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FACILITATING *Equity-Oriented* ELECTRIC VEHICLE INFRASTRUCTURE INVESTMENTS

Strategies for Project Design

OCTOBER 2024
Policy Brief

EV Equity Initiative


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OCTOBER 2024 | **POLICY BRIEF**

FACILITATING EQUITY-ORIENTED ELECTRIC VEHICLE INFRASTRUCTURE INVESTMENTS

Strategies for Project Design

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ABOUT THIS REPORT

The Center for the Law, Energy & the Environment (CLEE) developed this policy brief as a resource for local governments and community-based organizations seeking to advance equity-oriented electric vehicle infrastructure investments. The authors have applied research on equity-oriented project design to multiple mobility planning and electric vehicle infrastructure contexts, conducting interviews with mobility experts and program officials to inform the case studies in this brief. The report includes two case studies for each of three strategies for equity-oriented project design in California and presents recommendations for future project implementation.

CLEE developed this policy brief as part of its EV Equity Initiative, which aims to build locally tailored, community driven, and replicable approaches to the development of electric vehicle and mobility infrastructure in underserved communities in California and US cities.

This report also forms part of CLEE's new set of resources to support Equitable Climate Infrastructure Investment. CLEE is assessing models of community oversight, governance, and benefits; developing replicable frameworks to achieve climate goals and deliver meaningful benefits to communities; and partnering with stakeholders to bring them to fruition to ensure that climate infrastructure investments deliver environmental benefits and achieve equity and economic justice goals.

ABOUT THE CENTER FOR LAW, ENERGY & THE ENVIRONMENT

The Center for Law, Energy & the Environment (CLEE) channels the expertise and creativity of the Berkeley Law community into pragmatic policy solutions to environmental and energy challenges. CLEE works with government, business, and the nonprofit sector to help solve urgent problems requiring innovative, often interdisciplinary approaches. Drawing on the combined expertise of faculty, staff, and students across the University of California, Berkeley, CLEE strives to translate empirical findings into smart public policy solutions to better environmental and energy governance systems.

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GLOSSARY OF TERMS

Clean mobility planning refers to strategies and measures to improve efficiency and transition to low and zero-emission transportation modes.[1]

Community benefits refer to a series of measures incorporated in infrastructure development projects or plans that secure benefits–such as financial, labor/workforce, and environmental commitments–for the hosting and/or impacted communities.[2] These benefits are provided above and beyond any environmental or other mitigation required under the National Environmental Policy Act, the California Environmental Quality Act, and other local, state, and federal laws.

Community Benefits Agreements (CBAs) are contractual agreements between project developers and a community group or coalition of community groups obligating a project's inclusion of local and/or workforce benefits in exchange for community support or acceptance of the project.[3]

Community oversight councils are community-based project oversight bodies with a degree of decision-making authority over a project's life cycle.

Co-creation refers to an intentional, time-bound approach of sharing power and decision-making for mutually beneficial outcomes.[4]

Equity-oriented project design acknowledges and seeks to address the disparities in how communities experience both the benefits and burdens of climate change.[5]

Electric vehicle/EVSE infrastructure includes the structures, machinery, and equipment necessary to support an electric vehicle (EV).[6] In this report, electric vehicle infrastructure refers to charging stations, otherwise known as Electric Vehicle Supply Equipment (EVSE).

Local governance refers to strategies that give local jurisdictions and communities more decision-making power over how climate actions are designed, implemented, monitored, and how success is evaluated.[a]

Participatory budgeting processes allocate a portion of public spending to projects selected via community-wide voting processes, used in municipal budgets or state and federal grant investments.[7]

Priority populations refers to a California-based definition of census tracts that have a significant concentration of disadvantaged communities (as defined by the California Environmental Protection Agency (CalEPA) based on the California Communities Environmental Health Screening Tool (CalEnviroScreen))[b] and low-income communities.[8]

Shared mobility refers to transportation services and resources that are shared among users, either concurrently or one after another.[9]

Underserved communities refers to groups who have limited or no access to certain resources or that are otherwise disenfranchised.[10] These disproportionate effects are caused by physical (built and environmental), social, political, and/ or economic factor(s), which are exacerbated by climate impacts. These factors include, but are not limited to, race, class, sexual orientation and identification, national origin, and income inequality.[11]

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a CLEE definition drawn from the first principle of locally-led climate adaptation from the Global Center on Adaptation. More information is available at: https://gca.org/programs/locally-led-adaptation/

b CalEPA defines disadvantaged communities based on the CalEnviroScreen framework developed by the Office of Environmental Health Hazard Assessment (OEHHA). Based on the newest version of CalEnviroScreen, Version 4.0, CalEPA identifies four types of geographic areas as disadvantaged: (1) census tracts receiving the highest 25 percent of overall scores in CalEnviroScreen 4.0; (2) census tracts lacking overall scores in CalEnviroScreen 4.0 due to data gaps, but receiving the highest 5 percent of CalEnviroScreen 4.0 cumulative pollution burden scores; (3) census tracts identified in the 2017 DAC designation as disadvantaged, regardless of their scores in CalEnviroScreen 4.0; (4) and areas under the control of federally recognized Tribes. More information on final designations is available at: https://calepa.ca.gov/wp-content/uploads/sites/6/2022/05/Updated-Disadvantaged-Communities-Designation-DAC-May-2022-Eng.a.hp_-1.pdf.


EV

I. INTRODUCTION

Current EV access risks further disenfranchising already underserved communities, impeding the widespread uptake of sustainable transportation options and perpetuating patterns of mobility and environmental inequity. However, the emerging energy transition context provides an opportunity to design EV plans in a manner that advances local economic prosperity and environmental justice.

THE CLEAN MOBILITY TRANSITION: BARRIERS TO EQUITY

California has adopted plans to phase out the sale of new internal combustion engine vehicles (ICEVs) by 2035 in line with the state's climate targets.[12] State and federal policy support for zero-emission vehicles (ZEVs) and the rapidly growing electric vehicle (EV) market have generated a large-scale clean mobility transition: 25.7 percent of all new California vehicles sold in in Quarter 2 of 2024 were electric,[13] with California's Advanced Clean Cars II target expected to support 15 million EVs in the state by 2035.[14] Twelve other states have adopted California's vehicle standards,[15] and the US EPA has promulgated vehicle emissions standards anticipated to result in EVs comprising over two thirds of light-duty vehicle sales nationwide by 2032.[16]

An effective EV transition requires the extensive installation of electric vehicle charging infrastructure (EVSE). For example, the California Energy Commission projects the state's estimated charging need at 2.11 million public and shared private[c] chargers to meet the target of 100 percent zero-emission vehicle sales by 2035.[17] Although California leads other US states in terms of charging infrastructure availability,[18] progress is far short of this target with currently just over 150,000 public chargers in the state.[19] California's need for charging is just one example: the National Renewable Energy Laboratory (NREL) predicts similar infrastructure needs on a federal level, as national EV transition scenarios would require 26-35 million additional charging ports by 2030.[20] NREL compares this level of infrastructure development with the construction of the Interstate Highway System in the 1950s.[21]

c Private but publicly accessible charging.

As the national EV market is expected to grow nearly tenfold by 2030, state, federal, and private sector dollars are increasingly flowing into EV infrastructure across the U.S.[22] However, charging investments have thus far faced significant barriers to equity. The vast majority of charging infrastructure has been installed in single-family homes, with over 80 percent of charging currently occurring at early-adopter drivers' places of residence.[23] Public EVSE infrastructure is key to equitable charging access for lower-income and multi-family housing residents.[d] However, to date lower-income, Black, and brown communities experience significantly lower charging access than their whiter, wealthier counterparts (even though public charging access is typically greater in areas with a higher density of multi-family dwellings).[24] The communities least likely to be able to access charging infrastructure are often already underserved, facing the burdens of systemic inequities both socioeconomic and environmental.[25]

Historically redlined Black and brown communities are also disproportionately affected by air pollution from diesel exhaust particle emissions, reflected in disproportionately high rates of asthma and related emergency department visits.[26] As a result, these communities potentially stand to benefit the most from pollution reductions related to the rollout of EV infrastructure. However, current EV market concentration in majority-white communities has resulted in the underutilization of this opportunity to address equity and air pollution issues through electric transportation investments. Due to the rapid pace and scale of the mobility transition, current EV market projections instead highlight the risk of further disenfranchising already underserved communities, impeding the widespread uptake of sustainable transportation options and perpetuating patterns of mobility and environmental inequity.

AN OPPORTUNITY FOR EQUITY IN THE ENERGY TRANSITION

These barriers to equity in the mobility transition mirror social and economic patterns in the energy transition more broadly. The historic infrastructure investments currently underway in multiple clean energy technologies are expected to transform energy and transportation systems, creating foundations for new industries and supply chains with far-reaching economic and social implications. Unlike previous industrial transitions, the development of clean energy systems is driven in large part by government agenda-setting instead of exclusively by new technology markets. As such, this emerging policy context provides an opportunity to design climate infrastructure investments in a manner that does not repeat patterns of pollution and inequality, but rather utilizes new infrastructure development to advance local economic prosperity and environmental justice.

The International Association for Public Participation's spectrum of public participation illustrates the extent of public agency over decision-making processes through five distinctive categories that inform the analyses in this report.

d Public charging infrastructure refers to EV charging that is publicly accessible, even with some payment required. This includes charging infrastructure serving multi-family housing and other private but publicly accessible charging.

Figure 1. IAP2 spectrum of public participation applied to equity-oriented EVSE investments.

