awarded based on how well the project addressed or outlined how these tasks had been or would be completed in the proposed project. Additional points were awarded if the applicant lead was a CBO or federally recognized tribe. Additional points were also awarded if the project was located in a rural community and if the community has a measurable lack of clean transportation available for its residents. Rubrics and point values for Planning and Capacity Building grants were different from those for Implementation Grants.

For the STEP Planning and Capacity Building grant rubric, the Project-Specific Threshold and Criteria section was worth the most points (thirty-four), which is more than twice of any section. This specific section focused on the subsections: Scope, Equity Considerations, Community Engagement, Outreach, Data Tracking, and Calculated Benefits. The Project Identified subsection was worth the highest point value (fourteen), while the second-highest was Partnership Structure (thirteen). The individual task that was worth the most points was Workforce Development (six).

TABLE 3

STEP scoring rubrics

	PLANNING AND CAPACITY BUILDING GRANT RUBRIC	IMPLEMENTATION GRANT RUBRIC
Highest value section (subsections with multiple tasks)	Project-Specific Threshold and Criteria (34)	Project-Specific Threshold and Criteria (44)
Second-highest value section (subsections with multiple tasks)	Applicant and Partnership Structure (25)	Grant Framework (19)
Highest value subsection (multiple tasks)	Projects Identified (14)	Project Identified (12)
Second-highest value subsection (multiple tasks)	Partnership Structure (13)	Benefits Calculator and Supporting Documents (10)
Highest value task	Workforce Development (6)	Workforce Development (6)

The Implementation Grant rubric had slight variations in terms of points awarded per individual task but was generally similar to overall points awarded for subsections. Like the Planning and Capacity Building rubric, the Project-Specific Threshold and Criteria section was worth the most points (forty-four), again twice as many as any other section.

Similarly, the subsection with the highest point value (twelve) was Projects Identified. However, the subsection with the second-highest point value was the Benefits Calculator and Supporting Documents (ten). The Planning and Capacity Building rubric did not include a Benefits Calculator and Supporting Documents criteria; instead, the Partnership Structure was the second-highest valued subsection. This specific section may pose challenges for those applicants with limited bandwidth or capacity to develop and provide these types of metrics and supporting information. The individual task worth the most points in the Implementation Grant application was also the Workforce Development (six) section.

Overall, the tasks outlined in each of the rubrics were generally consistent with the mission of the program. In some cases, certain tasks, for example Workforce Development, had a higher value than other key elements that focused on themes of equity and diversity. It should be noted that themes of equity, such as increased accessibility and increased engagement, were also taken into consideration. However, these tended to be overarching themes or concepts of the overall application. The complex nature of the rubric may have diluted the value attributed to these metrics but, nonetheless, are considered a priority of these applications by CARB scorers.

Project Implementation and Outcomes

In observing project implementation and early outcomes through the research team's TA activities, background interviews, and review of program documents, several issues have been identified for analysis.

The first issue area noted in implementation and outcomes is a set of challenges related to contracting and reporting. The reimbursement-based payment system creates challenges for smaller or underresourced groups who may not be able to cover costs before being paid. This particularly impacts community-based nonprofits, which are often supported by grants and donors and do not have the capital and administrative system necessary for relying on reimbursement systems.

A related set of challenges is in the contracting between lead awardees and

subawardees. In some projects, a city is the lead and has contracted with a community-based nonprofit. The city's administrative process for setting up the contract entails requirements that take extensive time and staff capacity for the nonprofit to meet. This saps the time of the nonprofit, taking away from the time and resources they can put toward community-based programs.

A second issue noted in implementation and outcomes relates to the types of planning solutions proposed in the community-based transportation projects. There is sometimes a tendency to focus so much on the particular needs of a specific neighborhood or community that the solution developed meets those particular needs without addressing the equity of the system overall. For instance, an extension of transportation services in a neighborhood that has lacked access is an important improvement. However, if the overall system is structured so that the extended service is not sustainable because revenue and budgeting treat it as a less permanent or low priority part of the system, then the solution is not fully addressing system inequities. Inequities in revenue sources, budgeting priorities, and investments in services and infrastructure should be analyzed and addressed at a system level to complement the expansion of services in equity-seeking communities.

The third issue is ensuring that awardees understand and follow best practices in social equity and community engagement. Organizations often design community engagement processes that have low levels of participation from and accountability to marginalized community members. Frameworks like the [Spectrum of Community Engagement to Ownership](#) can help clarify how equitable a community engagement process is. A related challenge is when organizations conflate "community engagement" with equitable planning. Solely focusing on the engagement process leaves a gap in applying an equity framework to the solutions, plans, and investments that are being considered. An equity analysis of these planning outcomes is necessary to consider how they will distribute burdens and benefits across different social groups and geographic areas.

The structure of partnerships that awardees have set up is another area where we have noted challenges. Some awardees applied with CBOs listed as partners, but then limited the CBO to carrying out community outreach. Relegating CBOs to community engagement restricts the decision-making power they are afforded in other important areas of planning processes. A valid question that has been raised is, in cases where a CBO is the sub-applicant—not the lead—why didn't they apply as a lead? What kept them from being the lead organization? Who the lead applicant is has a significant impact on how equity and power dynamics play out.

The fourth issue noted in this area is the alignment and linkages across related funding programs. Questions have been raised about how the CTNAs and Planning and Capacity Building projects are being linked to subsequent mobility and implementation funds. More clarity is requested about which program a community/project is best aligned with and for referrals to appropriate funding programs. How can CARB and awardees address the needs that are far beyond what program resources are able to meet? There is concern about the long-term sustainability of Implementation Grants (financing, funding, etc.) as well as sustained engagement efforts. How could the planning processes lead to funding for implementation, given that there is more funding right now for planning than for implementation?

Technical Assistance and Capacity Building

Through our experience partnering with STEP grantees and providing TA, training, and collaborative planning, we have noted various challenges and solutions for effective, equitable TA and capacity building. We have distilled these reflections into a list of key competencies and qualities. We see these as essential parts of providing TA in a way that advances social equity. We share these as “things to look for,” not as a checklist or exhaustive set of what it takes to do equitable work.

Multidimensional understanding of social equity: Applying social equity values requires the ability to apply various concepts that clarify how the values can be put into action. For instance, the difference between procedural justice and distributive justice helps guide practices that shape both the decision-making process itself and how the resulting benefits and harms are distributed. Targeted universalism is a framework for moving beyond a focus on closing disparities to strategies that address the particular needs of each community while moving all people toward a desired goal.

Ability to do power analysis and support grantees to shift power dynamics: Communities impacted by social inequities are operating in contexts where they do not have the power to obtain what they need. An effective TA provider must be able to help community groups analyze the power relationships affecting their work and develop strategies that uncover new sources of power, and build power, for the community.

Popular education pedagogy and facilitation techniques: Knowledge gained through lived experience is a well of wisdom for designing equitable solutions, but it is often shut down or overshadowed by technical knowledge. TA providers using popular education techniques support community members

to honor and explore their own knowledge and experience, combine it with relevant technical knowledge, and use it to envision and articulate solutions.

Creative and transformative approaches to community engagement: Too often, community engagement strategies amount to an effort to document and use community members' perceptions, rather than to build the capacity and power of community members. Many creative and transformative approaches exist that strengthen participants' awareness, commitments, and relationships and result in greater community power. Some examples of methods and frameworks include participatory action research, photovoice, storytelling for narrative change, and participatory mapping. At the heart of many of these approaches is that goals and implementation are governed by community members themselves.

Critical understanding of data analysis: While data analysis is an essential and powerful tool for equitable planning, there must be a critical understanding of the limits of available data and the ways that data can sometimes make community experiences of inequities less visible. TA providers must have a critical understanding of averages, disparities, census data-collection methods, and other aspects of data analysis that can gloss over the nuances of the reality on the ground. Knowledge of qualitative and quantitative data analysis is important to create more holistic approaches that honor under-represented narratives that might otherwise be missed.

Equity as a practice and not a product: Equity is not something that can be easily quantified or produced through a standardized approach. Often, most of the equity conversations happen at the internal level, with a focus on the internal capacity of the community organization. But it is important to deconstruct equity concepts and practices across project teams, key decision-makers, and in the broader community. That sometimes includes the willingness and ability to do advocacy with and on behalf of community members in spaces with decision-makers. It is important to advocate on behalf of community members when decisions are being made in their absence and ensure that there is a commitment to shift decision-making structures to impacted community members so decisions don't continue to happen in their absence.

Balanced components of equitable TA: During our time with the current funded STEP grantees, our TA services have been informed by the different needs and capacities of each of the grantees but can be summarized as follows:

- 30% capacity building
- 30% advocacy

- 30% thought partner on strategies
- 10% identifying relevant resources for partners

Partnership Structures

Given the different configurations of project teams, it was important to understand the reasoning behind the composition of the community partners for each of the grantees. Partnership structures fell under one of two categories:

1. projects that had CBOs as grant leads in addition to other CBOs as community partners
2. projects that had transit agencies as the grant lead while also having a CBO as a subapplicant on the project

Projects that fall under category 1 displayed a deeper relationship with community members given their long-standing history in the communities that they serve. On the other hand, projects that fall under category 2 displayed a dependence on their partner CBO to lead the community engagement efforts. The first set of projects have appeared to have a better opportunity to not only include community members in the feedback process of a project, but also for community members to have more decision-making power in other aspects of the project. With the other set of projects, community voice is represented by the lead CBO staff on project team meetings and limits community members' access to decision-making power.

Conclusion

The findings in this review of literature and primary documents lay the foundation for the next phase of research, which is the evaluation of the CTNA process and outcomes in the CMO and STEP planning programs. The literature review helped establish a framework for the evaluation, identifying how needs assessments have been conducted elsewhere to offer comparison points, methods that would help surface root causes of inequities, and participatory processes that offer promising practices for equitable inclusion in decision-making. The Primary Document Review surfaced challenges with program structures that create obstacles for some organizations to apply for funding in the first place or to successfully implement projects if they did receive funding. Finally, a summary of key issues from the document review and TA activities identified areas of focus for the evaluation, including program

design, the selection processes, program implementation, organizational capacity for implementing projects, and pain points and opportunities in the partnerships established for the CTNAs and planning projects.

The findings helped the research team generate and revise a set of research questions that will guide the evaluation. The initial draft of questions focused on application and implementation of CTNAs, but the findings from the discovery phase helped the researchers improve the questions and focus on specific program and community structures that enable or create barriers to CTNA award and implementation. The high-level questions are organized into three thematic areas: **program design, metrics and methods, and community capacity.**

Program Design

- How is equity defined by CARB programs and among the various stakeholders in the CTNA process?
- What elements of community-centered research methods like CBPR and participatory action research can be used in programming and research focused on the CARB grant programs?
- How can a government organization like CARB transfer decision-making power to communities involved in their grant-making and other programs?
- In what ways can CARB and other government organizations improve methods of genuine participation into its public feedback cycles? Where and how can collaborative discussions be fostered?
- How do program guidelines and structures create barriers to applying for or obtaining funding for CTNAs?
- How do program design, selection processes, and implementation support equitable outcomes aligned with CARB program goals?

Metrics and Methods

- What methodologies guide identification of community transportation needs?
- What metrics are used to guide equity evaluation in CTNAs?
- To what extent is community participation and power transfer embedded in the CTNA process?

- How well are the needs of various community types addressed in the CTNAs?
- To what extent is root cause analysis, power mapping, and concept mapping guiding evaluation of community needs?

Community Capacity

- What organizational capacities predict successful receipt of funding and implementation of the CTNA process?
- What tools, skills, and data are necessary for grantees to implement equitable CTNA processes?
- How do partnership structures influence the success of communities in receiving funding and implementing CTNAs?
- How do the relationships between stakeholders (i.e., CARB, lead awardee, CBOs, community residents, and others) shape project outcomes?
- What barriers and challenges are preventing equity-seeking community members from meaningfully participating in CTNA and other transportation decision-making processes?

As described in more detail elsewhere, the evaluation will rely on data collection through interviews with stakeholders in the CMO and STEP programs. The findings from these interviews will be checked through the Community Accountability Process, where equity experts will offer feedback on research design, interview questions, findings, and implications of the research. The aim is to yield actionable insights into the design and implementation of equitable transportation programs by CARB, other state agencies, and organizations carrying out CTNA.

Stakeholder Interviews

THE PREVIOUS PHASES OF THIS EVALUATION PROJECT produced reviews of academic and professional literature, Clean Mobility Options (CMO) and Sustainable Transportation Equity Project (STEP) program documents, and public comments submitted to the California Air Resources Board (CARB) regarding the two programs. These analyses raised issues and established frameworks for understanding how program implementation was achieving the intended outcomes. In the final phase of this project, the research team interviewed key informants who work in equitable transportation in California or who have firsthand knowledge about the creation and early implementation of the CARB equity pilot programs and community transportation needs assessments.

It is important to note that the analysis that follows identifies broader issues and recommendations than those solely pertaining to CTNAs and the CMO and STEP programs. These themes reflect the perceptions of transportation equity challenges in funding programs from administrator, recipient, and nonrecipient perspectives, of which CTNAs specifically made up only a small part. Additionally, while the interview guides focused on the CTNA and Planning and Capacity Building components of the programs, some respondents who had participated in or applied for CMO Mobility Vouchers or STEP Implementation Grants provided feedback on these aspects of their experiences as well and viewed them as being directly connected to their experiences with the planning process and CARB programs overall. The interview findings also reflect, in some cases, a lack of deep knowledge of the program intricacies. We have identified where findings and recommendations refer directly to the two programs but contend that the broader analysis is equally important as a means to lay the foundation for the design of future grant programs.

Interview Findings

Program successes

The CMO and STEP pilot programs represent two major investments that aim to meet CARB's goal of investing in disadvantaged communities to redress the harm from environmental injustices and advance equity. The CMO grant includes two types of grants: Mobility Project Vouchers (MPV) and community transportation needs assessments (CTNA). MPVs are aimed to develop and launch zero-emission mobility projects, such as bike-sharing and ride-on-demand transit. CTNA grants are aimed to help underresourced communities identify and develop community-driven solutions that meet their unique needs. Both of these grant types have earmarked funds for applicants from tribal governments. The CMO application and awarding process is intended to be noncompetitive and first come, first served. The STEP program also includes two types of grants: the Planning and Capacity Building grant and the Implementation Grant, both of which focus on supporting transportation projects that can mitigate passenger vehicle miles traveled (VMT) and promote a long-term mode shift toward sustainable mobility. The application for STEP grants is a competitive solicitation where each application undergoes an extensive review process and only a select number are awarded.

Many interviewees agreed that some of the program elements were working in ways that achieve those goals. Despite the issues and concerns reported (discussed later), most who were aware of project outcomes cited specific positive changes or insights that had resulted from receiving planning or needs assessment funds. One interviewee specifically noted that the programs can yield innovative solutions that are not the norm for transportation funding programs:

I think as a whole [STEP is] a good program. It kind of gives you the opportunity to try different things and see what works in a community, and that's usually how you have to start. (C2_12)

Several participants praised CARB's shift in investments and focus seen in CMO and STEP that were not previously present, including the community-led approach and its focus on issues beyond transportation like climate adaptation, workforce development, and anti-displacement measures. There was positive discourse about CARB's access to public documents like the annual Clean Transportation Funding Plan, which has the programmatic criteria and guidelines for clean transportation incentives, and Senate Bill (SB) 350 Barriers Study, which was deemed to be an equitable approach in transportation planning. Although nearly all participants in Category 3 provided examples of CARB making decisions that do not support equitable transportation planning, there was one participant who reported that they appreciated CARB's web group meetings, to which stakeholders and the community were invited. However, they hoped CARB would reevaluate its current outreach strategies to further promote these events to grander and diverse populations:

The CMO program really was a leg up for us because when we were awarded that and had the opportunity to implement the...on-demand rideshare shuttle, it opened up the doors to other grant funding opportunities because other grant funders at the state level, and even the federal level, saw that we were able to get this grant to initiate the program. And so, providing these types of programs for CARB to continue to provide these types of programs to smaller cities is a great way to help make it equitable for all the cities. Secondly, CARB has a number of board meetings and seminars that allow us to participate and provide comments, and I think that's great, because I've seen in real time where they take the feedback and they apply it. (C3_12)

Some interviewees acknowledged that progress toward advancing equity has indeed been made by CARB. One participant identified the agency's willingness to focus on issues of equity and environmental justice as a marker of such progress. Another participant went a step further and recognized that the focus on this type of work and acknowledging mistakes made in the past demonstrates true leadership by state agencies:

That's why I'm so proud of our state agencies, that the people who are apologizing didn't do any of the harm. That's what's so amazing to me; that's called leadership. To me, that capacity exists and, honestly, I'm really curious to see where this [ends]. (C4_07)

Current TA practices were also recognized as a program success. CARB staff expressed positive comments, acknowledging that TA was so successful that the demand for it was more than the capacity to provide it. The creation of a mutual support group under the Clean Mobility Equity Alliance (CMEA),

part of the CMO grant, helped establish a network. The CMEA was created to serve as a cohort that can support each other and provide a mutual learning experience on overcoming implementation barriers. TA was key in creating a more equitable distribution of capacities, and at the same time, it helped foster a sense of community and belonging. TA was often cited for being responsible for increasing trust and relationship building. Similarly, some grant recipients who had experience with project TA shared positive comments about the TA they had received through CMO or STEP. One interviewee explained that it had been helpful to have someone to assist them with reporting and meeting other project requirements:

I just want to compliment [TA Provider] for being flexible and giving us a little bit more time to really work this out. [They were] really able to point us in the right direction and get this thing going. (C2_6)

Needs assessment processes

Key informants in Category 2, who had received funding through either CMO or STEP, were asked about their experiences and approaches to conducting CTNAs. The interviews included questions about organizational perspectives and processes on public participation in the planning process, and informants were asked to rate their organization's approach on the [Spectrum of Community Engagement to Ownership](#). This spectrum characterizes different levels of equity in approaches to working with communities, from Informing communities of updates and plans, to Consulting and gathering input, to Involving the community to incorporate their needs and interests, to Collaborating and having the community in a leadership role, and finally to Deferring to the community with democratic participation and community ownership of decisions.

