

Electric SHARED MOBILITY

California Lessons Learned for Equity in Program
Design

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EV Equity
Initiative



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ABOUT THIS REPORT

To prepare this report, the Center for Law, Energy & the Environment (CLEE) researched electric shared mobility programs and case studies and conducted interviews with electric shared mobility program officials and experts. This brief is intended to guide local government leaders, air district and transit planning and program staff, and other stakeholders involved in the planning and installation of electric shared mobility programs and infrastructure. The authors hope that the examples and lessons outlined in the report can help ensure that new and expanded electric shared mobility programs are both equitable and effective.

CLEE developed this policy brief as part of its EV Equity Initiative, which seeks 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.

ABOUT 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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I. INTRODUCTION

Transportation is the largest direct source of planet-warming emissions in the US,¹ and, as the nation shifts to a decarbonized transportation system, governments at all levels are setting higher electric vehicle (EV) targets. In 2020, California Governor Gavin Newsom set a statewide goal of reaching one hundred percent electric sales for new passenger cars and trucks by 2035.² In March 2024, the federal Environmental Protection Agency (EPA) promulgated new light duty vehicle emissions rules, with the result that over half of new vehicle sales are expected to be electric by 2032.³ As of June 2024, eleven states and the District of Columbia have adopted California’s light duty vehicle regulations, while two additional states follow California’s rules but have not formally adopted them.⁴

The states following California’s light duty standards, representing over 30 percent of US passenger vehicles, have set aggressive EV adoption goals.⁵ Unfortunately, setting ambitious standards does not ensure that the EV transition will occur equitably; many lower-income families are unable to afford the cost of an electric vehicle (or any vehicle), and many live in rented and multifamily homes and lack a place to charge an EV at home.⁶ Addressing both the wealth gap in the EV transition and meeting climate and air quality targets “will require a holistic approach that intentionally targets the long-standing marginalization and barriers to cleantech adoption that... low-income communities have faced.”⁷

Local governments can play a key role in the effort to decarbonize the nation’s transportation sector while also promoting equity, in part by helping to establish EV charging infrastructure and introducing more residents to electrified transportation options.⁸ Shared mobility programs—including EV carshare and mobility hubs—are one tool local governments can deploy to advance equitable access to low-carbon, flexible transportation options.

At the municipal level, cities across the country are planning and implementing shared mobility programs as a core strategy to meet their zero-emission transportation, climate, and equity goals. The city of Oakland, California, for example, has developed a Zero Emission Vehicle Action Plan, one component of which is to “develop a smart and equitable mobility hubs program.”⁹ Seattle has incorporated shared mobility into its strategy to address climate change

Shared mobility programs can help advance equitable access to low-carbon, flexible transportation options.

and healthy neighborhoods¹⁰ and Los Angeles has identified shared, sustainable mobility as an initiative that will help reduce transportation sector emissions.¹¹

Shared mobility can increase access to EVs and zero-emission mobility for those who may be unable to purchase or lease an electric vehicle, or who are unfamiliar with zero-emission transportation. Shared mobility programs can offer important transportation options for those who do not have the means to buy or maintain a private vehicle¹² or need only periodic vehicle access and lack viable public transit,¹³ especially in rural and low-income communities.¹⁴ As the Greenlining Institute has noted, shared mobility “can improve mobility for residents of underserved communities, reduce traffic and dependence on cars, and be engines of economic empowerment that help reduce the racial wealth gap.”¹⁵

Other benefits of shared mobility include increasing consumer choice, enhancing the safety of the transportation system, stimulating new public transit use, and lessening road gridlock.¹⁶ In addition, shared mobility can stimulate community economic activity by increasing foot traffic near shared mobility and transportation hubs,¹⁷ and can provide alternative transportation options for first and last mile commutes.¹⁸

Shared mobility programs also have the potential to reduce total vehicle miles traveled (VMT) by reducing single-occupant vehicle trips, a vital step in long-term sustainable transportation efforts. For example, the California Air Resources Board’s (CARB’s) 2022 Scoping Plan, which is designed to meet the state’s goal of carbon neutrality by 2045, notes that reducing VMT “will require leveraging the benefits of new mobility to offer high-quality alternatives to driving that reduce overall VMT, while mitigating its risks and negative impacts.”¹⁹ The CARB Scoping Plan continues by acknowledging that “...transit services cannot offer an efficient solution to all travel needs for every individual” and proposes that “[n]ew mobility [including shared mobility] could be the solution for many of these people, given its extended service hours and potentially larger geographic reach.”²⁰ This potential for shared mobility to advance climate goals and expand mobility access will be particularly valuable in communities that are reliant on automobile travel for economic opportunity and resource access.