	INCREASING IMPACT ON THE DECISION →				
	INFORM	**CONSULT**	**INVOLVE**	**COLLABORATE**	**EMPOWER**
PUBLIC PARTICIPATION GOAL	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.	To obtain public feedback on analysis, alternatives and/or decisions.	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered.	To partner with the public in each aspect of the decision including the development of alternatives and the identification of the preferred solution.	To place final decision making in the hands of the public.
PROMISE TO THE PUBLIC	We will keep you informed.	We will keep you informed, listen to and acknowledge concerns and aspirations, and provide feedback on how public input influenced the decision.	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision.	We will look to you for advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible.	We will implement what you decide.
EQUITABLE EVSE INVESTMENT LINKAGES	**Education and community outreach.**	**Community mobility needs assessments.**	**Community engagement and feedback processes.**	**Community oversight council structures.**	**Participatory budgeting processes.**

Source: Authors' modification of the International Association for Public Participation's (IAP2) spectrum of public participation.[27]

While historical infrastructure investments have often involved minimal public participation, closer to the "inform" side of the spectrum, an equity-oriented EV infrastructure rollout involves infrastructure project design closer to the "empower" side. While challenging to undertake, impactful and achievable strategies can be employed to ensure greater synergy between infrastructure development goals and the needs of hosting and impacted communities. Communities with decision-making power over the manner in which clean energy projects are implemented and their benefits are allocated are significantly more likely to accept and support climate technologies.[28]

An equity-oriented approach to the mobility transition carries numerous benefits not only for community mobility, but also for economic and workforce stakeholders across the automotive industry and vehicle supply chain. The phaseout of combustion-engine vehicles is generating significant shifts across the auto industry, and a just economic transition to clean mobility systems involves policy considerations for impacted workers across industries–from vehicle and parts manufacturing to fuel service stations–to ensure the continuity of employment and industry stability. While many of

these transition dynamics are broader in nature and therefore out of the scope of this report, they rely on the importance of place-based climate solutions to deliver jobs and economic development alongside emissions reductions in U.S. communities.

Local governance, or strategies that give local jurisdictions and communities more decision-making power over how climate actions are designed, implemented, monitored, and how success is evaluated,[29] is key to facilitating community co-creation of climate solutions. As the agenda-setting entities responsible for the details of clean mobility planning, local governments specifically play a key role in ensuring the development of an equitable mobility transition.[30] In designing, permitting, or procuring the public charging infrastructure essential for EV adoption among priority populations, local jurisdictions have an opportunity to implement plans that embed equity-oriented project design and support local mobility priorities. Prioritizing equity in public charging investments can facilitate more widespread access to EVSE infrastructure and ensure community input on the direction of clean mobility investments.

STRATEGIES FOR EQUITY-ORIENTED EV INVESTMENTS

This policy brief introduces a set of strategies for local governments and other stakeholders seeking to design equity-oriented electric vehicle infrastructure investments. These strategies were selected due to their combination of high positive impact and achievability for local policymakers; they consist of both structures and processes that can be deployed individually or collectively to embed equity considerations in the cornerstones of project design. As with other community-based processes, these measures should be conceptualized and implemented through working in partnership with established community-based organizations (CBOs) trusted by local residents.

The measures introduced in this report can be used to facilitate the implementation of many types of public EV infrastructure investments, including shared mobility and mobility hub programs,[31] curbside and public charging projects,[32] and charging projects that serve multifamily housing.[33] They are informed by literature on best practices in equity-oriented project design, which is driven by community participation–and ideally co-creation–throughout the project process. Due to the extensive community engagement processes inherent to effective strategy implementation, these approaches are best-suited to larger, jurisdiction-scale EV infrastructure projects, such as long-term charging site installation programs and large-scale clean transportation plans.

This brief explores three key strategies for local governments looking to advance equity in jurisdiction-scale clean mobility project development. These consist of two structures (Community oversight councils and Community Benefits Agreements) and one procedural tool (Participatory budgeting processes).

1. **Community Oversight Councils:** Oversight councils are community-based project oversight committees with decision-making authority over project development, serving as a key measure for incorporating local priorities throughout the project life cycle.

   Applicable project stages: Initiation, planning, implementation, and monitoring. Oversight councils are typically formed in the initiation and planning stages and closely inform the development of implementation and monitoring stages.

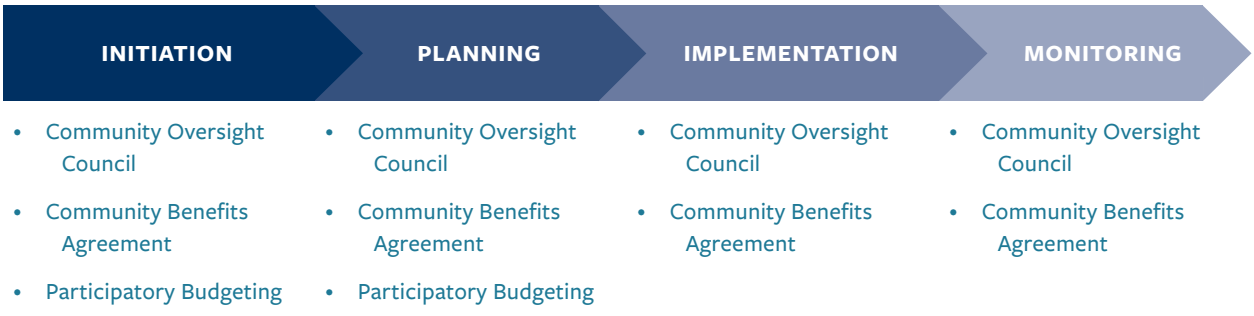
2. **Community Benefits Agreements (CBAs):**[e] CBAs are contractual agreements between project developers and coalitions of community groups obligating a project's inclusion of local and/or workforce benefits in exchange for community support or acceptance of the project.[34]

   Applicable project stages: Initiation, planning, implementation, and monitoring.[f] CBAs are typically negotiated and signed in the initiation and planning stages and closely inform a project's development of implementation and monitoring stages.

3. **Participatory Budgeting:** Participatory budgeting processes allocate a portion of public spending to projects selected via community-wide voting processes,[35] which can be used to allocate funds in municipal budgets or state and federal grant investments.

   Applicable project stages: Initiation and planning; participatory budgeting processes take place in early project stages, although their results inherently inform the project's implementation.

Figure 2. Stages of the Project Life Cycle: Initiation, Planning, Implementation, and Monitoring.



Source: Authors' own.

These measures are each addressed in the following sections through a strategy overview, two case studies, and recommendations for project implementation.

e Community Benefits Agreements (CBAs) are one of many potential community benefits arrangements, including project labor agreements, community benefits funds, and broader community benefits policies. Other types of community benefits arrangements may be appropriate for EV infrastructure investments in certain contexts.

f While CBAs are typically negotiated and signed during the initiation and planning stages of the project life cycle, CBA contracts themselves include a distinct implementation and monitoring stage. These implementation and monitoring stages inform and often occur in parallel to the implementation and monitoring stages of the infrastructure investment project.

ADDITIONAL PROCEDURAL TOOLS FOR EQUITY-ORIENTED PROJECT DESIGN

The three main strategies discussed in this brief (community oversight councils, Community Benefits Agreements, and participatory budgeting) are part of a wider toolkit of measures local governments and community-based organizations (CBOs) can take to support equity-oriented project implementation. The following procedural tools can further serve to inform community participation and input in developing equity-oriented EV charging investments:

Community mobility needs assessments: Needs assessments are a crucial first step in equitable mobility investment planning, allowing local agencies and communities to identify how investments can best serve community members as well as policy goals.[g] Best practices include building intentional, deep relationships with CBOs and community members, integrating multi-sector approaches, and compensating community members for their involvement in the process.[36]

Equity-focused community engagement: Community outreach and engagement should be facilitated by existing CBOs and may include, among other measures, attending and presenting at already-existing community meetings and events and conducting regular community engagement sessions throughout the project process. Best practices include the provision of translation and effective compensation for participation.[h]

Monitoring and evaluation on equity targets: Ongoing monitoring and evaluation by community members and third party evaluators plays a substantial role in ensuring the permanence of community voice throughout project implementation. Monitoring efforts should include multiple avenues for accessible and ongoing community feedback, as well as data-driven evaluations of project goals where applicable.

While these tools are not exclusively linked to the measures presented in this brief, they should be considered in any equity-oriented mobility project context.

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g Other forms of data-informed assessments project partners can pursue in the initiation stage include racial equity impact assessments and social and governance feasibility assessments. Environmental justice-oriented mapping platforms may also support developers in better understanding community needs.

h Equitable and effective compensation for community engagement with project development may include provisions such as meals, childcare, and transportation dependent on the context. Other accessibility and equity considerations include hosting meetings in trusted locations and at times when residents can participate, alongside provisions such as translation if necessary. Direct financial compensation may be appropriate in certain contexts, although research has suggested that funds provided in the context of infrastructure development may ultimately undermine community trust.

II. COMMUNITY OVERSIGHT COUNCILS

Community oversight councils, also known as oversight committees or steering committees, are community-based decision-making bodies with some degree of governing authority over a project's life cycle. They are separate entities from (though often initiated by) local government bodies, serving to formally embed an element of community governance into the project process.

