

MOTORIZED SCOOTER RENTAL INDUSTRY ISSUES AND SOLUTIONS¹

Our proposed update to the ordinance governing SMD rental companies addresses all of the following issues, which we have categorized under three basic headings: Placement, Use and Process.

PLACEMENT ISSUES (Why the City is facing a class-action lawsuit brought by Disability Rights CA)

- A. ADA compliance and pedestrian hazards are created by the scattered placement of vehicles by users - the “When finished, I can leave it anywhere” idea. Operators further contribute to this problem both by not staging in accordance with the ordinance and failing to quickly address the improperly parked scooters their customers leave or by not removing scooters for the City’s street sweeping program. They are given no incentive to do so.
- B. This is exacerbated by the uncontrolled number of vehicles made available and their concentration in areas favored by tourists and visitors rather than transit nodes.
- C. Scooters are easily knocked over and often left lying on their side.
- D. The ordinance established a confusing two-tier system of staging and parking. For downtown the rule is clear and simple: “stage in corrals only”. For elsewhere, the rule **requires** staging on sidewalks, (unless a corral has been provided), but if scooters are staged on sidewalks they will be driven on sidewalks, so they should always be placed, (staged and parked), in the street.
- E. Minimal distribution of SMDs to under-served neighborhoods.

SOLUTIONS TO PLACEMENT ISSUES:

- 1. Have a uniform policy throughout the entire city that requires that rented motorized scooters only be staged and parked in City-designated corrals, prohibit parking on sidewalks, and, if when the user ends the ride the scooter is not in a corral, require the companies to move their vehicles into corrals immediately. Require that the vehicles have technology to inform the company when they are lying on their sides.
- 2. Limit the number of companies offering scooters for rent via a Request For Proposals selection process and limit the number of scooters each may offer to 50% of the City’s corral capacity. Locate additional corrals in underserved areas and at transit nodes.
- 3. Require the companies to remove their vehicles from corrals where road sweeping will occur.
- 4. Create a Fines schedule and enable Traffic officers to give citations to the companies parking their vehicles on sidewalks.²
- 5. Enable the impounding service to act without delay.

¹ Although the ordinance refers to shared mobility devices, and defines them to include motorized scooters, motorized bicycles and electric bicycles, all the companies operating in SD claim that the devices they currently offer for rent in San Diego are “motorized scooters”. We understand that the City’s Mobility department is disputing this with *Wheels*, whose vehicles the City previously defined as “pocket bicycles” and then made the company remove. *Wheels* modified their foot pegs, replacing them with foot pads, returned and, until recently, the City accepted them as “motorized scooters”.

² The goal of these additional sanctions is not to penalize the companies but rather to provide them with inducements to comply with the City’s ordinance and resolve the problems their industry creates. Their ability to rapidly remove their vehicles from private property before they are impounded demonstrates they have the ability to do so.

USE ISSUES

- F. Driving on a sidewalk.
- G. Underage (under 18) driving.³
- H. Dual driving.
- I. Driving scooters on roads where they are not allowed: roads where other traffic may travel too fast.⁴
- J. Driving the wrong way on a one-way street.
- K. Drunk driving.
- L. Drivers who misuse vehicles cannot be easily identified.

SOLUTIONS TO THE USE ISSUES:

1. Use the RFP selection process to encourage innovation by the companies to prevent sidewalk driving, dual riding, and compliance with the City's Climate Action Plan and Zero Waste policy.
2. Require that the companies conduct an in-person verification of their customers' driver's licenses and prohibit the companies from activating more than one vehicle at a time per customer.
3. Add to the list of roads the companies are required to geofence their vehicles to 3mph, all roads where driving a motorized scooter is prohibited by state law. (Ensure that the City removes any corrals it has placed on such roads).
4. Require the companies through geofencing to slow to 3mph any of their vehicles traveling the wrong way on a one-way street.
5. Require the companies to add a label indicating that only one person may ride the vehicle.
6. Require that the companies attach a plate with a unique identifier to each vehicle.
7. Limit the companies' hours of operation to 6am to 9pm or, within those hours, to the hours the City has an impounding service operating if shorter.