Category 2 informants most often characterized their organization as using a combination of Consulting, Involving, and Collaborating, while some respondents stated that their approaches involve all five levels depending on the specific project or goals of the engagement activities. Several informants explained that they would like to conduct work primarily at the Collaborate and Defer levels, but that this is often difficult given certain institutional requirements, organizational resources, and time constraints. Two Category 2 informants noted that they were aware of or had applied the Spectrum of Community Engagement to Ownership in their organization's work, and all informants acknowledged the benefits of moving beyond the Inform stage toward a more participatory process when conducting needs assessments and other community engagement activities.

Each respondent who was directly involved in the needs assessment process for their CMO or STEP project discussed the process of conducting the assessment, including details of their engagement approaches, challenges and successes of identifying transportation needs, and current or potential future plans to implement interventions based on the needs identified during these projects. Most of these respondents had already been aware of certain community transportation needs before applying for CARB funding, but respondents generally reported that the surveys, interviews, and other engagement activities they conducted had helped to shape or refine existing identified needs or had identified new transportation issues and needs that were previously unknown to the organization. Although the interviewers received many comments about the challenges and barriers to conducting needs assessments and implementing transportation solutions, such as in relation to community engagement as described in the below sections, most Category 2 respondents positively reflected on the importance of conducting thorough engagement in different forms and with different parts of the community as part of the transportation planning process. The barriers and challenges are described throughout the rest of the findings.

Barriers to implementing transportation equity programs

While there were indeed some positive themes to arise from the interviews, the bulk of the discussion focused on barriers to achieving success within the pilot programs. This section details several barriers analyzed as important themes, including issues of distrust between state agencies and communities, the availability of TA and other resources for proposal development, data availability, and the need for additional community accountability.

Disconnect and distrust between communities and state agencies

A common barrier to program implementation that community interviewees identified was that of a disconnect between government institutions such as CARB and the communities that those institutions are intended to serve. This disconnect yielded mismatches of goals and priorities between communities and the state institutions, issues of distrust, and perceptions that staff managing the programs needed additional training and education to improve their understanding of equitable practices and community outreach efforts. Some interviewees additionally framed the programs as too narrow

of an intervention to affect meaningful change toward equity, which they viewed as further evidence of misaligned priorities between the state agency and communities.

CMO and STEP grant recipients (Category 2) focused on the relationship between CARB and other agencies and their communities. Several mentioned that there are communication issues or differences in perspectives that create barriers to effectively supporting transportation equity or transformative change. Interviewees noted that this applies to several aspects of transportation equity programs and parts of the institution, from TA to program requirements and guidelines, and project goals. A transit agency interviewee applied the concept of organizational disconnect to the relationship between consultants, academic partners, and communities, suggesting that professional or theoretical perspectives on community needs may not align with communities themselves:

If we talk about what I call the professional advocacy class...who have consultants who partner with universities, and they publish a lot of reports. They have a very specific viewpoint, and when you actually go around and talk to the people, you'll have a much different conversation. (C2_8)

This interviewee discussed a past transportation program they had worked to implement, where consulting organizations had suggested one program structure that was focused on transit but the community ultimately advocated for a design that would allow them to choose the type of transportation support that best fit their needs. This speaks to the importance of facilitating community-led projects that are not limited by preconceived ideas from institutions about how transportation equity can be achieved.

Many interviewees, particularly transportation equity experts (Category 3), identified a potential source of the disconnect between community and state goals as a lack of trust between communities and CARB. The distrust between community members and CARB was especially clear when holding community engagement events or, as two participants discussed, during the design process where the communities' input was not valued. One participant deemed that the lack of an attempt to establish that trust came from all parties involved, but the fault is on CARB because it is their task to bridge that gap as an institution of authority. Several participants framed the distrust as a result of power imbalances between the state agency and communities, and perpetuation of the historical inequitable infrastructure that has disregarded underserved communities. One participant emphasized that the mistrust will abate only when CARB is held accountable and acknowledges this historical disconnect:

...the end goal always is on the empowerment side of things and community decision-making, how we [are] recognized, and it's oftentimes not realistic to expect that right away from every government entity, especially if there is not that built trust relationships between government entities and communities. You don't really want to over promise these things and under deliver. (C3_06)

In another sign of distrust, some participants held the perspective that some community-based organizations (CBOs), such as those in particularly rural and underserved communities, were underrepresented when CMO and STEP funding distribution occurs.. One participant discussed this in the broader context of state transportation dollars, explaining that funding is often focused toward projects that build highways and directly or indirectly harm communities, rather than on projects that support clean and sustainable transportation. They perceived that CARB does not work in partnership with CBOs and communities; rather, their actions emphasize institutional priorities rather than meeting the needs of communities. Another participant discussed that the system does not conduct itself through a community-driven approach, as those within the community lack the resources and accessibility to secure funds and the opportunity to provide input during the planning and decision-making process.

Some of the lack of flexibility in grant programs can be traced to funding structures. The lack of sustainable funding for projects has left many local residents with poor perceptions of government when projects get planned and then never materialize. This has contributed to the lack of trust from communities toward state agencies—particularly those located in rural areas. The ability to engage in rural communities in low-resource mobility deserts is made even more challenging when state agencies have historically not paid enough attention or abandoned projects because of lack of funding or political will. As one state agency interviewee noted, this has created a further sense of distrust:

A rural agricultural project serving elderly residents was canceled because of COVID-19. The residents were excited that they had access to electric vehicles, but when COVID-19 hit, the cars went away and the residents were left in the cold. (C1_1)

Apart from the institutional disconnect with community members, transportation equity experts discussed the disconnect between CBOs and CARB. Interviewees point to a disconnect that is often related to inequitable funding practices, tedious grant application practices, and other obstacles that lead to additional barriers. In some cases a disconnect is created, when

promises of supporting community programs are made, yet funding or programming is not sustained, leading to a further sense of mistrust. There is mistrust between all parties, from communities to CBOs and CBOs to CARB:

...another barrier could be those baseline trust and relationship building [issues] between communities—whether it’s between government and community or between different community groups. I think we can’t just take for granted that, you know, folks all have the same vision and trust in each other’s approaches. (C3_06)

Four interviewees who represented CBOs with expertise in community engagement stated that building trust with the community was a prominent challenge when working to implement needs assessments or planning and capacity building efforts. Although these organizations were already familiar with the communities and worked with community members regularly, they found it challenging to obtain community trust with regard to transportation equity engagement, possibly because these projects were being implemented through state-funded programs.

Almost all of the interviewees who did not receive grant funding (Category 4) largely focused on the need for CARB staff to participate in training and education to improve their understanding of equitable practices and community outreach efforts or, in the words of one interviewee, to enable them to “understand the difference between equal access and equitable access.” One participant even suggested that CARB concentrate their efforts to engage groups beyond their established network. This interviewee argued that CARB has a typical audience of nonprofit groups and local stakeholders that only represents a small fraction of impacted communities, but most underserved communities remain largely disengaged and uninformed:

We are trying to bring not only education to the communities, but also educate the regulators, the policy-makers. [We] let them know that although you’re in this world and I’m there too. I’m just as guilty of [being in] this bubble of understanding; most of the rest of the world has no idea what you’re doing and isn’t paying any attention. (C4_03)

Interviewees in this group also pointed to the disconnect and lack of knowledge between local officials and their community groups that need support when applying for these types of state grants. Interviewees suggest that the lack of outreach from their local leadership often leads to misconceptions about the needs of a community. One interviewee described how the limited understanding of a region often leads to prescriptive solutions that fail to meet the specific needs of a community:

There's just a huge educational issue from the county [located near the Mexico border] that needs to happen, not at the supervisor level, because the supervisor for this area is from [the local area]. But more for the planners that are working at the transportation agency. Or folks who are doing analysis, that middle-management level, just don't really understand the context of these places, and make all these assumptions. (C4_08)

Such a lack of communication and accountability to community needs can ultimately lead to less participation in planning processes. Communities tend to become less motivated to engage, particularly when there is little to no report back on input from their past participation. One interviewee explained how the lack of government response to community needs contributes to distrust and apathy and encourages communities to focus their energy on more pressing basic needs:

I think the government has to do a better job of informing the public how they're using tax dollars. And based on how much money they're getting for transportation, explain to the people why it takes so long in some of these communities for things that seem as simple as fixing potholes.... And I work in government, and I don't understand how it takes so long for some communities to get potholes fixed. I think that right there, people...lose trust and they become apathetic, and they just get turned off. I think they start to ignore and focus on things that they have more control over, like day-to-day income survival. (C4_09)

Needs for technical assistance, training, feedback, and resource provision

Community interviews (Categories 2, 3, and 4) highlighted essential needs for training and guidance, better TA, and data to ensure success in grant applications. Both recipients and nonrecipients of funds reflected on the additional support, resources, tools, and metrics that would be useful for them or potentially for other program applicants or grant recipients. For example, one grant recipient suggested that CARB project applications and guidance should include more specific questions about who will be doing what and how they will be doing it during the project, to minimize gaps between CARB expectations and project team capacities. This suggestion relates to an issue mentioned by two of the interviewees representing transit agencies, who noted that the CBOs they had worked with during their projects were not prepared to conduct community engagement in the manner that had been specified in the grant agreement, which created delays in the project timeline.

Interviews with unsuccessful applicants of the CMO program revealed that additional resources would have been helpful when developing their application. CMO applicants described receiving notifications of a declined application and at times general comments, but most felt they did not receive thorough feedback or constructive criticism. One interviewee described how this lack of feedback can discourage small organizations from reapplying as they require that type of guidance for success in future funding cycles:

The problem is when we don't get responses or feedback on our answers, we can't get better the next time. And that's also a resource thing. The smaller the organization, the less resources they have to put into big grants like this. So, if we don't get feedback on them, we're going to make the same potential mistakes the next time around, or it's going to make us not want to apply because we feel like we're not going to have a shot in the first place. (C4_04)

Community interviewees noted problems specifically with the TA available to support developing the grant applications. In particular, organizations that did not receive funding described the TA provided by CARB as not always meeting the needs of prospective applicants. One interviewee pointed to a gulf between TA providers and the community they are meant to serve. This interviewee highlighted how a TA provider's lack of knowledge limited their ability to provide adequate guidance. A different interviewee described being a first-time applicant and being paired with a TA provider who was unable to provide help at the level of expertise a first-time applicant required:

...[The TA provider] had some background with CARB, but as far as TA—you know [they were too new]. I tell you what I accomplished with [that person] was this; a contact for our [local transit agency], that's what I got out of it. We can get you a telephone number, we get you a person. Okay, good. But nothing connected to the CMO or the CARB in itself for the assessment. There was nothing to get me ready, let me say that. Because I think being ready is the biggest thing, and I wasn't ready. I just wasn't ready, but nobody could tell me I wasn't ready. (C4_05)

These comments highlight that perhaps one of the most critical benefits of TA is communicating necessary components of a successful grant application for organizations who have limited experience in obtaining government funding. However, this benefit was not seen as the sole necessary asset of TA providers. One grant recipient noted there were trade-offs in having TA providers that are rooted in the community they are serving versus providers that have expertise in the grant programs and best practices of equitable

transportation, and suggested that striking a balance between these qualities could be a goal for future TA efforts.

Some interviewees discussed how personal background and experiences can limit the ability to help CBOs through TA. For example, one interviewee stated that the TA providers offered through CARB's programs are limited by their own perspectives and practices, which may not resonate with a particular community. This speaks to a challenge for program administrators in designing TA and selecting providers that have expertise that fits with the needs of a specific project or region. Another interviewee representing a CBO explained that they could have used TA with some aspects of the project, such as meeting grant expectations or applying for funding. However, the TA they received was instead focused on community engagement, a topic that the project team was already well versed in:

For us it just wasn't a fit...the technical assistance was on how to do communication, [and] I already live here, so what are you going to tell me about my community that I don't know? I grew up here...and I don't know how you can help tell me how to do engagement here with my people. (C2_17)

In a broader sense of assistance, many interviews from transportation equity experts—some who received program funding and some who did not—identified a lack of supportive resources offered for program implementation. The need for additional aid comes as a result of being understaffed or lacking expertise within their staff, where more training is needed in response to grant requirements. Some discussed high levels of stress from understaffing causing more responsibilities to be put on fewer individuals. In particular, several noted that they did not have the proper resources to uphold CARB expectations for grant recipients because the demanding requirements did not correlate with the resources given to complete those tasks. One participant found reporting and implementation requirements so onerous that they sought funding elsewhere, where they were able to organize and complete their report faster than if they stuck with the original CARB grants. A few individuals drew on these experiences to propose developing grant-writing teams and providing TA to organizations that lack these resources.

More expansive assistance would have benefited many organizations who did not receive funding, perhaps yielding more successful applications among this group. Nonrecipients described the gap between the level of expertise within their organization and the level of expertise needed to successfully secure and execute state grants. Interviewees described how staff typically needed several years of CARB grant cycles to understand the

application and awarding process, or even to know what questions to ask the state agency. Misunderstanding CARB's processes could jeopardize an organization's financial resources:

I think the lack of legal aid, like understanding what goes into contracts, is hurtful for smaller organizations. Because you sign something because you want to get the award, but you don't have a lawyer that's reviewed the contract. And so, you're committing to a certain payout schedule that actually hurts you because you're putting unrestricted funds, or heaven-forbid restricted funds from another grant, to pay for these expenses until you get reimbursed. (C4_04)

These organizations end up in a difficult position—not knowing how to seek help while running the risk of legal challenges for misunderstanding the rules behind using certain funds, especially when needing to fill budget gaps while waiting for funding disbursement. Knowing how small details like certain contract wording can prevent hiccups could go a long way in avoiding legal trouble. For example, one CBO submitted an application a year prior to when a new law was enacted that essentially required them to hire contractors for a project installation rather than using their own staff. Now, they had to reallocate their funds to hiring contractors, which caused their end date to be pushed back because of these legal implications. This participant noted that stronger communication between CARB and CBOs on topics like this could have limited legal exposure, representing another example of how the programs could end up having a high opportunity cost for participation:

It's one of those things where the state says we're going to be giving out X amount of money, and it sounds really good from the beginning. But it still feels like we're in a place where there hasn't been a true acknowledgment, or frankly accounting, of how much time, money, resources, and different kinds of team members you need to really do this work effectively and thoughtfully and justly. (C3_10)

Because of these hurdles, many organizations sought other sources of funding that were more flexible, had less burdensome reporting requirements, and were likely to pay them quicker. At least half of the unawarded applicants described the need to adapt and secure resources from other funding entities to continue implementing mobility projects in their communities. At least two interviewees explained how the experience of applying to a CARB grant taught them how to craft an application for and receive similar state and federal grants. Others described shifting to private foundations and individual donors mainly because applicants view the application process as more equitable, the finances much more flexible, and the administrative

back end less rigorous. One interviewee described the value of their intended project as too vital for the community that they used their own resources to move ahead to ensure that the project gains momentum.

We didn't get that million dollars on that second grant deal. So, we did our own thing. We're not going to pause and take a time out. We just move forward. This is something that CMO, CARB, and Calstart could have gotten a lot of mileage out of it. We're funding it ourselves. We're just doing it. We just can't wait. (C4_01).

CARB staff (Category 1) recognized their inability to meet the needs of certain communities with adequate TA. They noted that “too large” a number of communities needed support, primarily because “the application was complicated, and people needed a lot of clarification” (C1_9). This reflected larger challenges at the organization. Agency staff acknowledged they lacked the capacity to understand the complexity and diversity of needs at the local level. The lack of staff knowledge of other underlying social problems in grant-seeking communities made it difficult to solve mobility inequities that are often associated with other social issues like housing, jobs, and access to health care. Indeed, this came up in the language used in some interviews, where terms like “equity” and “equality” were sometimes conflated. The lack of ability to adapt to local needs by the state agency prevented it from being more responsive to those needs. Institutional cultural practices were highlighted as a weakness in the organization's capacity to serve marginalized communities because many of the staff do not have direct experiences that reflect the communities they serve.

