

Electric Scooter Rentals

Policy Brief

By Lily Zhou's Campaign Team

Context

Across dozens of cities in the United States - including San Diego - a problem has arisen around the use and proliferation of electric scooters (e-scooters) . These are scooters that pedestrians can rent for short periods of time to transport themselves across short distances.

There are a few major companies involved in the scooter business, such as Bird and Lime¹. There are several minor companies as well. Policies vary across each company, but the general principles of scooter rentals are consistent. The primary usage for these scooters is to help users get to their desired destinations at a faster pace than walking, without having to use public transportation or a personal vehicle².

San Diegans have several concerns over the proliferation of e-scooters. Every year, hundreds of users and pedestrians are injured (several fatally) due to collisions, improper parking practices, and poor riding choices. These scooters can also reduce the quality of life of regular pedestrians.

Problems

Parking

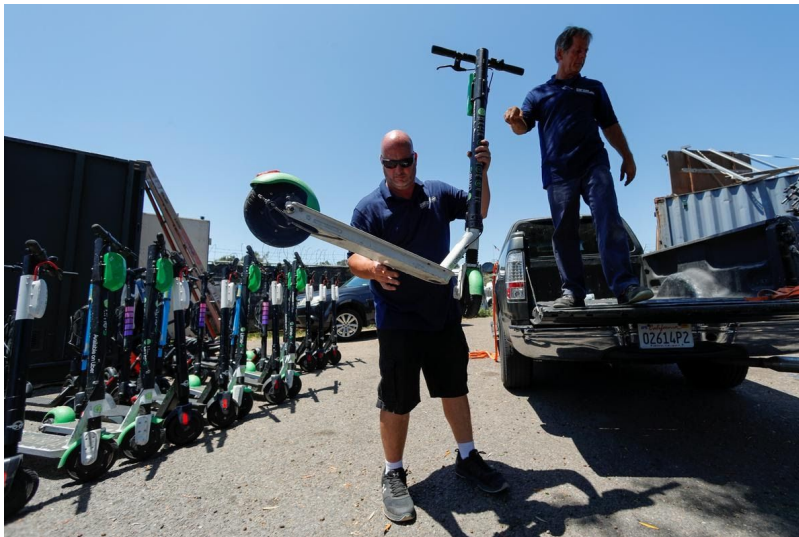
Once a rider finishes their trip with a certain company's scooter, they are prompted through the company's mobile phone app to park the scooter in a designated area. The improper parking of these scooters have been problematic for many pedestrians - especially disabled citizens. This improper practice has made it difficult for disabled people to commute, since sidewalks have limited space.

In addition, scooters can block access to certain properties, such as stores and hotels, which has led to the creation of the scooter collecting company ScootScoop. ScootScoop has deals with over 250 San Diego businesses, collecting scooters and sometimes charging companies upwards of \$50 per scooter to get them back. As of the time of publishing for this paper, there is an

¹ "San Diego. Don't Mind the Scooters. - The New York Times." 4 Sep. 2019, <https://www.nytimes.com/2019/09/04/technology/san-diego-electric-scooters.html>. Accessed 31 Dec. 2019.

² "Lime One Year Report Reveals Early Impact Of Scooter And" 23 Jul. 2018, <https://www.li.me/second-street/lime-one-year-report-scooter-bike-sharing>. Accessed 31 Dec. 2019.

ongoing lawsuit between ScootScoop and the scooter companies Lime and Bird for these removals, which Lime and Bird claim are unethical and predatory³.



Injuries

Many users do not know how to use e-scooters safely or responsibly. The Center for Disease Control measured that over a 3 month period in Austin, Texas, 20 people were injured for every 100,000 e-scooter trips. In 2018, there were over 38.5 million e-scooter trips across the United States and as such hundreds of people are hurt from the usage of e-scooters⁴.

For instance, a study published by the open access journal *Trauma Surgery & Acute Care Open* in August of 2019 found that 98 percent of sampled e-scooter injury patients weren't wearing helmets and 79 percent tested positive for alcohol⁵. To add on, the current infrastructure isn't designed for scooter usage. Potholes and other issues with roads make scootering dangerous for the users, since California law prohibits e-scooter riding on sidewalks⁶. Accidents involving cars are also common. However, most of these injuries are due to falling rather than collisions.

³ "San Diego duo takes on electric scooter industry - Reuters." 1 Aug. 2019, <https://www.reuters.com/article/us-california-scooters/san-diego-duo-takes-on-electric-scooter-industry-idUSKCN1UR47F>. Accessed 31 Dec. 2019.

⁴ "Electric scooter use results in 20 injuries per ... - The Verge." 2 May. 2019, <https://www.theverge.com/2019/5/2/18526813/scooter-electric-injury-austin-cdc-study-head-helmet>. Accessed 31 Dec. 2019.

