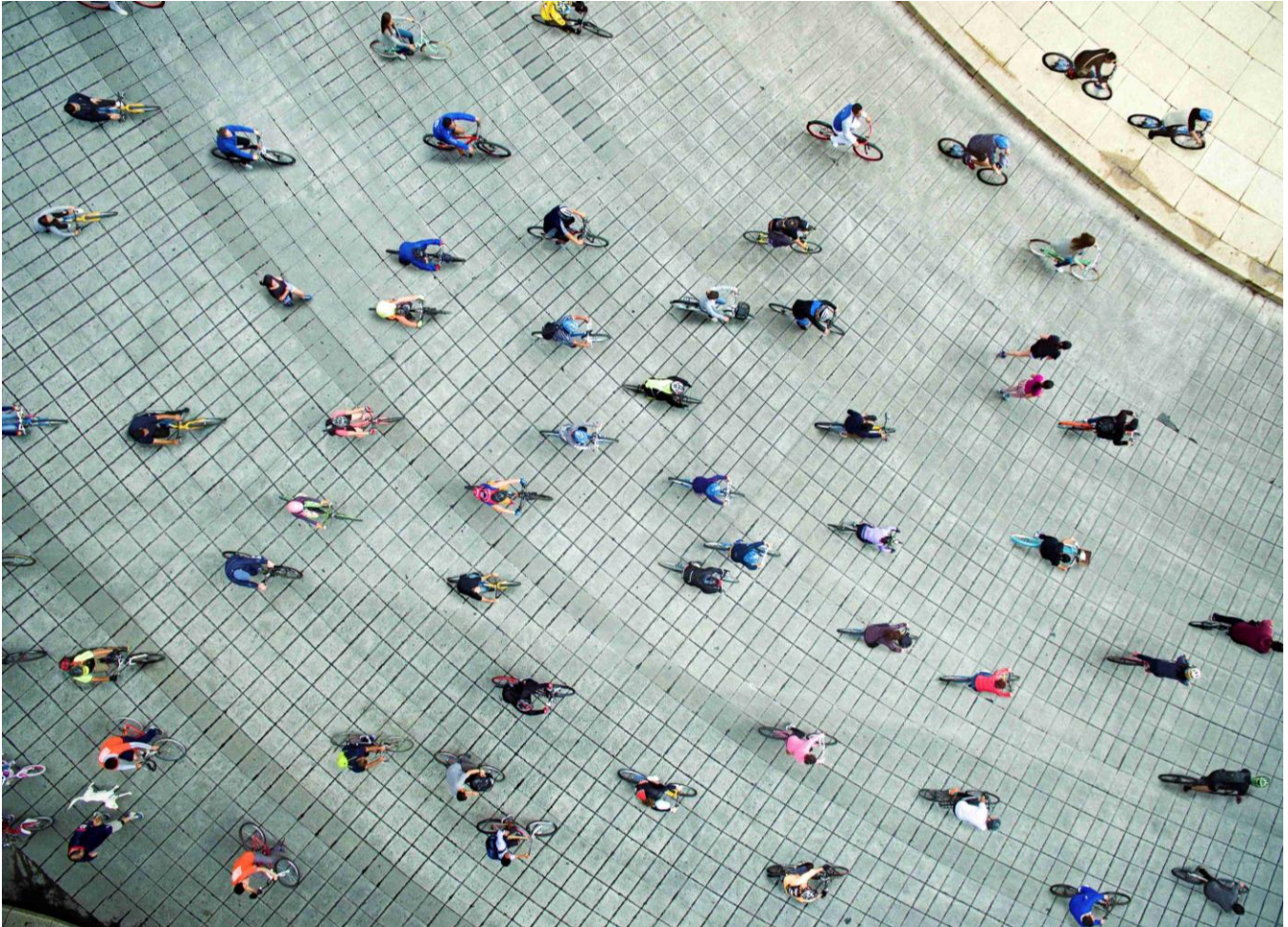


Shared Micromobility Program – Best Practice Review 2025



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Prepared by:

Steer
1610 R Street, Suite 300
Sacramento, CA, 95811
USA

+1 (213) 425 0990

www.steergroup.com

Prepared for:

City of Sacramento
Mobility and Sustainability Division
Department of Public Works
915 I St Ste 2000
Sacramento Ca 95814-2616
United States

City ref: K15195100,
Contract Number: 2024-1296

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Disclaimer

The City of Sacramento (the City) commissioned Steer Davies & Gleave Inc. (Steer) for the Shared-Rideables project (the Project), the scope of which included the Best Practice Review among other tasks.

