CALCULATE COSTS

A Guide for Budgeting a Mobility Project

July 2022

Project Implementation Toolkit
Guide 1 of 5

Calculate Costs

TABLE OF CONTENTS

WHAT IS CMO?

The Clean Mobility Options Voucher Pilot Program (CMO) is part of the **California Climate Investments (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, 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.

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.

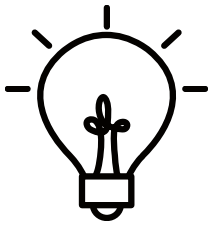
About This Guide

Calculate Costs summarizes relevant budget items for each eligible project service model as it draws from mode-specific pilot project examples.

Note that not all line items suggested for each mode will be relevant for each unique project; instead, this document acts as a reference to consider relevant project budget items.

WHAT IS THE GOAL?

The end goals of this guide is to provide awardees with information, tips, and worksheets to implement their mobility project budget and scale from pilot to program.



TIP!

NEED MORE GUIDANCE TO CALCULATE COSTS?

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

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 ***Consider Your Costs***
- Step 2 is to ***Adjust Your Cost Plan***
- Step 3 is to ***Compare Costs & Note Reimbursements***
- Step 4 is to ***Develop Your Budget***
- Step 5 is to ***Move to the Next Guide in the Toolkit: Hire Locally***

Considerations

1. Reference in this document 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 (CARB).
2. The sample budget figures are offered as reference points but are not meant to be the definitive costs your pilot project will experience. Nor is this guide intended to provide all of the details associated with running a shared mobility pilot program, but rather highlight some of the main considerations.
3. Any planning costs incurred prior to voucher execution post- award, are not eligible for reimbursement. Eligible costs are reimbursable only if the expense is incurred after voucher agreement execution. For specific help with budgeting questions before application submittal, please contact the CMO Administrator Team to receive one-on-one Technical Assistance.
4. Various models, infrastructure, and enhancements are eligible to receive Mobility Project Voucher funds (see **Section D for Project Eligibility** and **Section D.4 for Eligible Infrastructure Improvements** of the Implementation Manual)

CONSIDER YOUR COSTS

Budget Considerations

BikeVentura staff Zuleima Jimenez collecting a survey response at a free pop-up bike repair in La Colonia, Oxnard

The budget should consider the two primary phases of the project: planning and construction and project operations. The main costs stem from initial start-up requirements, permitting costs, capital equipment, and outreach and marketing during the planning and construction phase. Planning and construction activities will be supported up to one-year post voucher execution.

At the end of the planning and construction period (up to 15 months), the operations launch date needs to occur and the project operation period begins. Once the pilot project launches, operational and maintenance and repair costs become more prevalent. Considering this, this section summarizes the important components of these two primary phases.

Phase 1: Planning and Construction

Before the launch of a project, costs consist of project start-up planning and upfront capital and construction costs. These are necessary to consider when planning a mobility system that will operate sustainably for many years.

Partnerships formed with experienced providers will help to clarify the actual costs based on the equipment selected.

Administration costs include labor expenses (including total staff time and labor costs) and other administrative costs, including travel expenses, participation in CMO activities such as the Clean Mobility Equity Alliance (CMEA), office supplies, equipment, data collection, IT set up, office space, utilities, and insurance. For the reimbursement period, all projects need to account for voucher administration costs. The voucher costs need to be directly related to the project after the voucher execution date. Voucher funding can be "stacked" or leveraged - and project teams are encouraged to do so with other funding sources to increase the project's scale. The eligible reimbursable voucher administration costs fall under multiple cost categories below.

Planning costs include staff time dedicated to writing the project plan and general project planning, design, project management, initial outreach, and other direct costs. The budget should also consider direct costs such as license fees, permit fees, general supplies. The Eligible Project Costs listed in the **Section D.7 of the Implementation Manual** provides an overview of allowable voucher categories. However, to assist in long-term project planning and budgeting undertaken during the planning phase, further suggested topics and questions are below. One activity of the project planning stage is developing a plan to carry out the project's construction, launch, and operations.

Worksheet

A checklist of considerations has been developed to help make note of the type of line items to include in your budget/cost plan. See if there are any line items that you need to add to your budget or discuss with your Mobility Project Team.

TIP!

Remember that all worksheets can be downloaded from the **CMO Website** under Application Resources > Implementation Toolkit.

Office Planning

- [ ] Assess if new equipment is needed, such as office furniture, phones, computers, printers.
- [ ] Assess the need to install or upgrade the internet connection.

Site Selection

- [ ] Refine current and identify future site selection and planning costs.

Permitting

- [ ] Determine the cost and lead time to acquire different types of permits needed to site, launch, and operate the project.

Parking

- [ ] Do dedicated parking spots for the vehicles need to be acquired? Is there another great way to increase engagement efforts by meeting residents where they are at?
- [ ] Is there a need to develop a parking plan and rebalancing strategy per municipal guidelines?

Local Outreach

- [ ] Coordinate recruitment costs and efforts with mobility providers to hire workers from the local service area to build local capacity and promote workforce development efforts.
- [ ] Plan and coordinate outreach and launch events (include staff time – planning and day of, venue rent, equipment, cleaning supplies, etc.).

Insurance

- [ ] Are additional comprehensive insurance coverages needed as the fleet grows or as more users join the program?
- [ ] Did you account for general liability, volunteer, cyber, and other insurances needed for you and your team in this program?

Customer Service/User Needs

- [ ] Is there budgeted staff time or a dedicated person to address unexpected user needs?
- [ ] Plan for staff time to deal with non-user complaints/concerns (i.e., vehicle blocking a driveway or curb ramp).

Fleet Management

- [ ] Ensure adequate staffing to run the project.
- [ ] Factor in the correct fleet size and fuel costs for rebalancing (dependent on mode).
- [ ] Schedule and plan for proper training for drivers.
- [ ] Consider costs associated with asset recovery if the shared mobility offerings go outside the service area for an extended period.
- [ ] Budget for GPS or other telematics devices to track fleet usage and other key indicators.

- [ ] Plan and budget to address crashes or incidents requiring relocation and recovery of assets.
- [ ] Consider ongoing costs associated with cleaning and disinfecting vehicles and stations (per CDC guidelines).

ADA Compliance and Staff Training

- [ ] What type of accommodations are needed? For example:
    - [ ] Hand controls for carshare, carpool, or vanpool vehicles.
    - [ ] Wheelchair accessible vehicles.
    - [ ] Adaptive bicycles/scooters.
    - [ ] Web applications need accessibility options for visually and deaf and hard of hearing persons.
- [ ] Is training needed for staff to assist persons with disabilities?
- [ ] Costs associated with service animal accommodation.
- [ ] For additional guidance on ADA compliance, please reference **FTA Transportation Services for Individuals with Disabilities** and further explained in the **FTA Shared Mobility FAQ** and **Shared Mobility FAQs: Americans with Disabilities Act (ADA).**

Warehouse Space

- [ ] Identify the cost of adequate warehouse space near the service area and tools for operations and maintenance.

Data Management

- [ ] Identify costs associated with the acquisition or development of a comprehensive data management system.
    - [ ] A comprehensive data management system needs to include secure data storage and other security access features.

- [ ] Develop clear expectations of partners and stakeholders about data reporting needs.
- [ ] Dedicate staff time for collecting data and other relevant information, as well as time to process the data to report on project performance measures and general effectiveness.

Voucher Administration Cost for Awardees

- [ ] Determine the cost of having members of the Mobility Project Team participate in orientations, trainings, recurring meetings, reporting, and workgroups.
- [ ] Include an estimated cost for coordinating with the CMO Administrative Team for one-on-one technical assistance.

There are more details on specific cost categories to consider during the planning and construction stage continue in the next subsections.

Capital equipment costs occur with the acquisition and purchase of vehicles and associated hardware, charging or fueling equipment, and the associated installation costs. Vehicle purchases and charging/refueling infrastructure and infrastructure improvements are all eligible capital costs for the Mobility Project Voucher. See the **Implementation Manual** for eligible costs and the Cost Guidance by Mode section for detailed cost estimates.

Social Good Fund project Regeneration survey team after final day of canvassing for the Community Transportation Watsonville Needs Assessment.

Additional transportation enhancement costs are eligible up to 25% of the total voucher amount requested per project may be dedicated to activities or services directly supportive of, but not essential to, implementing the core project model. These enhancements may include other transportation resources or assets beyond capital equipment purchases that complement the core project model. Transportation enhancements provide additional options to improve accessibility, reliability, convenience, safety, and/or affordability for participants. See **Implementation Manual, Section D.5**, for details on eligible expenses.

Outreach costs include labor and material costs to encourage community participation, plan launch events, and encourage overall demand for the project. Conducting outreach is an opportunity to build trust and develop community support to cultivate a comfort level for residents to use shared mobility. The CMO program requires each program to provide a minimum of $25,000 or 10% of the total voucher, whichever is more, with a maximum of 30% of the total voucher program, for outreach.

Outreach to understand accessibility challenges in the community, gauge potential demand for accessibility equipment, and reflect in project design will require special accommodations and targeted outreach to hear from those most affected.

Typical outreach activities include:

- Website design/hosting
- Participation in local community events
- Outreach to local businesses and community organizations
- Press releases or media opportunities
- Mailings to target neighborhood businesses and residents
- Outreach to neighborhood organizations, community groups & local churches
- Partnerships with local area businesses
- Neighborhood events
- Community workshops and carshare orientation events
- Development of equity programs and engagements

The planning stage is also the time to plan for the launch event. This could be a single or series of events that "opens" the service for the community. This plan should consider the costs associated with the launch. One recommendation is to highlight the community's contributions and the project's purpose during the launch event. It is important to get community input on what the launch event will look like and who will "cut the ribbon" on the project to plan the costs associated with such an event. Costs of specific engagement activities will depend on the type of engagement and outreach intended. Planning for an in-person event should consider costs such as venue rent, supplies, AV equipment rental, refreshments, translation costs, participation incentives, personal protective equipment (PPE), and childcare. Note, not all of these costs are eligible for reimbursement (e.g. childcare) but are all necessary costs to

consider when planning an event. Eligible planning costs begin in **Section D.7** of the Implementation Manual.

Operations and Maintenance (O&M) costs are not a primary concern during the planning and construction phase. Reimbursable O&M costs for voucher-funded services are allowed once the new service, or expansion of the existing service is actively operating, but not before. This is true for both new and existing services and should be carefully considered before launch of the service.

The official operations launch date is marked by the first day participants start using the service. This date is also important as it is also determining the start date for the remaining 4 years of service necessary to fulfill the voucher agreement. While O&M costs are not a primary concern when actively planning and constructing a project, they need to be based on the design plan's output. O&M costs are the bulk of long-term costs associated with a mobility project and will continue throughout the life of the project. Resources will be required to meet the vehicles' operational demands and to maintain sustainability and service reliability throughout the project duration.

Phase 2: Project Operations

Project operations begin after the operations launch date (the day participants start using the service). At this time, budget priorities shift away from planning intensive activities to focus primarily on operations and maintenance costs. Additional staffing needs shift toward operations management and outreach and costs associated with vehicle operations and maintenance increase.

Operational staffing costs should include budgeted labor for additional staffing for user assistance activities such as customer service, ambassadors, and fleet operations and management, in addition to managerial and administrative costs. As the project progresses, data on the project's performance will become available; staffing should include hours to collect, process, and report on this data. If working with an operator, pay attention to staffing and local hiring and safety compliance protocols included in the Occupational Safety and Health Administration (OSHA) **California State Plan.**

As in the planning and construction phase, administration costs continue throughout the entire project operations period, with eligible costs reimbursable over the funded period.

Capital equipment and additional transportation enhancements during operations will consist of acquiring and replacing parts/devices for all capital acquisitions due to normal wear and tear, vandalism, and damage due to accidents. Also, as the project progresses, new transportation enhancements may be identified to improve accessibility, reliability, convenience, safety, and/or affordability for participants in addition to those planned for in the planning stages.

Outreach and community engagement activities and the associated costs continue throughout the entirety of the program. Through marketing and outreach, the project team can identify additional considerations for costs such as subsidized memberships based on income or other economic factors into the suite of programs. Training sessions and demonstration events for new and prospective users will likely have higher costs than an outreach campaign handing out materials. Community outreach and engagement activities also often require permits if using public space. Each municipality, transit agency, or private property owner will have different permitting and insurance requirements. Check required permitting needs with each entity.

Ongoing operations and maintenance costs support the operational processes that enable the project to run smoothly and meet the pilot project users' needs. Examples of eligible Operations and Maintenance costs are below.

Labor expenses (including total staff time and labor costs):

- Identify staffing gaps and needs
    - Can staff be reassigned or reorganized to new phases, or is there a need for new hires?

Other direct costs for operating and maintaining the mobility services after the launch of the service:

- Additional insurance coverage
- Price subsidies for the end-user
- Mode-specific safety courses for users
- Warehouse rent
- General costs related to operation and maintenance for motor vehicles micromobility vehicles and infrastructure

ADJUST YOUR COST PLAN

During the course of your mobility project, there will be opportunities and reasons to revise your budget/cost plan. Budgets may change due to changes in user needs, the market, line items, and the project's financial sustainability.

Worksheet

Here is a list of questions to review that may trigger adjustments to your budget/cost plan:

User Needs

- [ ] Is additional outreach needed to reach more members?
- [ ] Do service changes need to be made to serve the users' needs better? For example, longer operating hours, more bilingual staff, larger staff fleet sizes, incentives, etc.

Sustainability

- [ ] What is the revenue to cost ratio, and is the pilot project on track for being a financially stable program?
- [ ] Is additional equipment and/or staff needed to meet demand in the current service area and induce demand in areas with less demand than expected?

Sustainability (continued)

- [ ] Are there expansion opportunities for the pilot project, given its demand?
- [ ] What is the asset utilization rate? Is there the need and/or opportunity to increase utilization rates?
- [ ] What are other funding opportunities to go from pilot to program?

Additional Factors

- [ ] Do insurance premiums need to be readjusted?

This section outlined the questions and topics applicable during both the planning and construction and project operations section. The next section provides cost information by mode as well as hyperlinks to existing project budget details.

COMPARE COSTS & NOTE REIMBURSEMENTS

Overview

Costs of a mobility project can be generally categorized as:

- Staffing & Direct Costs
- Capital Equipment Costs
- Operations & Maintenance Cost

Worksheet

A spreadsheet has been created to help compare the actual cost of your line items with typical ranges in the industry for bikeshare, scooter share, carshare, carpool/vanpool, innovative transit services, and ride on-demand services. There is also a list of items that can be fully or partially reimbursed for CMO MPV Awardees.

The following section provides more context for the value and line items included in the spreadsheet.

The mode-specific summaries draw from pilot projects to outline the sample costs. When possible, these costs are converted to a per-unit measure to better estimate project-specific costs. These examples can serve as reference points while working with any professional operator partner. An operator partner can be a private sector operator, a local community-driven organization, or a non-profit operator. Where available, explore working with a community-based or local non-profit operator to further the project's community-based focus. A list of possible business models is briefly given in the Bikeshare and Scooter-share system section below but can be options for all mode types. Once an operator is identified, specific cost ranges to develop the project budget can be determined more fully.

TIP!

Click **HERE** to make a copy of or print out this worksheet.

Bikeshare & Scooter-Share - *Use this spreadsheet to compare costs of your line items with typical costs in the industry. You may also use this spreadsheet to estimate general project costs.* ***To use this spreadsheet, go to "File > Make a copy" and then place the cost and unit of your items in the blue cells.***

Category	Line Item	Typical Cost Range	Unit	*Your Actual Cost*	Unit
Staffing & Direct Costs					
One-Time Start-Up Administration Costs	Small Sized System	$15,000 - $30,000	<10 stations or <100 bicycles		
	Medium Sized System	$60,000 - $100,000	20 - 30 stations or <200 - 300 bicycles		
Ongoing Staff & Contractor Costs	Launch Manager	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Operations/General Manager	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Marketing/Community Engagement Manager	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Customer Service Saff	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Maintenance Staff	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Project Team Coordinator	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Project Team Planner	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Community Ambassadors	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Electrician	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		

Bikeshare & Scooter-Share - *Use this spreadsheet to compare costs of your line items with typical costs in the industry. You may also use this spreadsheet to estimate general project costs.* ***To use this spreadsheet, go to "File > Make a copy" and then place the cost and unit of your items in the blue cells.***

Category	Line Item	Typical Cost Range	Unit	*Your Actual Cost*	Unit
	Solar Panel Installation Technician	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Add other positions...	*Add typical cost range...*	*Person*		
Capital Equipment Costs					
Vehicle Type - *Note that CMO Awardees are eligible for reimbursements put towards certain vehicle types and technologies.* ***See page 14*** *for more details.*	Pedal-Assisted Bike, *2-3 year lifecycle*	$300 - $600	Pedal-Assisted Bike		
	Pedal-Assisted Bike, *5-10 year lifecycle*	$1,000 - $1,200	Pedal-Assisted Bike		
	E-Bike	$1,500 - 3,000	E-Bike		
	Docking Station	$30,000 - $60,000	Docking Station		
	E-Scooter	$800 - $1,200	E-Scooter		
	E-Cargo Bike	$1,800 - $8,000	E-Cargo Bike		
Charging Equipment	Charging Cord	$30 - $50	Charging Cord		
	Smart Bike System Software Platform	$100 - $200	Per Month Per Device		
	Telematics Device	$15 - $60	Per Month per Device		
	Smart Locks	$120 - $220	Vehicle		
	Smart Hub	Costs will vary	All Stations		
	Electric Docking Station	Costs will vary	Station		
	Level 1 EV Car Charging Station 120V	$1,000	Station		
	Spare Parts	Costs will vary	Per Part		
	Unlocking/Locking Access & Application Management	Costs will vary	Per Application Management		
	Infrastructure for Users Without Smartphones or Bank Accounts	Costs will vary	-		
	Installation Cost	$3,000 - $5,000	Station		
	Station Site Acquisition	Costs will vary	Site		
	Station Site Permitting	Costs will vary	Site		
	Vehicle/Device Insurance Cost	Costs will vary	Vehicle or Device		
Operations, Maintenance, & Administrative Costs					
Stations	Docked Systems	$85 - 150	Station per Month		
	Replacement Stations	Cost will vary	Station		
	Electricity	Cost will vary	Station per Month		
Vehicles	Maintenance & Repair Tickets	Cost will vary	-		

Bikeshare & Scooter-Share - *Use this spreadsheet to compare costs of your line items with typical costs in the industry. You may also use this spreadsheet to estimate general project costs.* ***To use this spreadsheet, go to "File > Make a copy" and then place the cost and unit of your items in the blue cells.***

Category	Line Item	Typical Cost Range	Unit	*Your Actual Cost*	Unit
Vehicles	Replacement Parts & Vehicles	Cost will vary	-		
General Operations & Maintenance	Maintenance of Storage Facility	Cost will vary	-		
	Marketing and Outreach Material	Cost will vary	-		
			TOTAL	$0.00	

Carshare - *Use this spreadsheet to compare costs of your line items with typical costs in the industry. You may also use this spreadsheet to estimate general project costs.* ***To use this spreadsheet, go to "File > Make a copy" and then place the cost and unit of your items in the blue cells.***

Category	Line Item	Typical Cost Range	Unit	*Your Actual Cost*	Unit
Staffing & Direct Costs					
Ongoing Staff & Contractor Costs	Manager	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Fleet Operations	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Member Services	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Marketing Staff	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Volunteers	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Customer Service	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Maintenance Staff	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Project Team Coordinator	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Project Team Planner	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Community Ambassadors	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Electrician	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		

Carshare - *Use this spreadsheet to compare costs of your line items with typical costs in the industry. You may also use this spreadsheet to estimate general project costs.* ***To use this spreadsheet, go to "File > Make a copy" and then place the cost and unit of your items in the blue cells.***

Category	Line Item	Typical Cost Range	Unit	"Your Actual Cost"	Unit
	Solar Panel Installation Technician	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Add other positions...	*Add typical cost range...*	*Person*		
Capital Equipment Costs					
Vehicle Type - *Note that CMO Awardees are eligible for reimbursements put towards certain vehicle types. For exact pricing in your area, please visit* **Kelley Blue Book** *or a local dealership for more information*	*Low-Mileage* ZEV	$30,000 - $50,000	ZEV		
	High-Mileage ZEV	$46,000 - $90,000	ZEV		
	Light-Duty Plug-In Hybrid	$35,000 - $55,000	Hybrid		
Charging Infrastructure - *Costs are outlined in* ***Section E Project Eligibility Costs*** *in the Implementation Manual.*	Electric Vehicle Supply Equipment (EVSE)	Cost will vary	Device		
	EVSE Installation Cost	Cost will vary	Station		
	Hydrogen Refueling Equipment	Cost will vary	Device		
	Hydrogen Refueling Infrastructure Installation Cost	Cost will vary	Station		
	Telematics Devices (GPS)	Cost will vary	Device		
Operations, Maintenance, & Administrative Costs					
Stations	Electricity	Cost will vary	Station per Month		
	Level 2 EV Charger	$925	Charger		
	Level 2 EV Charger Installation	$1,400	Station		
	Level 3 DC Fast Charger	$33,414	Charger		
	Level 3 DC Fast Charger Installation	$25,395	Station		
	Installation Distributed Solar Photovoltaic Equipment for 10 kW	3,897	Station		
	Installation Distributed Solar Photovoltaic Equipment for 10-100 kW	$3,463	Station		
	Installation Distributed Solar Photovoltaic Equipment for 100-1,000 kW	$2,493	Station		
	Installation Distributed Solar Photovoltaic Equipment 1-10 MW	$2,025	Station		
Vehicles	Maintenance	Cost will vary	Vehicle		
	Cleaning	Cost will vary	Vehicle		
	Roadside Assistance	Cost will vary	Vehicle		
	Bodywork	Cost will vary	Vehicle		
	Rebalancing Carshare	Cost will vary	Staff Time		

Carshare - *Use this spreadsheet to compare costs of your line items with typical costs in the industry. You may also use this spreadsheet to estimate general project costs.* ***To use this spreadsheet, go to "File > Make a copy" and then place the cost and unit of your items in the blue cells.***

Category	Line Item	Typical Cost Range	Unit	*Your Actual Cost*	Unit
General Operations & Maintenance	Managing & Procuring Parking Spaces	Cost will vary	Staff Time		
	Establishing Third Party Agreements	Cost will vary	Staff Time		
	Reservation System & Supporting Technology	Cost will vary	Technology		
	Multi-lingual Support & Materials	Cost will vary	Translation Service		
	Public Outreach/User Training	Cost will vary	-		
			TOTAL	$0.00	

Carpool/Vanpool - *Use this spreadsheet to compare costs of your line items with typical costs in the industry. You may also use this spreadsheet to estimate general project costs.*
To use this spreadsheet, go to "File > Make a copy" and then place the cost and unit of your items in the blue cells.

