





PLAN THE SITE

A Guide for Site Selection and the Planning Process

September 2022

Project Implementation ToolkitGuide 5 of 5











Plan The Site

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WHAT IS CMO?



The Clean Mobility Options Voucher Pilot Program (CMO) is part of the <u>California Climate Investments</u> (CCI), a statewide initiative that puts billions of Cap-and-Trade dollars towards reducing greenhouse gas emissions, strengthening the economy, and improving public health and the environment — particularly in disadvantaged communities.

CMO provides voucher-based funding for zero-emission carsharing, carpooling/vanpooling,

bikesharing/scooter-sharing, microtransit and fixed-route transit services, and ride-on-demand services in California's historically underserved communities. CMO also aims to improve underserved communities' access to clean mobility options and seeks to further mobility equity.



Fresno Metro Ministry demos the Arcimoto FUV at Manchester Center during a shared mobility event. This event was part of the Fresno Metro Ministry Southern Blackstone Transportation Needs Assessment Project.

The program is co-funded by the California Energy Commission's Clean Transportation Program, which is investing more than \$1 billion to accelerate the deployment of zero-emission transportation infrastructure and support in-state manufacturing and workforce training and development.

WHAT IS THE PROJECT IMPLEMENTATION TOOLKIT?

The Project Implementation Toolkit is a suite of five guides that have been designed to help awardees implement their mobility projects. Each guide in the Toolkit has been designed as a stand-alone resource with tips and worksheets.

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Guide 1: Calculate Costs

This guide includes information about budgeting throughout the Planning & Construction Phase and the Operation Phase of your mobility project. Special considerations and notes are included for bikeshare, carshare, carpool/vanpool, innovative transit services, and ride on demand.



Guide 2: Hire Locally

This guide includes information about hiring positions, budgeting, and strategies to create a team for your mobility project.



Guide 3: Engage the Community

This guide includes information about fostering project identity, addressing institutional inequalities, building capacity with residents, creating community buy-in, and developing sustainable ridership.



Guide 4: Finalize Contracts & Procurements

This guide includes information about procuring new mobility service operators, construction and maintenance services, project management services, or any other necessary contractors.



Guide 5: Plan the Site

This guide includes information to help you in planning the location of zero-emission vehicle or micromobility options stations and charging infrastructure, navigate the municipal permitting processes, check insurance requirements, and establish partnerships.

ABOUT THIS GUIDE

The Plan the Site Guide is part of a series designed to help prospective CMO applicants and current CMO Awardees plan for and implement their Clean Mobility Project.

Site planning is the process of translating community transportation needs into a mobility service, matching this service with the necessary infrastructure, locating this infrastructure, establishing partners to help carry out this equipment deployment, and moving forward with the necessary compliance measures. For the purposes of the Clean Mobility Options program, much of this site planning will occur during the application process and be carried out over the 15-months "planning and construction" phase of a project.

WHAT IS THE GOAL?

While this guide cannot cover all of the possible variations, challenges, and steps needed to complete a successful site plan, it intends to set out a framework for site selection and planning process, including useful tips and resources to help you navigate the launch and operations plans for your mobility project.

How to Navigate this Guide

The following sections in the guide are organized in a series of sequential steps to build out your mobility project budget. We suggest that you read each section and complete worksheets in sequence.

- Step 1 is to Understand the Results of the Needs Assessment
- Step 2 is to Establish A Project Model Based on Assessment Results
- **Step 3** is Identifying a Site
- **Step 4** is to Select Partners and Establish Stakeholder Agreements
- **Step 5** is to Understand the Breadth of Necessary Permits and Insurances
- Things to consider beyond this Toolkit!



NEED MORE GUIDANCE TO PLAN THE SITE?

For any questions or for further guidance, CMO awardees are encouraged to contact their Cohort Facilitator.

For prospective CMO applicants, please contact the CMO Administrator Team to receive one-on-one technical assistance.

CMO Hotline: 626-744-5670 Monday -Friday: 9AM - 5PM PST ☐ info@cleanmobilityoptions.org

www.cleanmobilityoptions.org

Considerations

Please note that reference to any specific manufacture, trade, company name, or service is for informational purposes only, and does not constitute endorsement, recommendation, or favoring by the California Air Resources Board.