Oversight councils are typically comprised of community members, representatives of CBOs, and local businesses who meet regularly throughout the project life cycle. Multiple models of council membership structure exist: some councils consist exclusively of representatives from community-based organizations, while others are open to any members of the surrounding community. While not all oversight councils have governing authority in their projects–some are merely advisory–truly equity-oriented program design relies on vesting councils with an appropriate level of decision-making power in the project process.[37]

Councils can play a wide variety of roles in the project development process, including:

- Convening multisectoral stakeholders on project development
- Voting on plan development and priorities
- Facilitating participatory budgeting and other community engagement exercises
- Facilitating the Community Benefits Agreement process where appropriate.

Community oversight councils can be implemented either at a plan-wide level or project-specific level; policymakers should consider the balance between not overburdening community members through the creation of multiple project-specific oversight councils while ensuring that each council has a narrow enough scope to effectively oversee project implementation. Community councils should also provide financial compensation for members' time and knowledge.[38]

The term community oversight council has been used to refer to broader community-based committees advising climate action in a particular jurisdiction, such as the San Francisco Enviornmental Justice Working Group, City of Los Angeles Climate Emergency Commission, Sacramento County Climate Emergency Mobilization Task Force,

and the UK Local Climate Commissions; or steering committees contributing to the implementation of a legal measure (see California's AB 617 Community Steering Committees and the Los Angeles Measure W Watershed Area Steering Committees). This report focuses on community oversight councils in the context of local jurisdictions' efforts to design and implement zero-emission mobility and clean infrastructure plans.

The use of community oversight councils is still emerging in clean mobility and clean energy investments, and multiple interpretations exist of council responsibilities and decision-making authority. Some council examples from California include:

- SFMTA Bayview-Hunters Point Community Steering Committee: A community council convened by the San Francisco Municipal Transportation Agency (SFMTA) informing the development of a transportation investment plan serving the historically underserved neighborhood of Bayview-Hunters Point.
- BlueLA Steering Committee (detailed in case study below): A CBO-led steering committee convened by the Los Angeles city government-led BlueLA program, a clean mobility carshare and charging investment program serving primarily low-income residents in Los Angeles.
- Solar on Multifamily Affordable Housing (SOMAH) Advisory Council: An equity-focused community council advising the implementation of California's SOMAH program, the largest investment in solar infrastructure in multifamily affordable housing in the US.
- Councils overseeing California state grant implementation of a series of climate infrastructure investments under the Transformative Climate Communities (TCC) grant program:[i]
    - Watts Rising Community Advisory Group: An advisory council overseeing and facilitating coordination among project partners in the Watts Rising Project, a community-wide project in Watts, Los Angeles including support for EV charging, anti-displacement programs, addressing pollution, and advancing economic development.
    - East Oakland Black Cultural Zone Community Development Corporation: A community-based corporation overseeing the implementation of the East Oakland Neighborhood Initiative, including community engagement for a TCC project investing in housing, greenspace, and safe and accessible transportation, among other areas.
    - Transform Fresno's Steering Committee and Outreach and Oversight Committee (detailed in case study below): A dual community oversight structure comprised of a steering committee informing investment direction and an oversight committee overseeing the implementation of the Transform Fresno grant, supporting investments in mobility, affordable housing, urban greening, food waste prevention, and renewable energy.

i Transformative Climate Communities (TCC) is a California grant program empowering communities most impacted by pollution to choose their own strategies, projects, and goals to reduce GHG emissions and air pollution. More information is available at: https://sgc.ca.gov/grant-programs/tcc/.

Community oversight councils vested with decision-making authority can serve as a key mechanism for embedding equity goals in EV infrastructure development and a versatile tool in overseeing multiple scales and applications of clean mobility planning.[39] The following case studies illustrate the use of community oversight councils in two community-led EV infrastructure development contexts.

CASE STUDY 1: BLUELA'S STEERING COMMITTEE

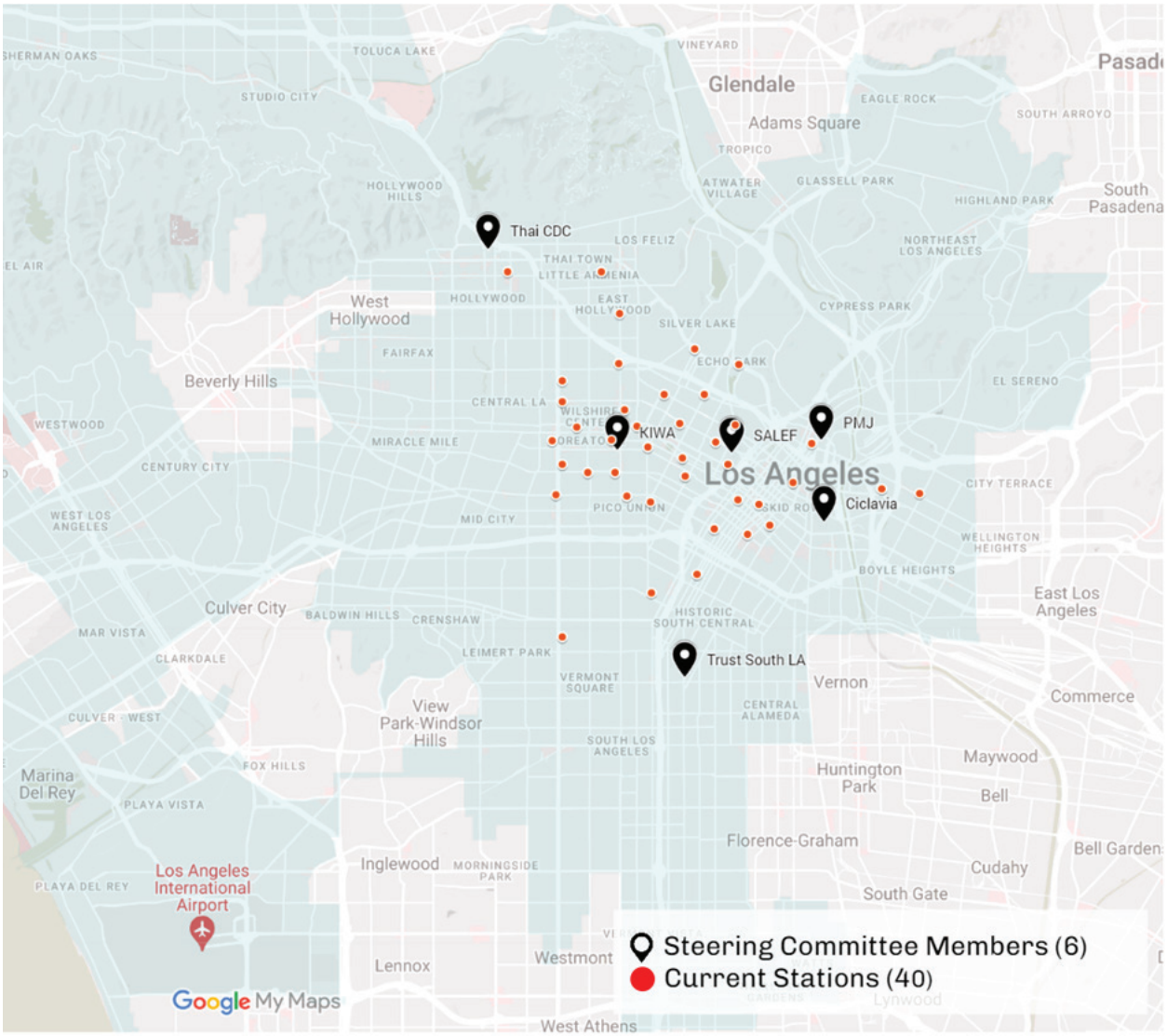
BlueLA is an equity-focused clean mobility initiative in Los Angeles, California, offering affordable EV car-sharing to communities in Downtown LA, Koreatown, Pico-Union, East Hollywood, Echo Park, Chinatown, Boyle Heights, and Westlake.[40] The project consists of 100 rentable electric vehicles paired with 40 curbside EV charging stations, and is a partnership between the Los Angeles Department of Transportation (LADOT), the Mayor's Office, the Los Angeles Department of Water and Power, and the California Air Resources Board (CARB). The second phase of the project currently underway will expand access to 300 cars and 100 charging stations across South LA, Boyle Heights, and East Hollywood.

BlueLA is the first city-led program of its kind in the nation,[41] supporting equity-oriented EV access and funding the construction of an associated charging network in underserved communities.[j] It offers two types of membership: a non-discounted market rate or a subsidized membership for lower-income drivers (defined as annual gross household income of up to $78,650 or qualification for certain public assistance programs).[42] Seventy percent of trips have been taken through the lower-income membership program, demonstrating increased public access to EVs in priority populations while reducing the need for private car ownership.[43] This approach treats vehicles as another public transit option, addressing cost barriers as well as aiding those living in higher density housing with limited parking availability.[44]

BlueLA established a community-based Steering Committee to ensure that the needs and preferences of hosting communities are driving program development.[45] The Steering Committee is comprised of representatives of six community-based organizations: the Koreatown Immigrant Workers Alliance (KIWA), the Salvadoran American Leadership and Education Fund (SALEF), TRUST South LA, People for Mobility Justice (PMJ), the Thai Community Development Center (Thai CDC), and CicLAvia. These organizations intentionally represent the geographic, cultural, and linguistic roots of the neighborhoods hosting EV charging development. One Steering Committee member recognized BlueLA for its role in supporting working-class residents and families through this equity-oriented focus on vehicle accessibility.[46]

j BlueLA is publicly funded through the California Climate Investments program.

Figure 3. Location of BlueLA Steering Committee organizations relative to charging stations.