Data unavailability

Data availability and tracking was another barrier to obtaining funding and implementing the grant programs. This was true both during application preparation and postfunding with program design and implementation. At least half of the interviewees who did not receive funding mentioned additional support in the form of metrics and data would have provided key quantitative arguments for their project narratives. These needs ranged in specificity—one identified the need for information on electric vehicle penetration rates, one wanted a database of philanthropic organizations, and another would have found use in a statewide equity dashboard with “metrics that are nimble and easy to grab” (C4_07). One interviewee specifically described the benefit of having free and open software for smaller agencies and non-governmental organizations that would help build a more comprehensive application. Similarly, transportation equity experts lacked access

to data, hindering their ability to design and implement program strategies. Issues with accessibility to data, often obtained via public records requests, include the long wait process to gain information about incentives distribution and household income, as some interviewees described in their experience with a clean vehicle rebate program. One participant noted their poor communication created a wait time that was longer than a month. Deeming this approach inequitable, interviewees described the need for easier access to information and data that can be used for analysis to support their advocacy. Several interviewees proposed solutions that would require easy access to data, like tracking community-level data, beyond what is available from the US Census Bureau, that would be helpful for organizations engaging in community outreach.

Some unawarded applicants described challenges and inconsistencies with the CalEnviroScreen tool. CalEnviroScreen is a data dashboard that indicates the level of environmental justice burdens that a community experiences and is widely used by state agencies to identify “disadvantaged communities” based on metrics defined in state law. At least three interviewees mentioned challenges with the designation their community receives, while another described heavy reliance on this tool as challenging because of the factors the tool fails to capture. One interviewee described the tools as “biased against rural areas because of the pollution index and how it relies on roadway pollution” (C4_08). Another noted that in areas with a high cost of living, a measure such as median household income may not place a community in a disadvantaged category, but a measure of income relative to the region would—an approach not available in CalEnviroScreen:

I went after a lot of grants when I worked for the City of [Disadvantaged Community as defined by CalEnviroScreen], and we were extremely successful because median income was so low and Disadvantaged Community Maps ranked us in a position of high competition. In [South Bay Area City], and a lot of the Bay Area cities, the income is just so high that if it were relative to other areas, it would be poverty. But it's not here because relative to the highest incomes...it's just tricky for us. (C4_06B)

Interview participants recommended exploring multiple map tools and resources that can provide a comprehensive view of all the factors that inflict social and environmental burdens on a community. Others identified resources from CARB that would be helpful to organizations that have similarly limited capacity, such as lists of available funding opportunities that could complement CMO and STEP or templates and other materials to guide CBOs in completing required reporting and other project tasks. TA providers indicate that the types of resources mentioned in these interviews were available

for applicants; however, it is likely that applicants were not informed or aware of them, particularly those organizations operating with limited bandwidth and under short timelines.

Community accountability as an opportunity for meaningful change

Overall, interview participants shed light on challenges related to the implementation of their projects. There were some competing perspectives about how well the grant program structures would be able to provide assistance for underserved communities. Some state agency staff, for example, expressed optimism that some elements would be successful because of leadership buy-in and efforts to be accountable to communities:

CARB knew that they were going to have to dedicate executives to that process. They were going to have to invite and involve these executives along the way in showing their faces at these events so that people could really see who was leading these organizations. They've put in the time, the energy, and the effort, and I feel like that is going to pay off in coming up with and developing a plan and an effort that is truly more representative of the needs of the community than most other things that they generally put out. (C1_14)

At the same time, there were limits in CARB's ability to deliver meaningful community change. In some ways, the way the grant program was written, coupled with other legal issues, shifted focus away from investments that would benefit communities. One interview highlighted that the legislature's focus was not on mobility needs when designing the grant programs; rather, "a lot of the [program] incentives were designed to support economic development from the beginning" (C1_12). Certain interventions would require much more coordination among different state agencies. Even simple community benefits were impossible to provide. For example, providing childcare and food at events to encourage families to participate in community events and feedback sessions is a prohibited expense under CARB policy ("these are two big barriers" [C1_14]).

Community interviews highlighted the disconnect between community needs and investment priorities centered on the scope of the programs. While interviewees acknowledged that funds from transportation equity programs are welcomed, several provided comments suggesting that many communities need larger scale holistic interventions beyond individual transportation improvements, and that a specified amount for transportation may not be effective if other issues in the community related to land use, food

insecurity, and other challenges are not addressed at the same time. One CBO interviewee explained that many people living in underserved communities are primarily concerned with basic needs such as food security and housing, and that institutional or state priorities such as vehicle electrification, reducing VMT, and emissions reductions are likely low priorities for people in these areas. This disconnect may create barriers to generating interest in transportation equity programs, particularly if program requirements limit the possible scope of projects in favor of pursuing those other goals:

It's not a concern when you are just living your life to figure out how you're going to make rent and put food on the table. You're not concerned with driving an electric vehicle. It's not practical. You don't even have the mental capacity to have an electric vehicle conversation, especially when you see the limits of how far you can drive on one charge. And you know that where you have to go to get to work exceeds that range round trip. So we have to get real as policy-makers. (C2_19)

Others concurred, making comments suggesting that the state emission or electrification goals may either not be the same as the goals of the communities they are trying to serve or have an overly strong focus on these goals that could cause projects to lose touch with what communities need most. This may also be seen as a communications challenge where CARB and grantees need to more effectively describe the way that transportation planning can address immediate concerns like cost of living and commute times while also addressing the public goals of reducing greenhouse gas (GHG) emissions.

Community interviewees framed these challenges in terms of the need for CARB to be held accountable for promises made through the administration of the grant programs, whether through events led by CARB itself or through enforcing a requirement that grantees hold meaningful engagement events. Some transportation equity experts identified inadequate or misguided community engagement as one area of failed promises. Two interviewees discussed the slow pace of information provided to communities from CARB. One interview participant mentioned that community engagement events grew to be more frustrating than helpful because a certain topic had already been discussed and felt that enough feedback was gathered for program implementation. Instead of having another meeting for the same topic, the participant proposed that if they were to meet again, it should be about program development updates and providing solutions rather than more of the same. The interviewee framed this challenge as an equity issue, in which the time of community members was not valued because the process is so inefficient. Two participants discussed the gap between program resources and community knowledge, where there needs to be more accountability

from CARB to keep the community informed of the progress from the last community engagement event. Years should not pass between events from program pilot to implementation without program progress:

I think the city could do a lot more to keep people abreast of where we are in the plans to begin with, what stage we're at, and just keep them informed a little bit more. So that when we do return three years later and say, "Okay, well, this is the input you gave us three years ago. That took us three years to put in place." And now you have new people in the community, and they're like, "Well, I didn't get that input, I didn't know." So I think the city in general could do better to make a better effort at keeping people informed at every step of every plan and process. It is a lot of heavy lifting, but it's our duty, and a lot of times we get so busy doing the work and don't realize how much time it takes us to do it; that's just that one component that we can improve upon. (C3_12)

This reflects a challenge for a state agency. While local organizations—both public institutions and CBOs—are in the best position to engage with community members on project input and reporting, some community representatives perceive that CARB should be more centrally involved in the engagement process to bridge stronger connections between the state and the public.

Nearly all interviewees from among the transportation equity experts (Category 3) mentioned that valuing collaboration is a method to minimize the gap in communication between organizations. It has the potential to promote equitable goals as it encourages organizations to become aware of communities that are underserved, including rural regions that lack resources and technology to advance.

Nevertheless, some interviewees expressed hope that tides were turning at the agency and meaningful change to be accountable to communities was still achievable, even if more work is yet to be done:

I think the [California] Air Resources Board has really embraced the need for change and the need to invest in these communities. I think that Governor Newsom has. But I feel like it's still kind of surface, and they're getting deeper and deeper. I just have to say that seeing you in this position asking me these questions gives me a tremendous amount of hope and satisfaction that we are going to listen to the people that come from and live in these communities and get out there, make ourselves known in our presence and become trusted instead of feared. (C4_03)

Organizational capacity required

Application and program requirements strain organizational capacity

Because of the complexity of program applications and implementation requirements, grant applicants and recipients faced organizational capacity limits to apply for and receive funding, and to execute programs once funded. Nearly every interviewee from each category concurred with this theme. Two grant recipients from consulting firms stated that local transit agencies and CBOs often do not have the capacity to seek out and apply for state funding and need support from specialized organizations, such as consultants who have experience with proposals and project partnerships. Several interviewees discussed the capacities required to apply for and receive CMO or STEP funding, including resources in the form of staff, time, and knowledge. While these organizations had successfully been awarded funds through one of the programs, interviewees commonly mentioned that the application process had been time consuming and that they thought it could be difficult for smaller CBOs or transit agencies to replicate this success. Interviewees who mentioned knowledge as an important capacity limitation explained that some organizations do not have staff who stay apprised of available funding opportunities, or do not have staff with expertise in preparing proposals or grant applications:

There are many community stakeholders that don't have the wherewithal to identify an opportunity, identify a solution, and then implement that solution...so you need all of those things in order to make something happen. (C2_10)

CARB staff acknowledged the difficulties with the grant process for many CBOs and smaller, underresourced organizations. Interviewees often stated that one of the largest barriers to proper project implementation for grantees was due to the complexity of the grant application process and the steep requirements of reporting, data collection, and storing requirements. For some organizations, the opportunity cost to apply in the first place is too great, even when funding levels are substantial. According to transportation equity expert interviews, continuing to enforce inflexible requirements in the application process leads to the belief that CARB lacks the acknowledgment of barriers these applications bring forth. Most experts discussed needed program adjustments, where access to technical resources and assistance are prioritized for grant applicants. Many interviewees noted a broad lack of and need for expertise in grant writing, organizing community engagement

events, TA, and other resources from CARB to promote equity in grant applications. Program adjustments were proposed as a solution where CARB needs to be more flexible and shift power dynamics for a truly equitable distribution of funds. Such adjustments included eliminating slow disbursement of funds once funded and shifting application practices such as having video submissions rather than tedious writing prompts.

Another strain on organization capacity results from requirements on CBOs when they are the lead agencies on grant proposals. One interviewee noted that very few grassroots organizations have the organizational capacity to take the lead in a complex contracting process or the initial costs that are required in a reimbursement-based award program. This suggests that building flexibility into the lead applicant requirements may allow some communities to participate whose CBOs otherwise would not have had the capacity to lead the project.

Regarding the implementation of awarded funds, two interviewees whose organizations had received funding through CMO or STEP mentioned that the project budgets did not allocate sufficient resources to support administrative tasks, particularly in cases where the lead organization needed to revise scopes of work and contracts or coordinate with project partners at the beginning of the project to establish procedures and responsibilities. One interviewee noted that they had to modify the contract several times due to the different organizational requirements of project partners, the local government, and legal teams who needed to sign off on the work. Three interviewees also spoke about the administrative resources needed to meet project reporting requirements and suggested that additional funds dedicated to administration would help to ensure that awardees are able to accurately meet project expectations without straining their organizational capacity:

The administration budgets need to be more. It needs more budget if you want it to run smoothly and make sure we get attention to every task. (C2_12)

On this topic of capacity and reporting requirements, several interviewees stated that data collection or reporting requirements are often a burden or barrier when implementing projects. Two of these interviewees specifically noted that CARB reporting requirements are burdensome, while three spoke generally about their experiences with grant reporting for CARB or other project sponsors.

Financial resources offered by the pilot programs are limiting

Interviews with unsuccessful applicants were especially revealing in how stretched many organizations were, in terms of personnel and resource capacity, to try to meet application requirements and deadlines. Many reported extending their teams' bandwidth to meet application deadlines during an already challenging period due to the COVID-19 pandemic:

At [our organization] we worked through the \$1,000,000 proposal. This was actually at the very beginning of the pandemic, and so there were a bunch of issues floating around here that actually prevented us from submitting our proposal even though it was done. (C4_02A)

Other nonprofit groups and community-based groups also pointed to relying on well-resourced allies and pro bono expertise to assist them when compiling these applications:

I made a comment earlier about some of the attachments [that] need to be very specific file types. Most people don't have access to that software when you're a smaller CBO, and I'm talking like \$2 million endowed- or \$5 million endowed-sized organizations. We've had to go to city partners and ask them, "Hey, would you mind turning this file into the right file name for us?" And thankfully they're willing to do that. But if you don't know where to turn and that's a requirement of a grant you're asking for, well can I even submit this? (C4_04)

Finally, an interview with a consultant working with a small municipality described the challenging environment that city personnel often struggle with. The interviewee described a situation in which personnel staff were forced to deal with the more immediate issue of a broken sewer line. However, the interviewee acknowledged that having consultants in this case helped the municipality meet the application deadline, but not all municipalities have the resources to have consultants available to carry applications forward.

Most of the real work was done by us and the consultants. [Municipal staff] just don't have the [capacity]. She was fixing...I think there was a water main break very close to the time that we did the CMO grant. I mean, it's either...is your city going to flood or are you going to put this grant in on time? (C4_11)

CARB staff acknowledged that the high cost of insurance requirements associated with the project is an obstacle for applicants. Many interviewees stated that some communities did not have the capacity to engage with a complex bureaucracy:

The two most obvious obstacles are the complex application process and reporting, and insurance requirements that are extremely costly, requirements of storing data for future audits. We are not covering all the costs associated with the burdens. (C1_1)

Unsuccessful applicants also reported frustration with the insurance requirements. One interviewee described their organization’s primary mission “to minimize our vehicle footprint as much as we can.” In other words, even though the focus of this organization was on resources and opportunities to increase active modes of transportation in their respective community, they were “required to, nonetheless, carry automobile insurance” (C4_10) as a part of their project.

Even when financial resources are sufficient, they are not consistently available when the grantees need the money. From the community perspective, the speed of funding distribution emerged as a dominant issue. Slow disbursement hinders program advancement, staff getting paid, and more. An organization’s inability to secure funds, or funding insecurity, is a direct obstacle to program implementation. For instance, CBOs worry about their budget or when they were promised a certain amount of money for the program, then that amount changes abruptly. Funding insecurities may result in organizations needing to leave the project midway or potentially enter situations where they may lose funding and be unable to complete projects or meet financial obligations.

So we’re talking about implementation plans for the work we want to do. But we can’t bill for any of it because we don’t have a contract yet. By the time we have a contract with the city for this grant that the CARB approved sometime early last year, I mean, that CARB approved sometime last year, we will already put in six months with the work. That’s not fair. That’s not equitable. They always say don’t do any work until [you have a contract], but that would mean just don’t even think about it for the first eight months, because it’s going to take that long to catch what the people are eager to do, the work. That’s why we write the proposals. It’s like there’s a need, there’s an urgency in people’s minds to do this work. But there’s no urgency at the agency. (C3_16)

Inflexibility in grant application design

A significant hurdle in applying for funding is the complexity of the application process. A participant discussed assigning liaisons or grant writers to communities in need to be able to successfully secure funding for their program’s implementation. (CARB staff also noted that proposal writers

were more likely to contribute to the successful awarding of funds to an organization.) Further, interviewees shared that CARB needs to be flexible with their grant-making design and willingness to create changes that align with community values. CARB and communities often do not speak the same language when it comes to grant applications, as noted by one transportation equity expert:

I find myself struggling, writing in the lexicon, in the style, getting on a computer and research[ing] to make it fit into the puzzle they've given you. (C3_13)

Accepting applications in formats that are comfortable for CBOs could yield dividends in ensuring that equity benefits are properly allocated. One transportation equity expert noted that an alternative format can draw in community members to help tell the story that needs to be told about engagement practices and capacity to implement successful projects:

You would have to pay somebody to write that freaking grant for you [in the current format]. But I think that a video in a journal entry, that's something anyone can do, well, there are limitations, obviously, for groups that don't have the technology, but most of us will know somebody who's willing to be like, you guys are awesome. Let me record, like, a couple of interviews, and let's go do a community event showing. And boom. (C3_13)

Unsuccessful applicants, in particular, shared their experience with other grant applications in which they were successful, highlighting some of the key practices of those other application processes that enabled their organization to secure resources. One interview described a different application process where the granting organization provided a more proactive level of assistance for organizations that had previously applied but failed:

They created a special category. One is that they would give special consideration to first-time grantees...entities that have never received a specialty grant from [the granting agency]. And the other one was that they would essentially provide ongoing technical assistance on the grant application itself. What happened was that someone from [the granting agency] actually micromanaged our grant process. As a result of that, we ended up getting \$100,000 for our project at [the project site]. (C4_02B)

Another interviewee described how the in-depth level feedback in other state grants was beneficial to their own application. The interviewee pointed specifically to the Transformative Climate Communities grant (administered

by the Strategic Growth Council) and how the publicly available feedback was helpful for other applicants. The interviewee outlined how that level of feedback could be beneficial to CARB grant applicants as it provides a guide for applicants to identify specific areas where their own application needs to be strengthened:

They had outlined where the scoring was in every area. It gave the results of the awardees and the folks or the organizations that were not awarded; it also gave their score, but it also documented how they could improve areas that they were weak in. I think if a matrix of sorts was utilized at every round of the CMOs, or whatever it is, whatever the funding source it is. If that information can be utilized, it's helpful, because for me it has helped me as I propose a project, just to be able to go back and continually review and look and read. (C4_05)

Other related barriers to proper implementation of the programs were funding structures and grant guidelines. Getting resources to the communities can be almost impossible because of the requirements that the state has for who can access funds. While the CARB grant programs have funding available for some community engagement activities, these guidelines and associated barriers are also relevant to transportation equity work and funding programs in California more broadly. As one interviewee noted:

We are stuck in a position where we are often asking community partners or community members to inform our work, and we cannot compensate them for their time and their expertise. And that is a huge institutional barrier because we are either going to continue perpetuating this idea that, you know, we can just take part in these extractive processes, or we are going to make it nearly impossible for these groups to actually participate in these processes. (C1_10)

These structural failures devalue community members of their expertise, representing a form of informational injustice within a greater conversation about mobility injustices. Seven participants proposed that their input needs to be valued during the decision-making process of funding allocations because CARB does not acknowledge their limited capacity, which is vital when deciding where funds should go. A participant discussed an explicit example of how securing funding and slow implementation processes are hindrances that cause participants to struggle in effectively completing their project:

But the truth is, we could have had up to sixty vehicles because for each year you could ask for up to thirty vehicles, and the years that I suggested that we use it, the city wasn't ready to do that. And now here we are five years later, struggling to find money to replace these vehicles that are

now aging out or by law need to be discontinued because we can no longer use them. Unfortunately, [our city] hasn't been very proactive, so we're playing catch-up. (C3_12)

Community knowledge and partnership building

Yet another barrier to proper equitable program implementation is that communities that have some of the most pressing needs do not even know about the pilot programs and do not apply. Interviewees described their perception that funding does not always get to communities that need it the most because some communities are, in their words, “difficult to reach.” (As some transportation equity experts noted, communities are often in a “difficult to reach” position because they have not been invited previously, and organizations in power have neglected to spend the resources to ensure they are included.) Tied to the uneven distribution of knowledge, key informants stated that there was an uneven distribution of capacity to apply and sustain the pilot programs. Additionally, the need to find the right partnerships is key to the success of the pilot programs.