UNDERSTAND THE RESULTS OF THE NEEDS ASSESSMENT

Step 2

The CMO program requires all Lead Applicants (Awardees) to select a project area and conduct a needs assessment in that project area, prior to applying for a Mobility Project Voucher (MPV). The Needs Assessment results should shed light on the lack of access to critical services that residents in that project area are facing. Using this information, a team can narrow down where critical gaps in services exist and identify locations for infrastructure that best support the community.

Step 1

ESTABLISH A PROJECT MODEL BASED ON ASSESSMENT RESULTS

Step 3

The type(s) of service model offered in the community will help to determine the site planning necessary elements, including relevant permitting and partnership agreements. Even for free floating or dockless options (e.g., bikes and scooters that don't rely on locked stalls), agreements with municipalities may be necessary to be allowed to park dockless micromobility vehicles and carshare services on public right-of-way and public parking/street locations.

Service Model

While fixed-route transit can provide access across any number of distances, cost-effective service requires a baseline number of passengers wanting to go the same general direction at the same time. Smaller-scale forms of transportation can offer alternatives in situations where there isn't that kind of demand. As shown in Figure 1, different shared modes are best suitable for different travel distances. Typically, bikeshare and scooter-share are suitable for trips of a few miles, whereas innovative transit services such as on-demand shuttles work best for mid-range trips, about less than 5 miles, and carshare, carpool or vanpool services are more suitable for trips more than 30 miles.

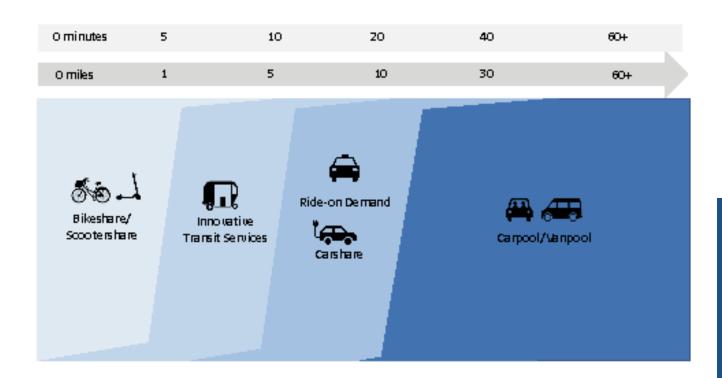


Figure 1: Shared Modes By Travel Distance. Source: Clean Mobility Options Voucher Pilot Program. 2020. Project Design Guide

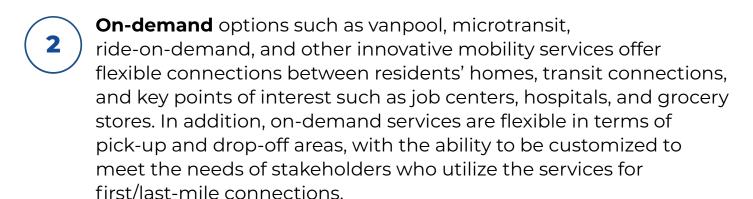
There are generally two types of user models in terms of how these services are accessed in a network: **self-service** and **on-demand**.



Self-service options such carshare and micromobility (bikeshare and scooter-share) offer users the flexibility to operate the vehicles themselves. These options should be easy to get to for first/last mile connections between workplaces, home, and public transit hubs. Carsharing is utilized for longer distance trips greater than five miles, while micromobility is used for trips less than five miles.



For self-service models, consider the need for fixed parking spaces or docks for vehicles, or free floating or dockless access.





For on-demand services, consider if the community would benefit from fixed pick-up locations, or if the service is "free-floating" and can be called on-demand to any location.

In addition to the conditions outlined above, another key consideration when refining the site plan is to account for fixed or floating service needs.

- Fixed or docked service options require users to borrow and return vehicles at the same location In regards to micromobility, customers unlock bikes from a fixed dock and return them (either to the same dock or to a different dock) at the end of a trip.
- **Pree floating or dockless service** options do not require a docking station. Since the mobility vehicles do not need to be returned to a particular docking station, users end rides by leaving the mobility vehicle anywhere within a defined operating area.

Charging Network

Another component of site design is the charging infrastructure network.

AC Level 1 charging uses the same conventional 120 volt outlet used to charge a phone and can provide up to five miles of range per hour of charging. This is what would be most appropriate for small batteries, like those used on bikes or scooters.

AC Level 2 charging requires a 240 volt power source, like those used for heavy appliances, and uses wall-mounted or freestanding charging stations. On average, these can provide up to 20 miles of range per hour spent charging.