³ Private owners of motorized scooters may legally drive them from 15 years and six months old with a permit, but all the rental companies require the driver to be at least eighteen, because they are entering into a contract.

⁴ The CA Vehicle Code VC Section 21235 (b) limits the speed of motorized scooters to 15mph and their use to roads with speed limits of up to 25 mph or on faster roads with a Class 2 or 4 bike lane, or on roads up to 35mph if the City allows this - ours has not. These limitations bring into question the advisability of the industry choosing to offer motorized scooters to the public as a First/Last Mile transportation solution rather than motorized or electric bicycles neither of which have these limitations and which are also inherently more stable in use.

PROCESS ISSUES

- M. Currently the only sanctions the companies face that could ensure compliance are impounding, (costly to the City), permit revocation, (slow, costly and ineffectual), and non-renewal of permits, (not an immediate, timely sanction). Finer grained and more immediate sanctions are needed e.g. fines and issuing of parking tickets. Currently traffic police are not enabled to issue parking tickets to motorized scooter owners but they could be and a fines schedule could be established.
- N. The hours of operation of the companies does not match the hours of operation, (11am - 6pm), of *Sweep*, which relocates and impounds scooters for the City.
- O. The three hour grace period currently afforded the operators to remove vehicles reported to them undermines the City's ability to deal with problematic parking and staging. (Currently *Sweep*'s shift is 7 hours long, but the 3-hour grace period means they cannot do anything about reports received in the last 3 hours of it so, effectively, it's only 11am to 3pm). Thus impounding is minimal. Revocation ineffectual and non-renewal is not applied.
- P. The City appears to lack procedures for permit revocation and renewal.
- Q. The scooter rental industry increases the carbon footprint of the city so needs to be encouraged to reduce it and must comply with the City's Zero Waste policy.⁵

SOLUTIONS TO THE PROCESS ISSUES

- 8. Enable fines by the City and citations by Traffic officers of the companies.
- 9. Match the hours of operation of the companies and the hours when the City enables impounding, within the allowed hours of operation, 6am to 9pm.
- 10. Require that companies relocate their vehicles to corrals immediately the user ends the rental of it and enable the immediate impounding or relocation to corrals of any vehicles staged or parked not in corrals.
- 11. Create clear processes for the renewal and revocation of permits and make compliance a factor taken into account when companies apply for renewal.
- 12. Use the RFP process to select companies that are demonstrably in compliance with the City's Climate Action Plan and Zero Waste policy.

⁵ *The Impact of the Motorized Scooter Rental Industry on the Carbon Footprint of San Diego*. Freeman and Szemenyei, 2019 (available on the Safe Walkways FB page and on request from the author via SafeWalkwaysSD@Gmail.com).

Are e-scooters polluters? The environmental impacts of shared dockless electric scooters, Joseph Hollingsworth et al 2019 *Environ. Res. Lett.* **14** 084031; viewed at <https://iopscience.iop.org/article/10.1088/1748-9326/ab2da8> on February 28, 2021.

Life Cycle Assessment on the mobility service e-scooter sharing, Severengiz, Semih, et al, 2020; viewed at https://www.researchgate.net/publication/342058237_Life_Cycle_Assessment_on_the_Mobility_Service_E-Scooter_Sharing on February 28, 2021.

KEY FEATURES OF OUR PROPOSED UPDATE TO THE ORDINANCE GOVERNING SMD BUSINESSES

Our proposals address all of the issues. Below we present short summaries of the proposals in the ordinance with the Process issues incorporated into the two other categories. Starting on page 3 we explain the underlying arguments and evidence supporting each proposal. Against each summary is a reference to the section in the proposed ordinance to which it relates.