Interviewees in Category 2, who had received funding through CMO and STEP, commonly spoke of the partnership structures that they had needed to develop to successfully obtain and implement funding. Several interviewees mentioned that it can be difficult for local governments or transit agencies to proactively develop effective partnership networks, or that even with networks that were able to successfully receive a funding award, there are opportunities for improved collaboration among CBOs, agencies, and governments. One Category 2 interviewee expressed frustration with the idea that communities are continually asked to develop a partnership structure and apply for funding to identify projects, when regional Metropolitan Planning Organizations, air districts, and other organizations are in a position where they could help to lead these organizing efforts to help regions meet priorities that have already been identified in plans such as local Sustainable Community Strategies. This interviewee explained that with many different organizations each developing its own priorities, securing its own funding, and partnering with different entities, there is a lack of coordination across the state and within regions of California.

Another Category 2 interviewee representing a private consulting firm mentioned that they had taken on the role of developing grant applications on behalf of transit agencies, even though private consultants were not eligible to be lead applicants for CMO and STEP. This interviewee explained that while public agencies often do not have the resources or expertise to apply

for grants, private consultants are experienced in this and are more than willing to lead the process of developing partnerships and securing funds. This interviewee mentioned that requiring CBOs or transit agencies to lead these projects, rather than permitting a contracted consultant to lead on their behalf, has prevented some of them from participating, and suggested that more could be done by CARB to facilitate the development of partnerships between nonprofits, for-profit organizations, transit agencies, and local governments.

Challenges in rural communities

Rural areas face unique challenges that are hard to fit within the program structures. Transportation equity experts described isolation that contributes to transportation inequities and a perception of disregard for their needs and priorities, particularly given that travel by alternative modes is not always feasible. Barriers in rural communities include lack of transportation access, limited mobility options, low financial status, and unreliable personal vehicles. Grant recipients also commented on the distinct needs and challenges of rural communities. One of these interviewees mentioned the community engagement challenges of involving rural residents who do not have access to a smartphone or other technology, suggesting that extra efforts need to be made to reach and seek input from rural populations. Another interviewee representing a transit agency explained that rural areas require very different transportation planning strategies when it comes to building transit infrastructure and services, but that rural areas often do not receive the same level of support or attention as urban centers:

There is a dearth of rural investment in the state. Rural poverty has all the misery of urban poverty, but with huge distances and inability to access health, care, and education on top of it. I come from an urban community...that's my background, and I will tell you it's just as needed, if not more so, in rural California. But it doesn't have the technical expertise being offered to it. (C2_3)

Similarly, unsuccessful applicants described how challenges can be exacerbated in rural communities due to the limited resources, engagement, and expertise. For these reasons, one interviewee described that rural communities are at a greater disadvantage when competing for resources, particularly against larger more sophisticated agencies and entities. However, the success of projects in diverse geographies, including rural communities, is key to promoting diverse models of success:

We need models of success in a variety of place types and incremental

change is necessary. People always want something close to point to. So, it's very intentional balancing of not just the big cities, but there can be amazing projects everywhere. (C4_07)

Ultimately, successful projects in smaller and rural geographies will likely require more resources and investment, but these have the potential for a more significant impact, as one interviewee described:

Yes, fund those magnificent transformative projects. I think they need to be done for California, but also kind of take a gulp and understand that projects in smaller communities are just as important to those individual communities, and they're going to cost more. They're going to cost more because they can't get the contractors. They're going to cost more because the staff isn't as sophisticated, doesn't have as many systems in place, and they're going to cost more, because it's harder to find the community to get feedback from and engage in, and they need more education. (C4_11)

Limited support for community engagement

Community interviewees spoke widely about limited funding and logistical support for community engagement efforts. Among transportation equity experts, some of whom had received funding, grant requirements include holding community engagement events. One grant recipient described a specific instance where they had to seek outside funding to hold a complete event:

Some of the other challenges are being able to support participants who are getting this [grant], for now participating in this program that these funds are supporting. So, for example, that advocacy boot camp that we just did. We were able to host the event, but we couldn't pay for food for multiday events, and we actually had to find a private donor who is willing to write off the cost of the food. So I think that is one thing where there are some very significant challenges and limitations, when with some of these grants, that make it more difficult to actually implement them once you have them. So I think, like, some of the grant's requirements are very difficult as are some of the limitations that you can actually use this money [for]. (C3_03)

Thus, as this participant explained, the restrictions result in financial burdens that prohibit community engagement events to take place, or if they do, then it presents justice issues such as doing “free labor.” For instance, two interviewees suggested that CARB should provide additional financial assistance for community engagement events that are expected to be held, including

financial stipends for community members who attend these events at a personal expense. (And when these expenses are permitted, it is not always clear to grant recipients that funding is available to them.)

Prioritizing equity also means that engagement events should be tailored around community members' needs. This means that they should not take place during normal working hours (i.e., "9 to 5"); rather, they should take place during the evenings or weekends when community members are able to attend events, without interrupting their routine:

The one other thing that's been difficult is actually providing financial assistance to these organizations because there's this expectation that you hold these events for these organizations. But this is taking time away from their work. It's taking time away from their capacity, oftentimes a personal expense. So being able to provide financial assistance, financial stipends to community participants is absolutely vital, because otherwise, it's like you're expecting them to do free labor. (C3_03)

Similarly, those unsuccessful in receiving state funds described the challenges they would encounter had they been awarded because they were aware of the limits on expenses that are critical to conducting authentic community engagement. Several described needs such as the ability to provide community participants with translation services, childcare services, meals, and stipends—all of which are costly for the organization. These expenses are critical for the success of community-focused projects, yet some organizations perceive they cannot be covered by these types of state grants, and when they are covered, the organizations may not have the funds on hand to wait for expense reimbursement. One applicant described these challenges:

We put in a lot of effort there, and what sucks is that that's expensive; we have so many added costs in doing that. But if we don't do that, the outcome for us is we reach less people, which means we're getting feedback from less people. Which means we're not really meeting the needs of the community; we're meeting the needs of a couple of people that have the capacity to come to those meetings. So, the cost of our comprehensive structure ends up producing benefits in the longer term. It's just harder to find funding for those things. No one really wants to pay for us to feed people or to pay a stipend for them coming to a meeting or whatever. (C4_04)

Transportation equity experts identified the need for CARB and other government entities to keep community members informed of implementation progress for funded programs in their communities to avoid

miscommunication and institutional disconnect. For instance, some described situations where feedback is used for the program but it is three years old or more, so when the program is actually implemented, community members feel that they were not informed or that their input was not included in the assessment that was conducted years ago. One participant remarked that keeping the community informed is CARB's job and not theirs because CARB expectations are too high and unrealistic for the tools they are given. CBOs are unable to accelerate program implementation since there are limited resources and CARB is slow in distributing funds; their perception was that CARB needs to be held accountable for acknowledging the lack of resources for CBOs and ensuring community members are engaged and informed to ensure the program is as equitable as possible.

Selection processes lack equity focus

Randomized selection is inequitable

A common theme from community interviews identified a lack of priority for equity in grant selection processes, meaning inequitable funding and practices are upheld by CARB. Participants described their perception that the programs failed to sufficiently account for community-identified transportation needs when deliberating funding allocation. Some viewed this prioritization process as unethical since programs have significant obstacles to obtaining funds.

It should be noted that the CMO grant is described by CARB's public-facing documents as a noncompetitive solicitation. However, many interviewees discussed problems with grant applications in regard to the lack of resources hindering their ability to apply and submit within the first few minutes of the application window. The first-come-first-served approach places a significant burden on organizations to rush applications, preventing smaller or underresourced communities that may lack access or technical expertise from completing the application during the application window. When applications are due on a fixed deadline, it prevents smaller or less-resourced organizations with limited flexibility to shift capacities to be in the best position to submit an application. Further, some applicants described not knowing in advance how they were required to submit certain information, reflecting a process that is opaque to those less familiar with applying for grants. This approach was deemed inequitable because grant application criteria are burdensome and do not account for the capacity and resources the organization has:

There's always a system created to always work against each other. I think that one of the barriers is just the accessibility to funding. Who really is [it] accessible [to]? Or how do communities or nonprofit organizations work with one another? (C3_08)

Overall, unsuccessful CMO applicants had much to say about the challenges with the first-come-first-served method of awarding funds. Several participants expressed the inherent inequities in the process, since meeting the deadline could simply be a reflection of capacity, resources, and expertise, and not quality of the proposed project. The single application window was viewed as a barrier because organizations perceived that they could not work with CARB to explore how to obtain funding for community needs outside of this time. While most acknowledged or were informed of modifications to the awarding process, their initial experience elevated distrust with the agency, and they did not apply for subsequent cycles.

I'm just going to go wait for the agency to change, and then we'll try again. I felt like it didn't seem worthwhile to continue to apply when it was clear that first-come, first-serve was completely arbitrary. And that CARB's definition of equity is actually equality, not equity. The bottom line is that these communities just don't have the same access to resources. And I don't...as an organization, [organization name] doesn't have the access to those kinds of resources, so we haven't tried again. (C4_03)

Four interviewees suggested that the approach to begin the application, including the first-come-first-served or the lottery-ticket method, is inconsiderate of all community organizations that need funding. There needs to be knowledge and recognition for the baseline level of capacity when developing a grant application, including the resources organizations have or lack thereof. For instance, there may be organizations that have a grant-writing team, but there are others that lack the knowledge and do not have the funds to hire a grant writer. A participant discussed that equity is more of a "race," where people who need the extra help to apply are being disregarded:

We had applied for other grants. But we just simply couldn't compete. We're competing with cities; I won't name them that are. That could also be counties like San Francisco City and a county, and they probably have a whole department of grant writers for each division, who knows. But when you're competing as a small city for a statewide grant or a nationwide grant, it's often hard to do so, when staffing's limited, time is limited, and you are just not familiar with writing those types of grants. (C3_12)

Some who had received funding through CMO made comments suggesting that they viewed CMO distribution processes as unethical or misaligned with equity goals. Two of these interviewees specifically mentioned the use of randomized award selection for CMO, stating that this approach does not seem to prioritize equity or focus funds toward communities that need them most. One interviewee representing a CBO with expertise in community engagement and fundraising explained that in their role as a member of a local committee that directs funds toward community projects, they use a set of six project criteria scored by committee members with different areas of expertise to conduct a thorough evaluation of each project application. With such a robust review process in place for a local committee, this individual questioned why the state would use a simple lottery system to select awardees when the state has data and tools available to them on disadvantaged communities:

I'm on a scoring committee for [an initiative] here locally, and we have six different categories that determine a project being able to pass, fail, and then to score. So I don't like the lottery system...I think putting together better scoring criteria can inform better products of selection. So looking at CalEnviroScreen, along with other databases, to be able to select the most deserving projects and not necessarily just keep it as "you got lucky." (C2_17)

A large proportion of interviewees who did not receive funding shared remarks that spoke to potentially unfair practices in the awarding process, specifically with CMO. Interviewees described the dedicated staff time to develop partnership and investment in community engagement to develop competitive applications. Participants felt that had the awarding process focused on evaluating the complete contents of the application, reviewers would have a better sense of the high quality of partnerships and rich community input that went into developing their application, and perhaps they would have been awarded the grant.

We applied and honestly, we met every single criterion in spades. I just thought we're in. I mean, of course we're going to get this grant....In this case we hired somebody, so I'm not entirely sure. I do know I read the grant; we got letters from all the five faith leaders [who] signed the letter. We had addresses, the churches, and the community centers, all of them in this community. Even the [city] sports stadium. This is my biggest complaint, and I've told CARB. I will say I have loyalty and respect for the [California] Air Resources Board. It's just there, it's a bias that I have. I definitely think very highly of the agency and the organization. But I told them, the first-come, first-served is just not equitable. Period. (C4_03)

Application guidelines create unnecessary competition for funds

Some interviewees spoke more generally about the competitive nature of STEP grants and other grant opportunities offered by state agencies and how requiring competition among communities can create barriers to implementing efficient and meaningful change. One of these interviewees, representing a local government, explained that the STEP Implementation Grant application encourages applicants to propose a wide range of initiatives, which may look good on paper and result in a high application score, but may not ultimately be as effective in supporting transportation equity as a smaller suite of more meaningful projects. Another interviewee representing a transit district mentioned that asking local agencies to compete against each other to receive funding causes them to use their resources against each other, rather than moving in a unified way toward solving statewide emissions and mobility issues.

[You're] literally competing against your neighbor for a project, and you're hiring private consultants to write your public grant applications, [it] seems very counterproductive from a societal...we're trying to solve a statewide issue, and then it's like local benefit competing against local benefit. (C2_10)

This perception of unnecessary competition came out in a review of the awarding criteria. During the initial review of CMO application material, the research team identified five reasons why an application was unsuccessful. Among these, a CMO application could be declined if another application in the same project area was approved first. (See the above section, Grant Application and Selection Process.) During this research project, CARB was able to provide language regarding the specifics of what constitutes “the same project area”; however, one applicant that was declined funding expressed receiving limited information at the time. It was later, when the awarded applicants were announced, that the unsuccessful applicant learned the competing organization’s name and the location of the project. According to the interviewee, they did not recognize the competing organization and were confused as to the nature of the competing project since it included a nearby community and a community in a different region of the state.

This is ancient history in my mind. It wasn't so much that there was a deadline. It was that the application had to be sent [in by] a certain time, and then it was first-come, first-serve. I think I sent it in like two minutes after it had opened, and they were like—sorry. But you're right, I think the organization that applied was like a split application, where it was

partially in [nearby municipality] and partially in [another part of the state]. Which was maybe why it was an organization that I've never heard of before. (C4_08)

One applicant shared a unique situation regarding their community engagement efforts. This interviewee's organization was able to conduct extensive outreach and engagement to identify community needs. This input eventually shaped their CMO application. Unfortunately, this applicant was unable to meet the deadline, but an applicant in a neighboring municipality that had a successful application reached out to use the result from the extensive community input to further develop their project.

Anyway, that's our history on the grant. Although, what's interesting is that the [other applicant]—which may have gotten one of the Community Needs grants, I'm not quite sure—they did reach out actually; they borrowed our Community Needs Assessment. (C4_02B)

In other instances, interviewees shared that their unsuccessful application was resubmitted by CARB staff for a future CMO awarding cycle. One interviewer shared that it was encouraging to hear that their application might have a chance, particularly because it was a light lift for the organization as the agency handled the resubmitting process. However, in both cases where this occurred, the application was unsuccessful again and discouraged both applicants from reapplying to future cycles.