With DC Fast Charging, AC to DC power conversion happens in the station itself, instead of the vehicle. This means the stations are physically larger than Level 2 stations and need to be near a power source capable of delivering 480 volts. While these stations are more expensive and complicated to locate, they can provide over 180 range miles in an hour of charging, depending on the vehicle.

Awardees should ask:

Will fleets be returned by the users to charging locations?
Will fleets be picked up by staff or volunteers to be charged at warehouse locations or a fleet recharging location?

Service Area

For fixed-or-docked options, the service area should encompass most if not all users' origin and destination points. If people cannot use the system to make meaningful connections between destinations, the project mode will be unable to provide convenience and access to its intended user audience.

For dockless or hybrid options, the service area can be the same as the project area. Dockless options give residents the ability to end or start a trip anywhere within the service area, thus, the service area should be clearly communicated to community residents. Unlike fixed or docked options, the service area has less of an impact on usage. Usage will be determined by availability and demand. Because of this, system size is

Project Model References

In the Appendix you will find examples of mobility project models established in cities throughout California. These projects serve as good references for entities who are working through system logistics (i.e. system size, site location, type of service model).

Community Demand and Support

Identification of sites should rely on community needs and gaps in transportation services. One should always make sure the site is accessible to the people who would need and want to use it. Oftentimes cities can be well intended in bringing shared mobility services into a community, however the lack of collaboration with community members can result in services being underutilized by the intended audience.

Communities are a significant source of information when trying to figure out where services are needed, and listening and engaging residents in this discussion will provide fruitful results and help identify accessibility locations for infrastructure placement.

IDENTIFYING A SITE

Step 2

The site planning process begins with identifying locations to site infrastructure. For instance, a site for an electrical vehicle project is a location where a shared electric vehicle may be accessed, returned, or charged. Choosing the site locations best suited for your project is critical to ensuring that the service or system will see high ridership and meet the targeted users' needs.

Establish Siting Criteria

Establishing siting criteria will help ensure that a project is successful because they offer much-needed direction for ongoing efforts. By having key goals in mind, one is better equipped to make siting decisions in the planning process that align with the needs of a community.

- Accessibility/Ease of Use
 - Sites should be convenient to access and easy for residents to use regardless of weather, time of day, or mobility limitations.
- 2 Safety
 Sites should not be perceived as unsafe.
- Visibility
 Sites should be visible to both vehicle and pedestrian traffic.

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Operational Feasibility

Sites should be easy to reach and service, particularly when it comes to maintenance, equipment, and operational requirements.



Equity

Sites should specifically address access barriers for those in a disadvantaged and/ or low-income community (e.g., unbanked users, lack of internet access, users without smartphones).

Siting Considerations

The specifics of siting and installation of shared mobility services will depend on the project model, however across modes there are a number of common considerations.

Community Demand and Support

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Destinations

Sites should be adjacent to or within close proximity to essential destinations. Depending on what kind of need you are addressing, these could be activity centers, medical facilities, places of employment or residences.

Policy and Regulation

Carshare parking, space for bike sharing and e-scooters, and pick-up areas for microtransit benefit–or even rely–on the visibility and easy access offered by on-street curb space. However, demand for access to this Public Right-of-Way often exceeds available space, especially in settings where priority has historically been given to low-cost parking for personal vehicles.

Awardees should contact their local government to understand the rules about the 'wheres and hows' of use of the Public Right of Way.



Look into whether your city addresses shared mobility in its curb management policies. For instance, cities may charge fees for this access while others may offer incentives for services that advance public goals.

Visibility

Whether it is pick up/drop off zones for carsharing or a bikeshare docking station, infrastructure sites should be visible to both pedestrians and vehicle traffic. Placing sites in highly trafficked areas can bring both challenges and visibility to services making it essential for project implementers to balance priorities. Sites in areas with consistent vehicle traffic should have elements such as lighting that make it safer for a pedestrian user.

Visible, clear and consistent wayfinding signage should be incorporated into or near the site to bring awareness to the service and promote access. Signage should give direction to all users and reflect the community's style (i.e., language, design).

Existing Infrastructure

Existing elements such as walkways, poles, curb cuts and other structural elements should be considered in a mobility site plan. These elements add costs for removal and relocation as well as present barriers to access.