In the context of the EV transition, shared mobility has the potential to accelerate transportation electrification, air quality and greenhouse gas reduction goals, meet the needs of underserved communities that most lack mobility access, and further broaden mobility equity policy goals. This brief highlights examples of shared mobility programs and identifies lessons learned for equity-focused program design, based on analysis of California projects in two key categories: EV carshare and mobility hubs. The brief identifies the following best practices for equity-focused shared mobility program design:

- Pursue public investment and public-private coalitions to enhance program sustainability
- Perform a needs assessment survey before project design, invest in community outreach and education, and incorporate community feedback
- Prioritize underserved communities through accurate site selection and community engagement
- Ensure adequate staffing and early political momentum for programs
- Hire local residents to train and educate others when introducing new programs

- **Build on existing community efforts and projects where possible to enhance program utility and increase program durability**

The case study examples and these findings are discussed in detail in the following sections.

A. DEFINING SHARED MOBILITY: MOBILITY HUBS AND EV CARSHARE

1. What is Shared Mobility?

Shared mobility can be thought of broadly as any transportation mode or resource that is used by two or more people and can include bike shares, carshare, scooters, public transit, and more.²¹ Shared mobility can serve multiple and simultaneous functions, for example, addressing discontinuities in existing transportation networks²² while also helping cities in their efforts to decarbonize transportation and reduce VMT,²³ especially if shared mobility results in lower private vehicle dependence.²⁴

2. Mobility Hubs

Mobility hubs gather various transportation modes into one location, offering multiple options like bike share, car and rideshare, public transit, and micromobility²⁵ and increasing transportation options without full reliance on private vehicles.²⁶ Mobility hubs, according to the Metropolitan Transportation Commission (MTC), should also incorporate user accessibility and community elements. A mobility hub is “a community anchor” that is “built on the backbone of frequent and high-capacity transit” offering “a welcoming environment” and “safe, comfortable, convenient, and accessible space to seamlessly transfer across different travel modes.”²⁷ Other municipalities and programs conceive of mobility hubs in looser terms, and mobility hubs can exist in locations without public transit as long as they gather multiple transportation modes in a manner that serves community mobility needs.

Mobility hubs can also incorporate and utilize Mobility as a Service, or MaaS, which helps users pay for multiple transportation services using a single online platform.²⁸ Mobility hub programs can serve important goals like enabling community members to better access school, home, work, and medical appointments—but may only decrease emissions if mobility options are shared and private vehicle ownership decreases.²⁹ Local guides on mobility hub planning and site selection include the Shared Use Mobility Center’s *Shared-Use Mobility Toolkit for Cities*³⁰ and Boston’s *GoHubs! Neighborhood Mobility Hubs Guidebook*,³¹ as well as MTC’s *Mobility Hub Playbook*.³²

A critical consideration in designing and operating mobility hubs is ensuring affordability for low-income users.³³ Planners should also be attentive to logistical barriers for low-income residents (such as lack of internet, driver’s licenses, or smart phones) and financial barriers (such as lack of a bank account).³⁴

3. EV Carshare Programs

Many underserved communities frequently face long, expensive, and unreliable commutes;³⁵ suffer from poor air quality; and lack access to mobility options, including EVs.³⁶ EV carshare programs (sometimes included as one of the services located at a mobility hub) allow residents to access a car when they need it, paying a use fee and avoiding many of the

costs of vehicle ownership, such as maintenance and sometimes insurance.³⁷ EV carshare programs can thus turn a determined, set household expense into an elastic one, enable mobility at a lower price, and spread vehicle access across multiple users.³⁸ For those who cannot or do not wish to own or lease a vehicle, EV carshare and shared mobility programs can reduce the need to buy a new private car at all.³⁹ In addition, EV carshare programs provide charging stations, eliminating the burden of finding a charging location, and provide vehicles that produce zero emissions, preventing air pollution in communities that most need clean air. These features create opportunities for carshare programs to increase EV penetration in low-income and priority communities and produce a more diverse and reliable mobility ecosystem.

Moreover, EV carshare and shared mobility programs can enhance equity by increasing transportation access for those who face a shortage of options by lowering the cost, providing a faster transportation alternative, or increasing available transportation modes.⁴⁰ Shared EV programs may enable users to reach destinations they would not otherwise be able to reach, or travel to desired destinations more frequently than they otherwise would because the length of the trip is shorter or less costly.⁴¹

Researchers have also examined the ability of carshare and shared mobility programs to reduce personal vehicle use. Some studies have found that in large cities, shared mobility programs can reduce individual car operation and can make the idea of foregoing car ownership more palatable for those owning multiple vehicles.⁴² However other researchers have noted that increasing participation in carshare programs may be hindered by the structural aspects and the “sunk costs” of car ownership; those who already own private vehicles have made large financial investments at the time of purchase, while the ongoing costs associated with those vehicles are much lower, which can eliminate the incentive to use rideshare or carshare programs.⁴³ Lastly, in terms of best practices, practitioners have noted that carshare programs operate more smoothly when stations work together, rather than being built as isolated stations.⁴⁴