A. SOLUTIONS FOR PLACEMENT ISSUES A THROUGH D INCLUSIVE.

- A.1. Require all SMDs to be staged and parked only in City-designated corrals, i.e. extend the requirements for downtown to the rest of the city and add corrals in underserved communities and at transit nodes. **§ 83.0310 (a) (2) and (3).**
- A.2. Require that all SMDs be parked in City-designated corrals. **§ 83.0310 (a) (2).**
- A.3. Require that the companies immediately relocate into corrals SMDs not in them. **§ 83.0310 (b).**
- A.4. Enable the City to immediately relocate or impound SMDs not in corrals.
- A.5. Limit the hours of operation of the SMD businesses to 6am to 9pm and to correspond with those when the City operates an impounding service if shorter. **§ 83.0308 (d).**
- A.6. Require that the SMD businesses remove their SMDs from in-street corrals to enable street sweeping. **§ 83.0311 (b) (3).**
- A.7. Require the vehicles have technology to inform the companies when their vehicles are lying on their sides. **§ 83.0308 (a) (9).**
- A.8. Limit the number of SMD companies, the number of SMDs they may have, extend the permits to two years and allow expansion into under-served areas. **§ 83.0305 (a), (b), (b) (2) a).**
- A.9. Enable Traffic Division to issue citations to the SMD businesses, create a fines schedule for the City to impose fines on them, both to be used for placement violations of the ordinance or State law and create a clear process for both the revocation and renewal of permits. **§ 83.0311 (e) (f) § 83.0312 2.**

B. SOLUTIONS FOR USE ISSUES

- B.1. Use an RFP process to encourage SMD businesses to develop innovations that will prevent sidewalk and dual driving, improve their carbon footprint and properly recycle. **§ 83.0305 (a) (b) (c). (7), (11), (12), (14), (17), (18), (19).**
- B.2. Require that the SMD companies verify a user's drivers license through in-person inspection. **§ 83.030544 (c) (7).**
- B.3. Require the companies to display a sign on the vehicle informing the driver that only one person may use the SMD and de-activate any "Group Rides" feature they have. **§ 83.0306 (a) (8), (10), § 83.0308 (e), § 83.0311 (a) (7).**
- B.4. In addition to the roads already required to be geofenced to 3mph add those roads where motorized scooters are prohibited by state law. **§ 83.0308 (c) (8).**
- B.5. Require SMD businesses to also use geofencing to slow to 3mph rented scooters traveling the wrong way on a one way street. **§ 83.0308 (f).**
- B.6. Allow the activation of the SMDs only during the hours 6am to 9pm. **§ 83.0308 (d).**

B.7. Require SMDs to display an identification plate visible to police and the public and the companies to provide a means for the public to report misuse. **§ 83.0306 (a) (8)**

EXPLANATION OF OUR PROPOSALS

A. SOLUTIONS FOR PLACEMENT ISSUES

A.1. Require all SMDs to be staged and parked only in City-designated corrals in the street, i.e. extend the requirements for downtown to the rest of the city and add corrals in underserved communities and at transit nodes.

- A.1.1. This makes one policy that is clear and simple to communicate, (“Only Stage In Corrals”), uniform throughout the city.
- A.1.2. The City currently has designated well over 500 corrals with a capacity of around 6,000 SMDs.
- A.1.3. These corrals are located in those neighborhoods the companies want to operate in: Downtown, the corridor to Hillcrest and the beach communities.
- A.1.4. This is evidenced by the location distribution plans that permit applicants file with the City which indicate that the preponderance of their vehicles will be placed in those neighborhoods.
- A.1.5. Creating additional corrals in other locations e.g. near transit nodes or in under-served neighborhoods gives the City a means of controlling, and testing, the viability of the companies as providers of First/Last Mile transportation solutions.

A.2. Require that all SMDs be parked in City-designated corrals in the street.

- A.2.1. This creates a policy that is clear and simple for the companies to communicate to their users, “Only Park In Corrals”. Many of the companies already provide users with a map of the City’s corrals which can be accessed on their phones when they want to end their rental.
- A.2.2. The companies currently employ technology to warn users of places they may not leave their vehicles, and they prevent the renting of the vehicle from ending if they do not comply, creating an incentive for the user to leave the SMD in a specific location.
- A.2.3. This means that when a user ends the ride, but does not leave the SMD in a corral, the company, to which the possession of the vehicle reverts when the renter finishes using it, becomes responsible for re-locating it to the corral.