If I recall, I believe several months later CARB came back to us and asked, "Are you still interested in this grant? There may be money available." It's hard in a disadvantaged community to keep their focus on any one thing, because the staff is wearing eight hats. At that point, they had moved on to number six or seven, and we're working on other grants and other initiatives. Unfortunately, we weren't able to go ahead and take advantage of that follow-up offer. (C4_11)

These grant application processes discourage and create a space where the lack of motivation to continue to apply occurs. There was discussion that programs lack TA, and the current resources tend to be slow in implementation. Program organizers are restricted in their ability to complete the application because the specific writing requirements do not align with their capability or because the organization may not have that expertise. Three interviewees discussed the additional obstacles that rural communities face in comparison to urban areas regarding resource allocation and the lack of knowledge to write grants. Many interviewees conveyed a sense of apathy toward grant application processes because they felt that equity was not prioritized and their input continues to be

ignored. As one explained, the unethical practices demonstrate a disregard for community needs.

You're almost getting tested for how well you can write ideas and concepts together. Even one of the applicants with my friend, who I know as a fucking badass, like, works in Skid Row, delivering the narcotics savers to people on the street, single, biking everywhere. She's in her fifties already. The way she wrote her freaking thing made it look like she didn't need it, and I was like, what the hell, I was like, she deserves it. But yeah, her application is not convincing at all. How do you capture that in writing? (C3_10)

Systemic injustices

Basic infrastructure needs

Many interviews focused on the level of disinvestment and dilapidated state of infrastructure in historically underserved communities. Most pointed to this as a key factor and challenge to implementing innovative transportation solutions, specifically electric vehicles and electric micromobility. Participants shared that investments that sought to bring basic infrastructure to historically underserved communities sometimes only served as a band-aid to larger structural social problems. One participant shared that a mobility ecosystem may look different for diverse communities, and it's possible that some communities will, in fact, rely on personal vehicles to travel, rather than take public transit or rent an electric vehicle.

Communities have been ignored for so long, and their infrastructure is falling apart; you can't even put charging infrastructure in these churches because they can't handle the power upgrade. Or their parking lots aren't flat enough, or don't have the right grade...you know what I'm saying...just to take a community like [ours] and put it on the same level so you can put infrastructure or build out the supporting infrastructure... that takes some, just, fundamental infrastructure development that doesn't exist in these communities. So that's where we're starting from. (C4_03)

Several participants described a need to focus on more fundamental investments, rather than investing in the latest technology:

I think what we're really seeing is this tension between the desire to put money into interesting bike-share or electric vehicles or things like that,

when really basic infrastructure was just not given to these communities. It felt like leapfrogging a lot of the issues that were sort of at play. (C4_08)

The participant continued, saying that when a community lacks “access to potable water, when you can’t fill up from your tap water to give to your kid, I don’t think people are going to be bothered with scooters” (C4_08). In one case, an interviewee discussed inequitable funding distribution in regard to the city funding scooters over other clean transportation projects they were attempting to secure funding for. In their estimation, because they were tasked with implementing the scooter program, it took away from projects they could work on that would truly meet community needs:

Suddenly some young person downtown thinks scooters are great, so let’s all have scooters. Let’s get money and put scooters in, or let’s invite some for-profit entity to come in and put scooters everywhere. So we went through that one for a while. Scooters everywhere, all people fallen over scooters just scattered on the sidewalk, scooters everywhere. Scooters stolen, and scooters broken in pieces everywhere. It’s just litter—people steal scooters and parts off scooters. There was no rhyme or reason. The community raised hell about it, and then the city went and said, “Oh, wait a minute. We’re gonna have a moratorium on scooters for a while, because we have to make new rules for scooter companies.” Your users are just throwing your product on the sidewalk, and it’s a trip hazard, and it’s a mess. (C3_16)

This was a relevant issue that carried across different spectrums of community organizers, regardless if they were from a rural or urban area. There were participants from an urban area facing issues with sidewalks that hinder accessibility to school and others from rural areas whose community members are unable to get their groceries or other necessities due to poor public transportation options, including poor quality roads, and unreliable vehicle access:

We’re a mostly urban region. We still have some communities that have unpaved sidewalks and some of them that are leading to schools. So it is really unfortunate that we still have that. But it continues to be a key issue when it comes to adequate active transportation options. (C3)

Among those who were unsuccessful in receiving funding, there were frequent remarks that pointed to CARB’s grant programs as failing to meet immediate needs in historically underserved communities. Several interviewees in this group expressed the need to shift their own mission away from those immediate needs and toward electric mobility projects, as they understood it was the primary focus of these state grants.

Just for full transparency, one of those things where I was like...okay, let's think about electric vehicles. Even though it's not...I can see how that would be helpful, but I also don't think it's a huge desire in a lot of these places, because basic infrastructure is the thing that is first worrying to people. I think that makes a lot of sense. It's hard to really think about a long-term aspirational thing when the basic provision isn't there. (C4_08)

One interviewee in this group described the need to improve basic infrastructure and basic provision in underserved communities before moving to innovative mobility. Interviewees shared that CARB's focus on innovative and clean mobility is challenging when the foundation needed for that type of ecosystem to exist is missing from communities. Simply, communities that have yet to receive their fair share of critical infrastructure are being forced to adapt into a new reality that frankly is far from the reality of the challenges their community faces.

I think a lot of disadvantaged communities have that issue of, like... there's a reason why they're considered "disadvantaged communities." It's not because they don't have electric vehicles. It's because there's no road to drive them. That seems like a big consideration within how these [grant] programs are put together, too. (C4_08)

Many thought that the current inequitable design creates obstacles by hindering the possibility of community input. Interviewees described systemic impediments that are rooted at the core of how policies are implemented, such as a limited return from the higher burden of taxes on lower-income communities. A common discussion was that lower-income communities tend to be saddled with infrastructure like the logistics industries in populated areas, factories next to schools and residential housing, and other factors that deteriorate public health. Furthering the belief that there is a lack of community engagement. Future implementation of equitable transportation includes electric vehicles, yet interviewees noted that these changes are not available to everyone:

Equitable transportation requires that the way we are funding our transportation system as a whole is equitable. So things like the gas tax or sales tax are inherently regressive and impact low-income populations more. And so an equitable transportation funding mechanism means that we're finding other creative ways to ensure that there's not such a burden on low-income folks. (C3)

When discussing these inequities, a theme related to the health and safety concerns of people as a result of transportation practices and designs rose to prominence.

Transportation concerns around air quality [are significant]—mainly trucking and trucking through neighborhoods. Specifically, marginalized communities that have some of the worst areas in the state...There is no way for those ships to plug in to electricity. So they have to keep their engines running, and so they idle, and they pollute nearby communities, and the pollution spreads all throughout [our region]. Somewhere close to 90% of all industrial zoning is in [our neighborhood]... (C3)

Some unawarded applicants linked this lack of basic investment to the economic pressures in underserved communities that result in high turnover and brain-drain toward well-resourced areas. This dynamic places even more pressure on the already limited bandwidth of nonprofit groups and small agencies to develop institutional acumen and important relationships. Interviewees highlight that the process by state agencies, including CARB, to validate the “disadvantaged” nature of a community and then asking them to compete for resources required so that communities can simply survive is yet another level of inequity:

You have such an underresourced community with such staff turnover, instability internally, underresourced for all the reasons that planning has not been great. And all the wealth of the planner, all that body power is out in the [suburbs]. You have a hundred cities and all this property value, yet this capacity is not where it needs to be. And that’s really unfortunate. (C4_07)

Structural racism

Historic legacies of systemic racism are key factors in contemporary issues of socioeconomic disadvantages. Several interviewees stated that program implementation policies and practices have resulted in racial disparities that continue to create gaps in different levels of accessibility for low-resource communities of color. One interviewee discussed that historic and current transportation goals and actions are negatively impacting communities of color, including Latinx, Asian, and Black communities due to policies that rely on incentivizing private investment in urban redevelopment without paying enough attention to the people that already live in those communities.

Many interviewees described processes of marginalization and destruction, which continues to occur because of inequitable practices, where communities of color are disproportionately disregarded and not included in decision-making. Current goals lack the acknowledgment of how different communities have different access to resources, and there is a huge need to understand class differences. One participant explained that CARB and

other government agencies attempting to resolve these inequities seem nonsensical because their actions do not mirror their mission statements. Some participants stated that CARB is focusing on unrealistic goals that do not reflect their own current capacity. A participant discussed that funding is essentially useless when it only serves a small percentage of the population that “has the time and leisure and the ability to participate.”

You have to understand the immense, compounded generational trauma that you have inflicted on hundreds of thousands of people in our community. So to even get close to equity without an answer that is nowhere close to radical or a real change of how we do business. Because obviously, the people that have been doing the work haven’t been making the impact that is necessary because these injustices still exist. If they’re not willing to really change how these things are done, to trust the community, we’re not even close to everybody. So I kind of just laugh at the idea that institutions are actually trying to get to equity. (C3_05)

One challenge for interviewees was connecting with folks at CARB and the TA providers that shared common lived experiences. Many unawarded applicants felt that CARB staff and the technical providers were disconnected socially and culturally from the communities they served, which may have made it difficult for them to understand the unique challenges specific to minority populations. One interviewee pointed specifically to having personnel from diverse backgrounds to serve as application reviewers as a key factor to ensuring that equity is baked into the application process:

First, I feel personally I can work with anyone from any background—doesn’t matter. But what would be nice if...I know everything in business today is inclusion, equity, and diversity. Even from the standpoint of TA, there needs to be people that look like me, and I just haven’t seen it. Just have not seen it. I say that because from this perspective, being African American, and growing up in a disadvantaged community. If you haven’t been there, you may not understand my story, and you may not even be able to assist me. (C4_05)

Structural racism in terms of the law, institutional, and cultural practices prevents funding from reaching the communities most in need in the state. In particular, Proposition 209, which prohibits the state from using race and ethnicity as criteria for public contracting, creates a legal obstacle in establishing targeted funding programs for historically marginalized communities of color. Institutional barriers to effective equity work and implementation have also been a challenge to navigate around, according to CARB staff, because the legal team puts roadblocks:

I think tribal communities are often left out of funding opportunities for a variety of reasons, and leads to sort of a barrier, you know, institutional type barrier. So, I think that's the biggest thing, and that is not specific to just tribal communities. And it could be communities of color again, that if we isolate, or...if we try to prioritize communities of color with investments, we kind of get into territory where it seems like we're providing preference. So that's that Proposition 209 dilemma, I think. So our legal team has been very restrictive in not prioritizing certain communities. (C1_14)

In many ways, this perpetuates a cycle of disinvestment, as echoed by a state agency representative: "For twenty years that I have been working for the state, I have not seen an effort to include marginalized populations" (C1_4). Although CMO grants earmarked resources for applications from tribal governments, there is an overarching sentiment that these programs could and should reach communities across the state that need them most.

Recommendations

THE PROJECT TEAM developed recommendations based on input from key informant interviews and insights gained from the initial background interviews, literature review, documentation review, and community accountability process. These recommendations are intended to address programmatic issues, equity concerns, and questions raised throughout the project research activities to support improved institutional and community capacities for equitable transportation. As not all key informants were in agreement about potential program or organizational changes, some recommendations in this section provide multiple options that should be considered as possible actions to address issues or concerns related to a certain topic.

The project team encourages CARB to present any planned changes through a community accountability process to seek feedback from stakeholders before changes are implemented, to maintain a participatory and inclusive process after this evaluation phase of the work is completed. The recommendations are organized into the focus areas that surfaced in the research: Program Design and Guidelines, Grant Application and Selection Process, Project Implementation and Outcomes, Technical Assistance and Capacity Building, and Partnership Structures.

One overarching theme of these recommendations is that while individual programmatic adjustments can help to align these transportation equity programs with stakeholder needs and address certain concerns, CARB should be open to reexamining these programs at their core and potentially considering major redesigns that begin with a foundation of equity and seek to reach transportation, land use, and emissions goals through new program design. Some key informants expressed that in their current forms, CMO and STEP incorporate equity as a component rather than as a foundation. Several interviewees and community stakeholders suggested that CARB should create a plan to reevaluate its core mission and deconstruct its current practices in favor of a new design, where valuing input and collaboration is prioritized. As one interviewee in Category 3 explained, you cannot “put a fresh coat

of paint on it,” suggesting that there needs to be a reevaluation of the root causes of inequity within these programs to create future changes. While the project team is not providing a formal recommendation to discontinue or fully redesign CMO or STEP, these concerns highlight the need to consider a wide range of changes, from minor to foundational, and continually examine gaps between stated program visions and applied processes.

The recommendations below include an indication of whether the recommendation applies to CMO, STEP, or both programs, where possible. In some cases, key informants spoke generally about their experiences with CARB programs without naming a specific program, and the project team interpreted feedback as applicable to one or both programs based on program structures and the context of key informant experiences.

Program Design and Guidelines

1. (CMO/STEP) Seek out underrepresented communities to identify barriers to participation and develop opportunities that are tailored to these groups.

Key informants representing both funded and unfunded applicants (Categories 2 and 4, respectively) discussed the ways in which CMO or STEP design does not align with the needs or realities of some communities the programs are trying to reach. Interviewees in Category 4 expressed having difficulty aligning their project idea with CARB’s vision for the type of projects the agency wished to fund. One interviewee described the need for the agency to provide more clarity regarding their vision and what success looks like for a project. Two interviewees in Category 2 also noted that they were unclear about the long-term or broader goals of these transportation equity programs, pointing to a disconnect between CARB’s reporting metrics and what success or failure looks like to a community.

In the initial documentation review, the project team observed public comments from stakeholders who were unable or hesitant to participate due to issues such as geographic boundaries for needs assessments that did not align with program definitions of eligible project areas or were considered redundant with other projects, lead applicants that did not qualify as nonprofits or government agencies, and uncertainty about whether it was worth it to complete an application for a project that may or may not be eligible for funding. As each potential project area has a

unique set of resources, challenges, interests, and possible solutions, CARB and the program administrator teams should continually seek out communities who have not successfully engaged with these programs to understand persisting or emerging barriers and look for opportunities to tailor project opportunities and requirements to communities that have been directly or indirectly excluded. CMO staff have done some of this assessment and engagement based on the results of past funding windows, and maintaining or strengthening this approach could help to gain additional engagement from underrepresented communities.

2. (CMO/STEP) Develop partnerships and learning processes with other transportation and climate equity programs to develop and incorporate best practices over time.

CARB has taken on a challenging role as a state air quality agency administering innovative programs that seek to achieve outcomes related to both transportation equity and climate goals. There are few precedents to the specific combination of goals that both CMO and STEP are seeking to achieve, but as more agencies and programs prioritize equity, there are opportunities to collaborate and remove inequitable designs in favor of practices with demonstrated success. For example, three interviewees in Category 2 from organizations that had received funding through the CARB programs mentioned the Transformative Climate Communities (TCC) program that is administered by the Strategic Growth Council, and generally had positive comments about TCC's approach to project guidelines, budgeting, community engagement, and overall design. These three interviewees work in regions that had recently received TCC funds and had either observed TCC implementation or were familiar with other organizations who had received the funding.

To the extent possible, equity-focused programs should learn from each other and begin standardizing designs and approaches based on positive feedback from stakeholders, including both awarded and unawarded applicants. This could lead to the development of best practices in transportation and climate equity programs to place collaboration and transformative change at the core of every program process. Feedback from program administrators indicates that program teams do coordinate to some extent, though insights from key informants suggest that more can be done to define, refine, and implement best practices across programs.

3. (STEP) Ensure CTNA processes are connected to state, regional, and local transportation plans.

While CNTAs reflect important barriers to transportation and community needs as evaluated by CBOs and local agencies, they do not reference local or regional transportation and sustainability planning efforts. The limited integration could yield community implementation strategies that fail to account for climate goals, or planning efforts that may not account for community-led clean transportation efforts. Local transportation planning, and progress in meeting California's climate goals overall, would benefit from greater clarity and accountability for how state and regional goals for GHG emission reductions translate into local targets for transportation improvements. Community-based transportation necessarily focuses on local-level mobility needs, but also must design transportation improvements that meet climate goals. While the state sets climate goals for transportation-related emission reductions at the state level through plans like the CARB Scoping Plan, and at the regional level through SB 375 Sustainable Communities Strategies, there is a lack of specific guidance for how local transportation planners or community needs assessments should contribute to meeting these goals. Similarly, regional plans could better incorporate and prioritize the needs and recommendations in CTNAs. Providing local planners and CTNA partners with local-level targets for mode shift and VMT traveled, for instance, could help local planning identify system-level improvements that both meet community mobility needs and climate goals.

Application and Selection Process

4. (CMO/STEP) Modify the application and selection process to ensure equity is prioritized throughout the process.