Overall, carshare programs are an important emerging tool to address needs for those who don’t own personal vehicles and may reduce long-term VMT without displacing those who require a vehicle. Forth Mobility has published a condensed guide to launching an electric carshare program⁴⁵ and in late 2023 launched the Affordable Mobility Platform (AMP) EV carshare program in underserved communities in 14 diverse cities across nine states.⁴⁶

Increasing access to zero-emission vehicles without reinforcing reliance on private vehicle ownership serves core mobility equity goals.⁴⁷ Moreover, EV carshare programs can and should be *intentionally* designed around equity-focused service models and rooted in enhancing mobility for the communities that host them.⁴⁸ Key strategies include:⁴⁹

- Ensuring that EV carshare services and chargers are available in low-income neighborhoods and underserved communities
- Using 100% electric vehicles to mitigate air quality impacts in frontline communities
- Deploying vehicles that take into account mobility access issues facing elderly drivers and drivers with disabilities
- Incorporating guidance and payment options for those who don’t have bank accounts

- Ensuring that the rental/use rate structure includes discounted prices for low-income consumers.

4. Mobility Hubs and Carshare Programs Combined

The Fresno Clean Shared Mobility Network provides an example of mobility hub and carshare programming designed to serve equity and climate goals. Through the California Transformative Climate Communities (TCC) program, the Fresno Clean Shared Mobility Network received a grant award to create a mobility hub including carshare, rideshare, and bikeshare at low or no cost to community residents.⁵⁰ The TCC Fresno project was funded in part by the California Climate Investments grant program.⁵¹

The Fresno Clean Shared Mobility Network is still under development as of summer 2024 and is anticipated to be completed in 2026.⁵² Partners include the Fresno Metro Black Chamber Foundation (FMBCF) and seven subcontractors and operators. Project components include:⁵³

- An hourly EV car and van share, with reduced rates for lower-income members
- An EV vanpool to employment centers
- An electric bike share, with 200 bikes
- Electric vehicle charging infrastructure
- Volunteer driver program providing electric vehicle rides to underserved residents
- Mobility Hub Customer Service Centers, with virtual and physical engagement for the community

The carshare portion of the mobility hub, called EV-Werx, was launched in November 2023.⁵⁴ EV-Werx is an all-electric carshare program that offers members the ability to rent vehicles at stations in southwest and downtown Fresno. Cars can be rented on an hourly, daily, or weekly basis.⁵⁵ To qualify, members must be over the age of 21, possess a valid driver's license and a "relatively clean driving record," as well as a valid credit, debit, or bank card (AB 60 licenses are accepted).⁵⁶ Forty EVs and three rideshare vans were available as of October 2023.⁵⁷

Two hundred bikes are also currently available through the mobility hub program.⁵⁸ Bikes must be picked up and returned to pre-established hubs using the Biz-Bike app. Rental requires a valid payment card, and discounted rates are available for residents within the Transformative Climate Communities grant area.⁵⁹

The Fresno Clean Shared Mobility Network is an example of how a mobility hub can center EV carshare services at a larger scale, while providing numerous mobility options for community members, focusing equity at its core, and promoting the EV transition.

B. KEY FINDINGS

Numerous examples of shared mobility and carshare programs can be found across the US, in locations such as Boston⁶⁰ and Minneapolis-Saint Paul.⁶¹ This brief discusses les-

sons learned from shared mobility programs in California, based on research and expert interviews. Programs surveyed here include:

- [BlueLA](#), an EV carshare program in Los Angeles
- [Green Raiteros](#), a rideshare program in Huron
- [Míocar](#), an all-electric car sharing service in Tulare, Richmond, and Stockton
- [Green Tech Mobility Hub](#), offering multiple mobility options in the Del Paso Heights neighborhood of Sacramento
- [EV Car Sharing and Mobility Hubs in Affordable Housing Pilot program](#), at sites in Oakland, Richmond, and San Jose
- [Our Community CarShare](#), an EV carshare program in Sacramento

The case studies examined in this report are largely from the urban context and the findings from this paper focus on those environments. Rideshare programs are less prominent but highly important for a range of non-urban populations. For example, agricultural worker shared transportation programs like CalVans—a program that provides older model vans to those who want to provide rides to themselves and others at their workplace or school—play a crucial role in ensuring equitable mobility access. Riders pay for their rides and CalVans provides for gas, maintenance, repairs, and insurance.⁶² While such programs play an important role in non-urban settings, some rural van programs are facing cost barriers to electrification, highlighting an area of focus for policymakers as electrification standards ramp up in the coming decade.⁶³