⁵ "The e-merging e-pidemic of e-scooters | Trauma Surgery" <https://tsaco.bmj.com/content/4/1/e000337>. Accessed 31 Dec. 2019.

⁶ "Are Electric Scooters Legal on Sidewalks in San Diego." 26 Jun. 2019, <https://www.ebtrialattorneys.com/are-electric-scooters-legal-on-sidewalks-in-san-diego/>. Accessed 31 Dec. 2019.

Scooter injuries can be very dangerous, as 48 percent of scooter injuries are to the head, and of those, 15 percent result in brain injury⁴.

The injuries are not limited to e-scooter riders. Pedestrians can be hurt too. *JAMA Network Open*, an open medical research journal, found in January of 2019 that 8.4 percent of emergency room victims were nonriders⁷. Pedestrians often get hit by riders or trip over the scooters left on the streets.

What Other Cities Are Doing

Santa Monica

Santa Monica has started issuing tickets to riders for safety infractions, such as failing to wear a helmet. Thus, unsafe riding has dropped significantly. They have also started impounding scooters and giving citations and fees to companies that leave them in improper places, or do not enforce proper parking with their customers. Because of this, scooter violations and improper parking has dropped substantially. Out of all the punishments for scooter violations, impounding scooters has been seen to have the most effect and reduce scooter violations the most⁸.

New York

In New York, e-scooters are legal in most public areas. However, the city has banned scooter use in Manhattan, as it is especially crowded and congested there. This opens up the possibility of regional compromises with e-scooter businesses, by banning them in specific areas that either don't want them or are too busy to have people use e-scooters safely in them⁹.

Chicago

E-scooters were limited to a maximum speed of 15 miles per hour and could only operate on streets (similar to California). In addition, scooters had a curfew from 5 a.m. to 10 p.m., in which they could not be operated. To cut down on clutter, the scooters had to be parked in the

⁷ "Injuries Associated With Standing Electric Scooter Use" 25 Jan. 2019, <https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2722574>. Accessed 31 Dec. 2019.

⁸ "How Santa Monica Established Order From Scooter ... - LAist." 22 Nov. 2019, https://laist.com/2019/11/22/santa_monica_scooter_program_mobility_future.php. Accessed 31 Dec. 2019.

⁹ "Electric Scooters Are Coming to New York, but You Can't Rent" 19 Jun. 2019, <https://www.nytimes.com/2019/06/19/nyregion/scooters-nyc.html>. Accessed 31 Dec. 2019.

same manner as bicycles: upright and away from street corners, bus stops, and buildings, and leaving a minimum of six feet of sidewalk clearance.

Companies were forced to retrieve improperly parked scooters within a two-hour window as well as collect all of their scooters every evening. The operators are also required to provide the city with continuous real-time data for officials to evaluate¹⁰.

Collecting the scooters every evening might be Chicago's most significant e-scooter policy. Most of the controversy over San Diego's scooter problem can be attributed to improper long-term parking and the impounding crisis.

Solutions

Parking

Institute minor fines for people who habitually park their scooters incorrectly. This would be enforced through location tracking (companies already have this) and payment information that users put into the app before using the scooter. This fine would give people more of an incentive to park the scooters in the correct areas, since people don't want to have to pay.



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Riders don't know where specifically to park their vehicles. Apps often don't give a specified location to park the vehicles. Bird's app gives a large circle to indicate a general area to park, but the company doesn't specify where to park within the circle to prevent "blocking the public right of way", which is something that Bird warns users not to do.

¹⁰ "Chicago to test dockless electric scooter on the city's West Side." 2 May. 2019, <https://chicago.curbed.com/2019/5/2/18527067/chicago-dockless-electric-scooters-west-side-test>. Accessed 31 Dec. 2019.

¹¹ "LA Councilman Paul Koretz seeks a temporary ban on electric" 31 Jul. 2018, <https://www.latimes.com/local/lanow/la-me-ln-electric-scooter-ban-20180731-story.html>. Accessed 31 Dec. 2019.

Thus, on apps, companies should stop assuming that riders know exactly where to park. Many users are tourists, so they might not know exactly how each city's public right of way works, especially since many are also from other countries. Designating more specific areas to park would allow there to be significantly less complaints and pedestrian injuries. This would allow riders to place the scooters in areas that wouldn't block pedestrians from walking on the sidewalks smoothly.

Riding

Most companies already recommend users to take precautions by wearing helmets. Bird even goes to the extent of sending free helmets if they are requested. However, there is a 10 dollar shipping and handling fee for a helmet. It is encouraged to wear helmets, but it isn't enforced.

One solution would be to have the companies enforce the usage of these helmets or encourage their use more aggressively. Since most of the injuries are head related, increased use of helmets would drastically decrease the number of injuries¹². What these policies would look like should be left up to the scooter companies. As long as helmet use increases, the policies should be acceptable.