The Best Practice Review included researching shared micromobility programs of cities in similar contexts comparable to the corresponding program in Sacramento. The approach included a combination of researching publicly available data and information, and interviewing program managers of these cities. This research and the interviews were conducted between March and May 2025, and as such any information included in this document pertains to that period. The details presented in this document are not updated to include any change in information since then.

The summary of the Best Practice Review contained in this document was developed exclusively for the City within the specific context and objectives of the Shared-Rideables project. Any application, interpretation, or use of these findings beyond the defined scope of the Project must receive prior authorization from the City. The information provided should not be repurposed or relied upon outside of this approved context without explicit consent.

1 Background

Steer’s work to support the Shared-Rideables program of City of Sacramento (the City) includes providing policy recommendations, as the City is assessing changes in the Shared-Rideables policy and regulatory requirements. One pillar to inform this policy analysis work was to conduct Best Practice Review research to prepare a comparative peer review analysis of Sacramento’s shared micromobility program, Shared-Rideables, in comparison to micromobility programs of a selection of peer cities. This study helped to not only identify Sacramento’s current micromobility regulations but also gain insights into a wider program that can be identified as best practices to inform policy recommendations.

This report presents findings from the peer review in comparison to five cities: Oakland, Long Beach, Minneapolis, Seattle, and Santa Monica. These cities were selected through qualitative assessment considering operational similarities (shared vendors like Bird, Lime, and Veo¹), geographic proximity to Sacramento (Oakland, Santa Monica), and program maturity (Seattle’s program dating to 2017).

The assessment focused on program structure, fee frameworks, and operational requirements, drawing from publicly available permit agreements and supplemented by structured interviews with program managers from four of the five peer cities conducted between March and May 2025. A copy of the interview guide questionnaire is given in [Appendix A](#).

The objective of this assessment is to provide the City with insights on the following three key areas:

1. **Fee and fine structures**, including permit fees, operational charges, and enforcement mechanisms
2. **Program rules and requirements**, encompassing parking regulations, equity requirements, and community engagement mandates
3. **Operational realities**, examining how program intentions translate into day-to-day management

The analysis presented in the next section is divided into three segments—areas where Sacramento aligns with peer city practices, where it is different, and where it is laxer than the peer cities, along with summary of industry challenges that surfaced through this research.

¹ Formerly called VeoRide, at the time of conducting research and interviews.

2 Comparative Review of Peer City Practices

Areas where Sacramento aligns with peer city practices

Fee Structure Consistency

Cities in this peer study have developed diverse approaches to structuring their micromobility program fees, reflecting different priorities in program management, revenue generation, and administrative efficiency.

The fee structure research reveals three predominant models across peer cities, which includes annual permit fee, per vehicle fee and per-trip fee. A summary of the fee components is presented in Table 2.1 below.

Table 2.1 : Fee Component Overview

City	Initial/Annual Permit Fee	Per-Vehicle Fee	Per-Trip Fee	Other Fees
Sacramento	\$4,440 application + \$2,220 annual	\$104/scooter, \$52/bike annually	\$0.10/trip	N/A
Seattle	\$416 issuance + \$316 renewal + \$350/hour review	\$150/scooter, \$50/bike, \$25/adaptive annually (prorated monthly)	N/A	\$224k bond \$350/hour permit review fee
Santa Monica	\$20,000 annually	\$104/device annually	\$0.20/trip	\$80/vehicle relocation fee
Oakland	\$2,500 initial + \$30,000 annually	\$64/vehicle annually	\$0.10/ per parking in metered zones	N/A
Minneapolis	\$1,000 annually	\$100/vehicle annually	N/A	Tiered vehicle fees; fleet increase fees, equity discounts

City	Initial/Annual Permit Fee	Per-Vehicle Fee	Per-Trip Fee	Other Fees
Long Beach	\$25,000 annually	\$75/device annually	\$0.25/trip	Performance bonds; \$0.50 geofence violation fees