Based on these California case studies, select interviews, and analysis of the supporting literature, this brief identifies the following strategies and recommendations for shared mobility programs that serve mobility equity and climate goals:

- **Pursue public investment and public-private coalitions to enhance program sustainability**
- **Perform a mobility needs assessment survey before project design, invest in community outreach and education, and incorporate community feedback**
- **Prioritize underserved communities through accurate site selection and community engagement**
- **Ensure adequate staffing and early political momentum for programs**
- **Hire local residents to train and educate others when introducing new programs**
- **Build on existing community efforts and projects where possible to enhance program utility and increase program durability**

These themes can serve as important guides for local agencies, community groups, and other stakeholders interested in launching equity-focused zero-emission shared mobility programs in their own communities.



II. LESSONS LEARNED FROM MOBILITY HUB AND CARSHARE PROGRAMS IN CALIFORNIA

California mobility and carshare programs that integrate EV technology are evolving and many remain largely in the pilot stage, but early programs highlight lessons for equitable program design.

A. PURSUE PUBLIC INVESTMENT AND PUBLIC-PRIVATE COALITIONS TO ENHANCE PROGRAM SUSTAINABILITY

Interviews with program staff from California-based projects reflect the challenges associated with incorporating private for-profit vendors into shared mobility programs. The Green Tech Mobility Hub in Sacramento, for example, was born out of the needs of a local community organization and those of local residents and is operated primarily by the community organization and the local metropolitan air quality management district and local government-owned utility, in part due to the difficulty of securing vendors. Other programs, including the Míocar carshare program, have relied on community infrastructure to keep pricing low without the use of vendors. The BlueLA carshare program, which does utilize private vendors, has encountered challenges with a private vendor-led model but program staff have identified several strategies to overcome these obstacles, such as pursuing separate vendors and contracts for charging stations and cars.⁶⁴ As private partners are likely needed to bring EV carshare programs to scale, lessons from the BlueLA program can provide important data about how to successfully pursue these partnerships, but also point to the need for diverse financing and program design partners.

1. Example: Sacramento Green Tech Mobility Hub

The Green Tech Mobility hub in the Del Paso Heights neighborhood of Sacramento was built out of a partnership between a local nonprofit, Green Technical Education and Employment (Green Tech), the Sacramento Municipal Utility District (SMUD) (a community-owned nonprofit electric utility), and the Sacramento Metropolitan Air Quality Management District.⁶⁵ Green Tech is a nonprofit organization focused on

workforce education and health for students and young adults living in economically disadvantaged communities.⁶⁶

The mobility hub initiative was started at the request of and in collaboration with Green Tech, whose students needed better transportation from one campus to another because many did not possess driver's licenses. In addition, the nearby high school had a policy of not providing bus services to students within a three-mile radius, and the electric shuttle at the mobility hub also assists those students in getting to school.⁶⁷

The mobility hub has three major components: EV chargers, an electric shuttle, and carshare EVs (operated through Zipcar). Benches with solar chargers for phones and small devices help to increase traffic to the mobility hub site.⁶⁸

Securing interest from private companies for projects in low-income Sacramento communities has been challenging, and while the Sacramento Metropolitan Air Quality Management District (Sacramento Metro Air District) has been able to contribute dollars towards up-front project costs, long-term operating funds have been more difficult to acquire. In addition, working with private vendors has also been challenging.⁶⁹ For example, GIG carshare company withdrew from the Sacramento region in 2023,⁷⁰ stating that operations weren't profitable in the area.⁷¹

The Green Tech mobility hub's location and combination of services proved an unlikely fit for partnership with a for-profit entity; rather, the Sacramento Metro Air District and Green Tech leadership team built on existing community-based efforts and infrastructure while integrating state grant funds (from the California Air Resources Board) and targeted private participation (Zipcar's vehicles). Subsidizing rates for ZipCar rentals has proven key to the project's success. The private-public-non-profit structure increases the likelihood that the Green Tech mobility hub can achieve long-term financial sustainability while serving community needs.⁷² With a diversity of modes, infrastructures, and partners, the Sacramento Metro Air District and Green Tech have been able secure the benefits of an EV carshare program through a mobility hub structure while mobilizing diverse funding streams.