¹² "Paris to ban e-scooter riders from sidewalks, fine those who" 25 Jun. 2019, <https://www.channelnewsasia.com/news/world/e-scooters-paris-ban-from-sidewalks-fine-bad-parking-11657380>. Accessed 31 Dec. 2019.

Riding instructions are present everywhere, but injuries continue to happen¹³. Most commonly, injuries involve the rider falling off the scooter. It is hard for riders to become accustomed to riding a scooter based solely off of reading a digital manual. One solution is the implementation of vibrating warnings through the scooter's handlebars when the rider is using their scooter improperly. These warnings wouldn't be startling or disturbing. They're also nearly impossible to ignore, as a rider's hands are almost always on the handlebars. These warnings would allow the riders to know when they need to adjust their riding method.



Additionally, bike lanes aren't ever designed for scooter use, so potholes, cracks, and rough roads often make riding hazardous. Additionally, many roads don't even have bike lanes, so riders are forced to ride on the sidewalks for their own safety. This would threaten pedestrian safety, which creates an unfortunate paradox for the rider.

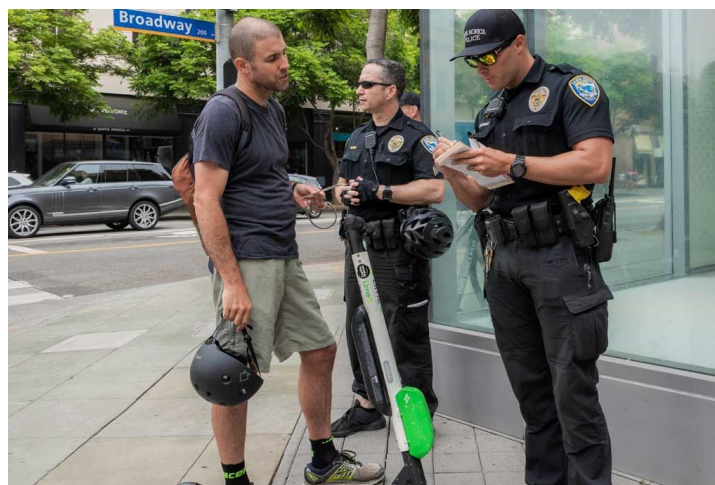
These issues aren't unique to micro-transportation and e-scooters. General problems with infrastructure harm bikers and even drivers as well. Investment into better infrastructure is a crucial change the city needs. Already, it is illegal to ride these scooters on the sidewalks, which should decrease pedestrian injuries. But, since riders can be stuck in situations where there

¹³ "How to Safely Scooter in Santa Monica | Santa Monica." 30 Jan. 2019, <https://www.santamonica.com/how-to-safely-scooter-in-santa-monica/>. Accessed 31 Dec. 2019.

isn't a good choice between riding on the sidewalk and riding in the road, injuries and complaints remain a problem.

If a scooter's maintenance isn't up to par, the rider becomes exposed to more danger than necessary. To check the scooter's condition, the rider should check the tires, handlebars, brakes, and other essential parts to make sure that they work. Making sure that the scooter is completely functional would decrease the number of falls and accidents. This routine would allow for the users to report issues to the company (preferably via mobile app) to get damaged scooters out of circulation and fixed. This would also prevent future users from using a damaged scooter.

Over half of injuries were found to be from users that were under the influence when riding. Police officers and members of the general public should be trained to recognize the signs of intoxication for scooter riders. This would decrease the number of injuries, since riders have a higher chance of being stopped before the injury even happens¹⁴.



A more effective but expensive solution would be the attachment of multi-use breathalyzers to each scooter. These breathalyzers must be used in order to start the scooter. A rider would be denied access if the breathalyzer reading is above legal limits. To maintain hygiene, the breathalyzer would have a plastic cap on the mouthpiece. The scooters would store used and unused caps, which would be refilled and cleaned out by the company each day or week.

The dangers involved with riding should pressure riders to avoid wearing headphones or talking on the phone. Instead of focusing on the digital and nonphysical world, citizens should keep a watch on the conditions that they are traveling in. Most importantly, each vehicle should only

¹⁴ "Anarchy on Wheels | The Argonaut Newsweekly." <https://argonautnews.com/anarchy-on-wheels/>. Accessed 31 Dec. 2019.

be used by one person. With multiple people on one scooter, the rate of getting into accidents increases exponentially; furthermore, riders with passengers become more distracted.

Overall, an increase in enforcement of safety regulations would allow for a drastic decrease in injuries. Making sure riders abide by local laws would not only benefit the rider, but would also provide a safer environment for pedestrians and drivers. We recommend that riders be sober, wear a helmet, and ride in the bike lane whenever possible. These simple requirements would decrease injuries significantly.