A common theme found across all four categories is that the rigidity of current CMO or STEP grant application and funding processes creates obstacles for equity to prosper as it creates expectations that are unrealistic to the organizational capacity of stakeholders. While the implementation of a two-step application process for CMO in Window 2 significantly reduced the initial application burden, interview comments commonly cited issues or opportunities for improvement with the application and selection process. In Category 1, there was a

consensus from all key informants that a sustainable, flexible funding source was needed to accomplish pilot program goals. Moreover, there was a broad agreement that legislative changes may be needed to allow state agencies to provide targeted funding for historically marginalized communities of color.

Potential actions to consider in addressing issues with the program application and funding processes are listed below. It should be noted that certain program adjustments would require a larger pool of available project funding or other legislative action.

- (CMO/STEP) Accommodate grant applications to fit current capacity levels with different options of grant submissions, including options as video of community engagement events previously held, other forms of media showing its mission, and more.
- (CMO/STEP) Consider alternate funding mechanisms such as formula-based funds or block grants if greater funding amounts become available in the future.
- (CMO/STEP) Reduce technical jargon of community-facing materials and the volume and complexity of program materials, where possible, to improve the accessibility of programs to a wider audience.
- (CMO) Eliminate the first-come-first-served and randomized selection rules within CMO and replace them with a rolling application period with prioritization of lesser resourced and smaller communities who have not yet received equitable transportation funds.
- (CMO) Provide reassurances to unfunded CMO applicants, such as priority consideration for future funding rounds; referrals to and assistance with other low-carbon transportation and equity programs such as STEP and TCC, where applicable; and reporting on geographic or demographic gaps in funding with possible prioritization of underrepresented populations in future solicitations.
- (STEP) Revise the scoring rubric for the STEP application review process, with changes such as increasing bonuses for rural, small, or racially marginalized communities if funding and progress in these communities is falling behind.

5. (CMO/STEP) Conduct strategic outreach to rural communities and consider set-asides or dedicated programs for rural transportation equity.

An overview of CMO applicants found that unawarded applicants were skewed toward organizations representing rural disadvantaged communities. (See Grant Application and Selection Process section.) According to interviewees in Categories 2, 3, and 4, rural communities are facing issues regarding resource allocation due to their input not being valued when designing and implementing transportation infrastructure, as well as issues with grant application requirements. Interviewees in Category 2 discussed how the unique challenges of rural communities create challenges in communicating with the state alongside transit agencies and cities that are more urban. They feel most funding opportunities appear to be primarily designed with urban environments in mind.

Rural community challenges include lack of mobility options, unreliable transportation, limited resources for grant writing, and lack of technical and expertise assistance. To address these concerns, CARB should invest time and resources into rural engagement, learn about how public funding has or can potentially make positive impacts in rural communities, respond to concerns about rural disinvestment, and potentially develop targeted opportunities for rural communities to apply for specialized capacity building support and transportation solutions that are informed by rural expertise.

6. (CMO/STEP) Coordinate with other funding sources and provide support to communities to obtain funding from multiple sources.

Most interviewees in Category 2 had experience with other funding programs, either those administered by CARB or by other state or federal agencies. One interviewee explained that with multiple sources of funding being implemented in a single location, there is an opportunity for these programs to coordinate with each other and with the community or facilitate peer learning, sharing, and leveraging funds to improve outcomes. Interviewees in Category 2 commonly spoke to the idea that isolated funding sources for specific transportation studies or improvements are limited in their ability to create lasting or large-scale change. Key informants in Category 3 also stated that there was a great need to centralize information about funding opportunities, so that it becomes easier to access information across the state and different agencies.

By helping underserved communities secure the funding they need to take a broader, holistic approach to transportation equity, infrastructure, housing, safety, and other needs, institutions like CARB may be able to expand their impacts beyond the limitations of individual funding programs. This could involve:

- (STEP) providing longer-term TA to communities to identify a wide range of needs and apply for relevant funding;
- (CMO/STEP) providing flexibility with the timing of CMO or STEP projects in cases where communities need to secure other funding sources to fully implement solutions;
- (CMO/STEP) directly working with administrators of other California Climate Investments or state agency programs and other funding sources to understand how funds are being allocated to communities and how CMO and STEP funds might fit into the larger context of other funds that are being provided, or are not being provided, to prospective awardees;
- (CMO/STEP) developing a matchmaking portal where communities can post project ideas or needs that are matched with potential opportunities;
- (CMO/STEP) hosting a consolidated inventory of available funding opportunities;
- (CMO/STEP) working with prospective awardees to identify funding gaps and sources that could be leveraged to deliver more holistic and successful projects; and
- (CMO/STEP) supporting grantees in researching local revenue strategies that could create sustainable funding for transit systems.

Project Implementation and Outcomes

7. (CMO/STEP) Identify paths toward increased flexibility of funds for project implementation.

Three interviewees who had received funding through CMO or STEP mentioned issues or possible solutions related to program flexibility. Two of these interviewees discussed program limitations in how funding could be spent during the Needs Assessment or planning process and reported that this had caused challenges. For example, budgets that allocate a specific portion of funds toward one project activity can be difficult to

move to another project activity beyond the allowed threshold without a revised agreement. Project plans generally require awardees to commit to certain activities before they understand what will work and how much of the project resources should be allocated to a specific component.

Additionally, interviewees in Categories 2, 3, and 4 mentioned the challenges associated with a reimbursement grant and how it can be difficult or impossible for some organizations to afford upfront costs and wait to be reimbursed. Since stakeholders routinely deal with limited financial capacities, CARB should consider allowing more flexibility in the agreements created with awardees, such as allowing for easier modifications to scope or budget allocations and exploring alternative financing options for awardees that cannot successfully implement engagement or other activities under a reimbursement approach.

8. (CMO/STEP) Increase flexibility of funds to accommodate needs for equitable community engagement.

Key informants from Category 2 and 3 who had received funding through CMO or STEP discussed the financial limitations that hindered project implementation, specifically with community engagement events. One participant regarded community members attending these events as “free labor” because there are root issues with the administrative approach to designing and holding community-engagement events. In other words, grantees are not provided sufficient resources to carry out a meaningful event that is respectful of a community’s time, energy, and knowledge. CARB creates expectations that these events are needed, and CBOs are in accordance with the benefits of these events, yet they need to be designed to be accessible. For example, the events are held during working hours, when they should be held outside of those hours, like on the weekends or evenings. Further, there are restrictions on purchasing food that create spaces where stakeholders are unable to feed their staff and attendees. One participant revealed they had to pay for catering from their own pockets. Comments such as this suggest that CARB should examine how CMO and STEP funding could be made to be more flexible, or how CARB may be able to support awardees in identifying the appropriate resources that CARB itself may not be able to provide.

Technical Assistance and Capacity Building

9. (CMO/STEP) Develop institutional capacity for equity and diversity work.

Category 1 key informants broadly supported the idea that there was a need to increase the organizational capacities of CARB to support working with and for diverse communities. Additionally, early public feedback on CMO and STEP provided by stakeholders and reviewed during the initial documentation review suggested that equity-focused programs should be designed, implemented, and monitored by organizations with strong expertise and capacity for advancing equity in underserved areas. In its efforts to deploy programs effectively, distribute funds equitably, and engage with stakeholders productively, CARB may be limited by institutional practices and priorities that do not resonate or that conflict with those of the populations it is working to serve. Interviewees in Category 4 described the need for CARB to be an ally and to be accountable for their mission of improving environmental conditions for communities across the state. Interviewees described the agency as taking a position of opposition, when in reality, both community and agency are aiming for the same goal of improving conditions.

Interviewees reported having positive connections and good rapport with individuals within the agency but found the agency as a whole often to have a different message than individuals. One interviewee, in particular, would like individuals to take a stronger and vocal stance to mobilize in a more effective way against the inequities affecting communities. Another interviewee presented an example of how this type of institutional change is time-intensive and challenging, but how CARB can be a leader in taking, at times, uncomfortable steps to begin making progress. To strengthen equity and diversity capacity, CARB should consider taking accountability by acknowledging the limited capacity and historic systemic issues that currently exist and have created dissonance, and by taking capacity building actions such as hiring staff with personal and professional connections to underserved communities, reevaluating partner organizations to ensure they have expertise in advancing equity, and seeking equity training for staff who will be engaging with stakeholders and administering programs.

10. (CMO/STEP) Consider providing additional practical tools to applicants and awardees to effectively conduct needs assessments or meet project requirements.

Beyond currently available TA and available tool kits and guidance, several interviewees who had received funding through CMO or STEP spoke of the need for resources such as:

- (CMO/STEP) access to travel data and spatial dashboards for planning purposes;
- (CMO/STEP) project materials such as project management or budgeting templates or tools;
- (CMO/STEP) other forms of support such as language translation services;
- (STEP) education on best practices and community engagement procedures; or
- (STEP) specifically for implementation grants, longer-term TA that sees a project through to its conclusion beyond initial guidance or instruction.

Comments from interviewees who had received funding through STEP suggested that applicants often feel the need to develop a proposal that complies with program requirements, even if that proposal could be difficult to implement given the resources or expertise available to the community. To avoid situations where awardees or applicants feel pressured to submit a proposal or implement a project according to a plan that may be too rigid or resource intensive, it would be useful for CARB to work with prospective awardees to develop a plan that both meets program guidelines and fits community capabilities, supplementing with needed resources to the extent possible. This could include assisting applicants with developing partnerships with CBOs or local agencies that have needed expertise, directing organizations to available data or tools that they can use in their planning or administrative efforts, or providing an easy way to adjust project budget categories or scope when changes need to be made to projects due to unforeseen implementation issues. Follow-up research to determine whether lower-capacity applicants were systematically denied funding (or were unable to apply in the first place) would yield information on additional support needed for capacity building work for the intended grant recipients.

Partnership Structures

11. (CMO/STEP) CARB and local public agencies should acknowledge and address in an ongoing way the marginalization of communities experiencing transportation inequities.

During a community accountability session, one attendee noted that there should be a reframing of the notion that some populations are “difficult to reach,” and that we should instead acknowledge that some communities or areas of communities have experienced disinvestment or have been ignored by the agencies that are meant to represent them. Many Category 3 interviewees perceived a lack of proper community outreach where CARB’s absence of acknowledgment of historic marginalization translates to a lack of prioritizing the work that needs to go into disinvested communities. Repeated discussion around issues with the funding programs shows that community representatives do not see how community feedback is valued during planning and implementation of a program.

To strengthen the lines of communication and begin to build partnerships between communities and state agencies, the project team recommends that CARB create public summaries of feedback received during program work group meetings, in written communications from CBOs and other stakeholders, and through other feedback mechanisms, to transparently acknowledge the types of input that the project team identified during the initial documentation review and key informant interviews. Stakeholders should have the opportunity to see the feedback that others are providing and to amplify questions or comments that resonate with their planning, funding, implementation, and communication challenges. Additionally, according to transportation and equity advocates in Category 3, shifting toward equitable transportation planning includes more attendance from CARB staff at community engagement events that are not historically deemed “sophisticated” and “professional,” such as those in community spaces outside traditional meeting locations, as CARB’s availability to attend, if desired by hosting CBOs, is vital toward ending the institutional disconnect between community and CARB.

12. (CMO/STEP) Assemble resources and guidelines to support equitable partnership development in underresourced areas.

Interview results suggest that there is a lack of communication between CARB and CBOs, particularly those who represent underresourced areas. Interviewees emphasized the importance of bridging the gaps of communication between stakeholders, policy-makers, and coworkers within an organization to reach a consensus and find solutions toward equitable planning. While interviewees in Category 2 reported that they had been able to assemble effective partnerships to qualify for, receive, and implement project funding, some of them noted that smaller or underresourced communities may not have the level of partnership network needed to engage with these programs. Additionally, several Category 3 interviewees requested more paths toward collaboration between partner organizations, highlighting the need to create a long-term plan to develop meaningful partnerships that are reliable and sustainable over time.

It may be useful to provide a database of CBOs, transportation agencies, and stakeholders with clear communication paths and mission statements to encourage cross-collaboration between organizations. The CMEA offers a partnership roster to awardees of CMO, and CARB should consider making similar resources available to underrepresented communities and unfunded applicants for both CMO and STEP. While CMO is not currently a competitive solicitation, some communities may not even apply if they are not aware of partnership opportunities. By providing these resources to a wide audience, CARB creates the possibility for collaboration to occur and combats inequity by promoting engagement with different organizations whose resources could be of advantage to one another during the grant application process.

The introduction of CMEA was one step toward facilitating stakeholder communication, but interviewees suggested that more effort is needed. Offering more events such as the Clean Mobility Forum that was held in October 2023, and providing event scholarships to representatives of communities who have not successfully engaged with CMO or STEP, may help to connect potential partners and include underrepresented stakeholders in the discourse surrounding paths to success and lessons learned.

Additional Recommendations

13. (CMO/STEP) Develop an accountability plan to transparently communicate CARB priorities, actions, and limitations related to programmatic changes.

- This evaluation has resulted in a wide range of feedback and suggestions from stakeholders who have experienced inequities, challenges, and inefficiencies with CMO and STEP. Many stakeholders have commented that the themes emerging from this work are familiar, and that much of this feedback has previously been shared with CARB in various ways throughout the past several years. In the interest of accountability, it would be useful for CARB to develop materials to formally respond to this feedback and outline planned steps to address the concerns and questions shared by funded applicants, unfunded applicants, agency staff, and transportation and equity advocates.
- Additionally, program administrator feedback suggests that some of the critiques and recommendations made by key informants have already been addressed in recent solicitations, such as reducing the CMO and STEP application burden by creating a two-tiered application process, developing the CMEA and its associated tools and resources, and adding to the scope of resources available through TA. However, the fact that the project team continued to receive feedback on these issues suggests that some key informants who initially engaged with CMO or STEP may not be aware of these changes, and it is possible that some communities have avoided applying for funding because they are not aware of how the programs have changed between funding windows. Clear documentation of past and upcoming programmatic changes would allow prospective applicants to see whether a past barrier to their participation has been addressed.
- Finally, the project team understands that some aspects of funding program design and implementation may be outside of the CMO and STEP programs' capacity to change directly, such as those rooted in legislative requirements. For this reason, we recommend identifying any issues and goals that will require policy changes at the institutional or legislative levels to provide policy-makers and community stakeholders a transparent understanding of how change is being made, and if certain changes cannot be made in the short term, what additional actions and advocacy may be needed.

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Primary Document Review Detailed Methods and Findings

THIS APPENDIX PRESENTS a detailed description of the methods and results from the Primary Document Review (Phase 1), which was conducted to inform research questions and focus areas for subsequent evaluation activities. Researchers created a document review matrix to organize and summarize the content of each document and allow for comparisons across documents. Upon completing the document reviews and populating the review matrices, researchers used the matrices to identify common topics and themes appearing in the reviewed materials, which may inform the next steps of the research.

The following Formal Program Materials were included in the document review:

STEP

[Planning and Capacity Building Grant Solicitation](#)

[Planning and Capacity Building Grant Solicitation Appendices \(A, C, D, E, H\)](#)

[STEP Proposal Flowchart](#)

[STEP Guiding Legislation](#)

[STEP Draft Project Requirements and Criteria](#)

[Technical Assistance Interim Report](#)

[STEP website \(www.arb.ca.gov/lcti-step\)](http://www.arb.ca.gov/lcti-step)

CMO

[Implementation Manual](#)

[CTNA Voucher Application](#)

[CTNA Voucher Application Guide](#)

[Program Logic Model](#)

[CTNA Survey Guide](#)

[CMO website \(cleanmobilityoptions.org\)](http://cleanmobilityoptions.org)

Table 4 displays the fields that researchers included in the review matrix for Formal Program Materials, organized by topic.

The following Public Feedback Materials were included in the document review. This list includes the approximate date associated with each meeting or group of comments received, and items appear in roughly chronological order:

TABLE 4

Matrix Topics of Formal Program Materials Review

TOPICS	SUBTOPICS
Program-Level Information	Origins and decision-making; eligibility requirements and guidelines; goals; definitions of key terms; references to best practices, frameworks, legislation, etc.
Funding and Selection Process	Requirements and guidelines, goals, selection procedures, references
Planning and Capacity Building Grant / CTNA Implementation Process	Requirements and guidelines, goals and success criteria, references
Planning and Capacity Building Grant / CTNA Reporting Process	

STEP

- Internal CARB notes on comments from Low-Carbon Transportation Work Group (3/28/2019)
- Stakeholder comment summary and internal CARB notes from Work Group Meeting on Community Solutions for Clean Transportation Equity Pilot (5/15/2019)
- Work Group Meeting #1: Attendee survey responses and questions received (10/29/2019)

- Work Group Meeting #2: Attendee survey responses and questions received (11/19/2019)
- Work Group Meeting #3: Attendee survey responses and questions received (12/10/2019)
- Work Group Meeting #4: Attendee survey responses and questions received (1/15/2020)
- Summary of public comments on Draft Project Requirements and Criteria (April 2020)
- Comments from Work Group on Planning and Capacity Building/STEP (12/12/2022)

CMO

- Work Group Meeting #1: Attendee comments and questions received (7/19/2019)
- Work Group Meeting #2: Summary of public comments received (8/16/2019)
- Work Group Meeting #3: Meeting Agenda, Presentation Slide Deck, and Attendee List (9/27/2019)
- Work Group Meeting #4: Stakeholder premeeting notes and meeting notes (6/1/2020)
- Work Group Meeting #5: Meeting notes and attendee comments received (9/30/2020)
- Work Group Meeting #6: Meeting notes (6/23/2021)
- 2021 Implementation Manual Update Work Group Meeting: Comments received (8/25/2021)
- Pueblo Planning Stories from the Field Presentation (2021)
- Work Group on Clean Mobility Options Voucher (12/8/2022)

STEP/CMO

- Funding Plan Work Group comments (4/19/2022 and 6/9/2022)
- Comments from Work Group on Clean Mobility Investments Implementation (1/18/2023)

In addition to reviewing the above documents, researchers attended Low-Carbon Transportation Funding Plan and CMO and STEP solicitation work group meetings and webinars hosted by CARB in 2022 and early 2023 to take note of comments and questions received from attendees.