Category	Line Item	Typical Cost Range	Unit	*Your Actual Cost*	Unit
Staffing & Direct Costs					
One-Time Start-Up Administration Costs	Background Check	$20 - $100	Person		
Ongoing Staff & Contractor Costs	Volunteer Participants	$0	Person		
	Alternate Drivers	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Bookkeeper/Manager	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Fleet Manager	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Customer Service	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Passenger Subsidies	Cost will vary - For example, $2/day up to $4/day	Person		
	Add other positions...	*Add typical cost range...*	*Person*		
Capital Equipment Costs					
Technology	Payment Platform	Cost will vary	ZEV		
	Reservation System	Cost will vary	ZEV		
	Routing Technology	Cost will vary	Hybrid		
Vehicle	Low-Mileage ZEV	$30,000 - $50,000	ZEV		
	High-Mileage ZEV	$46,000 - $90,000	ZEV		
	Light-Duty Plug-In Hybrid	$35,000 - $55,000	Hybrid		
	Software & Hardware	Cost will vary	Technology		
Operations, Maintenance, & Administrative Costs					
Stations	Electricity	Cost will vary	Station per Month		
Vehicles	Reimbursing Mileage	$0.56	Mile		
General Operations & Maintenance	Mobility Provider Fee	Cost will vary	Per Ride/Per Payment/Per Year		
	Outreach & Marketing	Cost will vary	-		
			TOTAL	**$0.00**	

Innovative Transit Service - *Use this spreadsheet to compare costs of your line items with typical costs in the industry. You may also use this spreadsheet to estimate general project costs.* ***To use this spreadsheet, go to "File > Make a copy" and then place the cost and unit of your items in the blue cells.***

Category	Line Item	Typical Cost Range	Unit	*Your Actual Cost*	Unit
Staffing & Direct Costs					
Ongoing Staff & Contractor Costs	Drivers	$0	Person		
	Management	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Administration	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Customer Service	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Maintenance Staff	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Project Team Coordinator	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Project Team Planner	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Community Ambassadors	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Electrician	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Solar Panel Installation Technician	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Add other positions...	*Add typical cost range...*	*Person*		
Capital Equipment Costs					
Vehicle - *Please see full list of* ***hybrid and zero-emission truck and buses.***	Medium-Duty Vehicle	$220,000 - $300,000	Medium-Duty Vehicle		
	Vans	$40,000 - $150,000	Van		
Operations, Maintenance, & Administrative Costs					
Stations	Electricity	Cost will vary	Station per Month		
Vehicles	Operations for In-House Service	$65 - $214	Per Service Hour for In-House Service		
	Operations for Contracted Service	$35 - $100	Per Service Hour for Contracted Service		
	Maintenance	Cost will vary	Vehicle		

Innovative Transit Service - *Use this spreadsheet to compare costs of your line items with typical costs in the industry. You may also use this spreadsheet to estimate general project costs.* ***To use this spreadsheet, go to "File > Make a copy" and then place the cost and unit of your items in the blue cells.***

Category	Line Item	Typical Cost Range	Unit	*Your Actual Cost*	Unit
	Cleaning	Cost will vary	Vehicle		
	Roadside Assistance	Cost will vary	Vehicle		
	Bodywork	Cost will vary	Vehicle		
General Operations & Maintenance	Mobility Provider Fee	Cost will vary	Per Ride/Per Payment/Per Year		
	Outreach & Marketing	Cost will vary	-		
			TOTAL	$0.00	

Step 3: Compare Costs & Note Reimbursements

WORKSHEET

Ride On-Demand - *This service is on-demand rides for individuals provided by taxi companies transportation network companies (TNCs). Therefore, taxi companies or TNCs are responsible for Staffing & Direct Costs, Capital Equipment Costs, and Operations & Maintenance Costs. However, mobility projects can subsidize rides. Subsidized ride costs are included below.*

Fare Model Examples	Trip Cost Paid By Rider	Trip Cost Paid By Agency	Cost to Agency (pier 1,000 rides)
Full Subsidy	$0.00	$12.00	$12,000.00
Flat Fare ($2.00)	$2.00	$10.00	$10,000.00
Flat Initial Fare ($2.00) With Capped Subsidy ($8.00)	$4.00	$8.00	$8,000.00
Cost Sharing (50%)	$6.00	$6.00	$6,000.00
Flat Subsidy ($5.00)	$7.00	$5.00	$5,000.00

Reimbursable Costs for CMO Awardees - Here is a list of the type of items that can be reimbursed through the CMO Program, and the maximum reimbursable amount for each item.

Bikeshare & Scooter-Share	
Vehicle Type & Technology	**Maximum Reimbursable Amount (per vehicle)**
New neighborhood electric vehicle (NEV)	Up to $15,000
New electric tricycle/pedicab (3-4 seats)	Up to $12,500
New electric bicycle (e-bike)	Up to $3,500
New bicycle	Up to $1,500
New electric kick-scooter	Up to $700
New electric cargo bicycle	Up to $4,500
Carshare	
Vehicle Type & Technology	**Maximum Reimbursable Amount (per vehicle)**
New light-duty ZEV	Up to $65,000
New light-duty plug-in hybrid (PHEV), only models with 6 seats capacity or more	Up to $40,000
Used light-duty ZEV or PHEV (6 seats capacity or more) 4 years or newer	100% of the Kelley Blue Book Value (cannot exceed maximum reimbursable amount for the new vehicle)
Leased new light-duty ZEV	Up to $850 per month (including up to $3,000 down payment)
Leased used light-duty ZEV	Up to $600 per month (including up to $3,000 down payment)
New zero-emission passenger van and shuttle bus up to Class 6 (<= 26,000 GVWR^2) or under 30 feet in vehicle length	Total vehicle purchase cost.
Additional allowance for purchase of new ADA-compliant vehicles: for van-size and up (e.g. wheelchair lift, wheelchair ramp)	Additional $20,000 beyond allowable reimbursable amount per vehicle
Carpool/Vanpool	
Vehicle Type & Technology	**Maximum Reimbursable Amount (per vehicle)**
New light-duty ZEV	Up to $65,000
New light-duty plug-in hybrid (PHEV), only models with 6 seats capacity or more	Up to $40,000
Used light-duty ZEV or PHEV (6 seats capacity or more) 4 years or newer	100% of the Kelley Blue Book Value (cannot exceed maximum reimbursable amount for the new vehicle)
Leased new light-duty ZEV	Up to $850 per month (including up to $3,000 down payment)
Leased used light-duty ZEV	Up to $600 per month (including up to $3,000 down payment)
New zero-emission passenger van and shuttle bus up to Class 6 (<= 26,000 GVWR^2) or under 30 feet in vehicle length	Total vehicle purchase cost
Additional allowance for purchase of new ADA-compliant vehicles: (e.g. wheelchair lift, wheelchair ramp)	Up to $20,000 additional to be allowable reimbursable amount per vehicle
Charging & Fueling Equipment Installation	
Charging and Fueling Infrastructure (includes Equipment and Installation)	**Maximum Reimbursable Amount (per unit)**

Reimbursable Costs for CMO Awardees - Here is a list of the type of items that can be reimbursed through the CMO Program, and the maximum reimbursable amount for each item.

Charging & Fueling Equipment Installation	
Charging and Fueling Infrastructure (includes Equipment and Installation)	**Maximum Reimbursable Amount (per unit)**
Level 2 electric vehicle supply equipment (EVSE) unit, including all equipment, construction, and installation costs	Up to $30,000 (Note: CMO will only reimburse the cost of two ports per funded vehicle)
DC Fast Charge EVSE unit, including all equipment and installation costs	Up to $112,000 per unit
Solar Photovoltaic Equipment to supply electricity for EVSE and other clean mobility options charging equipment	Up to $100,000 per installation
Infrastructure costs for conventional bicycle, scooter, and other micromobility vehicles (including docking equipment, lockers, and "quick build" right-of-way infrastructure and installation)	Amount reimbursed must be based on community input regarding the supply needed to support funded equipment
Fuel Cell Electric Vehicle (FCEV) infrastructure installation and fueling costs	Up to $200,000 per project for building a refueling station or providing fuel cards
Infrastructure costs for conventional bicycle, scooter, and other micromobility vehicles (including docking equipment, lockers, and "quick build" right-of-way infrastructure and installation)	Up to 200 percent of the voucher-reimbursable amount for bicycles in the project fleet ($1,500 per bicycle). Total cannot exceed $525,000 per project.
Infrastructure costs for electric bicycle, scooter, and other electric micromobility vehicles (including charging equipment, docking equipment, lockers, and "quick build" right-of-way infrastructure and installation)	Up to 300 percent of the voucher-reimbursable amount for e-bikes in the project fleet ($3,500 per e-bike). Total cannot exceed $525,000 per project.
Quick Build or Infrastructure (includes built structures for charging, storing, or parking conventional and electric micromobility devices such as but not limited to bicycles, scooters, pedicabs, and tricycles)	**Maximum Reimbursable Amount (per unit)**
Docking equipment, lockers, and quick build right-of-way infrastructure and installation for bikes and scooters	Up to $1,500 per bicycle or 200% of the Voucher reimbursable amount for bicycles. Total cannot exceed $525,000 per project.
Docking equipment, lockers, and quick build right-of-way infrastructure and installation for e-bikes and e-scooters	Up to $3,500 per e-bike or 300% of the voucher reimbursable amount for e-bikes. Total cannot exceed $525,000 per project.
Notes:	
Zero-emission passenger vans and shuttle buses are considered used if odometer reading is more than 3,500 miles at purchase or lease.	
Light-duty vehicles are considered used if odometer reading is more than 7,500 miles at purchase or lease.	

Bikeshare and Scootershare Systems

Bikeshare and scootershare systems provide members with access to bicycles, electric bicycles (e-bikes), or electric scooters (e-scooters) on a short-term rental basis. Dockless systems allow for variable distribution of devices across the service area, whereas docked-based systems require users to return devices to a station closest to their destination. The most common types of bike share technologies in the U.S. are "smart docking" systems where a dock with a terminal and kiosk holds the bicycles between rentals and "smart bike" systems in which locking technology is self-contained within the bicycle and can facilitate a dockless system.

The sections below outline cost considerations and offer sample cost values for Staffing and Direct Costs, Capital Equipment Costs, and Operations and Maintenance Costs. The numbers given do not guarantee a project team will receive similar rates and are solely illustrative. Additionally, all cost categories may not be relevant to every project. For example, start-up costs may not be relevant for projects where services are already operating. As another example, bikeshare or scooter-share services may be offered to the Project Lead through a "turnkey" partnership with a company. The operator partner bundles all costs and then receives compensation in the form of a blanket operating subsidy. In this case, the Project Lead may not be responsible for assembling all of the detailed and itemized cost information referred to below.

Staffing and Direct Costs

A project should first consider the initial staffing and direct start-up costs needed to establish a sustainable program. These one-time start costs generally consist of hiring and training new employees, organizing office space, retaining professional services, and obtaining necessary permits. Other staffing costs consist of specific hires needed to oversee, operate, and maintain different system parts. Finally, hiring and costs will be dependent on the chosen business model.

One-Time Start-up Administration Costs

Typical one-time administrative start-up costs for a small system (<10 stations, <100 bicycles) range from $15,000 - $30,000. For a medium sized system (~20-30 stations, ~200 – 300 bicycles), administrative costs can range from $60,000 - $100,000 and include:

- Recruitment costs to hire and retain initial employees who can pivot to new roles as needed
- Organizing or acquiring office space, warehouse, and storage space
- Purchasing office equipment and maintenance supplies
- Establishing and obtaining insurance, legal, and accounting services
- Permit acquisition
- Employee training

Ongoing Staffing Costs

Both bicycle programs and scooter shares range from a few dozen devices to a few hundred devices, and staffing needs depend on the program's size and the business model the project adopts. In general, a system needs the following positions to effectively oversee the launch and continuing operations of a shared micromobility system. These could be new hires or staff already involved in an organization's core program work where their roles will shift. For a small system, these roles will likely overlap between one to two full or part-time employees. Compensation will depend on local conditions, public agency or company compensation restrictions, and benefits offered.

Typical staffing needs include:

- Launch manager to manage end-to-end planning, siting permitting and legal requirements, stakeholder relationship management
- An Operations/General Manager to oversee operations, data gathering, and operations staff, liaison between the operator partner and public partners
- Marketing/Community Engagement manager and customer service staff
- Maintenance staff
  - If the project is a docked or dockless system, this includes staff to rebalance the fleet distribution and perform the field maintenance
  - Operations staff to repair assets

The staffing requirement will also depend on the business model that the project leverages. There are various business models a bicycle or scootershare project can take and varies depending on local conditions.

Examples include:

- Publicly owned and operated
- Public-Private Partnership (Publicly Owned, Privately operated)
- Nonprofit owned and operated
- Non-Profit-Private Partnership
- For-profit owned and operated

A variety of e-bikes and scooters were available to try at the mobility demonstration project as part of Bike Ventura County's Oxnard Clean Mobility Options Transportation Needs Assessment.

Typically, shared-bicycle systems in the U.S. are public-private partnerships. It is essential to define the operator's role and responsibilities in a shared bicycle operator partnership. Scootershares are often for-profit ventures operated by scooter companies through permits and operating agreements from a public agency. However, the business model depends highly on local conditions. It is necessary to understand the business model and the operator partner's complementary roles and how they will take on a portion of the project's costs depending on the partnership structure. Striking the right balance and understanding the responsibility of each partner will clarify the budget and staffing commitments. Also, leveraging community volunteers and staff at trusted community organizations to act as program ambassadors, distribute marketing materials, and staff events can reduce the overall staffing budget and build trust with community stakeholders, especially during initial operations.

Capital Equipment Costs

The initial capital costs associated with starting a bikeshare program include purchasing bicycles and docking infrastructure (for additional details, see **Section D.7 in Implementation Manual**). A shared bicycle system can take on a few different forms. When planning a shared bicycle project, there is a choice between a mixture of e-bikes and traditional pedal-assist bicycles and a docked or dockless system. Scooter share systems consist of dockless e-electric scooters or dockless lock-to scooters.

Both scooters and bicycles have a wide range of quality and features, and the chosen model needs to best suit the project design. For all capital equipment costs vary depending on the equipment type and quality, system size, and technology requirements (GPS, self-locking, etc.). The allowable reimbursable costs for purchasing vehicles and hardware are listed in the table below and further explained in the **Implementation Manual.**

This table outlines the maximum allowable reimbursable costs for vehicles.

Vehicle Type & Technology	Maximum Reimburseable Amount (per vehicle)
New neighborhood electric vehicle (NEV)	Up to $15,000
New electric tricycle/pedicab (3-4 seats)	Up to $12,500
New electric bicycle (e-bike)	Up to $3,500
New bicycle	Up to $1,500
New electric kick-scooter	Up to $700
New electric cargo bicycle	Up to $4,500

Ranges for Capital Equipment (Price ranges are given where applicable on a per-item basis and are general reference ranges):

Capital Equipment		Price Range
Non-electric bicycles		$400 - $800 per bike
Class 1 Electric Bicycle (pedal-assisted bikes)		$1,200 - $3,500 per bike
Class 2 Electric Bicycle (pedal-assisted bikes with throttle)		$1,200 - $4,000 per bike
Docking station, depending on features and station size		$30,000 - $60,000 per station
E-scooters		$600 - $1,200 per scooter
E-bike and e-scooter charging station (For more information on charging equipment and infrastructure, see Cost Guidance for Infrastructure Improvements and Transportation Enhancements, with some examples below)	Charging cords	$30 - $50
	Smart Hub	variable
	Electric Docking Station	variable
	Level 1 EV Car Charging Stations	usually packaged along with Level 2 system

Other capital costs to consider:

- Spare parts
- Unlocking/locking access and application management
- Infrastructure for people without smartphones or bank accounts
- Smart bike system platform: $100 - $200 per month, per device
- Telematics device (if not built-in): $15 - $60 per month, per device depending on fleet size and needs
- Smart locks: $120 - $220 per unit
- Installation costs: dependent on the size, type of equipment, expansion phase.
  - $3,000 - $5,000 per station
- Station site acquisition/permitting
- Vehicle/Device insurance costs
  - There are specific insurance costs needed for electric bicycles and scooters beyond the requirements for auto liability for vans or other vehicles used for rebalancing or collection purposes; see **AB 1286** for more detailed requirements.

Operations and Maintenance Costs

There are many costs associated with operating and maintaining a shared micromobility system. Operating costs can be negotiated before project launch and typically are on a per-dock per-month basis. With a recommended 1.8 – 2.0 ratio for dock-to-bike to ensure suitable docking locations for riders, this is an important distinction to consider when planning and negotiating operating costs with a mobility provider partner and establishing rebalancing strategies with the operator at the start of the project.

Station operating costs (if a docked system) are between $85 - $150 per station per month, depending on the type of rack or dock used and the system's size. This range is equivalent to $1,600 - $3,000 per year per bike.

Other operating and maintenance costs to consider:

- Vehicle maintenance and repair tickets
  - Include costs associated with estimated rates of destruction, theft, vandalism
- General operations (staff) costs associated with managing the project
- Customer service
- General maintenance and operations, of storage facility
- Replacement parts, vehicles, and stations
- Marketing and outreach

Example Budget Costs

Several communities have published bikeshare feasibility studies and scooter pilot plans are widely available. While costs will differ significantly from state to state, with California's costs most likely being on the higher end of most cost estimates, these examples provide further guidance around what information feasibility studies return and the baseline costs to be considered. **St. Louis Bike Share Study** and the **Grand Rapids Feasibility Study** both offer good overviews of costs associated with bikeshare systems. **GREENbike, Salt Lake City** is a medium-sized system that offers an overview of the feasibility and business model choice and high and low-cost estimates. There are several examples of scooter pilot programs to support the business model choice and partnership coordination. Documentation from the Alexandria, VA scooter pilot can be accessed **here**.

Bikes from a Big Pine mobility event part of the Tribe's Big Pine Paiute Tribe of the Owens Valley Community Transportation Needs Assessment.

Carshare

Carshare services provide members with access to an automobile through short-term rentals. Eligible carsharing models include round-trip carshare, which requires users to borrow and return vehicles at the same location; and one-way or free floating carshare, which allows users to pick up a vehicle at one location and drop it off at another.

ActiveSGV hosted a pop-up in front of Cyber Yogurt, a bicycle friendly business located in El Monte, to collect survey responses from folks as they waited in line for yogurt. This was part of ActiveSGV's El Monte - South El Monte Community Transportation Needs Assessment

Staffing and Direct Costs

A project should consider the staffing needs involved to launch, manage, and maintain a carshare fleet. A typical carshare program of fewer than 10 vehicles should plan on approximately 2.5 full-time staff. These could be new hires or staff already involved in an organization's core program where their roles will shift.

Manager	Oversee the launch and subsequent operations, including tasks such as managing permitting, legal, and insurance requirements
Fleet Operations	Make sure the vehicles are clean, working correctly, and where they need to be when not in use
Member Services	Oversee user relations, manage user needs and emergencies, and provide 24/7 on-call support – some carshare operators use call centers to help with these needs
Marketing Staff	Oversee marketing needs and build awareness of the program
Volunteers	Community-based carshare programs can engage its users to volunteer to help maintain the vehicles through incentives, such as driving credits

It is important to define the mobility operator's role and responsibilities before formally entering into a partnership with a carshare operator. For example, if the private/non-profit operator is responsible for purchasing the vehicles, they may likely manage the carshare fleet, assuring the vehicles are maintained and cleaned regularly. Other direct costs include vehicle insurance, including liability and collision damage, some of which could be absorbed by the mobility operator.

Capital Equipment Costs

The initial capital costs associated with starting an EV carshare program include purchasing vehicles, installing the charging infrastructure, and procuring the reservation system technology platform. Eligible costs are outlined in **Section D.7 Project Eligibility Costs** in the Implementation Manual. Capital equipment acquisition is potentially a place where the mobility operator can bring quite a bit to the partnership. The operator could have reservation technology platforms, for example, and have an established process for purchasing vehicles. The EV charging infrastructure is also an allowable capital cost under the CMO program. While planning for the charging infrastructure, the project should work with a licensed provider to ensure it is done correctly and follow local zoning and other ordinances.

The allowable costs for purchasing vehicles and associated hardware are listed in the table on the next page and further explained in the Implementation Manual.

TIP!

For more information on eligible project costs, see the **Implementation Manual.**

The table below outlines the maximum allowable reimbursable costs for vehicles.

Vehicle Type and Technology	Maximum Reimbursable Amount (per vehicle)
New light-duty zero-emission vehicle	Up to $65,000
New light-duty plug-in hybrid (PHEV) (only models with 6 seats capacity or more)	Up to $40,000
Used light-duty ZEV or PHEV (6 seats capacity or more) 4 years or newer	100% of the Kelley Blue Book (KBB) value (cannot exceed maximum amount for the new vehicle)
Leased new light-duty ZEV	Up to $850 per month (including up to $3,000 down payment)
Leased used light-duty ZEV	Up to $600 per month (including up to $3,000 down payment)
New zero-emission passenger van and shuttle bus up to Class 6 (≤ 26,000 GVWR) or under 30 feet in vehicle length	Total vehicle purchase cost
Additional allowance for purchase of new ADA-compliant vehicles: for van-size and up (e.g. wheelchair lift, wheelchair ramp)	Up to $20,000 additional to be allowable reimbursable amount per vehicle

For exact pricing in your area, please see **www.kbb.com** or a local dealership for more information. The price estimates on the next page were taken from the manufacturer's MSRP listing during the Spring of 2021.

There are limited models of ZEVs on the market. In general, many lower-mileage ZEVs cost between $30,000 - $50,000, depending on brand and quality. Higher-mileage vehicles tend to be more expensive, with costs between $46,000 - $90,000, depending on brand and quality. Examples are listed below but are not an exhaustive list of available ZEVs on the market. The complete list is found at the **U.S. Department of Energy Alternative Fuels Data Center**. The **Clean Vehicle Rebate Program (CVRP)** vehicle list can also be used to identify eligible vehicles. The examples below estimate costs but are not a recommendation or endorsement of the vehicle or brand by CARB. All mileage estimates are taken from the manufacturer's website.

New Light - Duty zero-emission vehicles with greater than 299 miles of range:

- Standard Sedan Models (Ford Mach-E, Model 3) $46,000-$65,000

New Light - Duty ZEV with less than 299 miles of range:

- Compact, 4-door Models (Niro, Kona, Bolt) $28,000-$44,000
- Standard Sedan Models (Polestar, Ioniq, EV6) $45,000-$65,000

There are also limited options for light-duty plug-in hybrids (PHEVs). Average base MSRP pricing is between $35,000 - $55,000. **The U.S. Department of Energy Alternative Fuels Data Center** comprehensive list of available vehicles can help explore options.

Voucher reimbursement is allowed only towards PHEVs that can carry 6 or more passengers, limiting reimbursable equipment to SUVs or minivans.

New Light-Duty plug-in hybrid (PHEV) (6 seats or more)

- 2022 Chrysler Pacifica Plug-in Hybrid (82 MPGe combined): $40,000 - $55,000

Used and leased vehicles are also reimbursable. It is recommended to explore **www.kbb.com** for accurate and up-to-date used car pricing. Locate lease deals on your local dealership's websites.

Used light-duty ZEV or PHEV (6 seat capacity or more) 4 years or newer (Fair market range from www.kbb.com)

- Used 2019 Tesla Model S Standard Range (263 mile range): $70,000 - $90,000
- Used 2019 Chevrolet Bolt EV (238 mile range): $15,000 - $25,000
- Used 2019 Chrysler Pacifica Hybrid (82 MPGe combined): $38,000 - $50,000

Lease new light-duty ZEV

- 2020 Tesla Model 3: $660 - $695/ month
- 2020 Chevrolet Bolt EV: $298/month

Leased used light-duty ZEV

- Check with a local dealership

Charging infrastructure is also a necessary cost and is detailed further in the infrastructure improvements and transportation enhancements section (beginning on page 31). Charging and refueling options include EVSE, Solar Photovoltaic (PV), and Hydrogen fuel cell.

Operations and Maintenance Costs

Operations include all of the activities necessary for operating and maintaining a carshare fleet. Cost considerations to plan for in a carshare program include:

Maintenance Costs

- Scheduled vehicle maintenance (tires, windshield fluid, brakes, etc.)
  - Note, many new car purchases or leases include routine manufacturer-covered maintenance for 2 to 4 years
- Cleaning, inside and out regularly
- Roadside assistance
  - Often included in new car purchases for a limited time
- Bodywork can be a high cost, and small damage like dings, dents, and crunched bumpers may be fixed outside of an insurance claim

Operational Costs

- Rebalancing carshare fleet (pertains to one-way carshare)
- Managing and procuring new parking spaces
- Establishing agreements with local businesses, residents, transit hubs for shared parking spots
- Identifying EV charging infrastructure at different legs of common origin/destinations and working on agreements for carshare users to utilize charging infrastructure
- Reservation system and supporting technology
  - The operator may already have a booking and reservation system in place. If not, this can be a large capital purchase and for EV you will need a trio of software and hardware that can communicate with each other and is also compatible with the charging infrastructure

Customer Service Costs

- Customer relations, help desk, call-in center
- Multi-lingual support and materials
- Orientations with new members to familiarize people with carshare
    - Covering topics such as:
        - Reserving a car
        - Setting up a payment system
        - Charging technology
        - Rules (keep vehicles clean, return on time, etc.)

Example Budget Costs

There are several useful references to look at to get a sense of how much it will cost to start and operate a carshare program, including the **Portland Hacienda EV pilot** and costs outlined in **Bringing Car-Sharing to Your Community** published by City Carshare. The latter is an older source, but it references some of the carshare budget and implementation considerations.

Carpool/Vanpool

Carpooling (or vanpooling) is the grouping of drivers and passengers with common origins and/or destinations into a shared vehicle. Carpooling uses a "self-serve" model, meaning the driver is a traveler in the pool just like other passengers instead of a hired driver in shared taxi rides or ridehail services. New technologies such as mobile device applications provide an opportunity to connect drivers and riders in innovative ways.

TIP!

Zero-emission passenger vans and shuttle buses are considered used if odometer reading is more than 3,500 miles at purchase or lease.

TIP!

Light-duty vehicles are considered used if odometer reading is more than 7,500 miles at purchase or lease.

Carpool/Vanpool drivers tend to be volunteers, generally using a vehicle already in their possession. As a result, overhead costs around staffing and parking are less than other shared mobility programs. With that said, coordinated carpool/vanpool programs still present some Operations and Maintenance and Outreach/Marketing costs.

Staffing and Direct Costs

Given that the drivers are often not paid employees, carpool/vanpool service differs in its business model from other shared mobility programs. It is also prudent to budget for background checks and other screening criteria for drivers and possibly users of the carpool/vanpool service. In addition to volunteer drivers, coordination is needed to manage the process.