Source: Los Angeles Department of Transportation[47]

The Committee plays an active role throughout multiple stages of the project process, working across community, business, and local government stakeholders to support BlueLA's development.[48] Committee members' historical knowledge about their neighborhoods and deep connections to community residents drive the charger siting process. The Steering Committee facilitates the program's community engagement and outreach, holding community forums, working with LADOT at tents at local events, flyering, and otherwise gathering resident input on the program and EV charger siting locations. The Committee also manages marketing and recruitment to BlueLA membership, including recruiting community-based ambassadors to encourage residents to sign up to the program. Following community input on program direction and siting location, LADOT

engages with the LA Chamber of Commerce and BlueLA's private partners to support the implementation of community preferences in plan development.[49]

The BlueLA Steering Committee is an example of an impactful NGO-led council membership structure. While closed to public participation, the Steering Committee supports existing community leadership through uplifting local organizations with already-established resident networks and community trust.[50] The Committee meets once or twice a month, and CBO representatives on the Steering Committee are compensated for their participation.[51]

According to an interview with a Steering Committee member, while the Steering Committee has achieved notable success in influencing project direction (including advocating for the BlueLA app to be made available in Spanish), this and similar accessibility considerations could have been embedded earlier if the Committee had been established in the project initiation stage.[52] Furthermore, while the Committee has impactfully represented communities' siting preferences in a complex web of project stakeholders, it could more effectively implement resident preferences if granted stronger decision-making authority. Some success in implementing the Committee's advice on project direction has been attributed to the City of Los Angeles supporting the Committee in its recommendations to BlueLA's private sector partners. While this demonstrates beneficial stakeholder alignment from a community perspective, it also highlights the risks of vesting community councils with limited decision-making power.

BlueLA is an innovative example of the application of equity-oriented principles to EV infrastructure development in underserved communities. While the program faces challenges associated with changing elected officials and variable political support, new private contractors, and perceived gentrification through the introduction of new technology in communities, it demonstrates the key role of local government in advancing community voice in EV infrastructure programs that the private sector would not address alone.[53] The Committee's multi-CBO council structure creates valuable precedent for local governments looking to develop jurisdiction-scale approaches to electric vehicle infrastructure and shared mobility.

CASE STUDY 2: TRANSFORM FRESNO'S STEERING COMMITTEE AND OUTREACH AND OVERSIGHT COMMITTEE

A different model of oversight council membership structure involves opening membership to any surrounding community members, as seen in the Transform Fresno Community Steering Committee. Transform Fresno is a historic project identifying, planning, and implementing a multitude of environmental and economic investments in Fresno, California, enabled by a $66.5 million Transformative Climate Communities (TCC) grant in 2018.[54] Fresno has a longstanding history of economic and environmental disparities, including high rates of agricultural air pollution due to its location in the San Joaquin Valley and historical segregation of immigrant and Black residents. Fresno also has strong existing civic and community engagement infrastructure, which the City of Fresno leveraged in its application for and subsequent receipt of the Strategic Growth Council's TCC grant in 2017-2018.[55] The resulting community-led plan additionally secured $122.3 million of outside funding to support project implementation across investments in mobility, affordable housing, urban greening, food waste prevention, and renewable energy.[56]

In line with TCC program guidelines, the City established a Collaborative Stakeholder Structure,[57] including a Community Steering Committee open to any individuals that "worked, lived, or owned property in the Transform Fresno Project Area" – downtown, Chinatown, and southwest Fresno.[58] The Steering Committee consisted of 165 participants and conducted an extensive community engagement process, including five public meetings, a town hall, project development workshops, a review day and an information session to invite resident proposals on the direction of TCC investments. The Transform Fresno Steering Committee embedded community direction from the project initiation stage, soliciting community input on the types of investments the grant would support before later advising the project's planning and implementation stages.

When the Transform Fresno Plan was finalized and approved by the Strategic Growth Council (SGC), sixteen members of the Steering Committee who "became integral to the process by organizing, speaking out, and representing on behalf of their community" were appointed by the mayor of Fresno to the newly created Transform Fresno Outreach and Oversight Committee.[59] The Outreach and Oversight Committee advises the development, implementation, and monitoring of the project's investments, including the establishment of the Clean Shared Mobility Network, a clean mobility initiative providing community-driven and low-cost green transportation options to the selected neighborhoods.[60] The Clean Shared Mobility Network is a carsharing and bike-sharing project with a fleet of 40 electric cars, 200 electric bicycles, and a vanpool service for rural residents.[61] The Outreach and Oversight Committee also acts as a formal liaison between community members, project partners, agencies, and city staff.[62]

Due in large part to the highly equity- and community-oriented structure of TCC grant program guidelines, both the Community Steering Committee and the Outreach and Oversight Committee have notable decision-making authority over project investments. The Steering Committee in particular embedded significant community voice in project development through a participatory budgeting process determining grant direction. While the Outreach and Oversight Committee is officially an advisory body, the committee does reserve the right to make some material changes (whether budgetary or programmatic) to projects if deemed necessary.[63]

Figure 4. Role of Transform Fresno's Steering Committee and Outreach and Oversight Committee in Project Stages

PROJECT PHASES	INITIATION	PLANNING	IMPLEMENTATION	MONITORING
COMMUNITY OVERSIGHT COUNCILS	*Steering Committee:* Community council determining the direction of grant investments.		*Outreach and Oversight Committee:* Providing community guidance on project implementation.	
CITY OF FRESNO	Convening body and the primary fiscal agent behind the TCC grant agreement.			
PROJECT PARTNERS	12 partner organizations responsible for project implementation and monitoring in accordance with TCC guidelines.			

Source: Authors' own, based on UCLA Luskin Evaluation of the Transform Fresno project[64]

The Outreach and Oversight Committee consists of four members representing Downtown, four members from Chinatown, eight members from Southwest Fresno, and a Committee Chair.[65] Current and future Committee members are required to (i) have held eligible voter status on the former Community Steering Committee, (ii) not be from a project partner organization, and (iii) live, work, or own property in the project area.[66] In cases where seats become vacant, these vacancies are filled through applications to the Committee with preference given to "project area residents, community based groups, church organizations, advocates, business owners, and community development corporations."[67] The Committee had, as of 2023, completed 19 meetings, eight input sessions, and six focus groups to collect community feedback about project progress.[68]

Thirty one of Transform Fresno's outreach and community engagement events (each engaging eight to 1,000 individuals) took place through the Clean Shared Mobility Network alone.[69] The Clean Shared Mobility Network had, as of 2023, installed 38 EV chargers across five charging sites, with the carshare program displacing about 1,908 miles traveled by combustion engine vehicles. The program has also added 1.3 miles of bike lanes and 0.6 miles of pedestrian walkways. Like BlueLA, Transform Fresno's Clean Shared Mobility Network addresses multiple mobility, access, and equity issues simultaneously, offering a valuable example for local governments of EV charging infrastructure investments forming part of broader equity-oriented clean mobility plans.

Transform Fresno's joint model of a Community Steering Committee selecting investments in the project initiation stage followed by an Outreach and Oversight Committee advising project implementation successfully embeds community oversight throughout the project process. The extent of the Transform Fresno Committees' decision-making authority is largely enabled by the equity-oriented structure of TCC grant guidelines, which embed a stronger community-oriented approach than many other state or federal grants. As community oversight councils emerge in jurisdiction-scale EV infrastructure development, local policymakers should examine any potential limitations of council decision-making authority to ensure that councils have the capacity to guide project development at a level appropriate to the project and the community needs.

RECOMMENDATIONS FOR COMMUNITY OVERSIGHT COUNCILS IN EQUITY-ORIENTED EV PROJECT DESIGN

By establishing community oversight councils for jurisdiction-scale EV infrastructure and clean mobility projects, local policymakers have an opportunity to embed community voice and decision-making power throughout project development–key elements to local acceptance and support of climate infrastructure projects.[70] Considerations with regards to council participation structure[k] and scope[l] should be incorporated during council construction depending on distinct project needs and contexts. Recommendations for local policymakers establishing community oversight councils in clean mobility projects include:

k Community oversight councils' participation structure can be CBO-based or a broader model that opens membership to all community members.

l Councils' scope should be narrow enough for effective governance within council capacity limitations while not overburdening community members in jurisdictions with multiple similar projects.

1. **Establish formal council roles throughout the project life cycle**, including the initiation, planning, implementation, and monitoring stages.[71] Councils should play an official role in key project elements such as infrastructure site selection and rate design.

    - Clean mobility projects can establish multiple committees for different stages of the project life cycle depending on the project context, such as the Transform Fresno Steering Committee and Outreach and Oversight Committee.

2. **Vest councils with substantial and formalized decision-making authority** over project development and priorities, including plan development, selection of mobility options and amenities, and project design.

3. **Conduct public consultation and feedback** at every stage of the project process, from initial mobility investment design to implementation and use by residents. Local governments should work closely with community-based organizations with strong trust in local communities, as well as leverage those relationships to solicit community feedback. Councils can serve as a forum for community collaboration and consultation on mobility needs, infrastructure site location, and collaboration with project partners.

    - Opportunities for public feedback should include providing multiple accessible avenues for community feedback on the user experience, monitoring of progress toward targets, and reporting by local government staff on outreach and engagement efforts.

4. **Ensure public accountability**, including inviting and acting upon feedback from community members on EV charger siting location, program membership or rate structure, and project effectiveness in addressing mobility needs.

    - This may include periodic third-party evaluations of the council and council members to ensure alignment with community goals and expectations.

5. **Embed democratic decision-making processes** within oversight council membership and governance structure throughout the life cycle of clean mobility plans, including transparent membership guidelines and voting processes.

6. **Provide compensation for council members** for their time and knowledge in advising clean mobility planning and implementation.