2. Example: BlueLA Carshare

BlueLA is an EV carshare program that provides emission-free, affordable transportation to low-income Los Angeles communities.⁷³ Initiated in 2015, BlueLA began offering carshare services in 2018, with subsidized rates available for those who meet the income requirements. The program has a fleet of 100 vehicles with 40 pickup locations and 200 charging locations across the city, which are managed by a private contractor. The pickup locations are spread across priority communities, including the Los Angeles neighborhoods of East Hollywood, Koreatown, Pico-Union, Downtown, Echo Park, Boyle Heights, Chinatown, and Westlake, with supplemental stations at Los Angeles Community College (LACC), Los Angeles Trade Technology College (LATTC), and the University of Southern California (USC). BlueLA program staff plan to expand into additional neighborhoods and will be adding vehicles and charging stations. BlueLA is funded in part by the LA Department of Water and Power (the city's municipal electric utility), as well as the California Climate Investments program, which deploys revenue generated through the state's GHG cap-and-trade program.⁷⁴

BlueLA implementation is supported by a steering committee, which includes members from 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 community organizations are based near existing and planned BlueLA stations and serve important engagement and outreach roles for the program,⁷⁵ as well as helping with ideas for siting new stations.⁷⁶

Between February of 2021 and September of 2022, the program enrolled over 1,300 subscribers who logged 52,000 trips. Most of these subscribers (72%) lived in neighborhoods with median incomes less than \$55,000, and over a third of all BlueLA members were eligible for low-income rates.⁷⁷ At present, 70% of all BlueLA trips are taken by enrollees in the lower-income membership program.⁷⁸

While additional stations were originally planned, expansion of the BlueLA program has proved challenging in light of the Covid pandemic, macro-economic factors such as chip shortages, and supply chain issues and other bottlenecks.⁷⁹ Other obstacles include vendor turnover and elected leadership turnover. In addition, finding vendors who are willing to invest in low-income neighborhoods for the purpose of providing mobility to underserved communities—with many users also receiving discounted service—has proved challenging, and sole reliance on the private market is unlikely to prove sustainable. However, while running an innovative carshare program for low-income communities through a private contractor is complex, pursuing separate vendors and contracts for charging stations and cars might help eliminate some obstacles.⁸⁰ Greater transparency in service provider contracts (regarding utilization and revenue targets, for example) could also provide greater contractor accountability in the context of lower-income community mobility needs.⁸¹ The BlueLA program demonstrates that private vendors alone cannot form the basis for carshare programs where users need subsidized services, but creative methods of implementing public-private partnerships may prove viable.

3. Example: Míocar Carshare Program

Míocar is an all-electric carsharing service with vehicles available for rent in Tulare, Richmond, and Stockton, California.⁸² Members unlock the cars via a phone app and can reserve a car for up to 24 hours. Membership for Míocar users is free but requires an application fee of twenty dollars, after which members can rent cars starting at \$4 per hour or \$35 per day.⁸³ Cars can be driven up to 150 miles for the hourly rate, with a charge of 35 cents per mile thereafter.⁸⁴ Users must be 21 or older, have a valid license, and a credit, debit, or prepaid card.⁸⁵

In setting up the program, administrators encountered challenges in securing a private vendor prepared to operate in rural disadvantaged communities and grant access to program data. As a result, program leaders created a new nonprofit, San Joaquin Valley Community Shared Mobility, Inc.,⁸⁶ to implement the carshare service, which enabled the program to maintain low prices for carshare rides. In addition, the nonprofit's bylaws mandate that a majority of the board must be customers of the carsharing service. This structure helped build local capacity and ensure that community interests are reflected in decision-making. In addition to capacity-building, The Greenlining Institute emphasizes the importance of folding wealth-building mechanisms directly into

program design, a key consideration for future shared mobility program implementers as they develop investment and governance structures.⁸⁷

B. PERFORM A MOBILITY NEEDS ASSESSMENT BEFORE PROJECT DESIGN, INVEST IN COMMUNITY OUTREACH AND EDUCATION, AND INCORPORATE COMMUNITY FEEDBACK

Crucial to successful shared mobility projects is investing in outreach and education for residents, incorporating feedback from those who are using, or will use, the project's services, and performing a needs assessment early in the project life cycle.

Highlighting the importance of needs assessments, equitable mobility experts at the Greenlining Institute have found that:

Addressing... entrenched transportation disparities will require a broad array of policy changes. As state and federal leaders, decision-makers, and advocates look ahead to a more sustainable and equitable future, it is critical to center marginalized communities' voices and decision-making in transportation planning and decision-making. Informing transportation decisions with community needs assessments is one foundational step that policy and decision-makers can utilize to guide, plan and implement equitable transportation projects.⁸⁸

The Greenlining Institute also highlights needs assessments as one of its “best practices” recommendations in its *Clean Mobility Equity* report,⁸⁹ needs assessments are crucial to designing mobility projects that serve community needs⁹⁰ and can help build interest and support for eventual project investment.