Source: Publicly sourced; Steer analysis

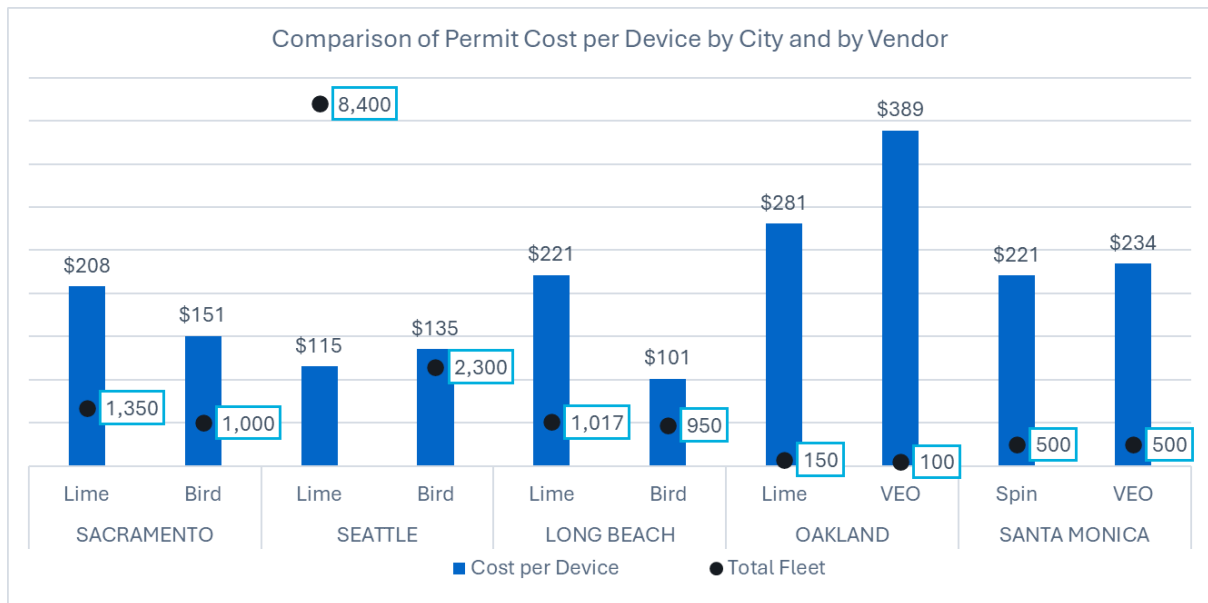
Sacramento's hybrid approach combining application fees (\$4,440), annual permit fees (\$2,220), per-device fees (\$104 for scooters, \$52 for bikes), and per-trip fees (\$0.10) aligns with emerging industry standards. The permit research reveals most cities employ similar multi-component models, though total cost structures vary significantly (Oakland: ~\$287K annually, Long Beach: \$25K base + trip fees, Santa Monica: \$20K + device fees + trip fees). Interview findings confirm operators across all cities express concerns about cumulative cost burdens.

To understand the practical impact of different fee structures the following analysis calculates approximate annual permit costs for operators per device by vendor and by city², based on actual fleet deployments reported in the interviews and documented fee structures. Note that Minneapolis is excluded from this cost analysis due to the lack of interview data providing current fleet deployment numbers. This is presented in The regulatory cost estimates approximations are based on available data from industry benchmarks, the program managers interview, as well as Steer's micromobility expertise. Actual operator costs may vary significantly due to vehicle mix deployed (e-scooters vs. e-bikes), utilization rates and number deployed vehicles.

Figure 2.1 below. The regulatory cost estimates approximations are based on available data from industry benchmarks, the program managers interview, as well as Steer's micromobility expertise. Actual operator costs may vary significantly due to vehicle mix deployed (e-scooters vs. e-bikes), utilization rates and number deployed vehicles.

² Calculations assume steady-state operations and do not account for permit modifications, seasonal adjustments, promotional pricing, fleet size changes, or program evolution that may affect actual annual expenditures. The analysis reflects documented permit fees and may not capture all operator costs including insurance, local taxes, performance bonds, or penalty assessments that vary by compliance levels and operational performance. For example, the estimates do not reflect operator-specific factors such as maintenance costs, theft/vandalism rates, rebalancing expenses, staffing requirements, or technology platform differences that influence total cost of operations.

Figure 2.1: Peer review of permit cost per device by city and by vendor (2025)



Source: Publicly sourced, Peer Cities' interviews; Steer analysis

The estimated permit cost per device in Sacramento appears to be on the lower to middle end of the costs compared to the peer cities, suggesting that the permit fee structure appears to be consistent with industry practices and standards.