Sites should not disrupt pedestrian flow. Shared mobility vehicles shouldn't be stored in areas that will present barriers to those biking, walking, or using transit. Integration of shared services should enhance the surrounding pedestrian environment instead of hindering it.

Existing Transportation Network

When identifying a site, project implementers should be cognizant of the current transportation network and how it functions to help with connections from the shared mobility service to the wider network. For instance, when establishing a bikeshare system, stations should be in close visual proximity to bus stops and bike lanes to promote integration and transfer of modes.



Consider integrating the planning or implementation of a shared mobility service into a transportation improvement project. Certain sites for micro mobility stations (e.g., bike docking station) could be incorporated into traffic calming projects to further project potential. Awardees may find it advantageous to look into areas where traffic calming measures are currently taking place.

¹ For more information visit here.

Design

Existing elements such as walkways, poles, curb cuts and other structural elements should be considered in a mobility site plan. These elements add costs for removal and relocation as well as present barriers to access.

Sites should not disrupt pedestrian flow. Shared mobility vehicles shouldn't be stored in areas that will present barriers to those biking, walking, or using transit. Integration of shared services should enhance the surrounding pedestrian environment instead of hindering it.

Siting Resources for Micromobility

- NACTO Bike Share Station Siting Guide
- ITDP The Bike Share Planning Guide

Proximity to Power Supply

Due to many shared mobility services offering an electric option, proximity to power supply should be a main consideration when siting infrastructure. The ability to connect to a power source is the top priority because without power, there is no charge and the service could be rendered useless. Connection to power can often require engaging with those in both the public and private sectors, including consultation with electric utility companies. In general, the closer that the site is to the power source, the cheaper the installation costs.

If your site requires EV charging infrastructure, it is important to consider the type and number of mobility vehicles that will need charging. One should assess:

The expected demand for charging in an area and how that demand will fluctuate throughout the day. Will the site be able to accommodate peak demand periods?

Once approximate energy demands are understood in a project, teams should consult with the appropriate local utility to determine the existing load capacity and what other kinds of site infrastructure may be needed. In general, lower-speed charging (e.g., Level 2) that is closer to the power source is more cost and time effective and reduces the need for electrical panel upgrades and the laying of additional wiring.

Siting Resources for Light-Duty Electric Vehicle Charging

- NYSERDA Siting and Design Guidelines For Electric Vehicle Supply Equipment
- U.S. Department of Transportation: Resources for EV Infrastructure Planning

SELECT PARTNERS AND **ESTABLISH STAKEHOLDER AGREEMENTS**

Step 3

Site planning involves identifying locations to install infrastructure and that comes with the need to navigate land ownership and public right-of-way.

Early on during the process, RFPs, contracts, and site host agreements must be developed and established with vendors and partners. In addition, community-based partnerships and support should be identified and cultivated. Strengthening partnerships with community leaders can result in buy-in from both community-based organizations and municipal leadership. Partner selection should ideally happen early in the project development process and should precede pursuit of permits.

Part of the mobility provider selection process and contract negotiations is to design and establish equitable stakeholder agreements amongst all parties involved.²

Some important aspects of stakeholder agreements include data sharing and reporting, insurance indemnification, approved contractors (e.g., certified electricians for EV charger installation), agreements about the costs of permitting and exclusivity to operate.



Coordinate with legal and finance professionals

To ensure agreements are sound, you may need to work with professionals outside your organization and industry to develop contracts and agreements.

² For information and guidance around contracting and procurement see The Project Implementation Toolkit's *Finalize Contracts & Procurement Guide*.

Insurance Considerations

Insurance is required to operate all shared vehicles on the public right of way. Insurance requirements and costs will depend on several factors including, but not limited to the following: service model and vehicle type, adding other project partners as an additional insured, and indemnification of third-party entities such as private property owners and the municipality in the event of injuries and fatalities.



Work with an insurance provider early in the process

An insurance provider can provide more information about insurance types and costs associated with operating shared transportation fleets on public rights of way.

Equity Considerations

As part of providing equitable access to clean transportation modes, consider designing access to services for the unbanked and users without smartphones.

Explore partnerships with local transit agencies, transportation providers, and community organizations. Consider technology-free solutions such as phone banks, community liaisons, and the utilization of existing transit resources can help you spread the message about multimodal transportation options and help users reserve rides and plan ahead.