Table 5 displays the fields that researchers included in the review matrix for Public Feedback Materials, organized by topic.

TABLE 5

Matrix topics of public feedback materials review

TOPICS	SUBTOPICS
Organizational and Institutional Feedback	Organizational or administrative issues, technical assistance, feedback on CARB outreach
Programmatic Feedback	Program eligibility and application process, program scope and scale, selection and scoring process, implementation and reporting
Subject-Matter or Outcomes-Oriented Feedback	Specific program goals or principles (community engagement; workforce development; housing; climate adaptation and resiliency; GHG emissions, energy, and VMT impacts), other equity considerations

The reviewed documents contained a wide variety of public feedback on the programs, with commenters including state agencies, local governments and agencies, private mobility operators, community residents, CBOs, and other stakeholders. In some cases, comments included the identity of the commenter, but in other cases, comments were provided anonymously or identifiers were absent from the documentation. Topics of public feedback ranged widely, such as questions about program eligibility, concerns about application requirements, recommendations to fund specific types of pilots or regions, and questions or comments about best practices in transportation and equity.

Through the Public Feedback Materials review, researchers placed an emphasis on identifying common themes of public comments and questions, particularly those that may relate to public concerns, requests, or recommendations for CMO or STEP. For example, many comments were requests for clarification that were answered by CARB or other program staff during the meetings, and researchers generally did not include this type of feedback

in the review results if the questions appeared to have been resolved. Additionally, while the Public Feedback Materials included feedback about all components of CMO and STEP, researchers primarily focused on comments and questions relating to the CTNA component of CMO or the Planning and Capacity Building grant component of STEP.

CMO Formal Program Materials Review Results

Legislative Context

Documents such as the CMO implementation manual and CTNA Voucher Application form refer to California legislation that built the foundation for the implementation of CMO. The implementation manual provides a detailed history of legislative activity leading to CMO, including the creation of the Air Quality Improvement Program and Clean Transportation Program, and the passing of Senate Bills (SB) and Assembly Bills (AB) to facilitate cap-and-trade investments into disadvantaged and low-income communities. The manual highlights the importance of SB 350, which created a study of barriers to clean transportation and led to CARB guidance for overcoming these barriers with initiatives such as mobility voucher funding. The barriers to clean transportation identified in the SB 350 study include access, safety, and reliability of mobility options; affordability and awareness of clean transportation; and the need for funding of clean transportation services. According to the implementation manual, CMO supports the priorities of the SB 350 barriers study by expanding funding for, and community awareness of, clean transportation options.

Program Goals

According to the CMO logic model, CMO CTNAs are intended to result in several benefits to recipient communities including increased knowledge of sustainable transportation options and community “buy-in” and motivation to implement clean transportation solutions. In the long term, CTNAs are designed to lead to the deployment of mobility services, the creation of local jobs associated with the services, and ultimately improved transportation equity and climate resilience in the community. These goals align with the SB 350 priorities of increasing clean transportation awareness and access to mobility options and infrastructure, and also align with the GHG reduction, job creation, and climate resiliency priorities of AB 1532. The CMO implementation manual further describes the role of CTNAs as a method of justifying funding for mobility solutions that address a community’s specific needs.

Overall, the implementation manual notes that CMO seeks to “streamline the delivery of funding for clean mobility options projects to smaller entities and communities with limited resources and access to funding.”

Finding: *In combination with the Guiding Legislation, the program goals suggests that a program priority is to direct CTNA funds toward applicants that (1) represent small organizations, (2) are located within environmentally disadvantaged and low-income communities, and (3) have limited funding and resources.*

Application Requirements

Eligibility

The 2022 CMO implementation manual and CTNA Voucher Application detail the eligibility requirements for applicants submitting for funding through the program. An application must specify a lead applicant but can also include multiple subapplicants. Lead applicants must be public agencies, nonprofits, or tribal governments, and the census tract project area defined in the application must be in an SB 535 disadvantaged community or AB 1550 low-income community (including tribal lands within those areas). Subapplicants may include a broader range of organization types, such as nonprofits, California-registered private organizations, public agencies, and tribal governments or tribally chartered corporations. The implementation manual also specifies a limit of one application per lead applicant within each solicitation window, except for unincorporated project areas that are not represented by a city government. For proposed projects that are fully within an unincorporated area, lead applicants are allowed to submit up to three applications per solicitation window. Lead applicants are also allowed to participate as subapplicants in additional applications that have a different lead applicant.

As CMO seeks to facilitate community-driven decision-making and change, the program requires that CTNA projects involve established CBOs that represent the project area. To meet this requirement, applications must have a CBO as the lead applicant or include a letter of support from a relevant CBO or CBO subapplicant. As defined by CMO, an organization must meet two of the following three criteria to be considered a CBO:

- the organization is place-based with an explicit geographic focus that includes the proposed project area

- staff members, volunteers, or board members reside in the community where the project is located
- the organization has a demonstrated track record of at least one year providing services in the proposed project area

Finding: *According to this definition, any organization that has provided services in an area for a year or more and has employees living in the area would be considered a CBO. If the CTNA applicant is not a CBO, the applicant must identify a CBO that supports the project and include a letter of support from this organization with the application.*

Proposal Components

To apply for a CTNA voucher, eligible applicants must complete a form that requests information about the project team, a narrative description of the proposed project, and a description of the project area. Applicants must also submit a budget summary, letters of commitment and support from subapplicants or supporting CBOs, and other supporting documents such as nonprofit corporate certifications.

Scope

Applicants can apply for up to \$100,000 in CTNA funding for a proposed project. The funding term for CTNA projects is twelve months. CTNA projects are intended to identify clean mobility solutions that meet community needs. CMO documents list examples of the types of implementation projects that may be identified through a needs assessment, such as car share, bike share, scooters, carpools, vanpools, on-demand transit, or shared on-demand mobility, though program language acknowledges that other solutions may be identified for a specific community and that these other solutions are within the scope of the program. Applicants must justify the requested funding amount by completing a budget worksheet that identifies the hourly rate, estimated number of hours, and total requested amount for each project team member, as well as the cost of administrative tasks and other project activities such as event costs and travel costs.

Selection Process

The following section outlines the review of the grant application material and selection process for the 2020 window of CMO and STEP grants. The reviewed materials included application documents, scoring rubrics, and any public information for each grantee. This process included a review of

successful and unsuccessful applicants. Based on the reviewed documents, a total of forty-seven applicants were received for the 2020 CMO application window. The application window opened on June 1 at 9:00 am. The application window was intended to remain open until the requested amounts totaled the amount budgeted for this specific window; that amount was reached at 9:04 am.

Application Window and Limits

To qualify for funding consideration, applications must be submitted after the CTNA solicitation window opens; Window 1 opened at 9:00 am PDT on June 1, 2020, and Window 2 was open from 9:00 am PDT on November 2, 2022, through December 7, 2022.

The CMO implementation manual states that CTNA vouchers will be limited to one voucher per project area, and that if CMO receives two applications for the same area, the first of the two received will be considered for funding while the second application received will be disregarded. The manual does not specify whether partially overlapping project areas will be treated as separate or duplicate areas. The implementation manual also specifies a limit of one application per lead applicant within each solicitation window, except for unincorporated project areas that are not represented by a city government. For proposed projects that are fully within an unincorporated area, lead applicants are allowed to submit up to three applications per solicitation window. Lead applicants are also allowed to participate as subapplicants in additional applications that have a different lead applicant.

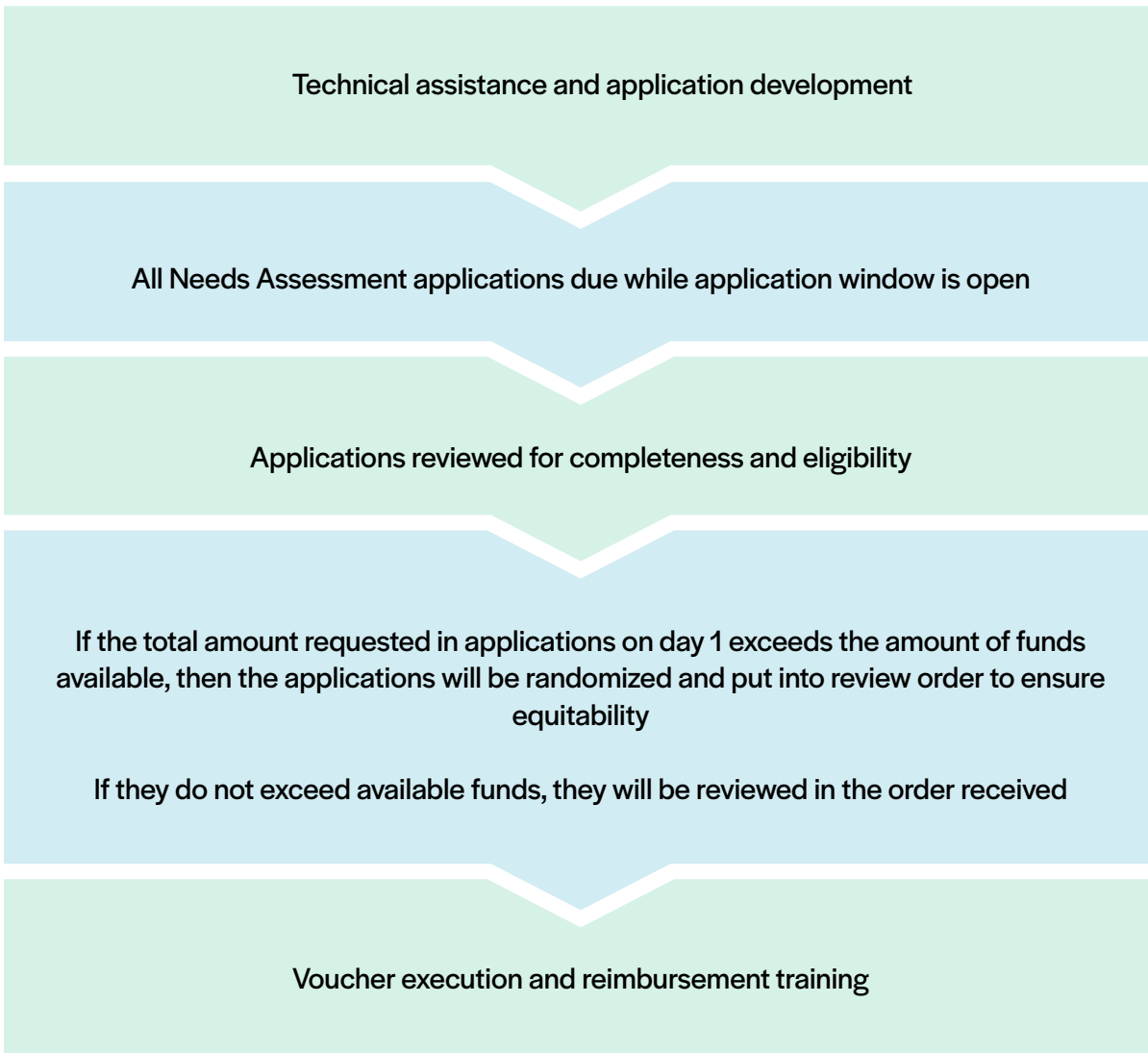
Allocation of Funds

Window 1 of the CMO solicitation used a first-come-first-served method of selecting applications for funding, where program administrators reviewed applications for completeness in the order that they were received, and allocated funding to eligible applications in order until all available CTNA funds were exhausted. In cases where an application required minor changes or where program staff had clarifying questions, staff contacted applicants and gave them an opportunity to revise their applications without losing their place in the review order. Applications that required major changes or that were deemed incomplete or ineligible based on the information provided were rejected.

The narrative information required for CTNA applications, such as a description of the project area, summary of past community engagement efforts, and potential mobility gaps and solutions, is used to demonstrate project eligibility and allow program administrators to ask clarifying questions, rather

FIGURE 2

CTNA application and selection process for Window 2



Source: *Implementation Manual for the Clean Mobility Options Voucher Pilot Program (CMO)* (June 27, 2022), 66.

than to score or rank applications for quality or need. CMO was designed as a noncompetitive solicitation process in accordance with CARB and legislative goals to support underresourced communities, and the first-come-first-served approach is intended to provide equal opportunity to all applicants.

As discussed in the research team's memo that reviewed the application selection results for Window 1, all CTNA funds were reserved within the first few minutes of the window opening. The current CMO implementation manual and program website explain that for Window 2, the program will

again use the first-come-first-served approach but will add a contingency in the event that all funds are reserved on the first day of the window. In this case, program administrators will assign a random number to all applications received on the first day and then rank the applications in numerical order before reviewing them and allocating funds.

The implementation manual states that this change is intended to give everyone the same chance of being selected, rather than favoring applicants who are able to submit their applications as soon as the window opens. The CTNA application guide explains that once an application is approved, applicants will receive a notification from the program administrator, which will be followed by signing a voucher agreement and beginning project implementation. Figure 2 is from the updated CMO implementation manual and displays the steps in the application and selection process for CTNAs in Window 2.

Finding: *The CMO implementation manual notes that applications received after funds are exhausted will be added to a waiting list and that these waitlisted applications may be prioritized in future funding windows. However, there are no details confirming that waitlisted applicants will be considered during future windows or how this prioritization will be structured.*

Implementation and Reporting

CMO program materials outline the requirements for completing a CTNA, which include conducting a transportation access data analysis; engaging with the community to determine gaps, needs, and preferences; and preparing interim and final reports of results and recommendations. Awardees are also required to attend orientations, trainings, and meetings with the Clean Mobility Equity Alliance (CMEA). CMEA is a peer-based group of funding recipients, transit agencies, local governments, and other stakeholders that is designed to facilitate collaboration and development of best practices and lessons learned for identifying and implementing clean mobility solutions.

The transportation access data analysis must consist of at least one resident survey. The Shared-Use Mobility Center, one of the administrators of CMO, developed a survey guide for CTNA recipients that provides information about how to develop and administer a resident survey. This guide suggests that recipients should try to obtain responses from at least one hundred people or 5% of the resident population, whichever is larger. The guide

also directs voucher recipients to contact CMO TA resources if they have questions about how to conduct this component of the project. The transportation access data analysis must also include three or more other data sources indicating transportation accessibility, such as the project area's US Environmental Protection Agency Walkability Index, vehicle ownership per household, cost of existing transit and personal vehicle fuel, household income data, job opportunity access, and information on existing clean mobility projects in the community.

For the community engagement component of CTNAs, awardees are required to conduct at least two engagement activities from a prescribed list or propose alternative engagement activities to the program administrator. Approved types of engagement activities as described in the implementation manual include community forums, public workshops or meetings, webinars or other virtual events, focus groups, house meetings, developing social media content or an interactive website, administering additional surveys, conducting outreach to other community groups, and conducting interviews with a sample of community residents.

CTNA awardees are required to complete a final report that summarizes the results of the transportation access data analysis and community engagement activities. The implementation manual explains that the final report should describe similarities and differences in results among the various activities conducted and highlight high-priority mobility solutions that the community identified during the needs assessment. Program guidelines state that the final report should also outline next steps for communicating the results of the CTNA with the community, conducting continued community engagement, and implementing any "quick start" actions that have been identified to immediately improve transportation access in the community. Awardees are also required to complete status reports every six months that describe project progress, delays, and issues; include collected data from user surveys, job creation outcomes, and community engagement; and provide responses to a program feedback survey that CMO will administer to awardees to assess their satisfaction and experience with the program.

The CMO implementation manual also notes that CTNA funding can optionally be used to begin planning details related to the implementation of a particular mobility project as a precursor to applying for CMO mobility pilot voucher funding or other pilot program funding. Mobility pilot preparation activities eligible for CTNA funding support include conducting community meetings to select mobility options, evaluating pilot feasibility and selecting

sites, creating project partnerships, developing a pilot budget, and working on a mobility pilot voucher application.