A.3. Require that the companies immediately relocate SMDs not in corrals into them.

- A.3.1. Through both the technologies they use and the photos they require users to send them at the end of their use the companies know where their SMDs are located both when in use and when the user finishes the rental.
- A.3.2. The City provides them with information on the location of its corrals.
- A.3.3. The companies employ teams of people to relocate, maintain and recharge their vehicles and are developing technologies that will enable SMDs to be relocated through remote control.
- A.3.4. SMDs left on private property are being impounded by a private impounding company. The SMD operators respond immediately when their vehicles are parked in such locations to remove them and avoid them being impounded. The companies thus have the capability to act immediately.
- A.3.5. When a user finishes using a SMD the company can immediately determine whether it is in a corral or not. It is therefore not necessary to give an hours-long grace period for the companies to deal with a misplaced SMD; this can and should be done immediately as the City is required to avoid ADA violations, the companies agree to comply with federal laws

and it is unreasonable to require people with disabilities to wait to access the amenities of their city.

A.3.6. Currently the City is spending millions of dollars to employ a company to relocate and impound misplaced SMDs and is proscribed from making a profit from impound fees. This external cost imposed on society should not be borne by the City. Rather it should be borne by the SMD rental companies, who have the wherewithal to avoid it but currently lack incentives to do so.

A.4. Enable the City to immediately relocate or impound SMDs not in corrals.

A.4.1. Currently the City limits the hours of operation of its contracted service to impound SMDs not in compliance. This combined with the three hour wait period means that the period during which impounding may occur is very limited, and thus a largely ineffectual sanction.

A.4.2. The companies know where their vehicles are located and have local teams operating to rebalance their location.

A.4.3. When impounding is imminent on private property the companies act to remove their vehicles immediately. Thus doing so is feasible for them.

A.5. Limit the hours of operation of the SMD businesses to 6am to 9pm and to correspond with those when the City operates an impounding service if shorter.

A.5.1. The City is obligated to comply with the ADA and employs a service to impound SMDs not in compliance with the ordinance.

A.5.2. If this service is not operating when the SMD businesses operate the City will not be in compliance with the ADA and thus open to lawsuits such as that currently being brought by Disability Rights California.

A.5.3. The City could expand the hours of operation of the service (currently the shift runs from 11am to 6pm) but to do so, under the terms of the current ordinance, it would need to increase the amount it spends on it.

A.5.4. In addition the current ordinance prohibits impounding for three hours, thereby limiting the City's ability to address ADA non-compliance issues, (unless the issue is one of an "imminent life safety hazard", which the Municipal Code defines as "any condition which creates a present, extreme and immediate danger to life, property, health or public safety." All three conditions: present, extreme and immediate, must apply to the danger for it to be classified in that way.

A.5.5. However it is possible that the combination of the requirements of items A.1 through A.3 inclusive combined with effective sanctions, proposed in the update and discussed below, could reduce the extent of the need for such a service, i.e. the service hours could be increased but fewer people and less equipment used. Our proposal B.6 below would create an operating period of fifteen hours per day. This implies a corresponding impounding shift period roughly double that at present, which should be feasible using half the current resources and thus costing the City little if anything in addition.

A.6. Require that the SMD businesses remove their SMDs from in-street corrals to enable street sweeping.

A.6.1. Currently the businesses are not removing their SMDs from corrals in advance of street sweeping and there is no sanction that can be applied if they do not.

A.6.2. The City has an established schedule for street sweeping which it publishes online and thus is available to the SMD businesses.

A.7. Require the vehicles have technology to inform the companies when their vehicles are lying on their sides.