Fleet Management

Sacramento's allowance for multiple vehicle types (e-scooters, e-bikes, and adaptive vehicles) matches peer city approaches documented in permits. However, interviews reveal a significant divergence: actual fleet composition heavily favors scooters due to profitability concerns. Only Seattle (8,400 Lime and 2,300 Bird devices) and Santa Monica (discussing e-bike incentives) show meaningful e-bike deployment, while Long Beach reports struggling with vandalism affecting actual deployment numbers.

Response Time Requirements

Sacramento's 2-hour requirement for urgent issues aligns with the documented 1–4-hour range across peer cities (Oakland: 3 hours, Long Beach: 2 hours, Minneapolis: 2 hours, Seattle: 1-2 hours depending on time, Santa Monica: 1 hour during peak hours). Interview findings suggest these timeframes reflect industry consensus on operational feasibility. It should be noted that vehicles blocking an accessible path of travel constitute a federal offense under the American with Disabilities Act (ADA). The City encourages that a vehicle in violation of the ADA is addressed with the highest priority and, whenever possible, immediately.

Data Standards

Cities require comprehensive data submissions from operators, though reporting frequencies and metrics vary significantly. This is summarized in the Table 2.2 below:

Table 2.2: Data Collection and Reporting Requirements across Peer Cities

City	Reporting Frequency	Key Performance Indicators	Special Focus Areas
Sacramento	Monthly	Outreach & education, equity, usage, customer service, sustainability, feedback	Comprehensive sustainability tracking, equity monitoring
Oakland	Quarterly	18 metrics including utilization, user data, maintenance, safety incidents, low-income participation	Any data that is already provided to a City-designated third-party data aggregator is exempted from the quarterly report; helmet distribution tracking
Long Beach	Monthly (12-month periods)	10 metrics focusing on parking performance, compliance, rebalancing, pedestrian conflicts, service resolution	Car-free rebalancing, beach area management, crash data
Minneapolis	Monthly (reviewed every 1.5 months)	12 metrics including fleet distribution, customer data, equity compliance, parking violations	Equity Distribution Area compliance, low-income participation rates
Seattle	Monthly + Quarterly	Monthly: 13 metrics on riders, subscriptions, fleet compliance, lifecycle data Quarterly: User behavior, warnings, fines, suspensions	Most detailed framework with 3-month and 12-month trend reporting
Santa Monica	Monthly (by 2nd Thursday)	12 metrics including active users, low-income participation, injuries, community engagement, VMT	Periodic user surveys, community engagement emphasis

Source: Publicly sourced, Steer analysis

Sacramento's General Bikeshare Feed Specification (GBFS) and Mobility Data Specification (MDS) requirements are similar among peer cities according to permit review. However, interviews revealed compliance quality varies significantly. Including the need for better data monitoring tools and limited bandwidth of the city staff for data verification.

Sustainability and Environmental Reporting

Sacramento requires comprehensive monthly reporting on operational activities including vehicle miles traveled, energy consumption, device lifespan, and battery disposal, creating one of the most thorough sustainability monitoring frameworks among peer cities. Seattle requires annual lifecycle reports detailing device lifecycles, component replacement, end-of-life locations, and recycling procedures.

Santa Monica requires lifecycle analysis upon city request, including material composition, device life expectancy, energy consumption, and disposal procedures. However, the program manager noted challenges in implementing "incentive-based structures to encourage e-bike deployment," suggesting that sustainability goals may conflict with operator economic incentives.

Long Beach emphasizes operational sustainability by requiring operators to describe vehicle rebalancing methods and emissions reduction strategies, while Minneapolis includes sustainability metrics in compliance meetings without specific requirements. Oakland's approach focuses on program viability over environmental goals.

Equity – Fares Program

Sacramento's reduced fare program aligns with peer cities by offering discounts to low-income residents and participants in assistance programs (e.g., Sacramento Housing and Redevelopment Agency (SHRA) housing residents and CalFresh participants).

Areas where Sacramento's requirements differ from peer city approaches

Community Engagement

Sacramento's requirement for 10 annual events (40% in opportunity areas) exceeds documented peer city requirements and reflects a more quantified approach to engagement requirements. Permit research shows Santa Monica requires 6 events (50% in disadvantaged communities), Seattle emphasizes helmet distribution (20 per 100 devices), while Oakland and Long Beach have general engagement plans without specific quotas. Interview findings revealed program managers questioning outreach effectiveness noting that such events are not as effective despite operator good faith efforts, and that operators "do the minimum they can."