    - Compensation should be commensurate with a living wage in applicable contexts,[m] and participating support provided (e.g., meals and child care during meetings) should be useful to members depending on the community and project context.

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m Advocates typically focus on the provision of compensation rather than the amount of compensation (see The Greenlining Institute's Clean Mobility Equity Playbook), but for councils that require a significant amount of time–specific project contexts will differ–, compensation should amount to a living wage.

ADDITIONAL TOOLS FOR EQUITY-ORIENTED PROJECT DESIGN: COMMUNITY NEEDS AND IMPACT ASSESSMENTS

Before establishing a community oversight council, an effective starting point in the project initiation stage involves conducting community mobility needs assessments, in addition to other assessments as needed. The Greenlining Institute's Roadmap for Equitable Community Transportation: Best Practices for Conducting Mobility Needs Assessments describes the following best practices for conducting mobility needs assessments:

- Build intentional, deep relationships with community-based organizations and community leaders
- Integrate a multi-sector approach
- Compensate community members
- Empower community through exposure to new mobility technologies and services
- Integrate art and storytelling into community visioning activities
- Celebrate community involvement
- Share and collect feedback from the community on final results of the needs assessment results.[72]

Racial and equity impact assessments may serve to complement community mobility needs assessments; examples include Washington, DC's Racial Equity Impact Assessments, Oakland's Racial Equity Impact Assessment and Implementation Guide, and San Francisco's Racial and Social Equity Assessment Tool.

Needs and impact assessments can be further supplemented with environmental justice-oriented mapping tools, such as the federal Climate and Economic Justice Screening Tool, CalEnviroScreen and equivalents at the state level, regional tools like the Bay Area Metropolitan Transportation Commission's Equity Priority Communities Framework, and city-level frameworks like San Francisco's Environmental Justice Communities Map.

III. COMMUNITY BENEFITS AGREEMENTS

Community benefits refer broadly to a series of measures incorporated in infrastructure development projects or plans that secure benefits–such as financial, labor/workforce, and environmental commitments–for the hosting community and/or impacted communities.[73] These benefits are provided above and beyond any environmental or other mitigation required under the National Environmental Policy Act, the California Environmental Quality Act, and other local, state, and federal laws.

Community Benefits Agreements (CBAs), or contractual benefit agreements between project developers and coalitions of community groups (including community-based organizations, labor unions, and tribal members),[74] are perhaps the most comprehensive mechanism for securing benefits through a legally enforceable agreement. While CBAs represent the highest standard of community benefits tools, local governments can also support other types of community-oriented measures, including project labor agreements,[n] community benefits funds,[o] and broader community benefits policies, which are less comprehensive and project-specific than CBAs but may be more appropriate in certain contexts.[p] This section examines the potential role of Community Benefits Agreements in securing local benefits in connection with clean mobility infrastructure projects.

CBAs obligate developers to provide material and/or procedural benefits[75] to the local community in exchange for the community's project support or acceptance, and can serve as mutually beneficial tools aligning infrastructure development with long-term social (and sometimes environmental) sustainability.[76] They are often facilitated and organized by a community coalition and require strong community and coalition cohesion to execute successfully, although CBAs can stand alone from the other tools

n Project labor agreements are pre-hire collective bargaining agreements negotiated between construction unions and construction contractors that establish the terms and conditions of employment for construction projects. More information is available at: https://www.dol.gov/general/good-jobs/project-labor-agreement-resource-guide.

o Community benefits funds are funds to which a developer contributes monetarily that can be administered by a neutral party and structured to include community oversight if desired.

p Community benefits policies include a variety of approaches requiring the consideration of community benefits in infrastructure projects.

described in this report. Because they are a product of community-developer negotiations, developers' contractual obligations in CBAs vary across projects and regions, but typically include considerations such as local hire commitments, the construction of new public facilities, and environmental protections.

The value of CBAs centers primarily in providing a voice in project oversight for interested community groups and in contractually delineating the relationship and obligations between project developers and community interests. In doing so, CBAs provide a legally enforceable avenue to embed local goals and equity considerations into development projects. Prominent examples include:

- Staples Center CBA: An agreement concerning the development of an entertainment district next to the downtown Los Angeles Staples Center Arena, signed between developers and financiers including the Anschutz Entertainment Group (AEG), and a coalition of environmental, labor, and community groups including Strategic Action for a Just Economy (SAJE) and LA Alliance for a New Economy (LAANE).
- New Flyer CBA: A Community Benefits Agreement concerning electric bus manufacturing facilities in Ontario, California and Anniston, Alabama, signed between New Flyer of America, Inc., an electric bus manufacturer, and two non-profit organizations, Jobs to Move America (JMA) and Greater Birmingham Ministries (GBM).
- Los Angeles International Airport (LAX) CBA: An agreement concerning an $11 billion LAX modernization plan between Los Angeles World Airports, the governmental entity operating LAX, and the LAX Coalition for Economic, Environmental, and Education Justice.
- Oakland Army Base CBA: A portfolio of agreements, including Good Jobs Policies, a PLA, and a Cooperation Agreement between Community Groups and the City of Oakland, concerning the redevelopment of the decommissioned Oakland Army Base into a technology and logistics center. Involved parties included developers, the City of Oakland, the Port of Oakland, and the Revive Oakland! Coalition, comprised of 30 labor, community, and interfaith community organizations.

Early stage and historical CBAs, some of which are nonbinding, have also been used in the clean energy context of offshore wind infrastructure; examples include the Vineyard Wind and California Castle Wind CBAs.[77] More recent, but private CBAs, include the CADEMO Corp-Santa Ynez Band of Chumash Indians CBA,[78] the Mashpee Wampanoag-Vineyard Offshore CBA,[79] and others. Due to the extensive negotiation processes and high technical costs associated with implementing Community Benefits Agreements, CBAs in the clean mobility sector may only be achievable for large-scale transportation infrastructure projects, such as those comprising extensive EV charging development, jurisdiction-level planning, or the combination of EV charging with other types of mobility infrastructure or housing infrastructure. For smaller developments, other community benefits tools (such as project labor agreements and community benefit funds) may be more appropriate.

Some local governments have begun to institute mandatory CBA requirements for renewable energy projects. For example, San Diego County's draft CBA Program es-

tablished mandatory and/or voluntary CBA programs for certain projects, including community engagement guidelines and a pre-set list of benefits.[80] This may be a viable policy approach, but communities must have pre-existing, strong civic engagement infrastructure, or be offered significant capacity building resources, in order for such requirements to meaningfully support community goals.

Numerous efforts have also emerged supporting the implementation of broader community benefits in energy and economic development projects. The Detroit Community Benefits Ordinance requires developers to address potential negative impacts of development projects and identify community benefits, and the Clean Air Task Force's San Joaquin Valley's Clean Energy Future project explores the potential for region-wide community benefits associated with climate infrastructure development. Federal and state policy has increasingly supported community benefits through the US Department of Energy's Community Benefits Plan requirements for new energy infrastructure and California's AB 205, streamlining the review process for certain renewable energy projects with demonstrated community benefits packages.

As community benefits become increasingly prominent requirements for climate infrastructure projects, local governments should explore viable options for securing meaningful benefits, including but not limited to supporting Community Benefits Agreements and the capacity building and technical assistance necessary for meaningful participation in CBAs and other community benefits mechanisms. While CBAs have not yet been applied to EV charging investments, the following two case studies in large-scale infrastructure development illustrate important considerations associated with the use of CBAs to secure community benefits in the context of clean mobility infrastructure.

CASE STUDY 1: LOS ANGELES INTERNATIONAL AIRPORT CBA

The LAX CBA was signed between Los Angeles World Airports, the governmental entity operating LAX, and the LAX Coalition for Economic, Environmental, and Education Justice in 2004.[81] The LAX Coalition for Economic, Environmental, and Education Justice formed in direct response to the LAX modernization plan announcement in 2003, mobilizing the primarily Black and Latinx communities living under the LAX flight path to ensure that the airport's expansion also secured benefits for surrounding communities. The Coalition included labor unions representing LAX workers, environmental organizations, school districts in surrounding LA neighborhoods, and religious organizations, among others. The final Coalition included 25 community-based organizations and engaged thousands of community members in the LAX region, resulting in the largest CBA signed to date.

The LAX CBA has been recognized for its equity-oriented process and meaningful benefits to the surrounding community, as well as two additional benefits agreements with local school districts.[82] Besides extensive community engagement, the process included the creation of a community steering committee, detailed enforcement provisions, and monitoring and evaluation processes over the CBA's implementation. Benefits negotiated in the main CBA included the following social, environmental, and economic considerations:

- A local hiring program to give priority for jobs at LAX to local residents and low-income and special needs individuals
- $15 million in job training funds for airport and aviation-related jobs
- Retrofitting diesel construction vehicles and diesel vehicles operating on the tarmac, curbing dangerous air pollutants by up to 90 percent
- Electrifying airplane gates to eliminate pollution from jet engine idling
- Funds for soundproofing affected schools and residences
- Funds for studying the health impacts of airport operations on surrounding communities
- Increased opportunities for local, minority, and women-owned businesses in the modernization of LAX.[83]

The environmental benefits negotiated in the LAX CBA addressed the extensive impact of airport-related transportation emissions on community health, including the electrification of cargo operations, airplane gates, and hangars, as well as a five-year program for converting buses, trucks, shuttles and passenger vans to lower-emissions vehicles.[84] For transportation infrastructure that could not be electrified, CBA language specified benefits for retrofitting high-polluting equipment, limits on idling for all airport vehicles, and the limitation of routes taken by high-emitting planes and vehicle traffic. These were supplemented by funds for community-based research on the air pollution impacts of airport emissions on surrounding communities.