In addition to conducting needs assessments, centering community voices requires that projects be community-driven at every stage and build from existing community programs where possible.⁹¹ Less intensive community engagement can manifest as community feedback and surveys, while more thorough community engagement can be accomplished through project co-design.⁹² Regardless of the outreach method, a full community engagement process should include minimum best practices such as transparency, compensation, and accessibility:

- Transparency includes elements such as reporting back to communities on the outcome of their input, to ensure that stakeholders feel heard.⁹³
- Accessibility includes ensuring that there is sufficient budget for—and that meeting organizers provide—food, audio-visual equipment, translation and interpretation, transportation, and childcare. Accessibility also entails holding meetings at times and in places that are convenient for local community members and stakeholders.⁹⁴
- Compensation entails providing payment for those who provide technical assistance, capacity building, and offer their knowledge and skills regarding community needs.⁹⁵

Several California projects, outlined below, have implemented successful community engagement and needs assessment strategies.

1. Example: EV Carsharing and Mobility Hubs in Affordable Housing Pilot program

TransForm, a non-profit organization, and the Metropolitan Transportation Commission (MTC, the Bay Area's regional transportation planning agency/metropolitan planning organization) have partnered to provide mobility hubs at affordable housing communities in Richmond, Oakland, and San Jose in the Bay Area with the goal of bringing EV carsharing, charging infrastructure, and more diverse travel modes to their residents. Partners and sponsors include the East Bay Asian Local Development Corporation, First Community Housing, Richmond Community Foundation, the City of Richmond, and the City of San Jose.⁹⁶ While the three project sites are in different phases of development, EV chargers were installed at the San Jose project location in 2023.⁹⁷

An interview with MTC program staff revealed the critical importance of conducting needs assessments to inform program design.⁹⁸ For example, since many residents were unbanked in some locations, standard mobility programs, which frequently require debt or credits cards, were not feasible. Many residents near the Oakland site did not drive, so program staff designed the project to focus more heavily on public transit and GIG carshare credits.⁹⁹ Resident concerns at many sites included personal safety and the cost of new and existing transportation modes.¹⁰⁰ Each of the three site projects has evolved differently because of different usage patterns and demands at each location. Armed with the information and buy-in gathered from needs assessments, program staff were able to design the mobility hubs differently to better ensure success and meet residents' needs.

In addition, the EV Carsharing and Mobility Hubs in Affordable Housing Pilot program staff tailored the program over time to better meet community needs and usage patterns and incorporated feedback from resident advisory groups at each project site. The program staff also ensured that the needs assessment survey was translated into relevant languages and that participants were compensated for their time in filling out the survey.¹⁰¹ These measures ensured that the program was tailored for the residents who would use the program's services. The EV Carsharing and Mobility Hubs in Affordable Housing Pilot program is a service-oriented rather than an infrastructure-oriented program, and the project's approaches serve as a model of community-centered design that should be replicated on other projects.

2. Example: Míocar

Researchers from UC Davis, in coordination with the California Department of Transportation and eight San Joaquin Valley San Joaquin Valley Metropolitan Planning Organizations (MPOs), helped to coalesce a set of models, research, and sites for shared mobility programs by convening focus groups and administering surveys to gauge desire for a shared mobility pilot. Staff members also implemented thorough stakeholder outreach to surface goals and concerns. Through this initial work, three mobility pilot programs were initiated, including Míocar.¹⁰² A California Air Resources Board (CARB) analysis of the San Joaquin Ecosystem of Shared Mobility, which includes the Míocar carshare program, found that education and outreach should encompass

various communication methods, including, for example, videos—although these can be labor-intensive. Lastly, the CARB analysis noted that as local community-based organizations had limited resources, external assistance was needed to provide education, prepare staff, and oversee implementation.¹⁰³

3. Example: BlueLA Carshare

As noted earlier, the BlueLA carshare program incorporates a steering committee, composed of representatives from various community-based organizations located near existing and planned BlueLA stations, who perform outreach, education, and other roles. The steering committee members currently function as advisors, although some think the steering committee should have greater decision-making authority.¹⁰⁴ The steering committee members are paid for their participation, which is critical in terms of valuing members' time. The steering committee has not only served outreach and education roles for community members but has also educated BlueLA contractors about how the program could better serve residents—for example, by making the carshare app available in Spanish—and has advocated for those changes. The advisory committee meets both privately and also holds separate meetings with the BlueLA contractor, which has proved to be a useful model according to some participants.¹⁰⁵ This type of approach can extend as far as program co-design, depending on the project,¹⁰⁶ but the steering committee model exemplifies an equitable practice of centering community in projects—a key component of mobility equity, according to experts.¹⁰⁷

4. Example: Our Community CarShare

Our Community CarShare Sacramento offers cars at the Green Tech mobility hub in the Sacramento neighborhood of Del Paso Heights, as well as various affordable housing communities in Sacramento. Our Community CarShare was started in 2017 with the goal of furnishing zero-emission vehicles to disadvantaged communities and is operated in partnership with Zipcar. Membership is free and the rental fee is four dollars per hour for residents of the relevant affordable housing communities. Residents can reserve cars for as many as twelve hours each week, or four hours each day. Users must pick up and drop off cars at the same location. Reservations are made through the Zipcar app or website and include roadside assistance.¹⁰⁸

An analysis of Our Community CarShare's equity measures by the Greenlining Institute (GLI)¹⁰⁹ lauded the program for adapting once it became clear that very few residents drove. In response, program administrators began offering gift cards that could be used on transit, bikes, and rideshare services, as well as volunteer drivers who provided rides.¹¹⁰ This example shows that prioritizing community engagement and incorporating community feedback into program design are not just good practices—they also result in more effective projects. Such iterative feedback loops should be replicated across other shared mobility projects to ensure project responsiveness and success.