Suggested roles to designate in the program are as follows:

- Volunteer Participants: leaseholder or primary driver
- Alternate drivers: people approved by your Vehicle Supplier to drive the vanpool vehicle
- Bookkeeper/Manager: many vanpools designate a person to assist the Volunteer Participant in maintaining the records of the vanpool
- Passengers: people who regularly or occasionally ride the vanpool to help meet minimum occupancy requirements

Capital Equipment Costs

The carpool/vanpool program's capital costs consist of purchasing the vehicles, installing charging infrastructure, and purchasing a reservation system so riders can be paired with one another. Examples of prices for allowable reimbursements are listed in the carshare section above.

There are several apps currently available that could be used for a carpool/vanpool system. Carpool/vanpool operators, such as those listed in the **Clean Mobility Provider Directory**, can help with the following aspects of a pilot project:

- Fleet Management
- Payment Platforms, with considerations for unbanked and users without smartphones
- Reservation Systems, with considerations for unbanked and users without smartphones
- Routing Technology
- Service Operations and Staffing
- Vehicle Procurement
- Vehicle Software and Hardware

Operations and Maintenance Costs

In its most basic form, carpooling involves someone using their personal vehicle to coordinate and pick-up passengers traveling along the same route through either a centralized coordination system or by waiting at specified locations at specific times - a process sometimes referred to as 'slugging.' Alternatively, the vehicles can also be owned by a mobility provider linked to an app that allows for pick-up coordination.

In both cases, the trip requests are logged, and users are paired based on their origin, destination and travel times. A **Ridesharing Learning Module** is available that reviews some of the dynamic carpool models currently available. In both cases, an operations team is responsible for working on relationships with area businesses to market and expand the user base and identify parking opportunities. For example, the BART carpool program guarantees a parking spot at select transit stations until 10 a.m. on weekdays for users of its carpool program. For carpool/vanpool programs that provide vehicles through a mobility provider, there is often an assigned driver responsible for picking up and dropping off the other passengers. This can switch between users as they take turns driving the vehicle. Usually, the driver then parks the vehicle at their residence overnight and during the weekends. Participants of the program then use those vehicles.

Driver and Passenger Incentives

- Driving credits
- Reduced cost of the program when a passenger if also a driver
- Access to the vehicle off-hours might be perks made available to the drivers
- Direct passenger payments per ride (Ex: San Mateo County Program: $2.00 per ride, up to $4.00 per day)

Reimbursement Rate

Volunteer drivers are usually reimbursed for the mileage associated with the vanpool/carpool at the **IRS standard mileage rate**, which is 58.5 cents per mile for 2022.

Service Fees

If using an app-based matching system, the provider can take a set fee per ride, per payment, or an annual fee. These fees cover operations and maintenance costs associated with the program. For example, a $1 per passenger service fee is common for providers offering the platform for such passenger driver matching. It is recommended to have a clear idea and negotiations on fees before signing a contract. The mobility provider partner in your project will likely have a process in place that you can take advantage of for your program. If the mobility provider does not provide these services, then another option is to hire contractors to manage the fleet to ensure proper working order.

Operations and Marketing Costs

Outreach and marketing a carpool/vanpool program is critical. For the program to be a viable option for people to rely on to travel to work, there needs to be a sufficient user base to pair riders based on their travel needs. If that user base does not exist, riders will likely look toward other travel options.

Marketing and outreach activities to budget for involve:

- Reaching out to neighborhood groups
- Attending local festivals/street fairs
- Visiting local community groups to try and familiarize people with the program so that they feel comfortable using it
- Polling potential users to find out where they are traveling to/from to define routes and manage workforce destinations

Example Budget Costs & Other Resources

The **LA Metro Vanpool program** offers many useful tips and procedures to consider when developing a Vanpool/Carpool Program. Many of the costs associated with the vanpool are passed on to the riders. LA Metro recommends that fares should reflect an equal division of the real costs of leasing the vehicle, less the Metro Vanpool Program lease fare subsidy. Maintenance fees (gas, parking, tolls, vehicle cleaning) may be set slightly higher.

Innovative Transit Service

Innovative transit services (or “microtransit”) provide members with access to services within a set boundary. Private companies traditionally operate Microtransit, but recently, some public agencies have begun offering innovative transit services of their own. Broadly, microtransit describes app-enabled transportation through dynamically-routed, multi-passenger vehicles. In some cases, these services involve curb-to-curb or door-to-door transportation. However, many microtransit operators require users to meet drivers at a common pick-up/drop-off location to streamline routing. This category also includes wheelchair accessible vehicles and complementary paratransit service.

The budget items, Capital Equipment Costs, Outreach, and Marketing Costs, and Operations and Maintenance Costs, outline the cost considerations and offer sample values associated with operating innovative transit systems.

Staffing and Direct Costs

Microtransit often resembles existing demand responsive transit modes or supplements fixed-route service. Public microtransit can be operated in a wide variety of partnership configurations. Different types of partnerships reflect the capital and operational needs of the partnering agency. According to the public agency's specific needs, a microtransit service provider can provide any or all of the technology, vehicles, drivers, maintenance, and other operations. Currently, a private partner's provision of technology is generally common to all these arrangements, however, other types of technology providers may be available in the future, such as a community-based or non-profit organization providing technology services.

Different partnership configurations between public, non-profit, and private partners that currently operate include:

- Private sector technology; public agency vehicles and drivers. An agency deploys the private partner's dispatch, routing, and/or user app technology on their agency-owned and operated vehicles. The **AC Transit** program uses this model.
- Private sector technology; public agency vehicles; non-profit agency drivers. A variation on the most basic arrangement above, more common to human services transportation.
- Private sector technology and drivers; public agency vehicles. The **Seattle Via-to-Transit** project is an example.

Turnkey Solutions

A single private, non-profit operator (or consortium) provides the entire microtransit transportation service for an agency, including technology, vehicles, and drivers. This type of partnership is common for agencies or jurisdictions that do not already have their own vehicles or structure appropriate to provide microtransit. The **Arlington, TX microtransit service** is an example a public-private partnership

Ongoing Staffing Needs

There are three general categories of staff roles: Drivers, Management/Administration, and Customer Service.

- Driver labor represents the majority of operation expenses.
- Management/Administration includes oversight, maintenance, and community engagement.
- Customer Service to answer user questions, respond to issues and manage the call center to assist in scheduling trips.

Capital Equipment Costs

Vehicles

The list of eligible medium - and heavy-duty vehicles is congruent with California's Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP). While CMO vehicles are not eligible for HVIP reimbursement, the voucher cost listed by HVIP is roughly equivalent to (but usually lower than) the incremental cost difference from diesel to EV. **The full list of vehicles can be found on the HVIP website** with some examples listed below.

- Medium-duty vehicles over 20 passengers (class 4-5, cutaway vehicle, useful life of 5 years, **example**): $220k - $300k total cost of vehicle:
  - Phoenix Motor Cars ZEUS 300 Passenger Shuttle, 105kWh: $270,000

- Vans (40kW battery, optimal closer to 110kw)
  - Ford Transit -- base MSRP: $40,000 - $50,000
    - EV Conversion: ~$80,000
    - For extended range (100+ mi), average total price: $150,000
  - GreenPower EV Star All-Electric Min-eBus
    - HVIP Incentive is $90,000*

**Since a total cost of vehicle purchase is reimbursable by CMO voucher funds, new vehicles funded by this program cannot receive additional incentives from HVIP program.*

Operations and Maintenance Costs

Operation and maintenance costs can vary widely by service for many reasons including labor, geography, and the different partnership configurations described above. Additional information can be found in **SUMC's Microtransit Learning Module**.

- For in-house service, total hourly costs per vehicle service hour can range between $65 - $220/hr.
  - Ranges from 2.4 - 4 passengers per vehicle service hour.
- $35 - $100/vehicle service hour for contracted service.
  - Ranges from 2.7 - 4 passengers per vehicle service hour.
    - These figures come from the *Transit Cooperative Research Program (TCRP) Synthesis 141, Microtransit or General Public Demand–Response Transit Services: State of the Practice. 2019.*
- Vehicle/Station maintenance is another important operational expense. This should be determined and budgeted when contracting an outside vendor or developing service in-house.
- Consideration for times of day service will be available to users.

Example Budget Costs

Examples of contracts are available from the **HGAC Buy** (government procurement services). **Shuttles, Transits, Trams, & Other Specialty Buses** and **EV Charging Equipment and Related Services** are two good places to start. Also, the following are two example agreements between municipal governments and Via, an innovative transit provider.

- **Arlington, TX agreement with Via**
- **King County, WA (Seattle) agreement with Via**

Student interns were the first passengers on the district's new electric school buses as part of Porterville Unified School District's (PUSD) project, PUSD Energy and Sustainability Program.

Ride On-Demand

CMO defines ride-on-demand services as on-demand rides for individuals provided by taxi companies and transportation network companies (TNCs). To be eligible as a core project model, the service must only include trips taken in zero-emission vehicles, consistent with the vehicle eligibility criteria described in **Section D.3** of the Implementation Manual.

The ride-on-demand services have slightly different eligibility requirements than the other CMO allowable shared modes. CMO will not provide funds to purchase or lease vehicles used for TNC services. This category also includes wheelchair-accessible vehicles and complementary paratransit service.

CMO funding will only cover allowable costs for the funding program that includes:

- Incentivizing and supporting greater utilization of rides-on-demand in clean vehicles.
  - Discounted fares for trips originating in the project area.
- Customizing the software platform
- Expanding or contracting boundaries of geofencing
- Community Outreach
- Marketing Costs - Costs include pre-launch activities, including rider acquisition and education. They also include ongoing marketing costs through the course of the service. In two recent partnerships between transit agencies and TNCs, the agencies spend 15-20% of their total budget on marketing expenses. Both projects' total budgets were between $100,000 and $200,000. Ride providers may conduct additional marketing activities at no additional cost to the agency.

When developing on-demand project budgets, project applicants should consider how they plan to utilize ride-on-demand services to help residents access certain destinations. Unlike other project models that are available in a fixed destination, on-demand services may fluctuate on how they serve riders and passengers. For instance, the on-demand service could be preexisting or could use a volunteer driver to provide on-demand rides as needed.

While the funding eligibility differs for ride-on-demand services, some questions to consider when planning these services are similar to other CMO eligible modes.

Some key questions and considerations include:

- What does your target community look like?
- How will on-demand services meet needs in the community?
- Partnerships with TNCs can be complex and often take considerable time to negotiate agreed-upon terms.
- What type of integration with a TNC or taxi provider app do you hope to achieve?
  - The simplest and most common integrations involve individual agreements with one or more mobility providers to establish parameters around splitting fares, geographic boundaries, and other aspects about the services. These typically have not required any up-front setup costs, as the funding agencies rely on providers' existing technology as the interface for the rider. The revenue is generated entirely through fares and the finances are reconciled at a frequency and method as agreed upon.
- If greater sophistication is desired, then front-end costs for a procuring technology and/or setup may be required. This may be of interest if an applicant is looking to integrate multiple ride providers on a single platform.

For taxi/TNC partnerships with public agencies, rides are typically paid for through a combination of rider fares and agency subsidies. This can take on a variety of forms:

- Full subsidy: The funding agency covers the full cost of the ride. The rider pays no fare. (e.g. **Pierce Transit Limited Access Connections**)
- Flat fare: The rider pays a fixed amount. The funding agency covers the rest. (e.g. **GoMonrovia**)
- Flat initial fare with capped subsidy: The rider pays a fixed amount, with the funding agency covering the rest up to a certain amount, beyond which the rider pays the remainder. (e.g. **Valley Metro RideChoice**)
- Cost sharing: The rider and funding agency share the ride's cost based on a defined percentage. This can come with a cap on the agency's subsidy, beyond which the rider pays the remainder. (e.g. **GoDublin**)
- Flat subsidy: The funding agency covers a fixed amount, with the rider paying the remainder. If the fare is less than the subsidy, then the agency covers the full fare. This is similar to providing the rider a discount of the fixed amount. (e.g. **PSTA Direct Connect**)

When choosing/adapting a fare model and determining your budget for rides, estimate what the average, minimum, and maximum trip costs would be based on trip length and duration and your local taxi or TNC rates. The agency can typically control these factors by making subsidies available only within a specified geographic area or during specific times of the day or days of the week. Placing hard caps on the subsidy or the number of trips an individual can take can control costs.

Since this mode requires rides in zero-emission vehicles, applicants should consider whether mobility providers charge more or less than they do for rides in conventional vehicles.

Eligible funding for projects may include infrastructure improvements only when they directly support, and are essential to, the core project model(s). The following infrastructure types are eligible to receive voucher funds as long as the equipment meets the eligibility criteria described in **Section D** of the Implementation Manual.

Fare Model	Trip Cost Paid by Rider	Trip Cost Paid by Agency	Cost to Agency (per thousand rides)
Full Subsidy	$0	$12	$12,000
Flat Fare ($2.00)	$2	$10	$10,000
Flat initial fare ($2.00) with capped subsidy ($8.00)	$4	$8	$8,000
Cost sharing (50%)	$6	$6	$6,000
Flat subsidy ($5.00)	$7	$5	$5,000

Charging and Fueling Equipment and Installation

Categorized under Infrastructure Improvements in the Implementation Manual, installation of electric vehicle supply equipment (EVSE) are eligible for funding as long as they meet the criteria outlined in **Section D.4** of the manual. For a carshare pilot project, these costs consist of charging stations and associated technology and equipment. The table below outlines the maximum allowable costs for charging infrastructure.

Charging and Fueling Infrastructure (includes Equipment and Installation)	Maximum Reimbursable Amount (per unit)
Level 2 electric vehicle supply equipment (EVSE) unit, including all equipment, construction, and installation costs	Up to $30,000 per unit (Note: CMO will only reimburse the cost of two ports per funded vehicle)
DC Fast Charge EVSE unit, including all equipment, construction, and installation costs	Up to $112,000 per unit (maximum of 1 unit allowed per project)
Solar Photovoltaic Equipment to supply electricity for EVSE and other clean mobility options charging equipment	Amount reimbursed must be based on community input regarding the supply needed to support funded equipment
Fuel Cell Electric Vehicle (FCEV) infrastructure installation and fueling costs	Up to $200,000 per project for building a refueling station or providing fuel cards
Infrastructure costs for conventional bicycle, scooter, and other micromobility vehicles (including docking equipment, lockers, and "quick build" right-of-way infrastructure and installation)	Up to 200 percent of the voucher-reimbursable amount for bicycles in the project fleet ($1,500 per bicycle). Total cannot exceed $525,000 per project.
Infrastructure costs for electric bicycle, scooter, and other electric micromobility vehicles (including charging equipment, docking equipment, lockers, and "quick build" right-of-way infrastructure and installation)	Up to 300 percent of the voucher-reimbursable amount for e-bikes in the project fleet ($3,500 per e-bike). Total cannot exceed $525,000 per project.

Level 2 EVSE

A level 2 charger average cost values as estimated from **California Electric Vehicle Infrastructure Project Eligible Equipment List (CALeVIP)** estimates up to 4 units cost a total of $9,299, with $3,676 toward the charger's costs and $5,623 for additional costs associated with the unit's installation. Construction costs are often additional, as site preparation is often needed to run proper electrical service to the chosen location.

Electric Vehicle Infrastructure Training Program (EVITP)

Voucher recipients must comply with **Assembly Bill 841** which requires a California state funded project team to have:

a) At least one EVITP certified electrician in order to install charging ports
b) At least 25% or more of the total electricians working on a project at any given time to be EVITP certified in order to install equipment that supplies 25 kilowatts or more to a vehicle.

Voucher recipients must show the CMO Program Administrator that the electricians on the team meet all requirements.

Learn more about the requirements and exceptions in Chapter 3, Section 3, 1bII of the Implementation Manual and in **Assembly Bill 841**. Voucher recipients must show the CMO Program Administrator that electricians on the team meet all requirements.

DC Fast Charge EVSE

Electric vehicle charging equipment, also known as electric vehicle supply equipment (EVSE).

The average cost, according to **CALeVIP**, of 1 DC fast charger is $73,584. This estimate considers the average unit cost ($37,298) and additional costs associated with installation and construction costs ($36,286). Construction costs fall into the latter category, as site preparation is often needed to run proper electrical service to the chosen location. These costs scale down with more chargers built at a single at one location.

Distributed Solar Photovoltaic (PV) Equipment

Distributed solar photovoltaic equipment generates electricity to power EVSE and other mobility options charging equipment. There are four PV technology types based on power output, with pricing based on peak dollar cost per peak watt. The prices have significantly decreased since 2018, with the average price per watt in 2020 $0.21. Estimated installation costs were obtained from **National Renewal Energy Laboratory (NREL).**

Installation costs:

- Residential (4kW - 7 kW): $2.71 per watt DC (WDC) (or $3.12/WAC)
- Commercial (100 kW - 2 MW): $1.72 /WDC (or $1.96/WAC)
- Utility-scale (5 - 100 MW): $0.94/WDC (or $1.28/WAC) for fixed-tilt utility-scale PV systems or $1.01/WDC (or $1.35/WAC) for one-axis-tracking utility-scale PV systems

To extrapolate these figures, the NREL report provides the following project estimates:

- $26,153 - $28,371 for a 7-kW residential PV system with 3 kW/6 kWh of storage
- $35,591 - $37,909 for a 7-kW residential PV system with 5 kW/20 kWh of storage
- $2.07 - $2.13 million for a 1-MW commercial ground-mount PV system collocated with 600 kW/2.4 MWh of storage

Hydrogen Refueling Equipment

Hydrogen Refueling Stations Voucher funds may be used to support the installation of hydrogen refueling infrastructure. A hydrogen refueling station can cost between $1-3 million dollars to develop hydrogen on-site. Accordingly, allowable voucher funding amounts may not be sufficient to cover all capital costs associated with these facilities; hence, applicants must demonstrate that other secured funding sources. Hydrogen refueling stations must be sited where similar infrastructure already exists (e.g., installing a hydrogen refueling station at an existing fueling station or a commercial or industrial facility). A refueling station consists of low-pressure storage tanks, a compressor, high-pressure storage tanks, a pre-cooling system, and a dispenser. The average costs below are taken from the **comparison of vs. modular hydrogen refueling stations and on-site production vs. delivery**, based on 2017 research. Station construction is estimated to take one year, with site preparation costs (engineering, design, permitting) estimated to cost $300,000.

Conventional Hydrogen Fueling Station:

- Low-pressure storage tanks: $45,633
- Compressor (100 kg/day station): $189,827
- High-pressure storage tanks:
  - Pre-cooling system: $150,000
  - Dispenser: $250,000
- Total for a 100kg/day station (with all ancillary equipment): $894,256
- Station Cost Range (based on different compressor capacities): $900,000 - $1.2 million

Modular Hydrogen Fueling Station:

Modular stations are contained in a single structure (less dispenser), reducing installation costs.

- Installation costs: $60,000
- Station cost: $750,000 – $1.2 million

Hydrogen Dispenser:

Modular and conventional stations, like gas stations, need pumps and dispensers to refuel vehicles.

- To expand an existing project, CMO funds could be used to support the purchase and installation of a dispensing unit, up to $100,000.
- Dispensing units range between $150,000 - $350,000.

E-bike and Electric Scooter Charging Equipment

There are a few options available for micromobility charging. As mentioned above, if charging is required, this can be built into the docking station, but for dockless systems and docked systems with a mix of electric and analog devices, this may not be practical. There are a few options to address this need.

Most bicycles and scooters can charge plugged into Level 1 standard US 120V wall outlets. Individual charging cords ($40 per unit) often come with the device and allow the user to plug the e-bike or scooter into a regular outlet. A new 120V outlet costs around $1,000 each to install. Level 1 outlets should follow the National Electrical Manufacturers Association (NEMA) commercial-grade outlets that meet the National Electric Code (NEC) requirements. These outlets should be on a dedicated circuit, preferably rated for 20 amps, and use a ground fault circuit interrupter (GFCI).

Level 2 EVSE docks (see above) usually have a Level 1 plug integrated into the tower; consider this option if the project uses multiple modes.

Social Good Fund Project Regeneration survey team members tabling at Farmers' Market in Watsonville as part of the Community Transportation Watsonville Needs Assessment.

Infrastructure and "Quick Build" Costs

Infrastructure and "quick build" costs include built structures or infrastructure to support the charging, storing or parking of devices. Infrastructure costs for conventional bicycle, scooter, and other micromobility vehicles (including docking equipment, lockers, and "quick build" right-of-way infrastructure and installation) are eligible for up to 200 percent of the voucher reimbursable amount for bicycles in the project fleet ($1,500 per bicycle). For e-bikes, scooters, and other electric micromobility vehicles (including charging equipment, docking equipment, lockers, and "quick build" right-of-way infrastructure and installation), are eligible for up to 300 percent of the voucher reimbursable amount for e-bikes in the project fleet ($3,500 per e-bike). The total cannot exceed $525,000 per project for either conventional or electric devices.

Bicycle and Scooter Parking and Docking Stations

Station based bicycle and scooter sharing require docking stations. These docking stations can be analog or automated. An analog station can be as simple as a multi-device racking system to store bicycles or scooters. Smart docking stations for e-bikes and e-scooters deliver charging parking and storage options. An automated system integrates with a digital application to control use, unlocking the device after receiving payment. An additional feature for some docking stations features integrated charging equipment. Cost estimates are taken from existing micromobility projects and average prices from multiple manufacturers; please contact manufacturers and sellers to identify more accurate pricing.

Automated docking stations costs depend on features and station size and are estimated to cost between $30,000 – $60,000 per station. Charging stations for both e-scooters and e-bikes that also function as docking stations

can be hard-wired, battery-powered, or solar-powered with costs on the higher end or more of the range given above.

Installation costs are dependent on the size, type of equipment, expansion phase but typically run between $3,000 - $5,000 per station

Charging Hubs

A charging hub features locker-like compartments that hold multiple devices at one time and can also store the devices overnight or when not in use. But there are specialized charging devices to speed up the process and charge multiple devices at once. Pricing is dependent on scale and size, so estimates need to be obtained from the manufacturer.

"Quick build" Right-of-Way Safety Improvements

Quick build safety improvements for bicycles and scooters (see **Section D.4.d for more details**) are eligible for reimbursement based on a per device relationship. These projects may include, but are not limited to, roadway and curb paint, signs, parking and loading changes, painted safety zones, posts separating bike lanes from vehicle lanes, changes to the configuration of traffic lanes, and dedicated rights-of-way using barriers, bollards, or other materials. Pricing on these items varies considerably based on type and location. These items may also require permits or additional authorizations from the local municipality, so such costs need to be planned for if included in a project plan.

Transportation Enhancement Elements

Most of the funding associated with the Mobility Project Voucher is intended to be used for project costs and activities essential to implementing the proposed core project models (as defined in Implementation Manual **Section D**). To be eligible for reimbursement, such costs must be included in the Mobility Project Voucher Application at the application submittal time. However, up to 10 percent of the total voucher amount requested per project may be dedicated to "additional transportation enhancements" that directly support activities or services but are not essential to implementing the core project model. These enhancements may include other types of transportation resources or assets that complement the core project model in a way that improves accessibility, reliability, convenience, safety, and/or affordability for participants. Suppose the proposed project includes any type of additional transportation enhancement not listed in the Implementation Manual. In that case, the applicant may request approval as part of the application submission (see **Section K** for more details).

Examples of eligible transportation enhancements include:

- Developing trip planning or mobility-as-a-service (MaaS) platforms or integrating project data into existing platforms.
- Developing multi-modal payment platforms or integrating project payment systems into existing platforms.
- Providing subsidies for traditional fixed-route and public transit rides to better connect projects to existing services (i.e., first-mile, last-mile solutions).
- Providing transportation subsidies and special incentives for homeless individuals and families.

Mobility-as-a -service (MaaS) Platforms and Other Payment Platforms

A recent paper by the Shared-Use Mobility Center, **Towards the Promise of MaaS in the US**, provides an overview and examples of the key elements of the varying degrees of MaaS in active development and use. The key feature of MaaS is an integrated payment system to allow for trip chaining. A platform allows the user to view and choose from multiple travel options from a single interface, with a single payment mechanism. Costs involved in developing such a platform would consist of purchasing a software solution from a provider or hiring a developer to integrate a payment system into an existing platform.

Subsidies for Services

Subsidies can cover all or part of the cost of a service. Many transit authorities offer subsidies at the rate of 50% discount to the user for ride tickets, tokens, and passes. Depending on the local needs, this rate could be higher or lower. Still, the estimated ridership and associated costs need to be adequately estimated to account for such costs in an annual budget accurately. It is recommended that the estimated subsidy is revisited each year based on past annual ridership levels and projected demand.

DEVELOP YOUR BUDGET

Overview

Now that you have a good sense of the line items to include and the general cost of items, work closely with your mobility provider and Mobility Project Team to develop a budget.

The spreadsheet is not intended to be used as a prescribed process that project teams must follow to complete their budgets, but rather, helpful tips to enable a smooth budgeting process. This checklist and associated document were created to help develop a complete budget to carry the project team through the four years of operations and beyond.

This spreadsheet includes the following tabs:

1. **Steps to Develop Your Budget**
2. **Instructions for How to Use "Develop Your Budget** - CMO MPV Budget Template"
3. **Develop Your Budget** - CMO MPV Budget Template
4. **Example Budget**

TIP!