Finding: *According to the manual, applicants must include mobility pilot preparation activities in their CTNA budget proposal before the CTNA is approved for funding or CTNA activities are conducted if they plan to use the funding for this purpose. It is not clear how communities would identify the need for specific pilot preparation activities and include these in their CTNA budget proposal if they have not yet conducted a needs assessment.*

Technical Assistance

CMO offers TA to applicants and interested parties who have questions about the program or need support to complete an application. The CMO website provides multiple contact methods for requesting TA, including an online form, an email address, and a telephone number. Additionally, the website provides a link to join a Zoom call, which TA providers host once per week to answer questions about the program.

STEP Formal Program Materials Review Results

Legislative Context

CARB issued a Guiding Legislation document to summarize the policy context for the design and implementation of STEP. This document lists the key California ABs and SBs that provided the foundation for STEP funding and guided the development of program objectives. This includes broad statewide policies such as SB 32, which requires the state to reduce GHG emissions to 40% below 1990 levels by the year 2030; and AB 1532, which required the state to use cap-and-trade auction proceeds toward GHG reduction. Additionally, the document cites STEP's specific relevance to legislation such as AB 1550, which defined expanded thresholds for the amount of cap-and-trade proceeds that must benefit disadvantaged and low-income communities; and SB 1275, SB 375, SB 150, and SB 350, which together relate to setting goals and assessment of progress and barriers to transportation, housing, and land use improvements.

Overall, program documentation asserts that STEP was designed to support the various objectives of these policies, including achieving GHG reductions, benefiting low-income and disadvantaged communities, reducing barriers to low-carbon transportation access, and facilitating coordinated efforts

toward improvements in mobility, housing, and land use planning. In addition to the Guiding Legislation document, these policies are also referenced within various other STEP materials. For example, the Planning and Capacity Building Grant Solicitation refers to the AB 1550 definition of low-income communities, as well as the SB 535 categorization of disadvantaged communities (using CalEnviroScreen 3.0).

Program Goals (Planning and Capacity Building Grants)

The STEP Planning and Capacity Building Grant Solicitation states that STEP seeks to increase the equity of transportation in disadvantaged and low-income communities, increase access to key destinations, reduce GHGs, and collaborate with and solve inequities experienced by hard-to-reach residents. The STEP Proposal Flowchart specifies that the main goal of Planning and Capacity Building grants is to identify community needs and prepare for projects that will benefit disadvantaged and low-income communities by (1) increasing clean mobility and (2) reducing GHG emissions. Similarly, the list of guiding legislation for STEP suggests that STEP is designed to help meet California's GHG reduction targets, overcome transportation access barriers, and provide jobs and other opportunities for communities and businesses.

Application Requirements

Eligibility

The STEP Planning and Capacity Building Grant Solicitation document and its appendices provide the requirements and guidelines for applicant and project eligibility. Applicants must be local governments, federally recognized tribes, or nonprofit CBOs. Regarding project scope, the solicitation states that there were up to \$2 million in funds available for the first solicitation window but does not specify an estimate or limit in the amount of funding available for each awardee. The solicitation states that to be eligible for STEP funds, at least 50% of the proposed project area (referred to as the "STEP Community") must comprise disadvantaged or low-income census tracts. Appendix E (Project Eligibility) of the solicitation states that funded Planning and Capacity Building grant activities must directly support implementation of the grant and that these activities should focus on engaging the community. The solicitation qualitatively states that STEP projects should place resident knowledge and expertise at the center of the design and implementation process but does not specifically mention how this objective is defined or measured. Other eligibility

FIGURE 3

STEP proposal components

PROPOSAL COMPONENT	SUBMISSION FORMAT
Cover page (Appendix C)	Attachment
Grant Framework PG. 7	
Vision Statement	Proposal Template
Projects identified	Proposal Template
Project Summary for public posting	Proposal Template
Applicants and Partnerships Structure PG. 11	
Lead applicant and sub-applicant identification qualifications and letters of support	Proposal Template & Attachments
Conflicts of interest declaration	Attachments
Community Partners identification and letters of support	Proposal Template & Attachments
Partnership Structure	Proposal Template
Proposal Thresholds and Criteria PG. 19	
Lead applicant and sub-applicant identification qualifications and letters of support	Attachments
Conflicts of interest declaration	Proposal Template
Community Partners identification and letters of support	Attachments
Partnership Structure	Proposal Template
Community Partners identification and letters of support	Proposal Template
Partnership Structure	Proposal Template
Proposal Thresholds and Criteria PG. 23	
Lead applicant and sub-applicant identification qualifications and letters of support	Proposal Template
Conflicts of interest declaration	Proposal Template
Community Partners identification and letters of support	Proposal Template
Partnership Structure	Proposal Template
Community Partners identification and letters of support	Proposal Template
Partnership Structure	Proposal Template
Proposal Thresholds and Criteria PG. 23	
Partnership Structure	Proposal Template
Community Partners identification and letters of support	Attachments
Partnership Structure	Proposal Template

guidelines mentioned in the solicitation documents include ensuring that funded outreach activities are multilingual, ensuring that proposed activities include an evaluation of community engagement success, and providing incentives or other compensation to community residents who participate in grant activities.

Similar to CMO, STEP seeks to support community-driven transportation capacity and equity outcomes. STEP requires that CBO applicants be nonprofits and that if the lead applicant is a local government, at least one co-applicant must be a CBO (and vice versa). Appendix A of the Planning and Capacity Building Grant Solicitation provides a definition of CBOs and other key terms for the purposes of the program. This document defines a CBO as having each of the following characteristics:

- CBOs are nonprofit place-based organizations with a geographic focus that includes the STEP community
- CBOs should have staff, volunteers, or board members that reside in the project community
- CBOs must have at least one year of experience providing transportation or equity services in the project community

The appendix also notes that lead applicant CBOs must be tax-exempt under Internal Revenue Service code section 501 and California state law.

Finding: *The STEP CBO definition varies somewhat from the definition specified in CMO documents, where a CBO would still be considered eligible by meeting two of three criteria, which are similar to those above, rather than meeting all three criteria.*

Proposal Components

To apply for a STEP Planning and Capacity Building grant, applicants must complete all sections of the STEP proposal including the (1) Grant Framework, (2) Applicant and Partnership Structure, (3) Proposal Thresholds and Criteria, (4) Project-Specific Thresholds and Criteria, and (5) Proposal Implementation Plan. Figure 3, taken from the original STEP Planning and Capacity Building Grant Solicitation, lists the required proposal components for each of these sections. Some of these items, such as the vision statement, project and community descriptions, applicant structure, and proposal budget, are similar to CMO CTNA application requirements. However, STEP also requires a variety of additional items related to project resources and

individual program goals such as displacement avoidance and climate adaptation and resiliency.

The STEP Planning and Capacity Building Grant Solicitation notes that STEP proposal requirements are intentionally resource intensive for applicants, requiring significant upfront work to build the foundation for a successful project and ensure that program administrators have enough information to appropriately distribute funds. Regarding the grant selection process, the solicitation states that STEP seeks to ensure that funded projects are those that are “most likely to address each community’s vision, help meet the state’s objectives, and achieve objectives that intersect across the climate, transportation, and housing sectors.”

Scope

Appendix E of the Planning and Capacity Building Grant Solicitation provides details on the types of projects eligible for funding through STEP. These projects include conducting community engagement to identify or plan for clean transportation projects, conducting land use or transportation plan development, or building capacity for implementing or expanding clean transportation projects.

Finding: The project requirements and criteria document notes that STEP proposals must clearly identify their proposed STEP Planning and Capacity Building project and include information about how this project was identified within the community. However, the Proposal Flowchart also states that STEP Planning and Capacity Building grants are intended for disadvantaged and low-income communities whose CBOs and other prospective applicants have conducted little to no community engagement. Thus, a comparison between the solicitation and flowchart creates some uncertainty regarding the specific amount of community engagement that is required of communities prior to applying for STEP Planning and Capacity Building grants.

Selection Process

Application Window

For the first solicitation window, STEP applicants were required to submit proposals by August 31, 2020.

Allocation of Funds

STEP is designed as a competitive solicitation process and uses a complex scoring rubric to assign points to submitted proposals. Prior to scoring,

CARB reviews proposals to determine which submissions are eligible for funding. According to the solicitation document, an interagency panel then uses the scoring rubric to assign points to each eligible proposal. Appendix D of the STEP Planning and Capacity Building Grant Solicitation details the scoring categories, criteria, and maximum available points. The scoring approach assesses the proposal's Grant Framework (twenty-one possible points), Applicant and Partnership Structure (twenty-five possible points), Proposal Thresholds and Criteria (fourteen possible points), Project-Specific Thresholds and Criteria (thirty-four possible points), and Proposal Implementation Plan (six possible points). According to the scoring rubric, points are assigned based on the extent to which the proposal responds to the scoring criteria for each category using the following scale: not responsive (0% of maximum points), minimally responsive (1–24%), inadequate (25–49%), adequate (50–69%), good (70–89%), and excellent (90–100%).

The rubric also allows for up to four extra points to be assigned to a proposal, for a total of 104 possible points. Two of these extra points are assigned to applicants who are community-based organizations or federally recognized tribes, and the remaining two points are assigned to proposals involving a rural community. The solicitation document explains that once the highest scoring proposals are selected for funding, CARB will announce the recipients. Unselected applicants will then have thirty days to request a debrief meeting with CARB to discuss the review of their proposal and identify recommendations for developing a more successful future proposal.

Finding: *The Draft Project Requirements and Criteria document issued in February 2020 also notes two other potential extra points categories for (1) projects in communities with high VMT per capita, and (2) projects in communities that lack clean transportation options. However, it appears that these categories were not adopted for the final solicitation. As discussed in the STEP Public Feedback Materials Results section, stakeholders provided varied suggestions on the types of bonus points categories that CARB should consider for STEP scoring.*

Implementation and Reporting

STEP materials outline the requirements for implementing a funded STEP Planning and Capacity Building grant. Generally, these materials state that awardees should implement projects as specified in their scope of work and grant agreements and should notify CARB of any changes to project objectives or deliverables. The solicitation states that awardees should follow best practices for community engagement and should document the

effectiveness of their engagement efforts. Appendix H of the solicitation outlines the data collection requirements for grants and lists a variety of metrics to collect, but also specifies that CARB and the awardee will collaborate to finalize a list of data that fits the funded project. Awardees are required to develop a data collection plan and include a summary of data in their reporting materials. Awardees must complete a report describing the activities completed, results, and lessons learned from their planning, engagement, and implementation activities.

Technical Assistance

Similar to CMO, STEP offers TA services to current and prospective STEP Planning and Capacity Building and Implementation Grant applicants. The STEP solicitation includes instructions for signing up for TA, and notes that such services will be provided “should they become available.” The document indicates that TA is intended to help applicants determine which STEP grant to apply for and to assist with mapping the STEP community to include with the proposal submission. Program materials such as the solicitation, STEP website, and CARB mailings provide information about a series of publicly available applicant teleconferences, which were held before the first STEP solicitation window. The solicitation document states that CARB will not answer questions about the grants before, between, or after these teleconferences.

Interview Guides

Objectives

- Conduct key informant interviews with scholars and practitioners familiar with transportation equity and equity pilot programs to understand emerging practice not yet represented in the literature.
- Delineate and critically analyze approaches to assessing the transportation needs of equity seeking communities.
- Facilitate a greater understanding of what community transportation needs assessments seek to achieve as well as the strengths and weaknesses of various approaches.
- Understand viewpoints of key informants including the motivation and beliefs of people with diverse backgrounds and opinions on particular issues, and if they chose to do so, offer recommendations for improving programs and processes.

Key Informant Groups

1. State agency staff and consultants contracted to provide technical assistance or other services related to the programs.
2. Local transportation agencies and nonprofit staff funded through the state programs.
3. Transportation equity advocates and community leaders in areas highly impacted by transportation inequities.
4. People engaged in equitable transportation planning not supported by the state programs, including those who were applicants but were not awarded grants by the state programs.

Interview Guides

Key Informants who are state agency staff and consultants

- Do you have any direct experience or experiences with inequities in transportation access? Please describe your experience.
- What capacities do you look for in an applicant to know whether they will be able to carry out an equitable needs assessment or transportation planning process?
- What qualities necessary for equitable CTNA processes are hardest to find in applicants?
- What are the recommended methodologies for identifying and measuring community transportation needs?
 - How do these methods assess or consider social equity and/or environmental justice?
 - How are members of marginalized communities involved in the process?
- How are CTNAs used by your agency to set priorities for which types of projects to fund?
 - What is the process you use to review CTNAs and ensure that funded projects reflect the findings and recommendations?
 - Has there been a time where you pivoted your approach to funding projects based on community feedback? If so, tell us about it.
- When supporting Transportation Needs Assessment for Environmental Justice communities, what strategies have you found to be successful?
 - Where did you develop or learn these strategies from?
 - How do you go about to make sure the strategies you've mentioned are included in funded work?
- What challenges have you encountered in your efforts to support equitable transportation planning?
 - What resources, practices, or support has been useful in moving beyond these challenges?

Key Informants who are local transportation agency and nonprofit staff funded through the state programs

- Do you have any direct experience or experiences with inequities in transportation access? Please describe your experience.
- Can you tell me about how you became involved in the (CMO or STEP) program? How did you find out about the program and what were the needs in your community that you thought the program would meet?
- Were there any barriers or challenges in the grant application process that made it difficult for your organization to apply and/or obtain funding to do a Community Transportation Needs Assessment (CTNA)? If so, what were they?
 - What support or resources were helpful for you to move beyond these challenges during the application process?
 - Are there support or resources that you wish you knew about or had access to during the application process? If so, what would they be?
- What barriers or challenges were encountered that made it difficult to carry out an equitable CTNA?
 - What support or resources were helpful for you to move beyond these challenges during the CTNA planning process?
 - Are there support or resources that you wish you knew about or had access to during the planning process? If so, what would they be?
- How did you identify and measure the needs in your community in the CTNA process?
 - At what points in the CTNA process were community members engaged?
 - How much decision making power did community members and residents have?
 - How did you ensure that you heard from members of marginalized communities?
 - Did you encounter any challenges in your efforts to meaningfully engage members of marginalized communities?
 - What support or resources from CARB were useful for making your community engagement more successful?
 - Are there support or resources from CARB or other agencies that you wish you knew about or had access to in order to make your community engagement more successful?

- How do you determine which social groups or geographic areas are the most in need?
 - What surprises, if any, did you encounter about which social groups or geographic areas had major needs?
- How are CTNAs used by your organization/agency to set priorities for which types of projects to pursue?
- What has your experience been trying to obtain funding for the projects that the CTNA set as priorities?
 - Are there projects/improvements that the CTNA are pointing to that CARB does not provide support to?
 - Do you feel the CARB programs funding transportation projects are addressing the root causes of transportation inequities in your community? If so, how?
- What do you look for in either a state funding program or technical assistance provider to know that they will be a good fit in your work to advance equitable transportation improvements?
 - What are ‘red flags’ - or things that make you concerned - about state funding programs or technical assistance, particularly when it comes to equitable transportation?

Key Informants who are transportation equity advocates and community leaders in areas highly impacted by transportation inequities

- Do you have any direct experience or experiences with inequities in transportation access? Please describe your experience.
- In what ways have you and the organizations/groups you are part of engaged in transportation planning?
- What barriers or challenges prevented your organization from applying and/or obtaining funding to do a CTNA, or other funding from CARB?
- What positive experiences, if any, have you had with public agencies doing transportation planning?
- What negative experiences, if any, have you had with public agencies doing transportation planning?
- What do you think CARB should be doing to better support equitable transportation planning in your community?

- What data do you wish you had that would be useful in equitable transportation planning in your community?
- What capacities do you wish your organization or other organizations in your community had so they could do more impactful work on transportation equity?

Key Informants who are people engaged in equitable transportation planning not supported by the state programs

- Do you have any direct experience or experiences with inequities in transportation access? Please describe your experience.
- What communities do you serve? Who are your major stakeholders?
 - What are the most significant transportation equity issues in your community?
- Have you applied for funding from CARB to carry out a Community Transportation Needs Assessment (CTNA)? (Y/N)
 - (if not) Were there any barriers or challenges that prevented your organization from applying for funding to do a CTNA? If so, what were they?
 - (if so):
 - What barriers or challenges prevented your organization from obtaining funding to do a CTNA?
 - Have you been able to carry out any needs assessment activities without funding from CARB programs? Are you seeking out other funding opportunities for carrying out these activities?
- What positive experiences have you had with public agencies doing transportation planning?
 - Has transportation planning in your community addressed and advanced social equity? If so, how?
- What negative experiences have you had with public agencies doing transportation planning?
 - How has transportation planning in your community failed to address and advance social equity?
- What types of funding programs could best meet the needs of your community and support equitable transportation planning?
- In what ways should the CARB programs be changed to better support

funding for equitable transportation programs (e.g., program eligibility, application selection)?

- What data do you wish you had that would be useful in equitable transportation planning in your community?
- What capacities do you wish your organization or other organizations in your community had so they could do more impactful work on transportation equity?