Here are some examples of partnerships with local transit agencies, community-based organizations (CBOs) and transportation providers:

• Scraper Bike Team

 A local youth-focused community-based organization (CBO) supported on behalf of Bay Wheels Bike Share expansion into East Oakland.

LyftUp

 A program for youth to access micromobility, increasing bicycles' usage and promoting multi-modal transportation as youth empowerment.

CitiBike Community Grants Program

 A mobility company partnering with communities to offer a variety of mobility related services; including but not limited to: Group rides, community bikeshare memberships, and obtaining mobility access without a bank.

Car Sharing and Mobility Hubs in Affordable Housing Pilot

 A project team of public and non-profit organizations working with residents at three affordable housing developments in the Bay Area to understand what kinds of transportation options are needed most at each site.

Movimiento en Bici

• This is a Latinx community outreach program for a rural bikeshare program that provides safety classes for adults who don't know how to ride a bicycle, and ensures that members of the Spanish-speaking community have access to bikeshare. The program also offers group rides and route recommendations to ensure that people can use the bikes around the entire service area.

UNDERSTAND THE BREADTH OF NECESSARY PERMITS AND INSURANCES

Step 4

Permits allow cities to establish standards that shared mobility operators must comply with to continue operating. Permitting requirements vary by city and jurisdiction. Therefore, you will need to coordinate with local municipalities and public agencies to ensure that permitting is done accurately in a timely manner. While permitting processes can appear linear, they can take longer than anticipated to obtain the necessary approvals. A good practice is to build in more time than necessary to ensure that deadlines align with your launch plan milestones. With staff reductions and the shift to remote work, many permitting systems may have longer lead times and may be online only.

Depending on transportation mode, the permitting process may be more nuanced than anticipated. As a good practice, start researching the permitting requirements of your proposed project area as soon as possible. The timelines of most permits are estimates, so build in extra time on launch plans to ensure that the team is setting realistic expectations to launch and operate the transportation project.

Sometimes, the permitting process can be overwhelming. The Clean Mobility Options Voucher Pilot Program Administrator Team offers free technical assistance to support you and your team as you navigate various permitting channels.

Check your municipality's website to apply for the right permits and to coordinate permit application deadlines before the launch of your mobility project. If you have questions about permitting, call the department to establish a direct point of contact and build a relationship.

Apply for Permits

KEY TAKEAWAY

Building relationships with people at the municipality is important because they can be valuable resources during the permitting process.

- Visit your mobility project's municipality's website for ordinances, rules, and regulations to understand the public permitting processes.
- It is advised to have the following information at hand since it is usually required when applying for permits:
- · Site renderings of your site for infrastructure placement
- Map of proposed infrastructure locations check local maps available via the City and coordinate with appropriate departments (e.g., Department of Public Works, Department of Transportation)
- California Environmental Quality Act (CEQA) documentation which may include a Notice of Exemption (NOE) - see CEQA section below for more information
- · Documentation of pre-launch community engagement efforts and outcomes
- Documentation of the agreement between the parties who control right-of-way
- · Documentation of sufficient outreach to abutters
- Proof of insurance and indemnification of the municipality and/or third-party partners
- Proof of Contractor License <u>Here</u> is a list of approved contractors for EVSE and solar installations throughout California
- · Payment in the form the municipality specifies
- Documentation of outreach with stakeholders
- Documentation of coordination with the transit agency
- Operations plan for parking vehicles during the maintenance of your mobility project

Since 2015, cities and counties in California must have local ordinances that provide a transparent process for installing EV charging equipment, as well as maximum permit approval timelines.³ Jurisdictions that have created, or are in the process of developing, ordinances are graded and visible at the State of California's interactive **EV Charging Station Permit Streamlining Map**. Depending on the scale of the project, local approval for EV charging can take between 5 and 40 days.

This local approval process is separate from approval from the utility to connect power to a parking space. Utility approval to begin the grid connection process varies by the individual organization. Examples of different application processes for different types of chargers and sites (e.g., on-street parking versus within a garage) in the Pacific Gas and Electric service area can be found at PG&E's **program resources** page. This process typically involves estimating the amount of power required, manufacturer details of the charging equipment, and diagrams of the nearby electrical circuit.