C. PRIORITIZE UNDERSERVED COMMUNITIES THROUGH ACCURATE SITE SELECTION AND COMMUNITY ENGAGEMENT

Not all shared mobility programs are designed to benefit lower-income residents and historically underserved neighborhoods.¹¹¹ Given this pattern, it is especially important that planners intentionally include priority communities in siting plans and program design. Identifying the right data and tools for site prioritization is important, and engaging community-based organizations throughout the process is critical for accurate site selection and program durability.

1. Example: BlueLA Carshare

BlueLA program staff observed that in a large urban center like Los Angeles, statewide data tools such as CalEnviroScreen¹¹² provide a starting point but aren't optimal for site selection as they do not always provide enough granularity in identifying priority neighborhoods. In addition, demographic shifts can render data obsolete. Los Angeles Department of Transportation (LA DOT) staff noted that it can take up to 18 months to construct a new carshare/charging station but when community demographics and income levels change rapidly in target communities, it can mean that a finished BlueLA station, originally intended for a low-income neighborhood, is constructed in a gentrified one. Involvement from local community-based organizations is critical to provide input on siting, both to understand community needs and dynamics and to ensure infrastructure is located where it is actually desired; in the case of BlueLA, site selection is finalized with input from members of the BlueLA steering committee, which includes representatives from community-based organizations near existing and planned BlueLA stations.¹¹³ The BlueLA program demonstrates that state and national modeling tools, while helpful, must be supplemented with on-the-ground information in order to ensure project applicability, and project durability.

D. ENSURE ADEQUATE STAFFING AND EARLY POLITICAL MOMENTUM FOR PROGRAMS

Various sources with knowledge of the BlueLA carshare program point to the importance of ensuring that new shared mobility projects have strong elected and city staff leadership in order to launch successfully.

1. Example: BlueLA Carshare

In analyzing the BlueLA program as a whole, LA Department of Transportation (LA DOT) staff noted that lessons learned include the importance of ensuring adequate staffing and inter-agency city coordination.¹¹⁴ Outside researchers who examined the BlueLA program have also opined that early support from elected and non-elected city leadership is crucial and that dedicated, clear leadership from the Office of the Mayor of Los Angeles produced strong cooperation between various agencies and departments and established BlueLA as a priority project.¹¹⁵ In addition, at least one analysis has found that ensuring that a robust budget for engagement with communities and businesses near the project was essential.¹¹⁶

This example shows that allocating resources to ensure staff engagement and political support is just as important for program success as program design and other components. Because shared mobility projects in low-income and underserved communities are often more complicated in terms of design, private-public partnerships, and funding, political will and staff capacity are crucial to launching these projects.

E. HIRE LOCAL RESIDENTS TO TRAIN AND EDUCATE OTHERS WHEN INTRODUCING NEW PROGRAMS

Electrification can and should aid in local workforce development;¹¹⁷ employing local residents on shared mobility projects can build trust and also assist in building community wealth within communities,¹¹⁸ although new jobs must be high road jobs in order to help low-income communities achieve sustainable, career-oriented employment.¹¹⁹ Moreover, hiring trusted community-based organizations to educate potential shared mobility program users is a strategy that can build trust and increase support and participation in shared mobility projects.¹²⁰

1. Example: EV Carsharing and Mobility Hubs in Affordable Housing Pilot program

In each EV Carsharing and Mobility Hubs in Affordable Housing Pilot program location, dedicated funds were available to enable an onsite staff person to conduct or supervise resident outreach.¹²¹ Building employees, who were known and trusted by residents, were hired as site coordinators for the program. In addition, residents were trained and then paid as survey gatherers for the needs assessment portion of the project.¹²²

2. Example: BlueLA Carshare

BlueLA program staff have emphasized that involvement from local community-based organizations is essential for education, outreach, and other program aspects.¹²³ Steering committee members serve as ambassadors for the program and play a large role in recruiting new BlueLA users, which enables those with community experience to connect with community members. In addition, paying community-based organizations serving in ambassador roles functions as a critical support by sustaining community leadership and ensuring that those who are best suited to do outreach, and have already established trust in the community, are able to play that role.¹²⁴