Click **HERE** to make a copy of or print out this worksheet.

Steps to Develop Your Budget - *To use this spreadsheet, go to "File > Make a copy" and then follow the steps below and update your status in the second column.*

Step 1: Review the budget information outlined in the Implementation Manual	**Status**
Review Eligible Project Costs (Section E.5)	
Review Allowable Voucher Funds (Section F)	
Step 2: Review budget templates and worksheets provided in this spreadsheet	
Review tab 2, "Instructions - Develop Your Budget Worksheet"	
Review tab 3, "Develop Your Budget - CMO MPV BUdget Worksheet"	
Review tab 4, "Example Budget"	
Review "Consider Your Costs" to familiarize the project team with the cost considerations	
Step 3: Review the Cost Guide and the Report	
Understand the difference between pre-launch (start-up) staffing, other direct costs with staffing costs, and direct costs post-launch	
Understand the different types of infrastructure costs and other capital costs	
Understand outreach and marketing costs	
Understand operations and maintenance costs come after launch but set up to conduct these activities incurs cost during the pre-launch phase	
Understand the rules around Voucher Administration Costs (Maximum 15% of total voucher)	
Review the questions to ask during each phase to plan for adjustments accordingly in the budget	
Step 4: Review the "Mode Summaries or "Cost Comparisons & Reimbursements"	
Identify desire mode(s) and review the guidance listed to familiarize the team with average and expected costs for each mode	
Understand all options associated with the infrastructure types and mode service model	
Review examples for previous projects and research additional examples	
Step 5: Work closely with identified Mobility Provider, other Project Team Members, and the community residents	
Clearly define the business model and define the roles of all parties	
Leverage the needs assessment to determine the level of volunteer contributions to the project	
Step 6: Develop Your Budget	
Gather all information, resource commitments, and input from mobility providers, other project team members, and the community	
Input and review the budget, ensuring the budget number make sense, and the voucher covers major costs	

Steps to Develop Your Budget - *To use this spreadsheet, go to "File > Make a copy" and then follow the steps below and update your status in the second column.*	
Include costs associated with program participation (i.e., Clean Mobility Equity Alliance and Program Evaluation Activities)	
Double-check the rules outlined in the implementation manual about allowable voucher costs and eligible project cost	
Complete/refine the project budget	
Step 7: Ask for Technical Assistance	
For any questions or for further guidance, please contact your Technical Assistance Leader.	

Instructions for How to Use "Develop Your Budget - CMO MPV Budget Template"	
Section 1. Project Components (columns a and b)	Describes given expense categories as defined in the **Implementation Manual** (column a) followed by specific items needed for individual projects (column b). Applicants should list all items in the "item description" column (column b) that require funding to launch and operate the project during both the Voucher Funding Term (i.e. up to one year of launch and two years of operations) and for the two additional years of operations after the Voucher Funding Term ends. Applicants may add or delete rows as necessary.
Section 2. Voucher Budget (columns c through h)	Describes the quantitative voucher request (columns c through e) and provides an annual breakdown of that request for each of the 3 years of the Voucher Funding Term (columns f through h). When describing the voucher request, the applicant must specify a unit that the cost will be based on (e.g. per hour, month, etc.) in column d, specify the number of units that will be needed for the entire Voucher Funding Term, and multiply those figures to determine the total voucher amount by item in column e. Applicants may use their discretion to determine what units and number are most appropriate. Please note that the total voucher amount by item column (e) does not automatically sum, so applicants must calculate this input manually.
	Applicants must summarize all the costs indicated in column e in the "Grand Total - Voucher Funding Term (Voucher Funds)" row. If approved, this will become the total voucher amount. If the applicant uses an auto-sum feature to calculate the total amount, it is the applicant's responsibility to ensure that the calculation is accurate. Applicants may provide any explanatory notes in the notes section.
Section 3. Other Funds Budget (columns i and j)	Describes the funding needed to operate the project during years 3-4 of operations by year. Funding in this period corresponds to expenses that are expected to be incurred and will be covered by funds other than the voucher. This section is used as a basis to develop the applicant's plans for financial sustainability which the applicant must discuss in the body of the application. There are no minimum costs for this period, but the applicant must provide a true and accurate representation of the costs that are expected to be incurred to continue to effectively operate the service for the remainder of the Voucher Agreement Term. Applicants must summarize columns i and j in the "Grand Total – Other Funds Budget (Non-CMO Funds)" row.
Actions	1. Complete the table by entering data in blue cells. Do not enter data in grey or white cells.
	2. Add or delete rows as necessary.
	3. Manually ensure that all subtotals and calculations are correct. The entire sheet is "unlocked" and it is the applicant's responsibility to ensure accuracy.
Cost Minimums and Maximums	Applicants must ensure that voucher individual amounts and category totals comply with allowable voucher amounts in the Implementation Manual (see Section F in the CMO Implementation Manual). Applicants may use the "Category Eligibility Check Worksheet" to ensure that they meet eligibility requirements for categories that have minimum and maximum requirements. Please note in particular the following requirements by category:
Outreach and Marketing Costs	Minimum of $25,000 or 10% of total voucher amount, whichever is more; maximum of 30% of total voucher amount.
Voucher Administration Costs	Maximum 15% of total voucher amount.

Instructions for How to Use "Develop Your Budget - CMO MPV Budget Template"	
Bicycle/Scooter Infrastructure and Installation	Maximum of 300% of amount of electric bicycle/scooter vehicles or 200% of amount of non-electric bicycle/scooter vehicles amount.
Additional Transportation Enhancements	Maximum of 10% of total voucher amount.

Develop Your Budget - CMO MPV Budget Template - *To use this spreadsheet, go to "File > Make a copy" and then enter data in blue cells. Do not enter data in grey or white cells. Add rows as necessary. The entire sheet is "unlocked" and it is the applicant's responsibility to ensure that subtotals and calculations are accurate. Voucher amounts and category totals must comply with allowable voucher amounts in the Implementation Manual. It is recommended that applicants additionally complete the optional "Category Eligibility Check Worksheet" in the table below to ensure that they meet eligibility requirements for categories that have minimum and maximum requirements.*

Section 1. Project Components		**Section 2. Voucher Budget**							**Section 3. Other Funds Budget**
		Description of Voucher Request			Annual Budget Breakdown for Voucher Funding Term (4 Years Total)				Annual Budget Breakdown for Expenses Needed to Operate During Year 4 of Operations (1 Years Total)
(a) Expense Category	(b) Item description	(c) Voucher amount requested per unit or hour ($)	(d) Number of units or hours requested	(e) Total voucher amount by item ($)	(f) Project Launch (Up to 15 Months) ($)	(g) Year 1 of Operations ($)	(h) Year 2 of Operations ($)	(i) Year 3 of Operations ($)	(j) Year 4 of Operations ($)
Motor Vehicles and Associated Hardware						n/a	n/a		
						n/a	n/a		
Bicycles and Scooters						n/a	n/a		
						n/a	n/a		
Charging/Fueling Equipment and Installation						n/a	n/a		
						n/a	n/a		
Bicycle/Scooter Infrastructure and Installation *(Maximum 300% of amount of electric bicycle/scooter or 200% of non-electric bicycles/scooter amount)*						n/a	n/a		
						n/a	n/a		
						n/a	n/a		
Planning Costs						n/a	n/a		
						n/a	n/a		
Outreach and Marketing Costs *(Minimum $25,000 or 10% of total voucher, whichever is more; maximum of 30% of total voucher)*									
Operations and Maintenance Costs									
Voucher Administration Costs *(Maximum 15% of total voucher)*									

Develop Your Budget - CMO MPV Budget Template - *To use this spreadsheet, go to "File > Make a copy" and then enter data in blue cells. Do not enter data in grey or white cells. Add rows as necessary. The entire sheet is "unlocked" and it is the applicant's responsibility to ensure that subtotals and calculations are accurate. Voucher amounts and category totals must comply with allowable voucher amounts in the Implementation Manual. It is recommended that applicants additionally complete the optional "Category Eligibility Check Worksheet" in the table below to ensure that they meet eligibility requirements for categories that have minimum and maximum requirements.*

Section 1. Project Components		Section 2. Voucher Budget							Section 3. Other Funds Budget
Additional Transportation Enhancements *(Maximum 10% of total voucher)*									
Grand Total									
Grand Total - Voucher Funding Term (Voucher Funds)		n/a	n/a	$0	$0	$0	$0	n/a	n/a
Grand Total - Other Funds Budget (Non-CMO Funds)		n/a	n/a	n/a	n/a	n/a	n/a	$0	$0

Optional: Category Eligibility Check Worksheet
Instructions: Calculate sums in "Category Total" and "Applicable Denominator" Column. User may need to adjust example formula if rows were inserted above.

Cost Category	Eligibility Requirement Summary (See Implementation Manual for Details)	Category Total	Applicable Denominator	Percentage	Conforms to Eligibility Requirement?
Bicycle/Scooter Infrastructure and Installation	Minimum $25,000 or 10% of total voucher, whichever is more; maximum of 30% of total voucher	$0	$0	#DIV/0!	
Voucher Administration Costs	No minimum or maximum but should include costs associated with the following: insurance, data collection and reporting, CMEA participation, Voucher processing and reporting	$0	$0	#DIV/0!	
Bicycle/Scooter Infrastructure and Installation	Maximum of 300% of amount of electric bicycle/scooter vehicles or 200% of amount of non-electric bicycle/scooter vehicles amount	$0	$0	#DIV/0!	
Additional Transportation Enhancements	Maximum of 10% of total voucher amount			#DIV/0!	

Notes:

Example Budget

Section 1. Project Components		Section 2. Voucher Budget							Section 3. Other Funds Budget
		Description of Voucher Request			Annual Budget Breakdown for **Voucher Funding Term** (4 Years Total)				Annual Budget Breakdown for Expenses Needed to Operate During **Year 4 of Operations** (1 Years Total)
(a) Expense Category	(b) Item description	(c) Voucher amount requested per unit or hour ($)	(d) Number of units or hours requested	(e) Total voucher amount by item ($)	(f) Project Launch (Up to 15 Months) ($)	(g) Year 1 of Operations ($)	(h) Year 2 of Operations ($)	(i) Year 3 of Operations ($)	(j) Year 4 of Operations ($)
Motor Vehicles and Associated Hardware	New 2020 GM Bolt EV	$40,000	5	$200,000	$200,000	n/a	n/a	$0	$0
	Used 2017 GM Bolt EV	$25,000	2	$50,000	$50,000	n/a	n/a	$0	$0
Bicycles and Scooters	2020 Xtracycle Edgerunner cargo bicycle	$3,500	5	$17,500	$17,500	n/a	n/a	$0	$0
	2020 Radpower Radwagon cargo bicycle	$1,875	8	$15,000	$15,000	n/a	n/a	$0	$0
Charging/Fueling Equipment and Installation	Level 2 charger equipment and installation	$25,000	2	$50,000	$50,000	n/a	n/a	$0	$0
	Backup Level 1 charger units and installation	$2,000	2	$4,000	$4,000	n/a	n/a	$0	$0
Bicycle/Scooter Infrastructure and Installation *(Maximum 300% of amount of electric bicycle/scooter or 200% of non-electric bicycles/scooter amount)*	Bicycle lockers with charging and installation	$3,000	5	$15,000	$15,000	n/a	n/a	$0	$0
	Bicycle charging equipment and installation	$2,000	5	$10,000	$10,000	n/a	n/a	$0	$0
	Quick build infrastructure	$50,000	1	$50,000	$50,000	n/a	n/a	$0	$0
Planning Costs	Planning – manager hours	$20/hr	400 hrs	$8,000	$8,000	n/a	n/a	$0	$0
	Planning – associate hours	$10/hr	100 hrs	$1,000	$1,000	n/a	n/a	$0	$0
Outreach and Marketing Costs *(Minimum $25,000 or 10% of total voucher, whichever is more; maximum of 30% of total voucher)*	Outreach – manager time	$20/hr	2500 hrs	$50,000	$20,000	$20,000	$10,000	$5,000	$5,000
	Marketing – manager time	$20/hr	2000 hrs	$40,000	$20,000	$10,000	$10,000	$10,000	$10,000
	Printed flyers and posters	$1,500	3 batches	$4,500	$1,500	$1,500	$1,500	$1,500	$1,500
	Meeting events	$1,000	5 events	$5,000	$3,000	$1,000	$1,000	$1,000	$1,000
Operations and Maintenance Costs	Driver 1	$20/hr	4000 hrs	$80,000	$0	$40,000	$40,000	$40,000	$40,000
	Driver 2	$20/hr	4000 hrs	$80,000	$0	$40,000	$40,000	$40,000	$40,000
	Operations manager	$20/hr	4000 hrs	$80,000	$0	$40,000	$40,000	$40,000	$40,000
	Bicycle mechanic	$20/hr	1000 hrs	$20,000	$0	$10,000	$10,000	$10,000	$10,000
	Bicycle parts	$1,000	5 bicycles	$5,000	$0	$2,500	$2,500	$2,500	$2,500
Voucher Administration Costs	Director	$40/hr	2000 hrs	$80,000	$40,000	$20,000	$20,000	$20,000	$20,000
	Office manager	$15/hr	2000 hrs	$30,000	$10,000	$10,000	$10,000	$10,000	$10,000
	Travel	$1000/yr	3 yrs	$3,000	$1,000	$1,000	$1,000	$0	$0
	Printing	$300/yr	3 yrs	$900	$300	$300	$300	$300	$300
	Mailing	$300/yr	3 yrs	$900	$300	$300	$300	$300	$300

	Office rent	$500/mo	36 months	$18,000	$6,000	$6,000	$6,000	$6,000	$6,000
Additional Transportation Enhancements *(Maximum 10% of total voucher)*	n/a	n/a	n/a	$0	$0	$0	$0	$0	$0
Grand Total									
Grand Total - Voucher Funding Term (Voucher Funds)		n/a	n/a	$917,800	$522,600	$202,600	$192,600	n/a	n/a
Grand Total - Other Funds Budget (Non-CMO Funds)		n/a	n/a	n/a	n/a	n/a	n/a	$186,600	$186,600

Optional: Category Eligibility Check Worksheet
Instructions: Calculate sums in "Category Total" and "Applicable Denominator" Column. User may need to adjust example formula if rows were inserted above.

Cost Category	Eligibility Requirement Summary (See Implementation Manual for Details)	Category Total	Applicable Denominator	Percentage	Conforms to Eligibility Requirement?
Outreach and Marketing Costs	Minimum $25,000 or 10% of total voucher, whichever is more, maximum of 30% of total voucher	$99,500	$917,800	10.8%	
Voucher Administration Costs	No minimum or maximum but should include costs associated with the following: insurance, data collection and reporting, CMEA participation, Voucher processing and reporting	$132,800	$917,800	14.5%	
Bicycle/Scooter Infrastructure and Installation	Maximum of 300% of amount of electric bicycle/scooter vehicles or 200% of amount of non-electric bicycle/scooter vehicles amount	$75,000	$32,500	230.8%	
Additional Transportation Enhancements	Maximum of 10% of total voucher amount	$0	$0	n/a	
Notes:					

NEXT STEPS: MOVE TO THE NEXT GUIDE

Congratulations on building out the budget for your mobility project! The next guide in the toolkit is the Hire Locally guide. Use this guide to get ideas on how to build your dream team.

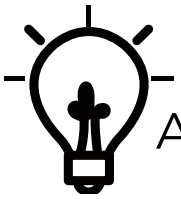
1. Calculate Costs

2. Hire Locally

3. Engage the Community

4. Finalize Contracts & Procurements

5. Plan the Site



Additional Support

For any questions or for further guidance, please contact your Technical Assistance Leader.

CMO Hotline:
626-744-5670
M-F | 9AM- 5PM PST

info@cleanmobilityoptions.org

www.cleanmobilityoptions.org

HIRE LOCALLY

Strategies for Local Hiring and Community Investment within Project Implementation and Design

July 2022

Project Implementation Toolkit
Guide 2 of 5

TABLE OF CONTENTS

WHAT IS CMO?

The Clean Mobility Options Voucher Pilot Program (CMO) is part of the **California Climate Investments (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, 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.

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 Hire Locally Guide is a resource to support practices and strategies that promote community wealth building and local economic development through the hiring process. By prioritizing local hiring and focusing on groups with additional barriers to employment, community members within the project area can receive additional benefits from project implementation. Local hiring also allows community members to bring their knowledge and expertise, ensures tax dollars are going back and reinvested in the community, and supports networks and programs that provide local opportunities.

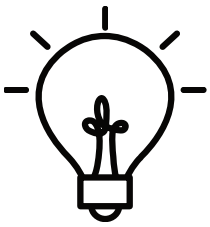
Economic investment through local hiring can help address economic inequities and increase job access by creating good-paying jobs and potential career paths for the local community. Hiring locally also increases trust and community buy-in for your project. Continued trust-building with the community can lead to increased ridership and leverage community knowledge and expertise to improve your project's long-term sustainability and success.

The Hire Locally Guide includes step-by-step strategies to support you and your team in identifying strategies to engage in hiring from within your local community. This guide includes a process to assess your project and local workforce needs and then align tangible project work with individuals and community members who can benefit from job access and opportunities. In addition, the guide includes links to resources, descriptions of strategies, reference sheets, and worksheet activities to support a thorough and intentional approach to hiring.

It's important to note that the process for local hiring is dynamic and highly dependent on the specific community and project. Therefore, the

exact hiring process needed for your project will be unique to your community and may depend on other factors not considered in this guide.

Reference to any specific manufacturer, trade, company name or service is for informational purposes only, and does not constitute endorsement, recommendation or favoring by the California Air Resource Board.



TIP!

NEED MORE GUIDANCE TO HIRE LOCALLY?

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

UNDERSTAND STAFFING POSITIONS

Project Staffing Needs

Most Mobility Project Voucher (MPV) project staffing needs will fall into four main categories:

(1) project management and administration;
(2) community outreach, engagement, and marketing;
(3) site construction, installation, and maintenance;
(4) mobility service operations.

Some of these staffing needs are necessary throughout the project, while others may only be necessary during a particular phase of the project (e.g., planning, construction, or implementation phase).

CARB voucher recipient, Social Good Fund Project Regeneration, survey team members tabling at Farmers' Market in Watsonville.

Project Management & Administration

An important project need is the overall management and administration of the project. CMO has many moving parts that will require an experienced and knowledgeable individual or team to plan, manage, and oversee overall project implementation and ensure processes, meetings, and tasks are completed on time to meet project goals and objectives.

Project Management & Administration tasks include:

- *Project and team coordination*
- *Project plan development*
- *Project design*
- *Project budgeting and accounting*
- *Vehicle or device acquisition*
- *Permitting and contracting*
- *Job outreach, hiring and training*
- *Program reporting*
- *Technical assistance*
    - *Attendance at CMEA meetings and trainings*

These tasks can be incorporated into a single role or distributed among various members of your team. Project management and administration roles will likely be full-time and long-term due to their importance in ensuring project success.

Community Outreach & Engagement

Community outreach and engagement are important to the planning process and throughout the launch and implementation stage.

Community Outreach & Engagement tasks include:

- *Community outreach and engagement planning*
- *Communications and marketing*
- *Survey implementation*
- *Event planning and coordination*
- *Creation and distribution of outreach materials*
- *Coordination with local CBOs and businesses*
- *Attendance and presentations at community meetings*
- *Translation and interpretation services*
- *Ambassador programs*
- *Training and education*
    - *Training community members on how to use services*
    - *Training volunteers or ambassadors on outreach*

Because tasks that fall under community outreach and engagement cover a range of skills and experience, there is a lot of variability in what kind of hiring is needed. These roles can be full-time, part-time, volunteer, paid through a stipend, short-term, or long-term. It is important to make sure that outreach is conducted by organizations and individuals who reflect the community so the project is for the community and by the community.

For ambassador programs, it is especially important to hire community members who are representative of those who live in the service area and who understand the culture and historical context of the community.

Site Construction & Installation

Site construction and installation is a project task that requires specific skills and technical experience. The exact task can vary depending on the service model and what infrastructure (if any) is needed for the project.

Site Construction & Installation tasks include:

- *Electric vehicle charging station installation*
- *Hydrogen fuel station installation*
- *Solar photovoltaic installation*
- *Wi-fi set-up for hubs*
- *Construction and installation of docking equipment and stations*
- *Telematics installation*
- *Changes to the right-of-way*

Due to the technical skills needed, level of safety required, and requirements from state legislation, certified electricians and contractors are required for solar and EV charging infrastructure installations.

Solar photovoltaic installation requires a contractor holding a C-10, C-46, or B license in good standing with the State of California Contractors State License Board. These are usually contracted positions and are often short-term to meet specific construction and installation needs before service launch.

*Starting in 2022, **AB841** specifies that all EV charging infrastructure located for customers funded or authorized by state entities be installed by a contractor with the appropriate license classification and have at least one electrician with **Electric Vehicle Infrastructure Training Program (EVITP)** certification. Additionally, if a state-funded project includes EVSE that supplies 25 kilowatts or more, 25% of the electricians working in the crew must have EVITP certification.*

Mobility Service Operations

Mobility service operation tasks support the operational success of the project and improve the overall user experience. In accordance with the **Implementation Manual (IM)**, the project needs to include an "experience partner" with at least 1 year of experience operating mobility services[1]. This role may fall within mobility service operations or it may be a project technical assistance advisor role who supports project management and operations staff.

Mobility Service Operations tasks include:

- *Fleet operation and management*
- *Customer service and membership services*
- *Vehicle repair and maintenance*
- *Data collection and reporting*
- *User survey implementation*

Depending on the specific service model, this may also include:

- *Hiring and training drivers*
- *Coordination of drivers*
- *Fleet rebalancing*
- *Roadside assistance*
- *Software or application development*
- *Management of reservation or booking system*

The specific needs of each project will vary depending on the chosen service model(s). For example, certain tasks can be full-time, part-time, contract, short-term, or long-term.

See Table 1 on the next page for the types of positions that are recommended for each project area.

[1] See the ***Experienced Partner and the Clean Mobility Provider Directory*** of the Implementation Manual for more information.

Table 1: Types of positions by project stage

See Table 1 below for the types of positions that are recommended for each project area.

	Project Management & Administration	Community Outreach & Engagement	Site Construction & Installation	Mobility Service Operations
Full-time	✓	✓	✓	✓
Part-time	✓	✓	✓	✓
Volunteer		✓		
Contract	✓	✓	✓	✓
Stipend-Paid		✓		✓
Short-Term (<6 months)		✓	✓	✓
Long-Term (>6 months)	✓	✓		✓

Table 2: Potential team positions by project stage

Table 2 below shows potential team positions that could be created.

Project Management & Administration	Community Outreach & Engagement
Project Lead / Manager Project Team Coordinator Project Team Planner	Marketing / Outreach Manager Outreach Associate Community Ambassadors
Site Construction & Installation	**Mobility Service Operations**
Electrician Solar Panel Installation Technician	Launch Manager General / Operations Manager Operations Associate Customer Service Representatives Vehicle Driver

It is recommended to look for local construction/electrician unions that are close to your project area. They will have greater familiarity with municipal requirements and regulations, understand local weather patterns, and other local construction issues. Please see some of the resources listed below to get started on finding a local group or a specific contractor in your region.

1. International Brotherhood of Electrical Workers

a. Electrical Workers Minority Caucus

2. National Electrical Contractors Association - Directories

3. Contractors State License Board

4. Department of Industrial Relations - Certified Electrician and Electrician Trainee List

Need some guidance on setting up contracts? Visit the **CMO Website** for the **Finalize Contracts and Procurement Guide** and the **Plan the Site** *Guide* for guidance on developing contracts.

ASSESS STAFFING NEEDS & BUDGET

The first step to ensure that any job created through your project prioritizes community members and an inclusive and diverse workforce is assessing and determining your project needs. Depending on the composition of your existing project team and your existing staffing budget, you may already have an idea of the staff you need or will need to hire to support project implementation.

Make a copy of **this worksheet** to:

Assess your staffing needs (Tab 1) - Use the worksheet to identify which positions need to be filled, if positions can be filled by regular staff or contractors, how many hours are needed, their wage, and at what point they will be needed in your mobility project.

When using this worksheet, consider the following questions:

- *Does outreach and marketing need to be front-loaded, or will it be an ongoing project task throughout your project?*
- *When do you need to install infrastructure, and how soon should you start the contracting process?*
- *When are you planning to launch services, and what do you need to ensure a successful launch?*
- *What support is needed during the service operations for fleet maintenance, customer service, and community engagement?*
- *What will you need during each stage of the project to ensure financial sustainability throughout the voucher term? Remember, Voucher Agreement Terms include 3 years of funding and an additional 2 years of continued operations.*

In addition to understanding the general staffing needs, consider what costs should be included for hiring and workforce development:

- *Marketing and outreach for job hiring*
- *Job training, certification programs*
- *Equipment and supplies*
- *Partnerships and programming*
- *Development of "pathway programs"*
- *Internships, fellowships, apprenticeships, shadowing opportunities, career counseling*

Budgeting (Tabs 2 - 6) - Input your hiring needs and create your mobility team.