Other Areas of Consideration:

- For many early EV adopters, coordinating charging in shared parking facilities, such as those found at many multifamily housing communities, proved more complicated than in personal garage units. It is important to note that state law requires commercial and residential landlords to allow small-scale EV charging installation.
- Accessible EV Parking Requirements may require 1 parking spot to be devoted to a van accessible handicap spot. This can sometimes require parking reconfigurations.
- California Building Code requires that charging at public locations, in most cases, at least one parking spot be devoted to handicap accessible vehicles.
- EV charger installation requirements may be different for new constructed buildings (e.g., new multifamily dwellings, new surface parking lot).

³ AB 1236 (GCS **65850.7**) and AB 970 (GCS **65850.71**)

⁴ For residential tenants, (GCS 1947.6) residential) and commercial tenants (GCS 1952.7)

⁵ California Code of Regulations, Title 24, Part 2

- DC Fast Charging installations require bringing more power to a site, resulting in an added layer of complexity compared to level 1 and level 2 installations. Since DCFS installation may involve intricate trenching, station developers should be cognizant of the right-of-way in which their installation is taking place, as they may need to obtain a special encroachment permit. This can be a lengthy process and should be accounted for during the project planning phase. For instance, The California Department of Transportation (Caltrans), requires developers to get an encroachment permit before trenching under an existing right-of-way.
- If a Hydrogen Refueling Station is part of your mobility project, you will need to have permits for this infrastructure, which usually consists of a:
 - Low-pressure storage tank
 - Compressor
 - High-pressure storage tank
 - Pre-cooling system
 - Dispenser

The California Environmental Quality Act (CEQA) Compliance

The California Environmental Quality Act (CEQA) requires agencies to inform government decision makers and the public about the potential environmental consequences of proposed activities. Evidence of CEQA compliance is required to obtain a full or standardized permit. However, it should be noted that CEQA only applies to projects that require discretionary permits from a state public agency. The State of California's Planning and Research Office offers many resources for understanding and implementing CEQA.

CMO projects are required to have an exemption from CEQA, therefore public agencies wishing to continue their projects need to prepare and file a Notice of Exemption. When an agency proceeds with a Notice of Exemption, the following items must be included:

- · A brief description, including location, of the proposed project
- · A finding that the project as proposed is exempt from CEQA
- · A citation to the applicable exemption in the statute or CEQA Guidelines
- A brief statement of reasons supporting the finding that there is no possibility that the activity in question (project) may have a significant effect on the environment

Coordinate Permit Application Deadlines

KEY TAKEAWAY

Project schedules should include permitting deadlines and buffers due to delays during Covid-19 pandemic.

Coordinate with local municipalities and public agencies to ensure that permitting is done accurately in a timely manner.

Different Permits for Different Modes

KEY TAKEAWAY

Permit requirements will vary depending on the characteristics of your mobility project.

- Depending on whether your mobility project provides a service that is free-floating, docked, or requires electric charging, there will be different permitting requirements. Communicate with your contact at the municipality to explain your mobility project and clarify which permits you need to apply for.
- Transit Agency Permits may be required depending on the mode and characteristics of your mobility project. Interdepartmental coordination may also be required depending on the infrastructure needs your mobility project presents.
- Depending on if infrastructure needs to be installed, coordination with local utility providers will be required.

CONGRATULATIONS: YOU HAVE REACHED THE END OF THE TOOLKIT

Congratulations, you have reached the end of the Project Implementation Toolkit!





5. Plan the Site

This is the end of the Project Implementation Toolkit

Things to Consider Beyond this Toolkit

THINGS TO CONSIDER BEYOND THIS TOOLKIT

Here are a few things to keep in mind after the siting process and things to consider beyond this Toolkit.

Encourage Ridership

The community or city should develop a clear marketing and outreach strategy to boast ridership among the newly introduced shared mobility service. Outreach campaigns should outline information on how the new shared mobility service works, where it can be accessed, and the benefits it can bring to the community. Campaigns should be launched periodically to strengthen the service's roots in the community. In addition, new mobility systems should have clearly defined brand identity and visibility within a community that distinguishes itself from other modes of transportation

Analyze Site and System Performance

After installation, be sure that the implementing agency regularly assesses infrastructure sites to determine if the site should be relocated or if other avenues should be taken to improve usage. These site visits should be informed by user data.

Appendix: Project Model References

APPENDIX: PROJECT MODEL REFERENCES

Local Examples of Self-Service Mobility Options

Bay Wheels Bikeshare, Bay Area

Since 2014, Bay Wheels has been the Bay Area's primary bikeshare service. Pedal-powered bikes can be picked up and dropped off at Bay Wheels docking stations, often located in areas that see a high number of regular users, such as commercial centers or areas with high population density. E-bikes can be both docked at a station or locked to any city bike rack. Between these two service models, Bay Wheels covers San Francisco, Berkeley, Emeryville, Oakland, and San Jose.