A CBA like the LAX CBA–concerning an $11 billion modernization plan–would likely only be appropriate for large-scale transportation investments combining EV charging infrastructure with a wider package of transportation and/or climate infrastructure. However, the coalition's approach to the LAX CBA can provide valuable lessons to policymakers designing equity-oriented EV infrastructure investments. Annual progress reports mandated by the CBA ensure ongoing monitoring and accountability to the public,[85] and the suite of transportation-related benefits creates a model potentially transferable to the clean mobility space. Such an approach could be implemented in an EVSE project such as a large-scale EV charging depot through the inclusion of a suite of benefits including green space, small business space, and a playground, among others. The LAX CBA also established job training funds in the airport and aviation sector, which would be easily replicable to employment pathways in the clean mobility sector for communities hosting EV infrastructure development projects.

Unlike many private CBAs, signed between community groups and private developers, the LAX CBA was signed between a community coalition and a public entity. This local government-community led model may be applicable for EV infrastructure projects owned, operated, or procured by a local government. While local governments may not always play an active role in the process of negotiating a standard private CBA,[q] they can consistently support the development of high-quality CBAs in their jurisdictions through community capacity-building mechanisms; robust community engagement infrastructure is key to the development of equity-oriented community benefits, including CBAs. By

q Government entities may be directly involved in CBAs for EV and clean mobility efforts through large-scale planning or procurement, but they may not be directly involved in cases of fully private CBA development.

investing in capacity building in local organizations, implementing community benefits policies, and incentivizing developers to include community benefits in infrastructure development, policymakers can foster the creation of community coalitions with the ability to negotiate strong and long-lasting CBAs in their communities.

CASE STUDY 2: OAKLAND ARMY BASE REDEVELOPMENT CBA

CBAs can be particularly impactful in the context of complex development projects combining transportation infrastructure with other types of commercial or industrial development. The Oakland Army Base Redevelopment Project repurposes the decommissioned 228-acre Oakland Army Base to a mixed-use technology and logistics center serving the adjacent Port of Oakland.[86] With funding from the City of Oakland, the U.S. Department of Transportation, the California Transportation Commission, and the Alameda County Transportation Commission, as well as partnership with private developers, the City of Oakland and the Port of Oakland lead the project combining public infrastructure development, job creation, private development, air pollution reductions, and lower traffic congestion in the port region.[87] The Oakland Army Base CBA consists of a portfolio of agreements, including Good Jobs Policies, a PLA, and a Cooperation Agreement[r] between community groups and the City of Oakland.

The Revive Oakland! Coalition, composed of 30 labor, community, and interfaith community organizations, launched a community benefits campaign in response to the project proposal in order to secure benefits for surrounding communities, many of whom are immigrant communities and communities of color.[88] Because the Oakland Army Base Redevelopment Project takes place on public, city-owned land and utilizes public funding, the coalition built on existing city labor ordinances to propose comprehensive labor and community benefits embedded in project development. Led by a 12-organization steering committee, Revive Oakland! engaged in a year-long organizing effort and negotiation process with project partners leading to a signed CBA in 2012.[89]

The Oakland Army Base Redevelopment Project CBA created 3,000 living wage[s] jobs, 50 percent of which were reserved for Oakland residents and 25 percent were reserved for workers from disadvantaged communities.[90] The CBA removed employment bans for formerly incarcerated applicants and limited the employment of temporary workers; it also allocated funding for a new jobs center, creating a pipeline for residents seeking local employment opportunities. The project established a monitoring board with community representatives responsible for enforcing the CBA throughout plan implementation.

The Oakland Army Base Redevelopment Project CBA has been recognized for its high level of community leadership and success in securing labor benefits to surrounding communities.[91] It serves as a useful model for embedding community benefits in mixed-use development contexts and building on existing city policies to secure community-oriented benefits. While the project's scale–and siting on public land–generated a uniquely strong foundation for Revive Oakland! to utilize city policies in support of

r A Cooperation Agreement is a formal document that outlines and governs provisions related to the association between two entities. More information is available at: https://www.contractscounsel.com/t/us/cooperation-agreement.

s This is notably distinguished from prevailing wage, the more common standard.

community goals (an asset that may not be present in all clean mobility projects), EV and mobility projects can draw several key lessons from the Oakland Army Base CBA.

CBAs signed for future EV charging infrastructure development projects can implement a similarly robust community engagement process informing EVSE infrastructure development. EV infrastructure projects can also utilize the Oakland Army Base's model of pathways to employment: CBAs in the clean mobility space can advance family-supporting jobs (in construction and operation/maintenance), as well as address equity through hiring underrepresented and community-based contractors. Finally, CBAs in the EVSE sector can embed similar monitoring and public accountability processes to ensure permanence in the alignment of charging development with community goals.

RECOMMENDATIONS FOR COMMUNITY BENEFITS AGREEMENTS IN EV AND CLEAN MOBILITY DEVELOPMENT PROJECTS

These case study examples can inform the use of CBAs as a community benefits mechanism in connection with large-scale investments in transportation infrastructure and other types of development. CBAs can serve as a powerful tool ensuring project-associated benefits for local communities spanning economic, environmental, and social provisions. While policymakers should consider the scope of infrastructure development projects when assessing the viability of CBAs as opposed to other types of community benefits structures,[t] recommendations for local governments supporting Community Benefits Agreements processes in the context of clean mobility planning include the following:

1. **Build community capacity to support the civic infrastructure necessary for negotiating and signing CBAs**, including the provision of financial and material resources to underresourced community organizations and the provision of technical assistance to the community coalition, which may include legal, technical, or specific mobility investment expertise.[92]

    - Community capacity-building in EV infrastructure contexts may involve evidence-based community education on EV technology and mobility, as well as state vehicle regulatory processes and transition timelines.

2. **Ensure the representation of trusted community organizations in CBA negotiations**, resulting from extensive community engagement processes and community-led coalition formation.[93]

    - Representation by trusted community leaders in the CBA coalition is key to ensuring that negotiated community benefits are aligned with local needs, resulting in a mutually beneficial process for community members and project developers.

3. **Specify direct and place-based community benefits that are measurable, specific,** grounded in community needs and identified by impacted communities.

t These may include community benefits plans and project labor agreements better suited to smaller-scale investments.

- Community benefits can incorporate economic, environmental, and social considerations, including employment and training opportunities in the clean mobility sector, wealth-building opportunities for local enterprise, and additional environmental benefits such as green space. Pipelines to mobility employment specified in CBAs can produce significant long-term benefits through building workforces trained in transportation technologies, especially impactful for priority populations and formerly incarcerated workers.

4. **Establish transparent and enforceable monitoring and reporting obligations** in the CBA for all parties for the duration of project implementation.[94]

    - This may include monitoring by third parties and publicly available progress reports.

ADDITIONAL TOOLS FOR EQUITY-ORIENTED PROJECT DESIGN: EQUITY-FOCUSED COMMUNITY ENGAGEMENT PROCESSES

Community engagement with, and ideally co-creation of, EVSE infrastructure planning underpins the equity-oriented strategies presented in this report. These measures comprise only parts of a comprehensive community engagement strategy, which would include building community capacity, providing translation and other accessibility measures, and compensating community members effectively for their engagement and participation throughout the project life cycle.[u] For resources on best practice in community engagement processes, see the Greenlining Institute's Clean Mobility Equity Playbook, Part 1 of Seattle DOT's Transportation Equity Framework, and the California Environmental Justice Alliance and Placeworks' SB 1000 Implementation Toolkit.[v]

For an example of the implementation of these principles, including workshops with participating CBOs, community pop-ups, feedback workshops, and listening sessions, see the San Diego Southeastern Community Mobility Roadmap.

u Equitable and effective compensation for community engagement with project development may include provisions such as meals, childcare, and transportation dependent on the context. Other accessibility and equity considerations include hosting meetings in trusted locations and at times when residents can participate, alongside provisions such as translation if necessary. Direct financial compensation may be appropriate in certain contexts, although research has suggested that funds provided in the context of infrastructure development may ultimately undermine community trust.

v The SB 1000 Implementation Toolkit is a guidance document intended for local governments, planners, community-based organizations, and other stakeholders who will be working to develop an Environmental Justice Element or a set of environmental justice policies for their General Plans to meet the requirements of SB 1000. More information is available at: https://caleja.org/2017/09/sb-1000-toolkit-release/.