Before creating specific roles and job positions for the project, consider where funding comes from for potential positions. Consider the following questions:

- *Will the positions be funded directly by the CMO voucher?*
- *How much revenue do you expect will be generated by user fees? What percentage will go toward vehicle and infrastructure maintenance vs. staff?*
- *Will you pursue outside sponsorship or advertising revenue?*
- *Will you pursue additional grants or outside funding sources?*
- *Does your organization or partnering organizations have additional funding they can contribute toward the project?*
- *Are there any training program component costs? (e.g. partnerships, equipment, certifications, fees, etc?)*

CMO Vehicle Type & Technology Reimbursable Costs (Tabs 7) - Double check which costs are reimbursable through the CMO Program and how that impacts your mobility project and hiring strategy.

Your understanding of the project's funding and revenue flow can help you determine how much you can budget for various positions and when those positions can be expected to come online.

Assess Your Staffing Needs - *Use this worksheet to note down the type of tasks you will need to manage for your mobility project. Add rows for tasks that have not been accounted for. Use columns B and C to add the number of hours need for each task to get a sense of how to combine tasks and optimize staff time. Check the boxes in columns D-H to note when in your project timeline these staffing needs are required.*

Make note of the tasks related to your mobility project.	Add the number of hours you estimate will be needed for the task.				Check the year in your mobility project's timeline for when this task will need to be staffed.				
Tasks	**Hours/Week (Regular Staff)**	**Hourly Wage**	**Hours on an As Needed Basis (Contractor)**	**Hourly Wage**	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Project Management & Administration Tasks									
Project and team coordination					☐	☐	☐	☐	☐
Project plan development					☐	☐	☐	☐	☐
Project design					☐	☐	☐	☐	☐
Project budgeting and accounting					☐	☐	☐	☐	☐
Outreach and marketing					☐	☐	☐	☐	☐
Vehicle or device acquisition					☐	☐	☐	☐	☐
Permitting and contracting					☐	☐	☐	☐	☐
Hiring and training					☐	☐	☐	☐	☐
Data collection and analysis					☐	☐	☐	☐	☐
Program reporting					☐	☐	☐	☐	☐
Add Rows for Other Project Management or Administrative Tasks...									
Community Outreach & Engagement Tasks					☐	☐	☐	☐	☐
Community outreach and engagement					☐	☐	☐	☐	☐
Communications and marketing					☐	☐	☐	☐	☐
Survey development and implementation					☐	☐	☐	☐	☐
Event planning					☐	☐	☐	☐	☐
Creation and distribution of outreach materials					☐	☐	☐	☐	☐
Coordination with local CBOs and businesses					☐	☐	☐	☐	☐
Attendance and presentations at community workshops and meeting					☐	☐	☐	☐	☐
Translation services					☐	☐	☐	☐	☐
Ambassador programs					☐	☐	☐	☐	☐
Training and education					☐	☐	☐	☐	☐
Add Rows for Other Community Outreach & Engagement Tasks...									
Site Construction & Installation Tasks									
EVSE installation					☐	☐	☐	☐	☐
Hydrogen fuel station installation					☐	☐	☐	☐	☐
Solar photovoltaic installation					☐	☐	☐	☐	☐
Wi-fi set-up for hubs					☐	☐	☐	☐	☐
Construction and installation of docking equipment and station					☐	☐	☐	☐	☐
Telematics installation					☐	☐	☐	☐	☐
Changes to the right-of-way					☐	☐	☐	☐	☐
Add Rows for Other Site Construction & Installation Tasks...									
Mobility Service Operation Tasks									
Fleet operation and management					☐	☐	☐	☐	☐
Customer service and membership services					☐	☐	☐	☐	☐
Vehicle repair and maintenance					☐	☐	☐	☐	☐
Data collection and reporting					☐	☐	☐	☐	☐
User survey implementation					☐	☐	☐	☐	☐
Hiring and training drivers					☐	☐	☐	☐	☐
Coordination of drivers					☐	☐	☐	☐	☐
Fleet rebalancing					☐	☐	☐	☐	☐
Roadside assistance					☐	☐	☐	☐	☐
Software or application development					☐	☐	☐	☐	☐
Management of reservation or booking system					☐	☐	☐	☐	☐

Bikeshare & Scooter-Share - *Use this spreadsheet to compare costs of your line items with typical costs in the industry. You may also use this spreadsheet to estimate general project costs. Place the cost and unit of your items in the blue cells.*

Category	Line Item	Typical Cost Range	Unit	*Your Actual Cost*	Unit
Staffing & Direct Costs					
One-Time Start-Up Administration Costs	Small Sized System	$15,000 - $30,000	<10 stations or <100 bicycles		
	Medium Sized System	$60,000 - $100,000	20 - 30 stations or <200 - 300 bicycles		
Ongoing Staff & Contractor Costs	Launch Manager	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Operations/General Manager	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Marketing/Community Engagement Manager	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Customer Service Saff	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Maintenance Staff	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Add other positions...	*Add typical cost range...*	*Person*		
Capital Equipment Costs					
Vehicle Type - *Note that CMO Awardees are eligible for reimbursements put towards certain vehicle types and technologies.* ***See page 14*** *for more details.*	Pedal-Assisted Bike, *2-3 year lifecycle*	$300 - $600	Pedal-Assisted Bike		
	Pedal-Assisted Bike, *5-10 year lifecycle*	$1,000 - $1,200	Pedal-Assisted Bike		
	E-Bike	$1,500 - 3,000	E-Bike		
	Docking Station	$30,000 - $60,000	Docking Station		
	E-Scooter	$800 - $1,200	E-Scooter		
Charging Equipment	Charging Cord	$30 - $50	Charging Cord		
	Smart Bike System Software Platform	$100 - $200	Per Month Per Device		
	Telematics Device	$15 - $60	Per Month per Device		
	Smart Locks	$120 - $220	Vehicle		
	Smart Hub	Costs will vary	All Stations		
	Electric Docking Station	Costs will vary	Station		
	Level 1 EV Car Charging Station 120V	$1,000	Station		
	Spare Parts	Costs will vary	Per Part		

Bikeshare & Scooter-Share - *Use this spreadsheet to compare costs of your line items with typical costs in the industry. You may also use this spreadsheet to estimate general project costs. Place the cost and unit of your items in the blue cells.*

Category	Line Item	Typical Cost Range	Unit	*Your Actual Cost*	Unit
	Unlocking/Locking Access & Application Management	Costs will vary	Per Application Management		
	Infrastructure for Users Without Smartphones or Bank Accounts	Costs will vary	-		
	Installation Cost	$3,000 - $5,000	Station		
	Station Site Acquisition	Costs will vary	Site		
	Station Site Permitting	Costs will vary	Site		
	Vehicle/Device Insurance Cost	Costs will vary	Vehicle or Device		
Operations, Maintenance, & Administrative Costs					
Stations	Docked Systems	$85 - 150	Station per Month		
	Replacement Stations	Cost will vary	Station		
	Electricity	Cost will vary	Station per Month		
Vehicles	Maintenance & Repair Tickets	Cost will vary	-		
	Replacement Parts & Vehicles	Cost will vary	-		
General Operations & Maintenance	Maintenance of Storage Facility	Cost will vary	-		
	Marketing and Outreach Material	Cost will vary	-		
			TOTAL	**$0.00**	

Carshare - *Use this spreadsheet to compare costs of your line items with typical costs in the industry. You may also use this spreadsheet to estimate general project costs. Place the cost and unit of your items in the blue cells.*

Category	Line Item	Typical Cost Range	Unit	*Your Actual Cost*	Unit
Staffing & Direct Costs					
Ongoing Staff & Contractor Costs	Manager	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Fleet Operations	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Member Services	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Marketing Staff	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Volunteers	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Customer Service	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Add other positions...	*Add typical cost range...*	*Person*		
Capital Equipment Costs					
Vehicle Type - *Note that CMO Awardees are eligible for reimbursements put towards certain vehicle types.* For exact pricing in your area, please visit **Kelley Blue Book** or a local dealership for more information	*Low-Mileage* ZEV	$30,000 - $50,000	ZEV		
	High-Mileage ZEV	$46,000 - $90,000	ZEV		
	Light-Duty Plug-In Hybrid	$35,000 - $55,000	Hybrid		
Charging Infrastructure - *Costs are outlined in **Section E Project Eligibility Costs** in the Implementation Manual.*	Electric Vehicle Supply Equipment (EVSE)	Cost will vary	Device		
	EVSE Installation Cost	Cost will vary	Station		
	Hydrogen Refueling Equipment	Cost will vary	Device		
	Hydrogen Refueling Infrastructure Installation Cost	Cost will vary	Station		
	Telematics Devices (GPS)	Cost will vary	Device		
Operations, Maintenance, & Administrative Costs					
	Electricity	Cost will vary	Station per Month		

Carshare - *Use this spreadsheet to compare costs of your line items with typical costs in the industry. You may also use this spreadsheet to estimate general project costs. Place the cost and unit of your items in the blue cells.*

Category	Line Item	Typical Cost Range	Unit	*Your Actual Cost*	Unit
Stations	*Level 2* EV Charger	$925	Charger		
	Level 2 EV Charger Installation	$1,400	Station		
	Level 3 DC Fast Charger	$33,414	Charger		
	Level 3 DC Fast Charger Installation	$25,395	Station		
	Installation Distributed Solar Photovoltaic Equipment for 10 kW	3,897	Station		
	Installation Distributed Solar Photovoltaic Equipment for 10-100 kW	$3,463	Station		
	Installation Distributed Solar Photovoltaic Equipment for 100-1,000 kW	$2,493	Station		
	Installation Distributed Solar Photovoltaic Equipment 1-10 MW	$2,025	Station		
Vehicles	Maintenance	Cost will vary	Vehicle		
	Cleaning	Cost will vary	Vehicle		
	Roadside Assistance	Cost will vary	Vehicle		
	Bodywork	Cost will vary	Vehicle		
General Operations & Maintenance	Rebalancing Carshare	Cost will vary	Staff Time		
	Managing & Procuring Parking Spaces	Cost will vary	Staff Time		
	Establishing Third Party Agreements	Cost will vary	Staff Time		
	Reservation System & Supporting Technology	Cost will vary	Technology		
	Multi-lingual Support & Materials	Cost will vary	Translation Service		
	Public Outreach/User Training	Cost will vary	-		
			TOTAL	$0.00	

Carpool/Vanpool - *Use this spreadsheet to compare costs of your line items with typical costs in the industry. You may also use this spreadsheet to estimate general project costs. Place the cost and unit of your items in the blue cells.*

Category	Line Item	Typical Cost Range	Unit	*Your Actual Cost*	Unit
Staffing & Direct Costs					
One-Time Start-Up Administration Costs	Background Check	$20 - $100	Person		
Ongoing Staff & Contractor Costs	Volunteer Participants	$0	Person		
	Alternate Drivers	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Bookkeeper/Manager	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Fleet Manager	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Customer Service	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Passenger Subsidies	Cost will vary - For example, $2/day up to $4/day	Person		
	Add other positions...	*Add typical cost range...*	*Person*		
Capital Equipment Costs					
Technology	Payment Platform	Cost will vary	ZEV		
	Reservation System	Cost will vary	ZEV		
	Routing Technology	Cost will vary	Hybrid		
Vehicle	Low-Mileage ZEV	$30,000 - $50,000	ZEV		
	High-Mileage ZEV	$46,000 - $90,000	ZEV		
	Light-Duty Plug-In Hybrid	$35,000 - $55,000	Hybrid		
	Software & Hardware	Cost will vary	Technology		
Operations, Maintenance, & Administrative Costs					
Stations	Electricity	Cost will vary	Station per Month		
Vehicles	Reimbursing Mileage	$0.56	Mile		
General Operations & Maintenance	Mobility Provider Fee	Cost will vary	Per Ride/Per Payment/Per Year		
	Outreach & Marketing	Cost will vary	-		
			TOTAL	**$0.00**	

Innovative Transit Service - *Use this spreadsheet to compare costs of your line items with typical costs in the industry. You may also use this spreadsheet to estimate general project costs. Place the cost and unit of your items in the blue cells.*

Category	Line Item	Typical Cost Range	Unit	*Your Actual Cost*	Unit
Staffing & Direct Costs					
Ongoing Staff & Contractor Costs	Drivers	$0	Person		
	Management	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Administration	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Customer Service	Compensation depends on local conditions, compensation restrictions, benefits, projects business model, and more.	Person		
	Add other positions...	*Add typical cost range...*	*Person*		
Capital Equipment Costs					
Vehicle - *Please see full list of **hybrid and zero-emission truck and buses.***	Medium-Duty Vehicle	$220,000 - $300,000	Medium-Duty Vehicle		
	Vans	$40,000 - $150,000	Van		
Operations, Maintenance, & Administrative Costs					
Stations	Electricity	Cost will vary	Station per Month		
Vehicles	Operations for In-House Service	$65 - $214	Per Service Hour for In-House Service		
	Operations for Contracted Service	$35 - $100	Per Service Hour for Contracted Service		
	Maintenance	Cost will vary	Vehicle		
	Cleaning	Cost will vary	Vehicle		
	Roadside Assistance	Cost will vary	Vehicle		
	Bodywork	Cost will vary	Vehicle		
General Operations & Maintenance	Mobility Provider Fee	Cost will vary	Per Ride/Per Payment/Per Year		
	Outreach & Marketing	Cost will vary	-		
			TOTAL	**$0.00**	

Ride On-Demand - *This service is on-demand rides for individuals provided by taxi companies transportation network companies (TNCs). Therefore, taxi companies or TNCs are responsible for Staffing & Direct Costs, Capital Equipment Costs, and Operations & Maintenance Costs. However, mobility projects can subsidize rides. Subsidized ride costs are included below.*

Fare Model Examples	Trip Cost Paid By Rider	Trip Cost Paid By Agency	Cost to Agency (pier 1,000 rides)
Full Subsidy	$0.00	$12.00	$12,000.00
Flat Fare ($2.00)	$2.00	$10.00	$10,000.00
Flat Initial Fare ($2.00) With Capped Subsidy ($8.00)	$4.00	$8.00	$8,000.00
Cost Sharing (50%)	$6.00	$6.00	$6,000.00
Flat Subsidy ($5.00)	$7.00	$5.00	$5,000.00

Reimbursable Costs for CMO Awardees - Here is a list of the type of items that can be reimbursed through the CMO Program, and the maximum reimbursable amount for each item.

Bikeshare & Scooter-Share	
Vehicle Type & Technology	**Maximum Reimbursable Amount (per vehicle)**
New neighborhood electric vehicle (NEV)	Up to $15,000
New electric tricycle/pedicab (3-4 seats)	Up to $12,500
New electric bicycle (e-bike)	Up to $3,500
New bicycle	Up to $1,500
New electric kick-scooter	Up to $700
New electric cargo bicycle	Up to $4,500
Carshare	
Vehicle Type & Technology	**Maximum Reimbursable Amount (per vehicle)**
New light-duty ZEV	Up to $65,000
New light-duty plug-in hybrid (PHEV), only models with 6 seats capacity or more	Up to $40,000
Used light-duty ZEV or PHEV (6 seats capacity or more) 4 years or newer	100% of the Kelley Blue Book Value (cannot exceed maximum reimbursable amount for the new vehicle)
Leased new light-duty ZEV	Up to $850 per month (including up to $3,000 down payment)
Leased used light-duty ZEV	Up to $600 per month (including up to $3,000 down payment)
New zero-emission passenger van and shuttle bus up to Class 6 (<= 26,000 GVWR^2) or under 30 feet in vehicle length	Total vehicle purchase cost.
Additional allowance for purchase of new ADA-compliant vehicles: for van-size and up (e.g. wheelchair lift, wheelchair ramp)	Additional $20,000 beyond allowable reimbursable amount per vehicle
Carpool/Vanpool	
Vehicle Type & Technology	**Maximum Reimbursable Amount (per vehicle)**
New light-duty ZEV	Up to $65,000
New light-duty plug-in hybrid (PHEV), only models with 6 seats capacity or more	Up to $40,000
Used light-duty ZEV or PHEV (6 seats capacity or more) 4 years or newer	100% of the Kelley Blue Book Value (cannot exceed maximum reimbursable amount for the new vehicle)
Leased new light-duty ZEV	Up to $850 per month (including up to $3,000 down payment)
Leased used light-duty ZEV	Up to $600 per month (including up to $3,000 down payment)
New zero-emission passenger van and shuttle bus up to Class 6 (<= 26,000 GVWR^2) or under 30 feet in vehicle length	Total vehicle purchase cost
Additional allowance for purchase of new ADA-compliant vehicles: (e.g. wheelchair lift, wheelchair ramp)	Up to $20,000 additional to be allowable reimbursable amount per vehicle
Charging & Fueling Equipment Installation	
Charging and Fueling Infrastructure (includes Equipment and Installation)	**Maximum Reimbursable Amount (per unit)**

Level 2 electric vehicle supply equipment (EVSE) unit, including all equipment, construction, and installation costs	Up to $30,000 (Note: CMO will only reimburse the cost of two ports per funded vehicle)
DC Fast Charge EVSE unit, including all equipment and installation costs	Up to $112,000 per unit
Solar Photovoltaic Equipment to supply electricity for EVSE and other clean mobility options charging equipment	Up to $100,000 per installation
Infrastructure costs for conventional bicycle, scooter, and other micromobility vehicles (including docking equipment, lockers, and "quick build" right-of-way infrastructure and installation)	Amount reimbursed must be based on community input regarding the supply needed to support funded equipment
Fuel Cell Electric Vehicle (FCEV) infrastructure installation and fueling costs	Up to $200,000 per project for building a refueling station or providing fuel cards
Infrastructure costs for conventional bicycle, scooter, and other micromobility vehicles (including docking equipment, lockers, and "quick build" right-of-way infrastructure and installation)	Up to 200 percent of the voucher-reimbursable amount for bicycles in the project fleet ($1,500 per bicycle). Total cannot exceed $525,000 per project.
Infrastructure costs for electric bicycle, scooter, and other electric micromobility vehicles (including charging equipment, docking equipment, lockers, and "quick build" right-of-way infrastructure and installation)	Up to 300 percent of the voucher-reimbursable amount for e-bikes in the project fleet ($3,500 per e-bike). Total cannot exceed $525,000 per project.
Quick Build or Infrastructure (includes built structures for charging, storing, or parking conventional and electric micromobility devices such as but not limited to bicycles, scooters, pedicabs, and tricycles)	**Maximum Reimbursable Amount (per unit)**
Docking equipment, lockers, and quick build right-of-way infrastructure and installation for bikes and scooters	Up to $1,500 per bicycle or 200% of the Voucher reimbursable amount for bicycles. Total cannot exceed $525,000 per project.
Docking equipment, lockers, and quick build right-of-way infrastructure and installation for e-bikes and e-scooters	Up to $3,500 per e-bike or 300% of the voucher reimbursable amount for e-bikes. Total cannot exceed $525,000 per project.
Notes:	
Zero-emission passenger vans and shuttle buses are considered used if odometer reading is more than 3,500 miles at purchase or lease.	
Light-duty vehicles are considered used if odometer reading is more than 7,500 miles at purchase or lease.	

DEVELOP JOB DESCRIPTIONS

A well-written job description is key to getting quality applicants who understand what they are applying to and the level of commitment needed for the position. When creating a job description, here are some components you may want to include:

Components of a Job Description

- *Job title*
- *Application deadline*
- *Type of position (e.g., part-time, full-time, volunteer, contract, stipend-paid, short-term <6 months, long-term >6 months)*
- *Job location*
- *Salary and benefits*
- *Remote, in-person, or hybrid*
- *Technical equipment that will be provided*
- *Information on hiring timeline (e.g., opening or closing date, expected first review of apps, expected start date, etc.)*
- *Description of your organization*
- *Information on your organization's mission, values, goals, etc.*
- *Background Information on CMO*
- *Description of the project*
- *Description of the position (and what it might entail)*
- *List of expected tasks, duties, or responsibilities*
- *List of required qualifications, skills, experiences or education*
- *List of desired qualifications, skills, experiences, and education*
- *Level of travel required*
- *Equal Employer Opportunity Statement*
- *Information on how, where, and when to send application materials*
- *Other hiring requirements (e.g., such as a background check)*

As a project funded by Clean Mobility Options (CMO) and the California Climate Investments (CCI), you can include the CMO and CCI logos and descriptive text in your job descriptions and posts.

Equity, Inclusion and Diversity Considerations For the Hiring Process

These are additional equity considerations to support the development of your job descriptions. The language you use and the information you choose to share (or don't share) can make a job post more inclusive and equitable or can discourage potential candidates from applying.

- **Avoid gendered language:** Use more gender-neutral language or a balance of masculine and feminine words. For example, using language in a job description coded to be more masculine or feminine may attract applicants of a particular gender while discouraging members of the opposite gender or individuals are non-binary or gender nonconforming from applying[2].

- **Competency-based hiring:** Remove education requirements where applicable and allow equivalent years of experience in the field to substitute for a degree. Many jobs require a 4-year degree or additional education even though the specific tasks and responsibilities may not require that level of education.

  - Residents often have skills and experiences that are often unrecognized in the hiring process. This includes the ability to connect to their community and institutional, social, and cultural knowledge that can help build buy-in to the program.

- **Include salary and benefits:** List out the available salary range, benefits, and other relevant position information such as length of employment (if contracted or short-term). Many potential applicants will want to know before applying if the salary fits within their budget.

[2] *Evidence That Gendered Wording In Job Advertisements Exists And Sustains Gender Inequality* lists masculine and feminine words used in job descriptions ***here***.

- Being transparent about salary and benefits can save your organization and potential applicants time spent submitting an application and going through the interview process if the expected salary is outside of their budget.

- **Remove jargon and acronyms:** Remove any unnecessary jargon, acronyms, or vague terms. Too much jargon may risk scaring away potential applicants with the right skills and experience but limited knowledge in your particular field.

- **Share Diversity, Equity, and Inclusion goals and Equal Employer Opportunity statement:** Share your Diversity, Equity, and Inclusion (DEI) goals if your organization has them and include your Equal Employer Opportunity Statement. An organization's culture around DEI has become a high priority to some applicants. You may want to emphasize or highlight what steps your organization has made toward centering equity and inclusion.

- **Concise requirements:** Make sure your list of requirements only contains what is necessary or needed for the position. Job descriptions can have a long list of desired skills, experience, education background, etc., however, that may discourage qualified applicants who don't meet all the requirements from applying. Instead, keep the list concise and connect it to a specific project, program, and organizational needs.

- Consider reducing other hiring requirements such as assessments, cover letters, and any writing or work samples.

- **Multiple submission options:** Allow both online and paper applications to be submitted. This allows people who don't have access to the internet or who would prefer to submit a paper version different options for submitting their application.

- **Working with diverse populations:** Consider prioritizing applicants who have experience working with diverse populations, including different ethnic, socioeconomic and racial backgrounds. This may be an important component to launching a successful project that is meant to serve multiple population groups.

- **Second language:** Consider prioritizing applicants who can speak a second language that is common in your project area. This is especially important for front-facing positions such as providing customer service, driving vehicles, or conducting community outreach. It is also helpful to have bilingual project management staff if a large portion of the team, such as the drivers, speak a language other than English.
- **Travel and time commitments:** Consider including transparent information on the expected travel and time commitment required for the position. Share whether the position requires working in the evenings or during the weekends, out-of-town travel, or regular travel to an office or for field work.

These are recommendations to make the application review and interview process more equitable. Consider how you want to design your hiring and interview process to reduce implicit bias and demonstrate transparency and clarity.

- **Blind hiring process:** A blind hiring process removes the name and other identifying information (name, school, gendered language, hobbies, address) to prevent implicit bias from affecting how you judge applicants. It's meant to focus the screening process on qualifications, skills, and experiences.
- **Structured and standardized interview process:** To ensure fairness across all candidates and reduce bias, develop a structured interview process with a set of standardized questions and set number and type of interviews.
- **Diverse hiring panel:** A hiring panel usually has 3 people who ask questions to the candidate and provide input to the hiring manager. Consider the different job levels within your organization and consider including people who represent different levels and different departments or teams. Also, consider what other characteristics may be overrepresented.

- **Prepare hiring panel:** You also want to make sure employees participating in the panel understand what role and perspective they bring. It is also important that you do not diversify your panel just for diversification and to influence the applicants' perception of your organization.

- **Inclusive interview questions:** In developing questions for interviewing, evaluate their level of inclusivity and consider if different types of candidates (e.g., with varying levels of experience, educational background, race, etc.) can answer the question. Consider including more strength or skill-based questions and test if your situational or hypothetical questions are universally applicable.

- **Flexible accommodations:** Considering allowing both in-person and online/phone interviews to accommodate people's different situations. Some candidates may have challenges with reliable internet, while others may have challenges getting to the office.

IDENTIFY & UNDERSTAND YOUR TARGET HIRING GROUP

WORKSHEET

It is important to identify and understand your target hiring group. Answer these questions to create a clear and common definition of community amongst your Mobility Project Team.