Parking Restrictions

Sacramento's mandate requiring parking at bike racks or designated areas aligns with some cities and is more restrictive than others. Long Beach and Santa Monica require parking at city-designated drop zones, Minneapolis mandates vendors to provide parking facilities including docks, while Oakland and Seattle allow more flexible right-of-way parking. Interview data supports this finding, with program managers emphasizing that overly strict parking rules can reduce system accessibility.

Minimum Fleet Requirements

Sacramento's 250-device minimum creates less operational flexibility than peer cities according to permit review, though service area differences may affect device availability and accessibility. Oakland requires only 50 vehicles across its 78 square mile area, Seattle requires 50% of its 20,000-maximum allowance (10,000 devices) across 84 square miles, while Long Beach requires 75% of its 2,000 maximum deployment capacity across 51 square miles. Sacramento's requirement translates to approximately 2.5 devices per square mile across its 100 square mile service area, compared to Oakland's 0.6 devices per square mile and Seattle's potential 119 devices per square mile. This density variation suggests that while Sacramento's absolute minimum appears restrictive, the per-square-mile availability may provide less coverage than smaller, denser markets. Interview findings suggest this operational flexibility is increasingly important given operator financial pressures.

Speed Limits

Sacramento's 15 mph limit for all devices is conservative compared to California state law requirements, which allow e-bikes to operate at speeds up to 20 mph (Class 1 and 2) or 28 mph (Class 3), while requiring e-scooters to maintain the 15-mph limit. This contrasts with permit documentation showing Santa Monica and Long Beach allow 20 mph for e-bikes while maintaining 15 mph for scooters, aligning more closely with state regulations. Oakland's permit uniquely includes quarterly speed limit evaluations based on collision data.

Areas where Sacramento is less restrictive than peer cities

Operator Selection

Sacramento's open permit system contrasts with competitive selection processes documented for Seattle, Santa Monica, Long Beach, and Minneapolis. However, interviews reveal these competitive systems haven't necessarily produced superior outcomes - one of these cities reported that it is considering consolidation to a single-vendor model due to limited administrative capacity of the city to oversee multiple vendors, while another city saw an operator exit in 2024 when the operator requested to deploy fewer than the required vehicles and focus on one type of vehicle over the other.

Equity Deployment

Sacramento's 20% minimum deployment in opportunity areas falls below requirements documented in permits: Oakland (50% in Communities of Concern), Minneapolis (30% in Equity Distribution Areas), and Long Beach (20% across three zones). However, similar to Sacramento's current situation, interview findings reveal widespread non-compliance: Long Beach reports only 1% actual deployment despite 20% requirements, while Oakland's equity requirements only apply above fleet thresholds they haven't reached post-pandemic. In Sacramento operators did not meet this requirement calendar year 2025.

Performance-Based Adjustments

Permit research showed two of the interviewed cities employ sophisticated performance metrics tied to fleet size adjustments (both allowing up to +4,000 additional devices for meeting service standards), while Sacramento maintains fixed caps. However, interviews revealed that this complexity requires substantial administrative resources (2 FTE plus interns) and contributes to their consideration of single-vendor consolidation.

Enforcement Mechanisms

Permit documentation shows Seattle implements the most aggressive enforcement protocols: specific monetary penalties (\$2,500) and fleet reductions (500 devices per violation) for equity non-compliance, plus escalating fines up to \$10,000 for repeat violations. Sacramento's enforcement appears moderate by comparison, with fines ranging \$100-\$1,000. However, the interviews revealed that punitive enforcement has limited impact, and operators prefer collaborative approaches, though specific outcomes weren't detailed.

The following Table 2.3 summarizes penalty structures across peer cities focusing on operator compliance penalties.

Table 2.3: Vendor Penalty Structures across Peer Cities

City	Penalty Type	Penalty Amount
Sacramento	Fleet violations	\$100-\$1,000
	Equity non-compliance	Permit suspension
Seattle	Data violations	\$1,000-\$10,000
	Equity violations	\$2,500 + 500 devices
	Fleet violations	\$1,000-\$2,500
Long Beach	Performance bonds	Variable
	Geofence violations	Applied to operators
Oakland	Improper parking	\$50 to operators
	Base fines	\$50-\$500
Santa Monica	Progressive fines	\$25-\$1,000
	ADA violations	\$500
Minneapolis	Non-compliance violations	\$40 per violation
	Equity violations	Fleet size reduction
	Equity violations	Loss of equity discounts

Source: Publicly sourced, Peer Cities' interviews; Steer analysis

Parking and ADA Violations

Sacramento empowers parking enforcement officers to issue \$15 citations (plus \$12.50 state fees) for devices blocking accessible paths, with operators required to pass citations to responsible users while maintaining an appeals process.