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IV. PARTICIPATORY BUDGETING

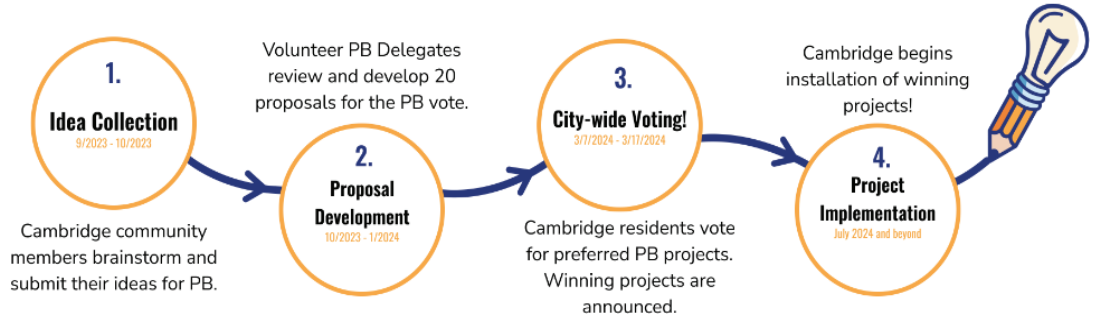
Participatory budgeting (PB) is a democratic budgetary mechanism allocating a portion of public spending to investment priorities selected via community-wide voting processes.[95] In contrast to the structural tools of community oversight councils and Community Benefits Agreements, participatory budgeting is a procedural tool that can be utilized alongside these structures to facilitate equity-oriented investments. Mobility equity advocates have found that participatory budgeting processes "represent the most comprehensive and equitable approach to identifying community mobility needs and potential solutions."[96]

Typical stages of a PB process include:

1. Establishing a community-based steering committee to oversee the process
2. Soliciting residents' ideas for investment
3. Developing ideas into budget proposals
4. Community-wide voting, and
5. Project implementation, as shown in the diagram below.[97]

Abbreviated PB processes may skip stages 1-3 to solicit public voting on proposals developed by a local government entity.[98]

Figure 5. Stages of a Participatory Budgeting Process.



Source: Cambridge City Council[99]

Local governments can use participatory budgeting to facilitate equity-oriented mobility investment through two primary avenues: (1) allocating a portion of municipal budgets to PB processes, or (2) integrating PB into federal/state grant investments administered by a local government entity. Best practice in implementing participatory budgeting involves close partnership between local governments and community-based organizations, as well as the creation of a community-based steering committee to manage the process.[100] While PB processes have historically solicited proposals focusing exclusively on capital improvements, they increasingly include programming and thematic investment areas of import to community residents.[101] This flexibility lends itself well to local investment in EV charging both through the lens of infrastructure improvements and through wider mobility planning initiatives.

Municipal governments across the US have implemented participatory budgeting processes, with noted potential for facilitating civic engagement and aligning public investments with community priorities. Cities across the country including Cambridge (MA), Durham (NC), Grand Rapids (MI), Nashville (TN), New York (NY), Philadelphia (PA), Richmond (VA), and Seattle (WA) have funded infrastructure improvements, community projects, and education programs through PB processes.[102] Transportation and mobility improvements are frequent thematic areas for resident proposals and community voting, including proposed investments of hundreds of thousands of dollars into EV charging infrastructure (see Cambridge (MA), South Lake Tahoe (CA)). While most US cities undertaking PB processes allocate a small portion[103] of their city budgets to participatory budgeting–for example, Durham has committed $2.4 million, Philadelphia provides $1 million, and Nashville allocates $2 million–PB has emerged as a compelling mechanism for local governments facilitating equity-oriented investment in climate infrastructure and mobility planning.

Participatory budgeting has also been used to direct the investment of federal and state dollars (see Community Block Grant Development Funds in Oakland (CA) and Transformative Climate Communities in Fresno (CA)). Its use in determining federal and state investment direction is particularly relevant to embedding community voice in climate infrastructure development as governments increasingly fund clean energy technologies.[104] State-funded clean mobility projects in California have begun to implement PB processes as emphasis has grown on equity-oriented approaches in climate investments[105] (see San Diego Southeastern Community Mobility Roadmap and San Francisco Bayview-Hunters Point Community-Based Transportation Plan).

For local governments allocating budget expenditure to clean mobility infrastructure or disbursing federal/state funding, PB can provide an impactful community engagement mechanism to identify local mobility preferences and uplift resident voices in plan implementation.[w] The following case studies illustrate the use of participatory budgeting in both municipal planning and state investment contexts to support community-led development of EV charging infrastructure.

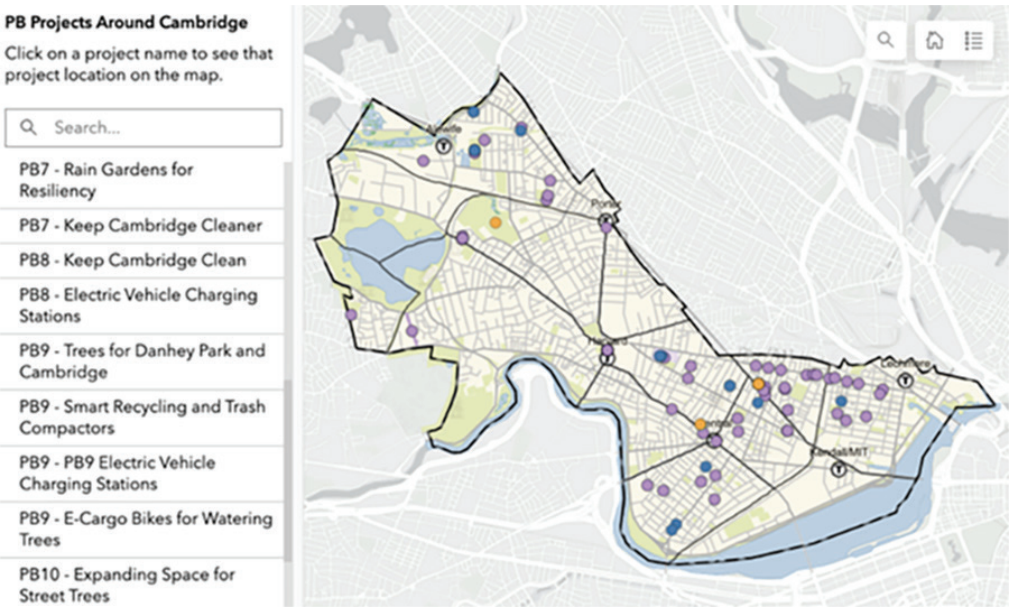
w Any resident adults and teenagers (minimum ages vary from 12-16 between jurisdictions) can vote in participatory budgeting processes regardless of legal status.

CASE STUDY 1: MUNICIPAL PARTICIPATORY BUDGETING IN CAMBRIDGE, MASSACHUSETTS

Cambridge, Massachusetts has operated one of the longest-running municipal participatory budgeting processes in the US, on its tenth funding cycle for fiscal year 2025.[106] The city employs a full PB process from idea collection to project implementation.

Since the program's inception in 2014, Cambridge has allocated a total of $9.5 million to participatory budgeting projects, converting 9,000 resident ideas into 72 initiatives[107] including mobility improvements, nature-based solutions, investment in public spaces, and support for vulnerable communities, among others.[108] Electric vehicle charging proposals won $500,000 of PB funding in cycles PB8 and PB9, building publicly accessible charging stations in four locations, and came 10th out of 20 proposals in PB10, but ultimately did not secure funding in 2024. Mobility improvements such as biking infrastructure and safer crosswalks have been funded in all ten cycles.[109] The city released a PB mapping tool in June 2024 allowing community members to track the location and progress of approved projects, shown below.

Figure 6. Map of environmental projects approved through the participatory budgeting process in Cambridge, Massachusetts.



Source: City of Cambridge[110]

Besides increased project transparency through this mapping tool, Cambridge has responded to public feedback on the program with notable improvements. These have included doubling the funding available for FY2025 to $2 million and expanding acceptable funding proposals from only short-term capital expenditure to also including longer-term programs and services.[111] The city has also addressed limitations with the program's accessibility[112] through making the PB ballot available in 8 languages and providing options for voting in-person or over the phone, as well as online.[113] As with many other PB processes, par-

ticipation is open to all Cambridge residents 12 years old and above, regardless of legal status and including university students.[114]

Cambridge has received widespread acclaim for its participatory budgeting process, which has been widely recognized as an example of positive municipal PB implementation.[x] Of course, full PB processes are not necessarily linked to EV and mobility investments, which may not be communities' highest priority for public funds. And, given the relatively small amounts of funds committed through PB processes–typically in the low millions per year in most jurisdictions–the high cost of EVs and charging infrastructure may not be a strong fit for all PB efforts. This raises wider issues surrounding the inaccessibility of costs associated with electric vehicles, and in communities for whom EVs are accessible, the need for community engagement and public education on clean mobility investments. While PB is an exemplary tool for community-informed investment, local governments seeking to incorporate it into large-scale EV infrastructure programs–which may have budgets far beyond what public PB processes comprise and in most cases will be largely privately funded–will need to craft their programs carefully to meet local community and policy needs.

Abbreviated PB processes can be used to ensure that voters select their preferred options from a particular category of investment, such as EV and mobility projects. For example, the South Lake Tahoe City Council proposed a series of projects for public voting in 2024 before inclusion in the PB budget.[115] Abbreviated PB processes may ensure that EV investments are on the participatory budgeting voting ballot and can be appropriate in some contexts,[y] but they may also remove the bulk of community members' engagement with and sense of ownership over the community improvements that PB processes provide. Local governments should consider municipal participatory budgeting as part of a wider community engagement process supporting community-informed investment to address mobility needs, with residents empowered to make a meaningful impact in project selection. Where capacity allows, municipal governments can facilitate long-term EV infrastructure adoption through community education and the support of climate solutions including but not limited to sustainable mobility.