1. Describe the groups of people that you hope will apply to new job positions.

2. Identify groups of people in your project area who have been historically oppressed, hurt, or experienced trauma from government designed policies and procedures.

3. Identify two strategies you will use to market job positions in each of these groups.

4. **Our Mobility Project Team's "target hiring group" refers to ...** (*please describe the groups of people the mobility team aims to hire for their own team and mobility project*).

There are existing resources that can be used to understand your community's demographics, labor force, local industries, education, and commute patterns. Table 3 provides a list of community characteristics to consider, associated questions, and data sources that can aid you in your research.

Table 3: Community data sources

Characteristics	Questions to Consider
Demographics	Who is in the community?
• **American Community Survey (ACS)** • **Census** • Local government websites (city, county level) • Local CBOs	
Labor Force Participation, Unemployment Rate	Who is employed, unemployed, or underemployed? Who is seeking out jobs?
• **Longitudinal Employer-Household Dynamics (LEHD)** • **Bureau of Labor Statistics (BLS)** • **Local Area Unemployment Statistics (LAUS)** • **Census** • Local government websites (city, county level) • Colleges and adult schools	
Local Jobs / Industries	What jobs are in the community? Who is working those jobs?
• **Quarterly Workforce Indicators** • **Occupational Employment Statistics (OES)**	
Educational Attainment / Skill Level	What education or skills do community members have?
• **American Community Survey (ACS)** • Local Colleges • Labor agencies	
Mobility Access, Commute Patterns	Does the community have reliable transportation? Where is work, and how long is the commute?
• **Housing and Transportation Affordability Index (H&T Index)** • **Longitudinal Employer-Household Dynamics (LEHD)**	

CONSIDERATIONS BEFORE HIRING

When working with certain target populations, we recommend partnering with a local CBO or nonprofit organization with experience and expertise working with these populations. For example, if you want to support workforce development for individuals who were formerly incarcerated or unhoused, it is best to work with organizations that have experience with those groups, understand their needs, and know what kind of support or training is helpful. Consider how such programs may be perceived by the community and who needs to be included in the conversation and planning to ensure the program fits the needs and norms of the community.

Consider the following groups that often have additional barriers to employment:

- *Displaced homemakers*[3]
- *Low-income individuals*
- *Indians, Alaskan Natives and Native Hawaiians*
- *Individuals with disabilities, including youth*
- *Formerly incarcerated individuals*
- *Homeless individuals, homeless children and youth*
- *Youth who are in or have aged out of the foster care system*
- *Individuals who are English language learners, have low levels of literacy, and/or individuals facing substantial cultural barriers*
- *Eligible migrant or seasonal farmworkers*
- *Single parents (including single pregnant women)*
- *Long-term unemployed individuals*
- *High school students*

[3] An individual who previously provided unpaid services to the family and home, who is no longer support by a spouse with unemployment or underemployment challenges.

Projects are unlikely to target all groups. However, you can prioritize one or two groups depending on your specific project needs and your targeted hiring goals. Additionally, you may want to focus on groups that represent your expected mobility service users or have a particular connection or relationship to your expected mobility service users.

Consider the following questions:

- *Who is working in the community? Who is employed, unemployed and underemployed?*
- *What is their income, and could they afford to take this job?*
- *Do they work in the sector that you will be hiring for?*
- *What skills do they have? Will you be providing training?*
- *Do workers travel in or out of the community for work?*
- *Who would benefit the most from employment opportunities available through the mobility project?*
- *Who do we expect will be the users of this mobility project?*
- *Which groups do you predict will have a more difficult time adopting this transportation service?*
- *What issues do you think residents will have using the services?*
- *Who are trusted messengers and stakeholders in the community?*

HIRE LOCALLY

Once you assess your project needs and consider potential applicants, you can share the opening with community members and conduct the hiring process. Listed below are some local hiring strategies that can be implemented to prioritize and promote hiring staff from the local community.

First Source Hiring

When conducting a locally-focused hiring process, consider implementing a "first source" hiring process. This means prioritizing certain groups in your outreach and recruitment approach prior to opening up the position to the general public. Here are the general steps to implement the strategy:

- *Partner with local CBOs, affordable housing sites, and employment centers, and local government and workforce agencies near the project area.*
- *Share the job opening with these partnering organizations as your "first source" who may be able to provide a list of eligible candidates or post the job position in their communication channels to share the opportunity with members or residents.*
- *Following the initial efforts to recruit locally and from first source partner organizations, the job position can be opened up to other platforms and recruitment sources to find qualified and well-matched candidates who are not from the local community.*

Targeted Hiring

Targeted hiring focuses on hiring preferences based on a certain range of worker characteristics. This can be based on characteristics such as residency in a low-income community or neighborhood, having been formerly incarcerated, having a disability, or being long-term unemployed. It may also be based on veteran status, sex, race, or ethnicity (where allowed) and whether these groups have been historically underrepresented in your hiring or the field.

- *Legal considerations: It is important to understand the potential legal implications of any hiring decision. **ACLU's Inclusion Targets: What's Legal** provides additional context on prioritizing equity and implementing targeted hiring without unintentionally engaging in discriminatory practices. Some important points to include:*
    - *Inclusion efforts should seek to remedy a protected group's low numbers in a particular job or sector*
    - *Programs can set numerical hiring targets or goals but should avoid rigid quotas or set-asides*

Youth Workforce Development

You may want to consider a hiring strategy focused on youth for tasks and roles that require a large team of workers. In general, youth is defined as teenagers and young adults between 16 to 24 years of age. Input from younger generations is often left out of major planning and development decisions that ultimately impact them and their communities for many years to come. High school students are usually local to the community, so youth-focused hiring strategies will help develop the local workforce and invest in the youth.

Some tasks and roles that may be suitable for youth include:

- *Conducting outreach and surveys*
- *Creating outreach materials*
- *Data organization and analysis*
- *Customer service*
- *Fleet rebalancing*
- *Interpreting at in-person events*
- *Translating written materials*
- *Community ambassadors*

In addition to youth that are in high school, college or recently graduate, you can focus on particular youth populations that may be experiencing other challenges such as LGBT+, unhoused, foster, formerly incarcerated or undocumented youth. These groups of youth may be at risk of not integrating into society and engaging in risky or dangerous behavior due the limitations and failures of various institutions and systems. A carefully crafted workforce development program with training, mentorship and supervision can help youth to gain work experience and skills, build a supportive professional network, and develop confidence and self-efficacy in themselves.

For examples of how other organizations prioritize youth workforce development consider looking into **Grid Alternatives' Installation Training and Partnerships** and **Rising Sun's Opportunity Build**. For CMO projects, this may look like a more focused internship, fellowship, apprenticeship, or community ambassador program.

Community Benefit Agreements

Consider implementing a Community Benefits Agreement (CBA), which is a contract between community-based organizations and funding recipients that identifies benefits to be provided as part of a project or program. Hiring priority for low-income individuals and prevailing wage requirements are commonly found in CBAs. CBAs may also include provisions for ongoing community engagement and mechanisms to ensure continued input and success. CBAs are most effective when implemented with a large-scale development project, which may be more applicable to local and regional agencies where your CMO project is one of multiple development projects.

For more information on how to develop CBAs see the **Community Benefits Agreement Toolkit** developed by Action Tank and the **Community Benefits Agreement Handbook** developed by Julian Gross.

Labor Agreements or Community Workforce Provisions

Another approach is to develop or expand comprehensive agreements with labor unions and funding recipients (e.g., contractors, developers, transit agencies, cities) to achieve a breadth of objectives including uniform labor standards. These agreements may extend across multiple projects.

Labor Agreements and Community Workforce Provision are also most effective when projects are hiring for many construction positions. For more information on how to develop a labor agreement or community workforce agreement see the **Community Workforce Agreement Guide** by Partnership for Working Families.

MARKET JOB POSTINGS

Market the job postings to community members and potential applicants. Partner organizations can share your job posting to their members or patrons or share a list of potential applicants with you if they are a workforce or employment-focused organization. See Table 4 below for a list of common organizations that may be helpful to partner with and recommendations on engagement:

Table 4: Resources for Partnerships

Organization	Target Group
Post-secondary education	Students, recent graduates
• Consider different types of schools - community colleges, CSUs and UCs, and private universities, trade schools, adult schools, and technical schools • Consider nearby Historically Black Colleges and Universities (HBCUs), Hispanic Serving Institutions (HSIs), and the Hispanic Association of Colleges and Universities (HACUs)	
Local high schools, continuation schools	Students, youth
• Consider the various roles at schools and who they may be the best contact - principal, classroom teacher, guidance counselor, sports coach, club advisors, parent volunteers	
Local CBOs	Varies
• Consider which local CBOs you are already connected to and which ones serve the target group(s) you are considering for employment • Consider organizations focused on addressing homelessness, environmental justice, youth development, working with formerly incarcerated, food services, health care, etc. • See **California Climate Investment's Community Connections** for organizations interested in building resilient communities and increasing meaningful investment	

Organization	Target Group
Local community spaces	Varies
• Community centers and public libraries offer many resources and activities for community members. For example, they can help advertise job opportunities and engagement events and provide facilities and meeting spaces. • Consider other local community spaces where people gather: local coffee shops or cafes, grocery stores, food shelters, food banks, food distribution centers, parks, health clinics, etc.	
Workforce focused programs and organizations	Unemployed, underemployed
• For organizations that work with job seekers, ask if they can share flyers directly with potential applicants that they recommend or provide a list of potential applicants • Consider local agencies which may have their own workforce program, local training programs and local STEM programs • Seek out **Job and career centers** and **local workforce development boards**	
Religious institutions	Varies
• Consider different types of religious institutions such as churches, mosques, temples, synagogues. Religious institutions may have access to communities who don't participate in other services or programs	
Affordable housing sites	Low income
• Connect and partner with the affordable housing site manager or coordinator. They often run leadership programs, committees, and meetings with residents. • If you are unaware of what affordable housing sites exist in your community, look at the **Affordable Housing Map and Benefits Calculator** • Consider hiring residents who live in the affordable housing sites located in the project area and who will benefit from the project	
Unions	Construction roles
• For construction and installation needs, consider connecting with local unions	

Outreach and Recruitment

Outreach strategies will help potential applicants learn about your job position and help you develop a list of qualified candidates. It's recommended to use both online and on-the-ground outreach strategies to reach different audiences.

You may want to consider additional costs associated with recruitment and hiring, such as fees for job boards, recruitment activities, and staff time spent conducting hiring.

TIP!

Strategies that have a **($)** in their description may require additional costs or fees.

On-the-Ground Strategies

While many communications have transitioned to online platforms, to be inclusive and reach potential candidates who are not as active online, you may want to include some on-the-ground, in-person strategies. For example, if you go where the community is or where they tend to go, it may be easier to ensure the job position goes to someone living or working in the community.

See below for some strategies to consider:

Physical flyers at an organization's site: *Ask to post a flyer for the job opportunity at their site. This may be on a community bulletin board, placed alongside other resources and brochures, posted on a wall or window, or near a front desk or counter.*

In-person presentation or announcement: *Ask to make a short presentation or announcement during a regular meeting, class or lunch period, or an upcoming event. This could be a project team member making this presentation or providing information to the organization's contact to make the announcement for you.*

It may be helpful to bring physical copies of a flyer or the job posting and share contact information for people to reach out to following the announcement.

Strategies continued

Pop-up outreach events: *Share information about the job position during planned outreach or engagement events or activities for the project. You may be able to recruit people curious about or already interested in the project through this approach.*

In-person career or job fairs: *Join an in-person job or career fair where you can speak directly to potential applicants and share information about the opportunity.* **($)**

Local newspaper or radio: *Include an ad or announcement in the local newspaper or radio.* **($)**

Online Strategies

Online strategies can help you reach out to potential candidates who are unaware of your organization and project. It may be harder to focus on local applicants using online strategies. Still, it may expand your reach beyond your usual communication channels, depending on how you approach it.

Organization's website and network: *Add the job opportunity to your organization's website and share it with associated members in your network through existing newsletters or contact lists*

- *Ask your organization's staff to share the opportunity with people they think are qualified or within their network*

Social media channels: *Share the job opportunity on your organization's social media accounts. This can include Facebook, Instagram, Twitter, LinkedIn.*

Online job boards or job search sites: *Post your job position on online job boards. Also, consider using local job boards focused on your specific region or city or job boards focused on specific sectors or groups.* **($)**

- *Some of these sites may charge a fee to include your job posting, while some may be free to add new job listings.*
- *Some examples of popular job search sites include Idealist, Indeed, Glassdoor, Linkedin, and Monster.*

Virtual career or job fairs: *Attend virtual career or job fairs to reach job seekers looking for new opportunities. Like in-person career and job fairs, you can speak directly to potential applicants and share information about the opportunity in a virtual format.* **($)**

Strategies continued

Professional networks or listservs: *Share the job position with professional networks whose members may be interested.* **($)**

Consider chapters or groups that are locally based first and then expand to more state-wide or nationally focused groups.

Examples of professional networks include American Planning Association, Young Transportation Professionals, and Institute of Electrical and Electronics Engineers.

Partner organization's online communications: *Ask partnering organizations to share with their members, to advertise the opening in their newsletters, or social media accounts*

Local CBOs: *Consider both CBOs that have a similar mission or vision aligned with your organization or project in addition to tangentially related CBOs that are close to the project area.*

Local educational institutions: *Ask teachers, guidance or academic counselors, and other staff if they can share the opportunity with students through an email to their class or through a department listserv*

Many higher education institutions use ***HandShake****, an online platform for connecting college students with jobs and internships. This may be a good strategy if you hire several positions geared toward college students or recent graduates.* **($)**

REVIEW STRATEGIES TO SUPPORT NEW STAFF

After you have hired new staff to fill the gaps in your project needs, it's important to provide ongoing support to help train your workers for their assigned jobs and solicit feedback to improve your project and mobility service.

Retention Strategies

Consider what on-the-job training and ongoing support is needed for new hires.

See below for some retention strategies to provide ongoing support to staff:

Onboarding and orientation: *The onboarding process and orientation provide new hires with their first impression post-hiring. Use an organized and well-thought-out onboarding process that provides the necessary context, introductions, resources, and tools to get started.*

Clear expectations and policies: *Set clear expectations and walk new hires through your organization's policies to help them get acquainted with their role, the organization's culture, and the rest of the team.*

Coaching and mentorship: *You can include coaching and mentorship as formal or informal aspects of the job. This can be from a supervisor, manager, or colleague with a similar role and more experience.*

Retention strategies continued

On-the-job training: *Some jobs will require more or less on-the-job training. This is important for new hires who do not have the required skills or need training for specific processes or technical tasks.*

Feedback on performance: *Provide regular feedback on their performance and what they can do to improve. Having a growth mindset or culture focused on learning can encourage new hires to learn from their mistakes and seek continuous improvement.*

Acknowledgment and recognition: *Provide regular acknowledgment of their work and recognition for their contributions to the project. This can be in various forms, written communication, shared in one-on-one conversations, in larger team meetings, or through some kind of reward or gift that shows appreciation.*

Professional development: *Show commitment to their professional development and future career. Work with your new hires to understand their interests and skills and help them take on tasks and roles that foster their professional development.*

> *Consider providing in-house training programs, paid outside training, or certifications to support career advancement within the organization or project. If possible, partner with local schools or organizations to provide career counseling and guidance.*

Advancement: *Allow room for advancement and wage increases. As staff gain knowledge, skills and experiences that have benefited the project and are able to contribute more, provide opportunities for career advancement or increased wages to match their growth and development.*

Stay interviews: *Consider conducting "stay interviews." While most organizations will conduct an exit interview where they solicit feedback and input from a staff member who is leaving the organization, a stay interview focuses on existing staff. It provides them with an opportunity to share what kind of support or changes they would like or need to consider staying.*

Connect With Local CBOs or Nonprofits: *If you are focused on hiring from specific groups that experience additional challenges and obstacles to employment, leverage partnerships and relationships with local CBOs familiar with those groups. You can also work with these organizations to understand what additional support is needed and how your team can build out processes and resources to ensure individuals hired feel included, supported, and cared for throughout their tenure with the project.*

Collect Feedback

Throughout implementing your mobility project, your staff will acquire knowledge of what is working, what isn't working, what they have concerns about, and what solutions and suggestions can help improve the project. Incorporating input from on-the-ground staff will improve the services of your project and the CMO program as a whole.

Consider the following to obtain feedback for your project and program:

Feedback at team meetings: *Make sharing feedback a regular part of your team meetings or consider periodically hosting feedback sessions where team members can share their perspectives and provide input on what is or isn't working.*

> *Feedback sessions can also help your team see where they share similar perspectives and opinions on common challenges and can lead to brainstorming sessions that focus on developing new strategies and creative solutions.*

One-on-one check-ins: *You can also obtain feedback in one-on-one meetings with staff through regular check-ins that you have with them. Some staff may prefer sharing feedback in a one-on-one manner as opposed to in a larger group setting.*

Feedback surveys: *Consider sending feedback surveys to your staff as a way for them to provide their input anonymously. Some staff may fear repercussions for sharing an unpopular opinion or thought and may feel more comfortable sharing their feedback anonymously.*

Changes made based on feedback: *Make sure to highlight any changes or decisions based on your team's feedback and suggestions. By showing you are listening to what they share, you are helping them to feel more invested and a part of the project. As a result, they may feel more empowered to help implement some of the changes or come up with solutions to suspected problems.*

Point of contact for feedback: *You may want to set up a specific point of contact for any feedback on the project or mobility service, for example, the project lead or the operations manager. Having one centralized person may allow the point of contact to understand common suggestions or feedback better.*

Exit Interviews: *For staff leaving your organization, you may want to conduct an exit interview to gain their feedback and perspective. They may be more open to sharing insight on projects or services they didn't feel comfortable sharing as staff members.*

Review Hiring Process: *While you may not have the opportunity to get direct feedback from applicants (or potential applicants who chose not to apply), you may want to review your recruitment, outreach and hiring processes to understand if there are interesting patterns or insights.*

Consider the following questions, evaluate why certain patterns are happening, and implement changes to address the issue.

- *Is there high turnover for certain positions?*
- *Are similar reasons given for why job offers are turned down?*
- *Are certain demographics or groups consistently rejected? Why?*
- *Are certain demographics or groups not applying for job openings?*
- *Were there candidates who were very close but ultimately not hired?*
- *What were they missing?*

It is important to establish a culture of feedback throughout the project. Ensure workers know that they can share their perspective with the overall team or project lead on approaching challenges or areas of concern. It is also important to recognize that feedback should be focused on the services and operations and other areas such as how meetings are run, organizational processes and policies, overall leadership, communication channels, etc. If there is any feedback about the larger CMO program, you may want to share those with the program administrator team, so program-wide processes and policies can be changed or adjusted.

NEXT STEPS: MOVE TO THE NEXT GUIDE

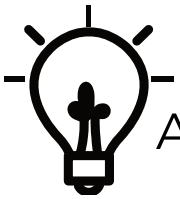
1. Calculate Costs

2. Hire Locally

3. Engage the Community

4. Finalize Contracts & Procurements

5. Plan the Site



Additional Support

For any questions or for further guidance, please contact your Technical Assistance Leader.

CMO Hotline:
626-744-5670
M-F | 9AM- 5PM PST

info@cleanmobilityoptions.org

www.cleanmobilityoptions.org

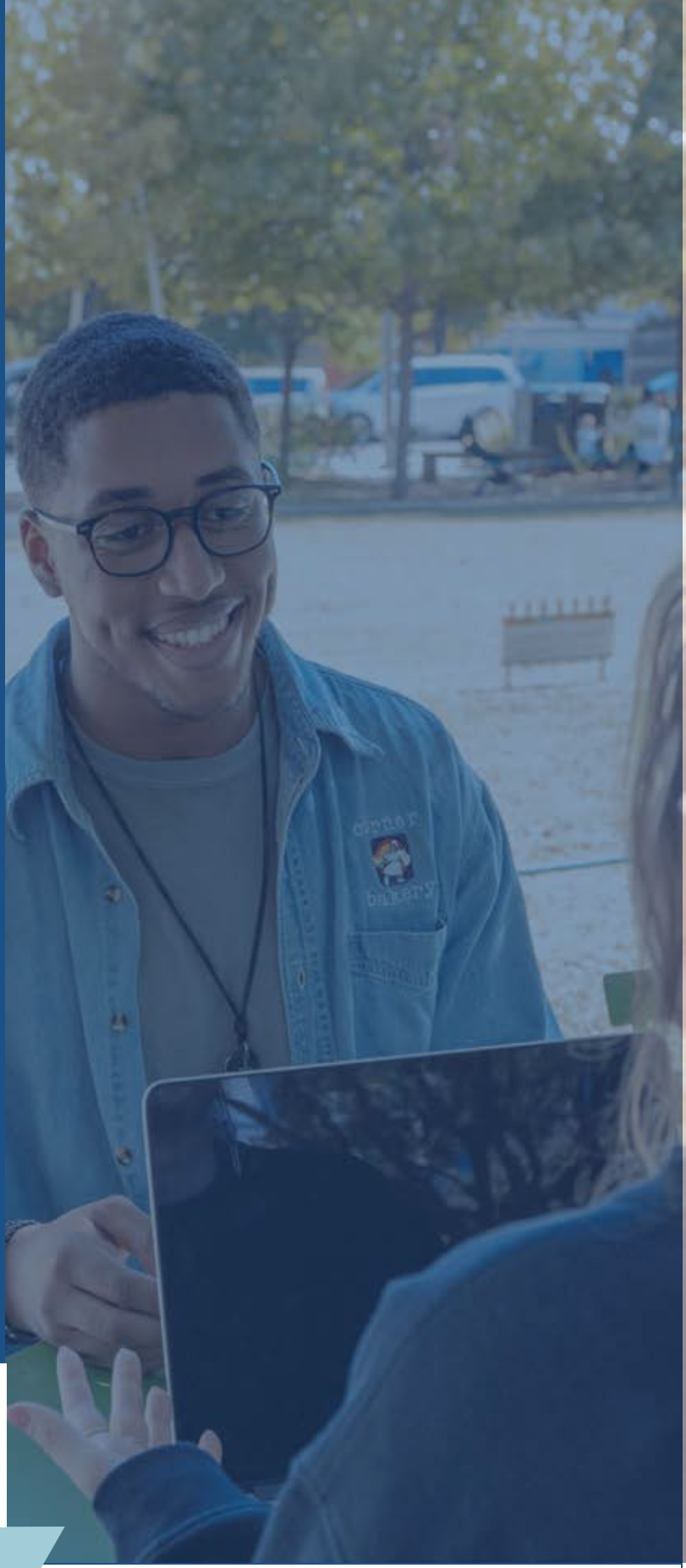
ADDITIONAL RESOURCES

- ***STEP Workforce Development Guide (2020)***
- ***Putting California on the High Road: A Jobs and Climate Action Plan for 2030 (June 2020)***
- ***High Road Training Partnerships (2022)***
- ***Local Hiring and First Source Hiring Policies: A National Review of Policies and Identification of Best Practices (October 2013)***
- ***Equity, Diversity and Inclusion in Recruitment, Hiring and Retention (October 2018)***
- ***Understanding Your Community: Labor Market and Workforce Development System Data Toolkit (January 2019)***
- ***Exploring Targeted Hiring: An Assessment of Best Practices in the Construction Industry (March 2014)***
- ***Community Workforce Agreements: The Pathway to Coalitions Between Labor and Community (March 2010)***
- ***Community Benefits Agreement Toolkit (2020)***
- ***Community Benefits Agreement Handbook (2005)***

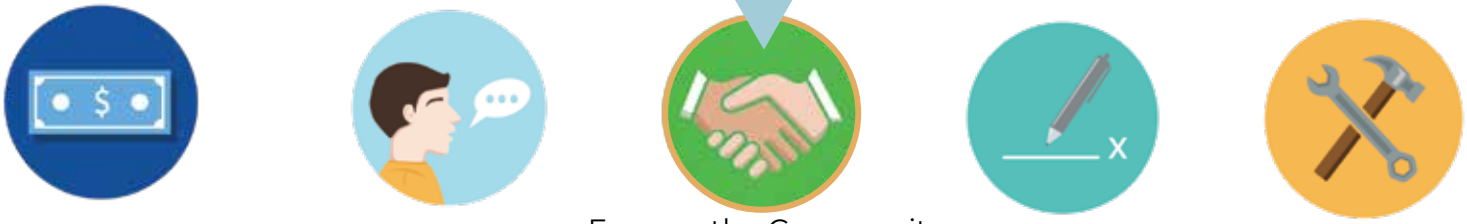
ENGAGE THE COMMUNITY

A Guide for Developing a Community Engagement Plan

September 2022



Project Implementation Toolkit
Guide 3 of 5



Engage the Community

TABLE OF CONTENTS

TABLE OF CONTENTS

WHAT IS CMO?

The Clean Mobility Options Voucher Pilot Program (CMO) is part of the **California Climate Investments (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, innovative 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.