- Santa Monica classifies ADA violations as Class E infractions carrying \$500 fines, while Seattle addresses them under their obstruction hazard framework with \$20 per incident charges.
- Long Beach uses a 311-reporting app for real-time violation tracking, requiring operators to respond within 1-2 hours or face escalation to third-party enforcement vendors.
- Oakland relies on field staff and 311 reports, receiving about 10-15 reports monthly, with improper parking as the most common violation.

User Enforcement

User enforcement focuses on parking violations, riding behavior, and device misuse, though cities report significant challenges in identifying and penalizing individual users. A summary of user penalties is presented in the Table 2.4 below.

Table 2.4: User Penalty Structures Across Peer Cities

City	Penalty Type	Penalty Amount
Sacramento	ADA violations	\$15 + \$12.50 state fees
	Parking violations	Variable
Seattle	Obstruction	\$20 per incident
	Account suspension	After 3 violations
Long Beach	Impoundment	\$100 + \$25/day
Oakland	Parking fines	\$25 to users
	50% of parking fines	50% of operator fine
Santa Monica	User violations	Through operators
	User violations	Through operators
Minneapolis	N/A	N/A

Source: Publicly sourced, Peer Cities’ interviews; Steer analysis

Key market realities affecting all programs

Financial Viability Concern

Program managers expressed concerns about operator sustainability, noting challenges of long-term financial viability and other challenges in the form of vandalism and theft affecting deployment numbers. This context influences enforcement decisions across all markets, regardless of permit language.

Equity Implementation Gap

Despite varying requirement levels, all cities struggle with meaningful equity program implementation. Deployment requirements consistently fall short of targets, while affordability programs show minimal uptake across all markets.

Industry Consolidation

All the cities interviewed have experienced significant operator attrition, with most markets now supporting only 2-3 operators. This consolidation has shifted municipal strategies from managing competition to ensuring service viability.

Administrative Capacity Constraints

Cities highlight limited staffing affecting all cities: Seattle (2 FTE plus interns), Long Beach (recently saw the exit of up to 7 staff during reorganization), Oakland (10-15% of one manager's time). This reality affects enforcement capacity and program evolution regardless of permit specifications, suggesting Sacramento's approach should account for realistic oversight capacity.

Appendix

Appendix A: Interview guide

The following standardized interview guide was used across all peer city interviews to ensure consistency and comprehensive coverage of key program areas:

Program Structure & Operations

1. Could you confirm which operators are currently active in your market as of 2025?
 - How many devices is each operator permitted to deploy?
 - What is the current actual fleet size across all operators?
2. Is your program structured as an open or competitive permitting process?
 - What factors led your city to choose this approach?
 - How has this structure influenced program outcomes, particularly regarding operator accountability and service quality?

Fee Structure & Financial Aspects

3. What is the typical total cost range that operators in your city face annually? (+ confirm cost breakdown)
4. Have you received feedback from the operators on how the current fee structure work for them? Are you considering any adjustments to the fee structure in the coming year?

Equity Requirements

5. What are your current minimum deployment requirements for historically underserved areas?
 - What metrics do you use to define these areas? How do you track and verify compliance with these requirements?
 - Have these equity requirements been effective in achieving your program goals?
6. What community outreach activities do you currently require from operators?
 - Are there specific requirements for outreach in historically underserved areas?
 - Are you satisfied with the way the outreach is being conducted by the operators? Any best practices?

Enforcement & Compliance

7. Could you explain your citation process for non-compliant operators?
8. What specific enforcement mechanisms do you have for equity requirements? Have you needed to enforce these penalties frequently?

Future Direction

9. Do you have any best practices to share with the City of Sacramento?
10. What innovations are you considering for your program's next iteration?

Prepared by	Prepared for
Steer 1610 R Street, Suite 300 Sacramento, CA, 95811 USA +1 (213) 425 0990 www.steergroup.com	City of Sacramento Mobility and Sustainability Division Department of Public Works 915 I St Ste 2000 Sacramento Ca 95814-2616 United States
Author/originator	Distribution
Steer	Client: 1Steer: 1
Version control/issue number	Date
V1	March 2026

steer