As part of an exclusive contract for station-based bikeshare in the Bay Area, siting of docking stations is done in coordination with public officials and neighborhood input. This arrangement has helped ensure equitable distribution of service and intentional placement of infrastructure that compliments public transportation options and expansion of the region's bikeway network.

The average Bay Wheels station has 19 bike docks, a kiosk for rental transactions, and are solar powered. Stations located off-street take 12 feet of continuous, uninterrupted sidewalk width; on-street, this is about the same space as three cars.⁷

⁶ For more information about Bay Wheels, check <u>SFMTA's dashboard</u> on system usage

⁷ San Francisco Municipal Transportation Agency. TASC Summary Sheet. October 20, 2020

GIG Carshare, Sacramento

GIG Carshare is an all-electric car service, deriving its name from a focus on ride hail and delivery gig work. GIG Sacramento uses all-electric Chevy Bolts, unlike its other locations which use traditional hybrid vehicles. With roughly 250 vehicles, it's the largest carshare network in the US that uses the one-way, free-floating model. These cars can be picked-up or dropped-off in a 20 square-mile 'home-zone' which covers most of downtown Sacramento.

Users are reimbursed for the cost of charging the vehicle on short trips, which allows users not to worry about the cost for charging vehicles; however, GIG also employs a standby staff to maintain a minimum charge in active vehicles. GIG's Sacramento 'home-zone' contains 13 DC fast-charging stations and 142 Level 2s.

Green Commuter, Los Angeles

Another example of dual-uses of carshare is with Green Commuter, which primarily rents electric vehicles for vanpooling or for fleet's. Green Commuter primarily owns and rents electric vehicles for use in vanpool programs, partnering with transit agencies like LA Metro to extend the appeal of ridepooling with Tesla Model Xs.⁸

Also in LA, Green Commuter is also part of the Watts Rising Collaborative, neighborhood redevelopment project focused on climate resilience and green economy workforce training. The project includes the deployment of 15 all-electric carshare vehicles and a network of 24 Level 2 chargers across three sites.⁹

⁸ <u>"First All-Electric Vanpools in the United States Begin Commuter Service at L.A. Metro,"</u> Business Wire, May 13, 2019

⁹ Watts Rising Baseline Progress Report

Appendix: Project Model References

Local Examples of On-Demand Mobility Options

TransPort in Porterville, CA

An example of microtransit in California is TransPort in Porterville, CA, an on-demand, curb-to-curb service available to residents at \$3 per trip. TransPort's service boundary covers an approximately 35 square mile area and is a means to replace transit buses on routes with low ridership.

The service uses 12 all-electric Lightning Electric Transit vans, with seats for seven passengers and a wheelchair securement area. Fully owned by the City of Porterville, these vans have 86 kilowatt-hours of battery capacity with a range of 120 miles and can be charged in just over an hour by a 50-kW DC fast charger. These were partially funded with special funding from the California Air Resources Board (CARB) Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP).

REV-Up, Fresno

In October 2020, the Fresno County Rural Transit Agency (FCRTA) launched the Rural Electric Vehicle Utilization Project (REV-UP) (rural electric vehicle utilization project), a ride-hailing program targeted towards residents in rural Fresno County. Residents in the small communities of West Park, Biola, and Kerman can reserve a ride in an electric vehicle in advance, or call up a ride when they need it, at \$5 per ride. REV-UP's fleet comprises two Chevy Bolt battery-electric vehicles supported by a Level 2 charger at the operator's administrative office.

^{10 &}quot;Inspiration Transportation | Micro-Transit | United States," iTransportEV HQ

Appendix: Project Model References

Community Bridges Lift Line, Santa Cruz County

In an early iteration of the Clean Mobility Options program, Lift Line received funding to replace three gas-powered shuttles with electric alternatives. These 14 to 16-passenger EV shuttles are used for paratransit, designed for low-income seniors and disabled riders transportation to essential services. The system uses several Level 2 charging stations, installed under the program at the Lift Line fleet facility in Watsonville, CA.

¹¹ LCTI: Lift Line Paratransit Dial-a-Ride Electric Vehicle Transition Program