This 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 designed to help each of the awardees implement their mobility project well. Each Guide in the Toolkit has been designed as a stand-alone resource with tips and worksheets.

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.

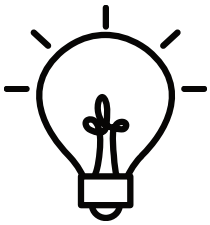
Guide 5: Plan the Site

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

In your application, you submitted a Community Outreach Plan that summarized your outreach efforts and activities to engage community residents as you prepare for the launch of your project and throughout the project's operations.

This guide helps you expand upon your plan so that you can bring the community into decision making around things like project siting, pricing, a launch event, and other project milestones. This guide also provides guidance for fostering project identity, addressing institutional inequalities, building capacity with residents, creating community buy-in, and developing sustainable ridership. That trust is imperative to making your program successful.



TIP!

NEED MORE GUIDANCE TO ENGAGE THE COMMUNITY?

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

SET COMMUNITY ENGAGEMENT GOALS

Refine Community Outreach Plan and Project Milestone Schedule

At the time of application, you submitted a Community Outreach Plan to show how community engagement would inform your project, and a Project Milestone Schedule, to lay out a timeline for your project's major achievements. Holding these up together and pairing engagement strategies with your milestones will help you set goals for community engagement.

Review your Community Outreach Plan from your application. You might have goals identified or need to tease them out. Here are some steps to help refine your goals, center them around community decision making, and tie them to your project's timeline.

Establish an Engagement Timeline

Looking at the milestone schedule and community outreach plan, identify major milestones for and where there are opportunities for synergy to engage and include the community. Ensure there is sufficient time to plan and prepare for the engagement, build relationships and trust, and incorporate community in a meaningful way.

Key Milestones to build your engagement timeline around:

Project Kickoff - before service begins, it's not too early to bring in the community, establish relationships, and start building buzz.

Planning Phase - A crucial opportunity to build trust, create community buy-in, and leadership.

Construction Phase - If installing charging stations, docks for bikes, or even using a public parking space for a shared vehicle, it's vital to let the community know what to expect, and get feedback. Critical here too is anticipating any political pushback and using engagement to get ahead of it.

Project Launch - This is a chance to celebrate the project with the community that helped bring it to life.

Operations Period - Engagement doesn't stop when the service starts. Keep engaging the community throughout the operations period to continually improve it to better meet the community's needs, and market the service to build sustainability beyond the grant period.

Worksheet

Identify Target Participants

An important step before determining how you engage the community is to establish who to involve in the process (e.g., who you want to inform, get feedback from, and lead specific project elements).

- [ ] Define what 'community' means to your project; describe the groups of people the mobility team aims to impact with the mobility project and bring in through engagement.
- [ ] Which priority populations or groups are you trying to ensure use the service?
- [ ] Which groups of people in your project area have been historically marginalized?
- [ ] Who is often excluded from engagement? Who is most impacted by projects? Are these the same groups? Different groups?
- [ ] Who often chooses not to participate in community engagement efforts in your project area?

TIP!

After identifying these groups, think about what that history will mean when trying to involve them. It may not be as simple as inviting them to a meeting. For more about building trust, see "Establish Context and Principles of Community Engagement" below

Write Out Engagement Goals

What are you hoping will happen because of this engagement process? How do you want community engagement to impact your project?

After thinking about the above, you could write out goals like this:

"We want _____ (target audience) to _____ (role/action) during _____ (project phase or activity)."

Examples:

"We want ***Spanish-speaking seniors*** to ***identify key drop-off locations*** during the ***planning phase of the service***."

"We want ***local businesses*** to ***learn that on-street parking is being removed for service*** during the ***construction phase***."

"We want ***students*** to ***use the service*** during the ***operations phase***."

"We want ***six representative residents*** to ***lead 10 house visits*** to collect feedback during ***the entire project period***."

TIP!

For help identifying roles and levels of participation for community members in your engagement process, see the **IAP2 Spectrum of Participation.**

REVISIT COMMUNITY CONTEXT AND PRINCIPLES FOR ENGAGEMENT

Review and Build on Previous Efforts

Project teams conducted robust outreach and engagement efforts during the Community Transportation Needs Assessment, which was required for the Mobility Project Voucher (MPV) Application. Along with that, there may have been more transportation planning efforts or outreach in the project area that should be reviewed for more context. Further community engagement throughout the MPV project period should build and improve on these past processes. The focus of this engagement is much smaller as well and will present different users and feedback than previous efforts. Project teams know their communities best, but engagement must continue to facilitate a community-led project.

- Screen for community triggers and community trauma around planning, mobility, and displacement.
- Research what community engagement work has already been done.
- Closely review and understand findings from the “Needs Assessment.”
- Move at the speed of trust. For example, rather than wanting to engage residents first, a great step is to think about how you can be a source of knowledge and service.
- Work with key stakeholders in the area to understand the best paths forward for community engagement.

TIP!

It's always good to show your face, and a great opportunity to start doing this is while you are learning about community context. Attending meetings and saying nothing will get you recognized as someone ready to listen, and not purely to extract from the community.

Establish Principles for Your Community Engagement

Develop guiding principles to help the Mobility Project Team stay rooted in how the mobility project is connected to the community. Here are some basic core tenets to keep in mind when conducting community engagement:

Clarity: Clear communication about the purpose of the community engagement, the project, and the community's role in project planning and implementation.
Accessibility: Accessible times and locations of events, meetings, and gatherings (e.g. virtual engagement when possible, evening meetings, meeting locations close to transit, neutral meeting locations) and accessible materials (e.g., language and ADA accessibility).
Representation: Activities that reach a broad and representative subset of the whole community, including hard-to-reach residents that are not typically served well by existing public feedback processes.
Transparency: Consistent, clear, and easily available information about community engagement activities, including notices before they happen and follow-up after they happen

PLAN FOR REQUIRED SURVEYS

Develop Goals and Strategies for Survey Collection

The CMO Voucher Pilot Program requires that awardees collect information from community members participating in engagement activities and from those using the services. Some questions are required for each survey category, but there are also opportunities to modify, add, or subtract optional questions to get the information needed to improve the project. There should also be a timeline and goals set for these surveys that you can work with the Program Administrator to develop.

- ☐ **Intake/Sign-Up Surveys (Required)** - Deployed either during planning and construction phase or beginning at Operations Launch as residents begin to use the services.
- ☐ **Post Trip Surveys (Required)** - After a designated intake period, post-trip surveys will be deployed to capture travel activities and service feedback and satisfaction throughout the Operations Period.
- ☐ **User Surveys (Required)** - Beginning at least 1 year from Operations Launch and 6 months before the end of the Voucher Agreement Term a user survey will be deployed to capture behavior change and service feedback and satisfaction.
- ☐ **Community Engagement Surveys (Recommended)** - During or after community engagement activities, Awardees are encouraged to request feedback from attendees, however all the required questions are included in the intake/sign-up surveys and/or annual user surveys throughout the Voucher Agreement Term.

TIP!

For more tips on survey design and deployment, see the **Community Transportation Needs Assessment Survey Guide.**

CHOOSE ENGAGEMENT ACTIVITIES

Worksheet

Pick the Right Activity to Meet Project/Community Goals

Reviewing your milestones, context, and core principles for community engagement, **identify the specific community engagement events that best support the goals and attract the intended audience to participate. Below are some activities.** For more examples, please see the **Community Transportation Needs Assessment Engagement Guide Appendix.**

- **Steering/Planning Committees:** A steering/planning committee is made up of a group of individuals or organizations who help guide the project and planning by using their expertise within certain aspects of the project.
- **Resident Committees:** Create a resident-based committee with target populations, youth, seniors, and more. The committee can be empowered to lead further community engagement activities and given decision-making authority.
- **One-on-One Discussion:** One-on-one discussions are similar to interviews where you discuss with one or two individuals to get insider knowledge or expertise on a topic or field. These can occur with industry experts, residents in the project area, and more. These conversations can be extremely helpful at the beginning of your project when you are working to build relationships.
- **Focus Groups:** Group interviews or discussions involving a limited number of people to receive opinions and impressions on a specific topic.

- [ ] **Town Halls** Meetings that are generally held in a public or governmental space to review specific topics with members of the community and record their opinions.
- [ ] **Interactive Workshops** Events where community members have a specific list of questions or hands-on activities to explore specific topics and offer reactions and/or potential solutions.
- [ ] **Open Houses** Invitation to a public event where people can view and interact with a specific place, concept, or new technology.
- [ ] **Roundtables** Roundtables invite key stakeholders from the community to discuss a set of guiding questions related to project implementation. Roundtables usually feature a facilitator, a clear outcome of the discussion, and allow for knowledge sharing.
- [ ] **Local Partners & CBOs** Coordinate with local partners or community-based organizations to share information and surveys with their group members through email newsletters, social media, and announcements at their events/activities. Consider paying CBOs to help with the engagement.
- [ ] **School & PTA Meetings** Connect with local schools and Parent-Teacher Associations (PTAs) and become a regular at their meetings. Ask to present items or facilitate discussions around the needs of your project.
- [ ] **Pop-Up Shops** Opening a short-term space for an event or series of limited events to sell or showcase new items or concepts.
- [ ] **Web-Based Engagement** Engage with the community online through websites, email or social media to keep them informed about news, events or products.
- [ ] **Mobility Launch** The start of a service or set that includes carsharing, bike sharing, mobility hubs and/or data platforms.
- [ ] **Safety Courses** A class or series of classes to teach best practices for safe use of specific equipment or services. These could include in-person, online or video training.

Key Considerations for Engagement Activities

Consider the following questions when considering community engagement events:

Where: Where will the community engagement activity or event be held? Is it accessible to the individuals or groups that should be there?

When: What date and time will the event be held? How long will the event last? Is this a good time for target populations or groups?

Who: What level of staffing or volunteer support is needed?

Outreach: How will the engagement activities be advertised and shared with audiences?

Materials: What material or equipment is needed to ensure a successful event?

TIP!

What additional community engagement components will be provided to make it more inclusive?
Consider cultural relevance, language, virtual options, health and safety measures (i.e., COVID-19), etc. See the **Community Engagement Guide Appendix** for more in-depth information on these additional components.

Engagement Tips

Be Flexible, Prepare for Different Communication Styles
Develop multiple strategies, alternatives, and ideas for engagement. Sometimes an idea or approach won't provide the results that were anticipated, and you will need to shift your strategy altogether. Rather than waiting for that moment to come, plan for different forms of engagement upfront.
Some residents may prefer to engage verbally, with written text, or tactile exercises. Further, some residents may prefer quick and direct answers, while others like answers with tons of context. In any case, it's always best to ask if the community has further questions or would like to approach something differently.

Provide Different Types of Incentives
Consider using raffles, gift incentives, prizes, and other creative incentives to get residents to participate and provide input during events. Awardees should note that CMO cannot directly pay for food or childcare expenses.

Use Digital and Analog Outreach
One community may prefer to use online surveys, while another may find paper surveys more suitable. Making sure you include an array of options for engagement, including digital and analog outreach opportunities, will include residents with limited-technology capabilities and can help bolster engagement responses.

Understand When It Is A Good Time To Reach Out To Residents
Talk to place-based organizations, review your needs assessment results, and generally get a feel for when your community prefers to engage, such as weekends, evenings, or during regular business hours.

Host Engagement Efforts In Centrally-Located Destinations
Host events that are readily accessible by transit, familiar to residents, and generally ADA accessible. Even if there are more lucrative and luring areas to host an event, residents may not feel compelled to attend if they are not centrally located or easy to find.

TIP!

*Inclusive ADA event resource: University of Kansas' **Best Practices for Planning an Accessible Event.***

Meet People Where They Are
Some residents will be somewhere at a specific time - leverage those opportunity moments for engagement. These events could include laundromats, food carts, post-church community events, school events and meetings, park visits, and more.

Leverage Existing Events
Rather than creating a new event, join an existing event like a community fair, a church event, council meeting, farmers market, and more. Coordinating with existing events will avoid organizing a new event, engage people that wouldn't otherwise attend your event, and allow you to be part of the community.

Creating Content

When designing content for community members, such as flyers for events, social media posts, or informative brochures, it's important to make the document accessible, enjoyable, and representative of the community. Here are some tips to ensure that documents, social media posts, flyers, and more are created in an inclusive way.

Don't Assume
Be sure to include descriptions, benefits, and images of mobility options and reference any projects in the community.

Language
Produce content and documents in all major languages spoken in the community and avoid jargon and acronyms to make language explicit and direct. Include images, photos, or icons to help convey a message or tell a story.

Cultural Relevance
Consult with local community groups, leaders, and champions, including youth and local artists, for culturally relevant ideas that will resonate with the community and gain traction. Conversely, discuss what cultural sensitivities need to be kept in mind when creating content so as not to surface any community traumas.

Americans with Disabilities Act Accessible
Ensure material and documents are ADA accessible and are available in multiple formats and languages using both digital and analog formats per the community's needs/preferences.

Informed Consent/Data Transparency
Be transparent about how participants' data or responses will be used or protected.

MEASURE PROJECT SUCCESS

Build Evaluation into your Engagement Timeline

Over your project period, an easy place to start evaluating is to go back to your community engagement goals and see if you were able to meet them fully or in part. With that in mind, how often will you check back on these goals and recalibrate if necessary? Who will you incorporate in this evaluation? Remember your post-event surveys!

Worksheet

Questions for Evaluating Engagement

Here are some more questions to consider asking throughout the engagement process and after activities:

*Evaluating Community **Reach***

- [ ] Did our target audience participate in this engagement?
- [ ] Were they actively participating in the engagement, giving feedback? Or were they passively listening or watching?

*Evaluating Community **Access***

- [ ] Were participants' language, literacy, age, and culture taken into consideration with the process design?
- [ ] If a facilitator was used, did they provide a safe and well managed environment?

*Evaluating Community **Capacity Building***

- [ ] Did the public engagement process provide residents with additional skills, knowledge, and experiences likely to encourage their role as committed and effective community members?
- [ ] Was background information provided so participants were prepared?
- [ ] Did the process result in the agency making a more informed and/or better decision?
- [ ] How might your agency continue to draw on and develop these community capacities?

*Evaluating Community-led **Decision Making***

- [ ] Did the agency consider the ideas resulting from public process in final decisions?
- [ ] Did the process result in the agency making a more informed and/or better decision?

*Evaluating **Transparency***

- [ ] What happened to the input gathered?
- [ ] Have participants been given the opportunity to add their names to appropriate mailing lists/listservs for future engagement opportunities?
- [ ] Was the process appropriate for the degree of specificity you were seeking?
- [ ] Were materials used in the process helpful?
- [ ] Did the agency provide feedback to participants about how their recommendations were or were not used and why?
- [ ] Was there an effective external communications effort to the larger public during, or at the conclusion of, the engagement effort about the intent of the process, or its outcomes?

*Evaluating **Effectiveness***

- [ ] Were you satisfied with the internal communication among staff within your organization, project partners, and (any) consultants during the engagement process?
- [ ] Was there greater support for the (resulting) new policy or action?
- [ ] Did the community say they would be more or less likely to participate in other such processes in the future?

Remember your post-event surveys as well. These are vital to the evaluation. Remember to be flexible! Listen to the community and show that you are learning from them and incorporating their feedback. This will also build trust and buy-in to your process and improve your service.

NEXT STEPS:
MOVE TO THE NEXT GUIDE

Thank you for using the Engage The Community guide. We hope it helps you engage with your community throughout your mobility project. Feel free to repurpose, change, or modify any of these activities to best support you with engagement.

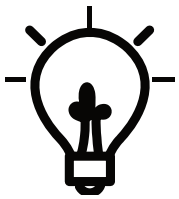
1. Calculate Costs

2. Hire Locally

3. Engage the Community

4. Finalize Contracts & Procurements

5. Plan the Site



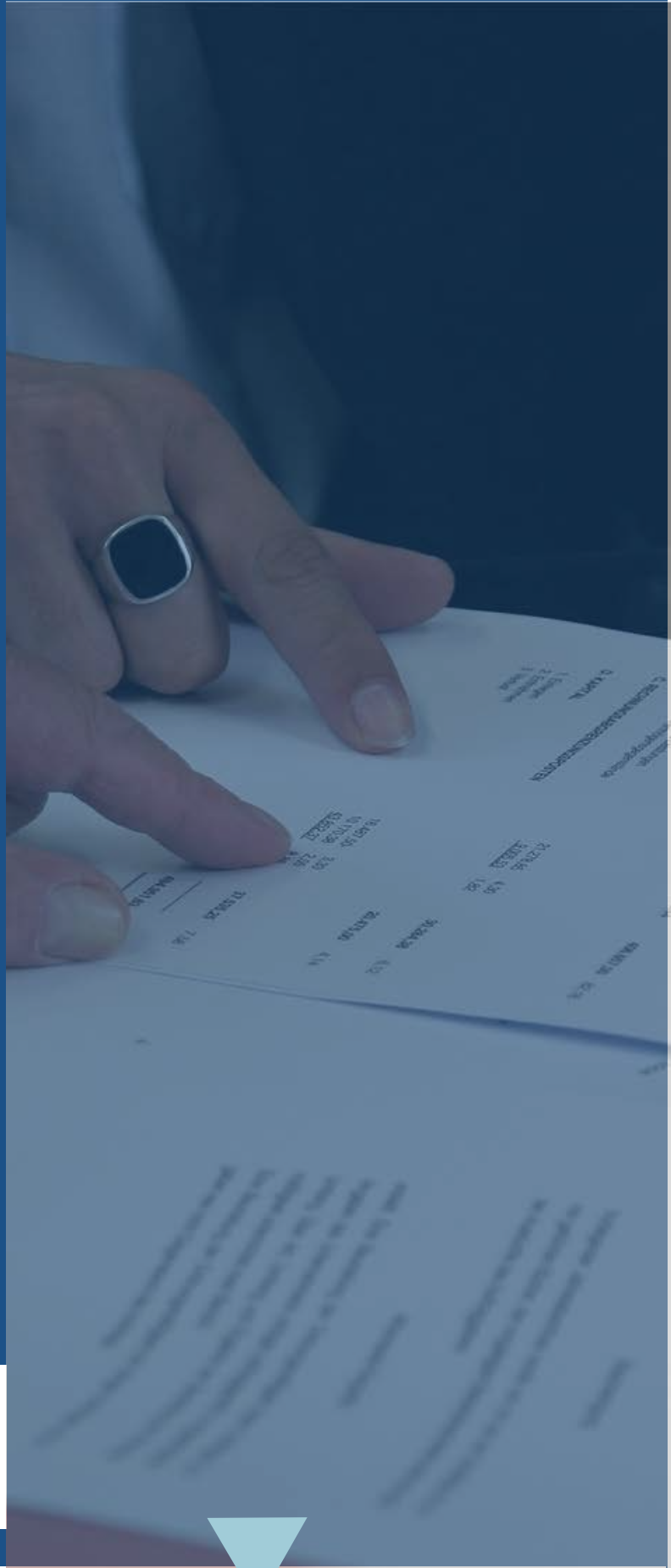
Additional Support

For any questions or for further guidance, please contact your Technical Assistance Leader.

CMO Hotline:
626-744-5670
M-F | 9AM- 5PM PST

info@cleanmobilityoptions.org

www.cleanmobilityoptions.org



FINALIZE CONTRACTS AND PROCUREMENT

Strategies and Considerations for Setting up Contracts for Your Mobility Project

August 2022

Project Implementation Toolkit
Guide 4 of 5

TABLE OF CONTENTS

WHAT IS CMO?

The Clean Mobility Options Voucher Pilot Program (CMO) is part of the **California Climate Investments (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, 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.

This 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 designed to help each of the awardees implement their mobility project well. Each Guide in the Toolkit has been designed as a stand-alone resource with tips and worksheets.

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 & Procurement

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 **Implementation Manual (IM)** contains important guidelines and eligibility requirements for Mobility Project Voucher awardees, and awardees must conform to standards set in the IM. It is important to review the IM because in some cases, program eligibility is contingent on conforming to these standards.[1]

The standards and requirements outlined in the IM may ultimately require developing contracts with other entities. This Guide includes information and considerations about procuring new mobility service operators, construction and maintenance services, project management services, or any other necessary contractors. All Mobility Project Voucher (MPV) awardees are encouraged to seek legal counsel when drafting their own contracts with mobility providers and other ancillary services. Lead Applicants (Awardees) are responsible for all contractor activities, including the activities of subcontractors.

WHAT IS THE GOAL?

The end goal of this guide is to provide awardees with information, tips, and worksheets to establish contracts and procurements that support good partnerships and help meet the mobility project's goals.

1 Awardees should note that they will be held to the guidelines of the IM in place at the time of application submission. The IM may be updated several times per year to accommodate operational process changes and thus change eligibility requirements. Awardees would refer to the most updated version of the IM found **here**.

How to Navigate this Guide

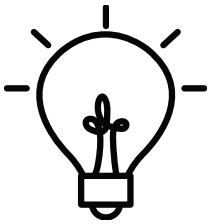
The following sections in the guide are organized in a series of sequential steps to build out your mobility project budget. We suggest that you read each section and complete worksheets in sequence.

- Step 1 is to Learn Contracting Basics
- Step 2 is to Identify Potential Services to be Contracted
- Step 3 is to Select Your Partners and Develop Stakeholder Agreements
- Step 4 is to Understand The Types of Agreements
- Step 5 is to Finalize Contracts For Your Mobility Project
- Step 6 is to Move to the Next Guide in the Toolkit - Plan the Site

Considerations

This document is not a substitute for legal advice or contract sampling.

Reference in this document 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 (CARB). Calculate Costs summarizes relevant budget items for each eligible project mode as it draws from mode-specific pilot project examples.



TIP!

Need More Guidance to Contracting and Procurement?

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

For prospective CMO awardees, 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

LEARN CONTRACTING BASICS

Pre-Contracting Considerations

Building relationships with community partners, operators, companies or institutions is essential to identifying who may be good partners for your project. Before engaging in this relationship-building, clearly identify internal budget, staff needs, and other obstacles so that you will be prepared to communicate your team's limitations and constraints with potential partners. The "Calculate Costs" and "Hire Locally" Toolkit Guides have resources to help identify these needs for your Mobility Project.

TIP!

Be sure to include the cost of seeking and using legal partners when establishing a budget

Worksheet

A checklist of considerations has been developed to help make note of the type of line items to include in your future contracts. See if there are any line items that you need to add to your contracts or discuss with your Mobility Project Team.

- [ ] The number of vehicles or services provided.
- [ ] The project area of those services with language to address the possibility of scaling (if applicable).
- [ ] The availability of those services, with language about the hours of operation, headways, or number of vehicles.
- [ ] Employment details with language about the number of employees and who their employment is contracted with.
- [ ] Mobility Project timeline with language about the duration of the Mobility Project.
- [ ] For any reporting, the type of metrics, data, frequency of reporting, and the roles and responsibilities of each group that is involved.
- [ ] Expectations around data collection, data standards, and data sharing.

Lessons Learned in Forming Successful Partnerships

Learning from other awardees is critical to the success of pilot projects. In addition to the information below, reach out to your cohort members and your Cohort Facilitator to help connect you with current and past awardees to help understand the challenges and effective strategies in forming successful partnerships. The Program Administrator reached out to a couple previous awardees to provide some real world examples. Their advice? Focus on the details, build a strong, healthy relationship and always have a contingency plan. We expand on focusing on the details and having a contingency plan below.

Focus on Details

According to one awardee,[2] working with a mobility provider who was "an excellent partner from the beginning" meant 9 months of steady progress towards signing a contract. This long period wasn't due to obstruction by either side, but instead came from carefully negotiating every possible detail for all likely scenarios. This process began with the government agency describing what they wanted the program to be while listening to what the mobility operator was able to provide. At every point during this 9-month period, having a healthy relationship was key.

2 The Sacramento Metropolitan Air Quality Management District administers a car sharing pilot program available to low-income Sacramento residents.

Have a Contingency Plan

Another awardee[3] learned an important lesson about defining the scope of a program. Despite using a single contractor for all operations and subcontracting, the scope of the agency's project evolved over time. This transformation caused problems with the relationship between the public agency and its private contractor, and the agency was forced to find a new group to take on these responsibilities. Specifically, the contractor was initially asked to manage all of the vehicles, but this scope expanded over time to include acquiring and insuring the vehicles to the contractor's name. Because this changing scope grew outside the initial agreement between the agency and the contractor, the contractor wanted to renegotiate the terms given the new scope. This meant that the agency was forced to find a new contractor to handle vehicle acquisition and insurance.

There were multiple lessons learned from this experience. Not only did future negotiations involve increased attention to detail, but the agency knew that any future contracts would need to include a Plan B. The change in roles between contractors involved months of paperwork, including the transferal of assets. This included vehicles, insurance contracts, and charging infrastructure. The agency later reflected that contingencies should be designed to predict everything that could go wrong. With that in mind, milestones should be agreed upon by both parties to ensure progress is tangible and easily monitored.