- A.7.1. The California Vehicle Code prohibits motorized scooters from being left on their side.
- A.7.2. Even if in corrals motorized scooters must be upright in order to create the capacity for them to be stored there, as well as to avoid a safety hazard for people who want to use them.
- A.7.3. Technology exists that can sense whether a motorized scooter is or is not upright.
- A.7.4. The companies already use technology that informs them of the location of their vehicles.
- A.8. Limit the number of SMD companies, the number of SMDs they may have and extend the permits to two years and allow expansion into under-served areas.**
- A.8.1. Other cities control the proliferation of companies and the number SMDs they operate in their area.
- A.8.2. Often they begin with a pilot scheme that involves a quite small number of SMDs and develop policies and processes from there. San Diego has had over three years of experience in dealing with SMD businesses from which to draw on to develop a better ordinance to govern them. A pilot scheme is not needed but a better ordinance is.
- A.8.3. Not all SMD companies have been in compliance with the City's current ordinance, its Climate Action Plan, City and State recycling requirements or other state and federal laws, e.g. multiple studies of the motorized scooter industry's claims to benefit the environment have shown that it actually *increases* the carbon footprint of a city. Nonetheless the City's processes have led to the renewal of as many permits to as many companies as ask for them and no operator's permit has been revoked. These processes need to be improved to provide incentives for SMD companies to address these policies and requirements. This means that the City needs a process for determining who should operate a SMD business, and how extensively, as well as processes that give the companies that are permitted, incentives to comply, and to do so without, again, imposing significant external costs on the City e.g. in the form of police enforcement.
- A.8.4. We propose the City includes a Request For Proposals, (RFP), process as part of the permitting process. Creating an RFP process to select operators to be permitted enables the City to provide incentives for beneficial operators to contribute to the City's transportation system.
- A.8.5. Limiting the number of SMDs each business may operate helps control the problems their misplacement creates. The City's current corral capacity is at 6,000 SMDs. However, under the proposed "corrals only" policy, space will be needed in corrals to enable users to have a place to park their vehicles. Our proposal is thus for three companies to have a combined potential total of 3,000 SMDs using the currently created corrals, i.e. 50% of the current capacity.
- A.8.6. Our proposals also allow for operators to increase the number of SMDs they operate if the City creates additional corrals in designated neighborhoods, e.g. as part of an Equity Program for under-served neighborhoods, or at transit nodes.
- A.8.7. Currently the City operates a semi-annual permitting process. We propose this be replaced by a two-year permit which will reduce the overall administrative cost and enable an effective RFP to be implemented once every two years.
- A.9. Enable Traffic Division to issue citations to the SMD businesses, create a fines schedule for the City to impose fines on them, both to be used for placement violations of the ordinance or State law and create a clear process for both the revocation and renewal of permits.**
- A.9.1. The public was told that the current ordinance was created as a means to improve the public safety issues created by the motorized scooter rental industry.

- A.9.2. The evidence of Get-It-Done reports shows that the ordinance has failed to do so and that the operators are frequently ignoring its provisions.
- A.9.3. The sanctions the City has available currently are ineffectual and costly to apply.
- A.9.4. Currently there are three sanctions which can be used by the City to induce compliance with the ordinance: revocation of a permit, refusal to renew a permit and impounding of SMDs.
- A.9.5. Revocation has been attempted only once and was challenged by the SMD company, resulting in legal expenses for the City and failure, in part because the City had not developed a clear revocation process.
- A.9.6. To date any company that has applied for permits has had them granted in whatever numbers the applicant has asked for, i.e. refusal to renew has simply not been applied as a sanction, despite objections to renewal being submitted by the public and the evidence of non-compliance held by the City in its Get-It-Done reports.
- A.9.7. Non-renewal of a permit is not a timely sanction as currently a period of up to six months can elapse before a renewal application is considered.
- A.9.8. Impounding could be a timely sanction but the three hour wait period and the shift of the impounding service contracted by the City prevents the current system being applied in an effective manner, (see Process Issue M) and that shift does not correspond to the periods of highest demand for SMDs.
- A.9.9. Motorized scooters are not required to be registered with the DMV but that is not an impediment to issuing citations for violations involving such vehicles. The City created a means for Traffic officers to issue citations to other vehicles that were not registered with the DMV, pedicabs. A similar system could easily be established for SMDs and Traffic officers could then be enabled to issue citations to the SMD businesses.
- A.9.10. The City could establish a schedule of fines for violations and require the payment of both outstanding fines and citations before any impounded SMDs are returned.
- A.9.11. Clear processes for both revocation and renewal need to be established in order for revocation or refusal to renew a permit can be effective.