CASE STUDY 2: PARTICIPATORY BUDGETING FOR STATE FUNDING IN FRESNO, CALIFORNIA

While allocating a portion of municipal spending to participatory budgeting is the most common type of PB process in the US, the mechanism has also been successfully used to determine the direction of individual state government investments. For example, the City of Fresno undertook an extensive PB process to determine investment priorities as a recipient of California's Transformative Climate Communities (TCC) state grant in 2018. This type of PB application differs significantly from an annual municipal PB cycle: Fresno's PB process was only undertaken once, but for a much larger-scale investment,

x Cambridge, a relatively affluent city with a disproportionately high number of university-educated residents, may not be representative of some communities seeking to implement PB processes to engage residents on equity-oriented EV infrastructure. For other examples, see PB exercises utilized in Durham, Oakland, Grand Rapids, Philadelphia, Seattle, and New York.

y In jurisdictions where EV uptake and approval is high, abbreviated PB processes proposing EV charging installation may be closely aligned with the needs and preferences of community residents. However, if employed in a community where this is not the case, this strategy has the potential to alienate community members and decrease positive civic engagement with PB processes.

totaling $188.8 million of combined state and outside funds. The resulting participatory budgeting process was the largest ever conducted in the US.[116]

Transform Fresno project partners conducted a full PB process, issuing a public call for proposals before converting these into budget investments and community voting. The selection of PB as a project strategy emerged as a result of community opposition to the project investments and collaborative stakeholder structure[z] originally proposed to determine TCC funding direction. The city of Fresno responded effectively to local organizing efforts by pursuing an extensive PB process to solicit community proposals for funded projects and align TCC investments with community needs.[117]

Project partners formed a Community Steering Committee to facilitate the process, which was open to "any resident, employee or property owner in the eligible neighborhoods."[118] In order to vote on project selection, resident Committee members had to attend at least three of five Committee meetings, while business and property owners had to attend at least four out of five meetings to participate.[119] Sixty-two projects were proposed and 25 were ultimately chosen, with 13 of the winning 25 projects proposed by community-based nonprofit organizations that benefited from the received funds.[120] This funneling of substantial public investment into community-based organizations had a significant capacity-building effect for Fresno-based CBOs that is expected to last well beyond the project implementation stage. Among winning proposals was the Clean Shared Mobility Initiative, supporting a 40-vehicle EV carsharing fleet and 38 charging stations throughout the project neighborhoods, in addition to other clean mobility solutions.[121]

While TCC is a singular source of climate funding in the US, state and federal grant programs increasingly require equity-oriented approaches in transportation investments. California's Clean Mobility Options and Communities in Charge grant programs, as well as the federal Charging and Fueling Infrastructure (CFI) Program's Community Charging Track specifically center equity needs in EV infrastructure projects. State and federal grants are also increasingly investing in community-led development to jointly address environmental and economic inequities: grants such as the US EPA Community Change Grants and the upcoming Washington Grant Addressing Air Quality in Overburdened Communities may further lend themselves well to incorporating equity-oriented elements of EV infrastructure planning and implementation.

As the innovative use of participatory budgeting in Transform Fresno demonstrates, participatory budgeting can be used in a variety of project contexts to grant communities decision-making power over the nature of investment and its direction. Given the substantial public and private funding streams currently supporting EV and mobility infrastructure development, policymakers should explore how participatory budgeting can be used to shape the implementation of EVSE investments. Multi-billion dollar funds disbursed through the federal CFI Program (and, to a lesser extent, the highway corridor-focused National Electric Vehicle Infrastructure Program) could be particularly amenable to PB-based decision-making processes. Local jurisdictions receiving these funds have an opportunity to incorporate meaningful equity-oriented outcomes through exploring the potential of participatory budgeting processes to facilitate community co-creation of these mobility investments.

z TCC grantees are required to form collaborative takeholder structures as per TCC Program Guidelines. More information is available at: https://sgc.ca.gov/grant-programs/tcc/.

RECOMMENDATIONS FOR PARTICIPATORY BUDGETING PROCESSES IN EQUITY-ORIENTED EV PROJECT DESIGN

Participatory budgeting is an impactful and flexible community governance strategy, applicable to EV infrastructure and clean mobility projects funded through either municipal budgets or innovative applications of state and federal funding. Lessons learned from the above case studies may guide similar efforts as local governments utilize available funding for sustainable transportation and community-led initiatives. Recommendations for local governments considering participatory budgeting processes in the context of clean mobility planning include the following:

1. **Employ full participatory budgeting processes to guide large-scale local spending priorities** and consider abbreviated processes to target investment toward community needs within the category of EVs and zero-emission mobility.
    - Abbreviated PB processes may be especially applicable for smaller-scale or subsequent investments, such as e-bike parking and charging alongside EVSE installation.
2. **Develop a wider community engagement strategy** extending beyond participatory budgeting processes to facilitate community co-creation of clean mobility plan development. Engaging communities as closely as possible to the "empower" side of the IAP2 spectrum will be more likely to result in EV planning and infrastructure projects aligned with community needs and supported by community members.
    - Community engagement processes (including but not limited to participatory budgeting) can be facilitated by a community oversight council and/or other community organizations depending on project context.
3. **Provide accessible, evidence-based public education on clean mobility and EV infrastructure**, including communications initiatives, resources, and educational programs accessible to all voting community members.
4. **Implement transparent, inclusive, and accessible participation and voting processes**, including online, in-person, and phone voting options for residents.
    - These may include translation and inclusive times and locations where applicable.
5. **Prioritize public information-sharing throughout the project life cycle**, including monitoring and evaluation on EV project progress and impacts with community members.
6. **Create accessible public feedback spaces** on EV infrastructure projects' community engagement processes, including participatory budgeting rounds.

ADDITIONAL TOOLS FOR EQUITY-ORIENTED PROJECT DESIGN: MONITORING AND EVALUATION ON EQUITY TARGETS

Feedback, monitoring, and evaluation by community members and third party evaluators plays a substantial role in ensuring the achievement of equity-oriented targets and the permanence of community voice throughout the project life cycle.[122] The Greenlining Institute's Clean Mobility Equity Playbook offers a suite of resources on inviting and collecting community member feedback.

Third party evaluations have also played a key role in tracking projects' progress toward stated goals and priorities, such as the UCLA Luskin Transformative Climate Communities (TCC) grant evaluations[123] and the UC Berkeley CLEE evaluations of OPR's climate resilience grant programs.[124] Policymakers can implement requirements for ongoing monitoring and evaluation on equity targets in the project initiation stage; these are particularly important for ensuring that clean mobility programs deliver real, meaningful, and sustainable benefits for communities over the long term.

V. CONCLUSION

The disparities in access to EV charging infrastructure require equity-oriented approaches to ensure the widespread adoption of sustainable transportation options and avoid the perpetuation of mobility inequity in underserved communities. Addressing this equity gap will require improved investment in and access to public charging infrastructure, alongside the incorporation of strategies for community decision-making power over EVSE project design.

Local governments play an essential role in designing and procuring many types of public EV charging infrastructure projects, including shared mobility and mobility hub programs, [125] curbside and public charging programs,[126] and multi-family housing charging projects.[127] As such, local policymakers have an opportunity to prioritize equity-oriented strategies and local mobility needs to advance a more equitable implementation of the clean mobility transition.

This policy brief introduced a series of three strategies for local jurisdictions seeking to design equity-oriented electric vehicle infrastructure investments:

1. Community oversight councils;
2. Community Benefits Agreements; and
3. Participatory budgeting.

Community oversight councils and Community Benefits Agreements are structural tools, while participatory budgeting is a procedural mechanism supporting more equitable investments. While this report identified strategy-specific best practices for each of these measures, the following thematic recommendations emerge across strategies to advance equity in public charging projects.

1. **Establish formalized and enforceable processes for community input in clean mobility infrastructure investments.**

    - When creating community oversight councils, local governments and community stakeholders should formalize councils' role, responsibilities, compensation, and decision-making authority over project development and priorities, especially in key project elements such

as program design, available mobility options and amenities, and infrastructure site selection.

- Local governments should ensure the provision of specific, meaningful, and enforceable community benefits identified by impacted communities, including but not limited to Community Benefits Agreements where appropriate. Community benefits can include place-based employment and training opportunities in the clean mobility sector, a suite of environmental and social benefits, and wealth-building opportunities for local businesses, among others.
- Local policymakers should conduct full, formalized participatory budgeting processes where possible, including portions of municipal budgets and grant-funded clean mobility projects. Abbreviated processes may be appropriate for smaller-scale or subsequent investments, such as e-bike parking and charging alongside EVSE installation.

2. Employ democratic decision-making processes across the project life cycle.

- Community oversight councils should embody democratic internal governance structures to guide membership criteria and vote on project development and priorities.
- Local policymakers should embed processes for public accountability throughout the project life cycle, including the provision of accessible avenues for community feedback, as well as timely and transparent action on public feedback where it is provided.
- Participatory budgeting should be employed where possible as a direct form of democratic decision-making. Local governments should ensure participatory budgeting exercises are accessible and inclusive to all voting community members.

3. Ensure community engagement and education as the foundation of equity-oriented project development and success.

- Local governments should develop a place-based and comprehensive community engagement strategy that facilitates co-creation of clean mobility plan development and infrastructure implementation.
- Local policymakers should provide evidence-based community education on clean mobility and EV infrastructure accessible to all community members. This may include education on EV technology, the benefits of clean mobility, state vehicle transition timelines, and technical or subject-matter expertise to support a community coalition in the CBA negotiations process.
- Public consultation should be centered at every stage of the project process, from initial mobility investment design to implementation and use by residents. For example, oversight councils can serve as a forum for community collaboration and consultation on mobility needs, infrastructure site location, and collaboration with project partners. Local governments and project stakeholders should embed

mechanisms of accountability to community feedback throughout the project process.

Prioritizing these themes in designing EV infrastructure investments will advance wider access to clean mobility infrastructure and community input on the direction of EV investments across multiple formats. Through working directly with community-based organizations to embed equity-oriented strategies and design place-based approaches to fit local needs, local policymakers can play a crucial role in shaping a more equitable and effective clean mobility transition.

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