3 The San Joaquin Valley Air Pollution Control District was awarded $2.5 million for a pilot project, Ecosystem of Shared Mobility, to provide residents with new modes of transportation while reducing air pollution and GHGs emissions.

IDENTIFY POTENTIAL SERVICES TO BE CONTRACTED

This section focuses on different types of services that you might expect to contract for your Mobility Project, as well as some key considerations for each service.

Mobility Operators

Mobility operators are entities that lead the development and implementation of systems for operating a mobility service. This includes activities such as bringing together back-end systems such as user databases and payment platforms with front-facing activities such as vehicle fleet maintenance and day-to-day service provisions. The **Clean Mobility Provider Directory** has been developed to help Lead Applicants (Awardees) identify mobility operators and other relevant contractors for their project. This can be the Lead Applicant (Awardee) if the organization meets the minimum qualifications of an "experienced partner" as defined in the IM.[4] If not, Lead Applicants (Awardees) must include an "experienced partner" as part of the project team. Lead Applicants (Awardees) are responsible for the activities of all sub-applicants and subcontractors.

[4] Each Mobility Project Voucher team must include an organization with at least one year of experience operating mobility services. The "experienced partner" may be the entity that operates the proposed service, or it may serve in another capacity such as a project technical advisor.

Site Agreements

Site requirements for new mobility services vary greatly by transportation mode. Some modes may involve private contracts with landowners, often called Site Host Agreements. For example, services like bikeshare and carshare may require publicly-accessible space for vehicle parking, storage, or charging. This could involve contracting space from existing, privately-owned land. On-Demand services such as innovative transit don't have the same requirements, but they may still need to procure space for charging or overnight vehicle storage.

For more details on site planning, including navigating the relevant permit requirements, please see Guide 5 - Plan the Site.

Local Construction Contracts

If your project requires construction, here are some considerations when hiring locally for construction contractor positions:

Find local construction/electrician unions that are close to your project area. Please see some of the resources listed below to get started on finding a local group or a specific contractor in your region.

- **International Brotherhood of Electrical Workers**
- **Electrical Workers Minority Caucus**
- **National Electrical Contractors Association - Directories**
- **Contractors State License Board**
- **Department of Industrial Relations - Certified Electrician and Electrician Trainee List**

To hire locally, work with local unions to obtain a list of qualified candidates within or near the project area. Mobility Projects funded by the CMO program require:

- All electric vehicle charging infrastructure and equipment located on the customer side of the electrical meter must be installed by a contractor with the appropriate license classification, as determined by the Contractors' State License Board, and at least one electrician on each crew, at any given time, holds an Electric Vehicle Infrastructure Training Program (EVITP) certification.
- Projects that include installation of a charging port supplying 25 kilowatts or more to a vehicle must have at least 25% of the total electricians working on the crew for the project, at any given time, who hold EVITP certification.
- Projects that include installation of a charging port supplying less than 25 kilowatts to a vehicle must have at least one electrician working on the crew for the project, at any given time, who hold EVITP certification.
- One member of each crew must be both the contractor and an EVITP certified electrician.

Worksheet

Here is a list of potential services that will require contracts. Review the list and consider if there is or will be a need for a contract with any of the following individuals or groups.

- [ ] Mobility Operator
- [ ] Software Providers
- [ ] Vehicle Suppliers
- [ ] Infrastructure Suppliers
- [ ] Landlords for Site Agreements
- [ ] Construction Services
- [ ] Mobility Project Staff Positions
    - Full-Time
    - Part-Time
    - Volunteer
    - Independent Contractors
    - Stipend-Paid

SELECT YOUR PARTNERS & DEVELOP STAKEHOLDER AGREEMENTS

Part of the mobility operator selection process and contract negotiations are to design and establish equitable stakeholder agreements amongst all parties involved. Some important aspects of stakeholder agreements include data sharing and reporting, insurance indemnification, approved contractors, agreements about the costs associated with permitting and exclusivity to operate, and confidentiality agreements.[5] Additional coordination with legal and finance professionals may be needed in some cases.

Before launching, programs should coordinate with legal and finance professionals - To ensure agreements are sound, you may need to work with professionals outside of your organization and industry to develop contracts and agreements.

Procurement Process

In addition to contractual agreements with partners, procurement strategies should be reviewed with them as well. There are requirements for the CMO program that must be met regarding certain purchases. These requirements include ensuring services and vehicles funded by CMO be maintained throughout the Voucher Agreement Term, telematics devices be installed on all devices used, alternative payment options must be available and certified EVITP electricians are included in the installation team for infrastructure and more. For a full list of these requirements see

5 The CMO program requires all partners and individuals participating in the CMO program to sign a provided Confidentiality Agreement that will be provided to the Lead Applicant (Awardee).

Implementation Manual Terms and Conditions. Remember, sub-applicants and contractors may be eligible for direct reimbursement so this should be explored during procurement considerations to limit out of pocket burdens on the Lead Applicant (Awardee).

Reimbursements/Payments

All voucher payments are reimbursed. Sub-applicants and contractors may be eligible for direct reimbursement. To be eligible for direct payment these groups must be established as a "Registered Vendor" and approved by the Program Administrator prior to the submission of direct payment requests. To qualify as a Registered Vendor, the vendor must be an incorporated business in good standing with the California Secretary of State, nominated by the Awardee and approved by the Program Administrator prior to making the payment request. To assign payment to a Registered Vendor, the Awardee must submit a Payment Assignment form signed by both the Awardee and Registered Vendor.

Reporting Requirements

Data reporting is important for adhering to the evaluation requirements of the CMO Mobility Project Voucher. Data reporting requirements for CMO voucher recipients are found in **Appendix F of the Implementation Manual**. Awardees must provide information to program administrators on a regular basis to receive reimbursements.

From the IM, Project Status reports must include the following:

- Description of progress, expected (or past due) launch date, delays, deviations from community outreach plan
- Documentation of Resource Contributions
- Data collected on vehicles, equipment, travel activity, outreach, and job creation (**IM Appendix F**, "Data Collection Requirements")

A complete list of all data reporting requirements for CMO voucher recipients is found **here**. These include (but are not limited to):

- Final report ("must be received by the Program Administrator within 30 days of voucher agreement end date, or 30 days prior to project completion date, whichever comes first.)
- Required Datasets (**IM Appendix F**)
- Vehicle and Charging/Fueling Equipment Specifications
- Bicycle/Scooter and Charging Equipment Specifications
- User Surveys
- GHG Emission Reduction Inputs

UNDERSTAND COMMON TYPES OF AGREEMENTS IN MOBILITY CONTRACTS

When developing contracts, additional agreements may be required. Data sharing and sponsorship agreements are outlined below, additional agreements may be required and should be identified prior to signing a final contract.

Sponsorship Agreements

Sometimes additional funding may be needed to support costs associated with launch and operations. Therefore, sponsorship agreements with local or national businesses may be a viable solution.

Depending on the nature and scope of the mobility project, there may be opportunities for sponsors to pay to have their brand on assets such as ad panels, vehicles or kiosks. Any sponsorship agreements would need to be incorporated into a modified stakeholder agreement with the Lead Applicant (Awardee), mobility operator, municipality and third party property owners.

Leveraging community resource contributions and in-kind donations, sponsorship can come in a variety of forms such as cross-promotional materials and events with local area non-profits and transit agencies. The sponsorship can also supplement costs associated with outreach and community engagement budgets.

Data-Sharing Agreements

As data reporting is critical to fulfilling the voucher agreement, it is recommended to incorporate data sharing agreements into any contract with a subcontractor who will be collecting, analyzing, owning/holding, and handling data on behalf of the team. The Lead Applicant (Awardee) is responsible for complying with all data requirements outlined in the IM, and thereby responsible for all subcontractor's data collection activities. It is the Lead Applicant (Awardee)'s responsibility to collect and submit all required data from their subcontractors.

During the solicitation or request for proposals (RFP) process to find subcontractors, consider incorporating the following data-sharing components in contracts and service agreements that collect and analyze data relevant to the operations and equity consideration of your project.

1. Review the parameters, required data points, and data reporting dates. Data reporting requirements for CMO voucher recipients are found **here**. Data reporting for CMO occurs on a quarterly basis. Data reporting should accompany the Project Status Reports.
2. Identify how data will be collected (it is required, where possible, to collect vehicle data through telematics). The reporting requirements as described in the IM should be followed for all data reports to CMO.
3. Consider the potential to embed surveys into user interfaces. Surveys are required to be distributed on an annual basis to assess user behaviors and obtain a clear understanding of how the fleet is used in the field. Explore if embedding into user interfaces is an option for a provider to determine the cost or needs associated with this program requirement.

4. Check with local partners about data reporting needs. Data sharing can help support a successful program and prepare for reporting. It would be a good practice to establish any other needs or uses of the data the Lead Applicant (Awardee) would wish to use the data for and incorporate that into the agreement upfront.

5. Build accountability practices and contingencies into data sharing agreements in the event the subcontractor does not comply with program requirements. As referenced above, it is the Lead Applicant (Awardee)'s responsibility to ensure all requirements of the program are met. Beyond contingencies, it is recommended to (1) establish a clear data reporting process to maintain relationships of trust between all parties involved, (2) convey data needs and requests for transparency early on in the process between the Lead Applicant (Awardee) and Mobility Operator, and (3) engage with municipal and public agency partners early-on to streamline data requests, points of contact and data reporting structure.

6. Meet Data Specification Standards. Successful programs use these broader standards, such as the General Bikeshare Feed Specification (GBFS) or the General Transit Feed Specification (GTFS) to their advantage. Due to their established uniformity, these standards help operators communicate with more than one municipality or governing body using the same data reporting. These agreements should cover future scaling possibilities, user privacy, and cohesion with other programs. Agreements should also specify that the Lead Applicants (Awardees), transit agencies, or municipalities can request telematics data directly from the operators. From the Shared-Use Mobility Center, **this guide on data specifications** and its role helps illustrate the importance of these data standards.

7. Explore open data sharing. Enable application programming interface (API) for user-facing apps. For example, the app Transit can collect departure information or trip matching information (for microtransit), to help streamline the collection process for easier data reporting.

Indemnity Agreements

An indemnity agreement allows for extra protection against loss, damage, or legal action from third parties, and it may be necessary to provide such an agreement for a mobility project. For example, if a user gets into an accident, an indemnity agreement will generally protect the mobility project from any lawsuits, damages, or claims from third parties. Attorneys' fees, court costs, intellectual property claims, and other costs associated with litigation can end up being a major financial burden for a mobility project, and a well-written indemnity agreement can offer some additional protection.

Service-level Agreements

Service-level agreements dictate the details of specific aspects of the service being provided. For a mobility project, this might include definitions of services, standards for responsiveness, availability, or quality of service, and metrics for measuring those aspects. Though these agreements require effort to manage and monitor, they can be a helpful tool for the mobility project to describe and establish specific aspects of the project and evaluate the progress and provisions of its vendors.

End-user Agreements

It may be important to develop an end-user agreement to cover the final customer's interaction with the mobility project's services. These agreements allow for the use of the mobility service while dictating how it can be used and detailing restrictions and limitations. These agreements

are necessary to protect the rights of the mobility project by describing the terms of the service and setting the expectations of the user.

Worksheet

It is important to have a road map to help anticipate contractual and agreement needs for the short term, medium term, and long term of your mobility project. Here is some note taking space to help you organize the type of contracts or agreements you expect over the course of your mobility project.

Year 0-1: Planning & Construction Phase

During this phase, the Mobility Project Team plans to have contracts or agreements with (use the check box to indicate which agreements or contracts need to be established):

- ☐ Sponsorship Agreement
- ☐ Data-Sharing Agreement
- ☐ Indemnification Agreement
- ☐ User Agreement
- ☐ Service Level Agreements
- ☐ Mobility Operator Contract
- ☐ Software Providers Contract
- ☐ Vehicle Suppliers Contract
- ☐ Infrastructure Suppliers Contract
- ☐ Landlords for Site Agreements Contract
- ☐ Construction Staff Positions Contract
- ☐ Mobility Project Staff Positions Contract

The Mobility Project Team has:

- Included the development period for the agreements in the project schedule.
- Budgeted for the time and labor required for developing and finalizing the agreements.
- A buffer has been established in the projected schedule and agreements to anticipate delays to finalizing contracts or agreements.

During this phase, the Mobility Project Team plans to have contracts or agreements with (use the check box to indicate which agreements or contracts need to be established):

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- A buffer has been established in the projected schedule and agreements to anticipate delays to finalizing contracts or agreements.

Personal Notes (use this section to write down thoughts, ideas, or to-dos for the Mobility Project Team):

FINALIZING CONTRACTS FOR YOUR MOBILITY PROJECT

Once you have been awarded funds for your Mobility Project, and the voucher is executed, you will need to finalize agreements and contracts with your subcontractors. Here are a few key considerations for finalizing these contracts.

The Mobility Project's timeline should be accurately reflected in contracts

The Mobility Project Vouchers issued by CMO are based on a multi-year model, as illustrated in the below graphic (**from the IM**). The Voucher Agreement Term and the Voucher Funding Term for Mobility Project Vouchers are defined as following: a. Voucher Agreement Term is minimum 5 years from the date Voucher Agreement is executed. This includes up to 15 months for project design, planning and construction (Planning and Construction Period), and minimum of 4 years of service operation (Project Operation Period).

Note that the Voucher Agreement Term lasts 5 years from the execution date. This means that programs are required to operate for a full year after CMO funding ends. For this year ("Year 4 of service operation" in the chart below), only administrative costs are reimbursable through CMO sources, not operations costs. When developing a contract, it is recommended to explore contractual contingencies in the event that a mobility operator or other contractor moves to terminate an agreement after the CMO-funded

period. Lead Applicants (Awardees) are encouraged to use the first 3 years of service operation to secure other funding opportunities to continue operations beyond the CMO-funded period.

<table>
<tr><td rowspan="5">Voucher Agreement Execution</td><td colspan="7">Voucher Agreement Term</td></tr>
<tr><td rowspan="2">Project Kick-off Meeting</td><td rowspan="2">Up to 15 months for Planning & Construction Period</td><td rowspan="2">Operation Launch Date*</td><td>Year 1 of service operation</td><td>Year 2 of service operation</td><td>Year 3 of service operation</td><td>Year 4 of service operation</td></tr>
<tr><td colspan="4">Project Operation Period (minimum of 4 years)</td></tr>
<tr><td colspan="5">All eligible costs incurred during this time can be reimbursed by CMO Voucher

(Planning and Construction Period + first 3 years of Project Operation Period)</td><td>During this time and until the end of Voucher Agreement term only administrative costs are reimbursable</td></tr>
<tr><td colspan="7">Data Reporting Period (minimum of 5 years)</td></tr>
<tr><td colspan="7">*Operation Launch may begin at any time during the first year of the Voucher Agreement period but must occur no later than 15 months from the date of project kick-off meeting.</td></tr>
</table>

Figure 1: Mobility Project Voucher Agreement Timeline

Maintaining financial sustainability over the life of the voucher agreement can be challenging. Establishing clear duties and responsibility for funding and financing is also recommended to be agreed upon prior to entering into a contract. For more guidance on costing out mobility programs within the constraints of the Mobility Project Voucher, CMO has provided a **Guide to Calculate Costs** to manage budgeting expectations across the different relevant project modes. In general, awardees should seek funding sources in addition to service fares to support the last 2 years of the voucher agreement term. The Shared-Use Mobility Center has also published a more general learning module on **Shared Mobility Funding Strategies** that can provide broad guidance.

Understand Which Capital Costs Are Reimbursable

When negotiating a contract, ensure awareness on all sides that there are maximum allowable costs for vehicles and infrastructure. The full list of maximum reimbursements for all available vehicle types and charging/fueling infrastructure can be found here (**full list**). Purchase or development of software for reservation and payment of the mobility service also qualifies as a capital cost. In addition to vehicles and infrastructure, the IM also **defines** warranties, repair labor, helmets for bicycle/scooter services and parking spaces as eligible capital expenses. Please see the **Calculate Costs Guide** for more details.

Understand Maximum Reimbursable Costs

The IM also outlines the maximum reimbursable amount for certain capital costs. When negotiating a contract, ensure awareness on all sides that there are maximum reimbursement costs associated with the CMO Program. Subcontractors can submit their own reimbursement requests directly to CALSTART, which reduces payment request timing and improves cash flow for Lead Applicants (Awardees).

Confirm Availability of Required Documentation for Reimbursement

In many cases, supporting documents are required for each reimbursement, **with the full list available in the IM**. Some of these supporting documents include:

Proof of costs incurred for vehicles, infrastructure, and other approved costs.

- These can include contractors/subcontractors, staff labor, and other fees associated with the new program. Please note that the IM includes a detailed list of eligibility requirements for CMO vehicles as well as eligibility and required documents for approved infrastructure.

Solar Photovoltaic (PV) Infrastructure documentation (in addition to previously described infrastructure documents).

- **From the IM,** these include: "A copy of the official Permission to Operate (PTO) notification from the local electric utility, AND a signed compliance affidavit that the solar PV system complies with all program regulations or, Alternatively, if the solar PV system is receiving funding from the Solar on Multifamily Affordable Housing (SOMAH) Program, a copy of the submitted SOMAH Incentive Claim Form (ICF-V1-2019) along with all required attachments and affidavits."
- Please note that separate from CARB, the State of California provides guidelines for solar contractors through its C-46 License. These guidelines are available in **this study guide** for C-46 license applicants.

Status reports and supplemental documents (as required).

- These must be kept up to date in order for programs to receive reimbursements. This includes timely submission of quarterly project status reports, responses to any outstanding survey information or responses to special requests for information by the Program Administrator or CARB, and/or other documents as required. Awardees must complete and submit a project status report at least on a quarterly basis, including contents described in **the IM Section N**.

Other potentially required documents for reimbursement

- This could include site locations or site agreements, community input on services and infrastructure from outside the planned service area, insurance information for vehicles and equipment, along with additional documents requested from service providers by local Project Administrators.

NEXT STEPS: MOVE TO THE NEXT GUIDE

Congratulations on building out contracts and finalizing stakeholder agreements for your mobility project! The next guide in the Toolkit is the Plan the Site guide. Use this guide to get ideas on how to navigate the permitting process.

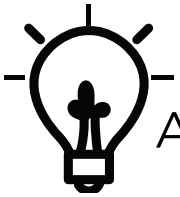
1. Calculate Costs

2. Hire Locally

3. Engage the Community

4. Finalize Contracts & Procurement

5. Plan the Site



Additional Support

For any questions or for further guidance, please contact your Technical Assistance Leader.

CMO Hotline:
626-744-5670
M-F | 9AM- 5PM PST

info@cleanmobilityoptions.org

www.cleanmobilityoptions.org

ADDITIONAL RESOURCES

The Institute for Public Procurement (NIGP) hosts a **Best Practices Resource Hub**, which may be relevant to program admin needs. Specific modules of interest include:

- **Best Practices on Specifications**
- **Best Practices on Technology to Aid in Procurement**
- **Best Practices on Contract Administration**

Other Legal Resources (from **americanbar.org**) which may provide practical value:

- **Sustainable Economies Law Center**
  - From the American Bar Association: "The SELC has two complementary programs aimed at increasing access to transactional legal services for low-income entrepreneurs and change-making organizations, such as worker cooperatives, nonprofits and urban farms."
  - **communications@theSELC.org**
  - 510-398-6219

- **The Online Self-Help Center: Judicial Council of California**
  - Court-sponsored online database for self-help.
  - Also directs users to other **free and low-cost legal resources in California.**

- **Lawguru.com**
  - Free interface to submit legal questions to attorneys. Also includes a database with hundreds of thousands of attorney-provided answers.

- DWF (Legal Consultant)
  - **"Procuring Bikesharing Schemes Without Reinventing the Wheel"**

PLAN THE SITE

A Guide for Site Selection and the Planning Process

September 2022

Project Implementation Toolkit
Guide 5 of 5

TABLE OF CONTENTS

WHAT IS CMO?

The Clean Mobility Options Voucher Pilot Program (CMO) is part of the **California Climate Investments (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.

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.

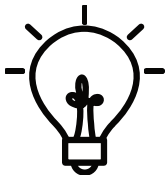
WHAT IS THE GOAL?

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!



TIP!

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

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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

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.

ESTABLISH A PROJECT MODEL BASED ON ASSESSMENT RESULTS

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.

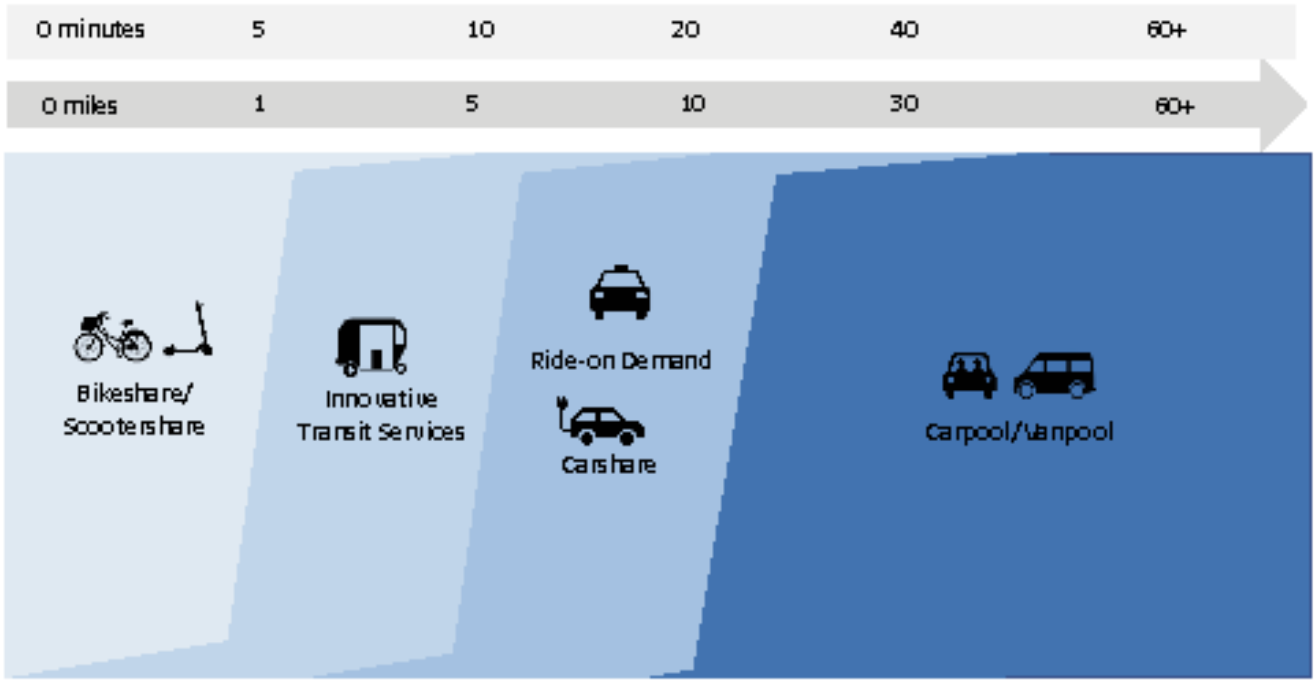


Figure 1: Shared Modes By Travel Distance.
Source: Clean Mobility Options Voucher Pilot Program. 2020. Project Design Guide

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

1. **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.

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

2. **On-demand** options such as vanpool, microtransit, ride-on-demand, and other innovative mobility services offer flexible connections between residents' homes, transit connections, and key points of interest such as job centers, hospitals, and grocery stores. In addition, on-demand services are flexible in terms of pick-up and drop-off areas, with the ability to be customized to meet the needs of stakeholders who utilize the services for first/last-mile connections.

   A. 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.

1. **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.

2. **Free 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

pertinent to the project's success.

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

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.

1. **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.
3. **Visibility**
   Sites should be visible to both vehicle and pedestrian traffic.

4 **Operational Feasibility**

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

5 **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

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.

RESOURCE ALERT!

See the CMO Website Project Implementation Website for the Engage The Community Guide

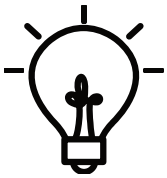
Destinations

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.



TIP!

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.

TIP!

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]

[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

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.

TIP!

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.

TIP!

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

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 - **Here** 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.[4]
- 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.[5]
- 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!

1. Calculate Costs

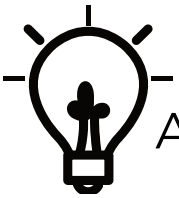
2. Hire Locally

3. Engage the Community

4. Finalize Contracts & Procurements

5. Plan the Site

This is the end of the Project Implementation Toolkit



Additional Support

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M-F | 9AM- 5PM PST

info@cleanmobilityoptions.org

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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

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.[6] 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 **SFMTA's dashboard** 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 **"First All-Electric Vanpools in the United States Begin Commuter Service at L.A. Metro,"** Business Wire, May 13, 2019

9 **Watts Rising Baseline Progress Report**

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.[10] 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 **"Inspiration Transportation | Micro-Transit | United States,"** iTransportEV HQ

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**