B. SOLUTIONS FOR USE ISSUES

B.1. Use a RFP process to encourage SMD businesses to develop innovations that will prevent sidewalk and dual driving, improve their carbon footprint and properly recycle.

- B.1.1. Encouragement to innovate to prevent sidewalk driving is part of the selection process used by the City of San Jose, CA.
- B.1.2. Some SMD businesses in the USA are innovating to prevent dual driving, and Lyft has innovated to occasionally use a tricycle for rebalancing rather than a gas-powered van.
- B.1.3. Currently the ordinance has no provision for proper recycling, despite the City having a Zero Waste policy.
- B.1.4. Encouragement for all these desirable developments is given in the criteria of the proposed RFP process.

B.2. Require that the SMD companies verify a user's drivers license through in-person inspection.

- B.2.1. This is a requirement for the rental of a motor vehicle under CA state law.

B.2.2. It is also quite feasible for the companies to implement given the teams each employs to be in the vicinity of their devices as indicated in A.3.3 above.

B.3. Require the companies to display a sign on the vehicle informing the driver that only one person may use the SMD and de-activate any “Group Rides” feature they have.

B.3.1. State law explicitly states that only one person may use a motorized scooter at a time.

B.3.2. Users often say they are ignorant of the relevant law, e.g. almost none are aware that, in California, in the absence of a Class 2 or 4 bike lane, motorized scooters may only be driven on roads with a speed limit of up to 25mph.

B.3.3. Many SMD businesses have developed “Group Rides” options, whereby one account holder activates multiple SMDs at the same time, thereby enabling unverified users, e.g. children and people without a license, to drive them. Other authorities have already banned this feature.

B.4. In addition to the roads already required to be geofenced to 3mph, add those roads where motorized scooters are prohibited by state law.

B.4.1. This State prohibition only applies to motorized scooters, and under the current and proposed updated ordinance the SMD businesses are free to provide motorized or electric bicycles for their users as an alternative to motorized scooters. A number of these companies, e.g. Bird, have already announced the development of electric bicycles.

B.4.2. As the City is mandated to effect State law the alternative to requiring the companies to use geofencing is for it to post signs on all streets with a speed limit over 25mph, (without a Class 2 or 4 bike lane), indicating that motorized scooters are prohibited. As the motorized scooter rental industry is popularizing motorized scooters for private use that is necessary anyway. However, by making clear to the public that in California motorized scooters are a more limited mode of transportation than other options, (e.g. motorized / electric bicycles), are not only limited in the roads on which they may be used but also are limited to a top speed of 15mph, the growth of private-use motorized scooters may be slowed, giving the City more time to implement a signage process.

B.5. Require SMD businesses to also use geofencing to slow to 3mph rented scooters traveling the wrong way on a one way street.

B.5.1. The companies’ technology enables them to determine both the location and direction of travel of their vehicles. In the event a user recklessly endangers their own or others’ lives by driving against traffic on a one-way street, the companies have the ability to deter this by slowing the vehicle to walking speed and issuing a warning or sanction to the user.

B.6. Allow the activation of the SMDs only during the hours 6am to 9pm.

B.6.1. SDPD records show that a high proportion of accidents involving motorized scooters take place after dark and after 9pm, despite the low frequency of their use between 1am and 6am.

B.7. Require SMDs to display an identification plate visible to police and the public and the companies to provide a means for the public to report misuse.

B.7.1. Drivers who misuse SMDs and violate the Vehicle Code cannot easily be held accountable for their actions because the driver cannot be easily identified. Requiring an identification plate and means for reporting increases the chance of such accountability, and that will reduce the likelihood of such behavior.