3. Example: Our Community CarShare Sacramento

One analysis of Our Community CarShare Sacramento found that after initial program design challenges, the program staff took an engaged and thorough approach to community outreach and education. Program administrators trained on-site housing staff at various housing locations and provided resident education on opening bank accounts and credit cards, securing minimally priced cell phones, health care, employment, and other services. Advocates have lauded these practices as “sophisticated and impactful approaches” that should be reproduced on other projects.¹²⁵

4. Example: Green Raiteros Rideshare

Green Raiteros is a rideshare program in Huron, CA, which emerged from a pre-existing informal, community-centered effort.¹²⁶ The program has both paid drivers¹²⁷ and volunteer drivers from the community, who receive a small fee to provide rides (with either their own vehicles or the program's)¹²⁸ to riders for low or no cost.¹²⁹ Often, drivers are retired or semi-retired and want to contribute to the community.¹³⁰ Many of those served are farm workers and other low-income workers in the surrounding community.¹³¹ The practice of engaging local residents as drivers contributes to equity by embracing and expanding community structures and systems and creates employment for community members, thus keeping profits in the community.¹³²

These examples illustrate the different ways in which programs can compensate and/or hire local residents to help implement shared mobility projects. This practice not only ensures that the program engages trusted voices but also builds wealth within local communities.

F. BUILD ON EXISTING COMMUNITY EFFORTS AND PROJECTS WHERE POSSIBLE TO ENHANCE PROGRAM UTILITY AND INCREASE PROGRAM DURABILITY

One throughline among programs examined for this brief was the practice of standing up a shared mobility hub or carshare program on top of already-existing community efforts. Among the lessons offered in its *Clean Mobility Equity Playbook*, the Greenlining Institute has noted that strategies for creating equitable mobility systems include building community capacity, ensuring that community groups have a role in each step of the process, and creating programs that increase the assets and capacity of communities.¹³³ The Green Raiteros rideshare program offers an example of those strategies in action.

1. Example: Green Raiteros Rideshare

An analysis by the Greenlining Institute found that Green Raiteros exemplifies an equitable approach to mobility because it seeks not only to address transportation challenges but also to provide solutions to economic injustice, climate, and health challenges. Bilingual drivers provide culturally appropriate services that embrace local norms. And lastly, the program's use of local drivers and other program features help build community wealth and maintain assets within the community.¹³⁴

The practice of building on local efforts, rather than constructing a program from scratch, capitalizes on local knowledge and results in more effective programs.



III. CONCLUSION

In communities that have experienced significant disinvestment, shared mobility can be a critical basic mobility resource with the potential to make carbon free transportation available for all and reduce local pollution burdens. Advocates have emphasized that car sharing programs are essential for disadvantaged communities,¹³⁵ and case studies echo that theme; one BlueLA carshare program steering committee member noted that users of the service have not had to buy cars because they are BlueLA members.¹³⁶ As state and local leaders push toward a zero-emission vehicle future, these programs can play a key role in meeting both community needs and transition targets.

As cities launch and expand shared mobility programs, department leads and staff should keep several important elements in mind to ensure that these programs are both equitable and effective. Practices such as performing a needs assessment before designing a mobility hub or carshare program will ensure that projects reflect community needs and goals. Moreover, hiring and training local residents from project sites and local community-based organizations to conduct education and outreach, administer surveys, and serve on advisory committees can help build community wealth, ensure that residents are aware of new programs and services, and ensure that the services meet the needs of those they are intended to serve.

Maintaining affordability for low-income communities is a key consideration when designing shared mobility programs.¹³⁷ For some communities, gentrification associated with increased EVs, EV charging, and mobility hubs is a concern and should be addressed.¹³⁸ Remedies include preserving existing housing, maintaining tenant-supportive policies through existing incentive programs and planning processes, and carefully thinking through public agency land policies.¹³⁹ Anti-displacement plans created by community residents and advocates are another tool.¹⁴⁰ Addressing the needs of unbanked residents is also important in program design.

The Greenlining Institute and others have identified the importance of equitable practices such as needs assessments, local hire, and responsive program design to ensure that projects are driven by community members and that programs enhance community capacity and build community wealth.¹⁴¹ Common across all of these strategies is a focus on directing zero-emissions shared mobility investments toward community mobility needs first.

In the drive to decarbonize transportation, shared mobility programs, including EV carshare programs and zero-emission mobility hubs, can serve important functions. Practices identified in this brief, among others, can help ensure that all residents have equal access to clean mobility options.



NO PARKING
IN FRONT OF
BUS STOP

TOW-AWAY
ZONE
NO PARKING
IN THIS ZONE
EXCEPT FOR
EMERGENCY
VEHICLES

EV CHARGING STATION
ELECTRIC VEHICLE CHARGING STATION

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