

Canada Lime-S Electric Scooters and Canada Lime-E Electric Assist Bikes

(The two attached PDFs re: **Canada Lime-S Electric Scooters** and **Canada Lime-E Electric Assist Bikes** provides detailed information about product specs, Lime Operation teams, maintenance of fleets, vehicle technology, and policy issues, etc.).

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Benefits of Micro-Mobility

Early data reveals people are not just replacing car trips with electric scooter rides; they're replacing car ownership.

Findings from a [Portland Bureau of Transportation \(PBOT\) survey](#):

- 38% report using electric scooters like Lime either daily or weekly
- 34% report using an electric scooter to replace a trip by car, taxi or rideshare for their most recent ride
- 30% report using electric scooters regularly to commute to work, school or appointments
- 45% report never biking in Portland before opting to ride electric scooters\
- 16% report considering getting rid of a personal car because of the availability of electric scooters, with another 6% actually doing so

In a recent Lime survey in San Francisco (see attached):

- Riders combine scooters with public transportation for their workday commutes. Consistent with our first mile /last mile use case, almost 40% of users are combining Lime scooters with public transit.

- Lime scooters are replacing single occupancy vehicle trips, particularly Lyft and Uber rides.

In Seattle, a recently-released [SDOT/University of Washington report](#) indicates that, unlike the city's former dock-based system, companies like Lime are being used across the entire metropolitan area "including strong ridership in the Industrial District and the Rainier Valley."

A Washington, [DC dockless bike survey](#) revealed interesting findings between a traditional docked bikeshare system and a dockless bikeshare system in terms of equity:

- Dockless bike riders were, on average, a more racially diverse set of riders than docked bikeshare members.
- Dockless bike riders have a slightly higher proportion of riders that were women as compared to docked bikeshare members.
- Dockless bike riders may have a lower household income than docked bikeshare members.
- Dockless bike riders have a proportionally more geographically dispersed pattern than docked bikeshare members.
- Dockless bikes proportionally may have more riders that are from historically disadvantaged races and lower household incomes than docked bikeshare members. Geographic data suggest that dockless bikes are more accessible than docked bikes in certain geographic areas.

Safety

Safety is our top priority. Lime has developed a series of educational videos, dedicated instructional pages and in-app messages to ensure riders know and abide by applicable rules and regulations. We also offer free helmets to all riders with over \$10 in Lime credit in their account, and our engineering team works closely with cities to develop new features such as "Parked or Not" that address local safety concerns.

Lime's "[Respect the Ride](#)" safety and education campaign is focused on promoting responsible riding habits at every step, from putting on a helmet to parking properly. As part of this education campaign:

- Lime will distribute 250,000 helmets worldwide as part of the Respect The Ride campaign.
- Lime is asking riders to join us in pledging to adhere to safe and responsible riding behaviour.
- Lime's on-the-ground safety ambassadors are dedicated to educating local communities about scooter safety. This includes safety fairs with responsible riding education, scooter lessons, group rides and more.
- Lime is adding to an already robust Trust and Safety team dedicated to promoting responsible riding behaviour and addressing safety concerns. Most immediately, we are bringing on a new Head of Trust and Safety to oversee our company's commitment to the communities we serve.

- [Lime is providing educational videos on using electric scooters](#)

Lime riders can always reach Lime customer service via the Lime app or via phone (in English and French): +1 (866) 948-9678 (This information is available in app or on vehicles).

A [Kansas City study](#) reviewed accidents related to e-scooters:

- A manual review of nearly 100,000 EMS records logged between July 2018 and Oct. 31 shows only 19 accidents involving electric scooters
- None of the reported injuries were life-threatening, with only one case resulting in someone being transported to the hospital as an emergency disposition. Eleven others were taken to hospitals for evaluation and treatment, while five others refused treatment or transportation to hospitals. Two calls were cancelled by the caller.

Educational videos:

How to Lime: [Electric Scooters](#)

[How to Park a Lime-S Electric Scooter](#)

[How to Ride Lime-E Electric Assist Bikes](#)

LimeBike Safety: [What You Need To Know](#)

Helmets

While helmet laws vary from city to city, Lime recommends riders wear a helmet at all times. Whenever possible, Lime distributes free custom-designed helmets to the communities we serve as a way to keep our riders safe on the road. The Lime mobile app also educates users on the best practices when riding a bike, e-bike or e-scooter.

Operations

Lime Operations team actively manages our scooter fleet, rebalances scooters and responds to any support calls. We provide the following services completely free:

- **The Daily Patrol Team:** The day begins with deployment of several vans with 2 people who deploy e-scooters and e-bikes to corrals. Throughout the day, additional teams will conduct a full sweeps of the service area each day. They will re-park any misplaced vehicles, fix any vehicles that need repair, or bring broken vehicles back to the warehouse for repair. The teams will also wipe down scooters as they go.
- **The Rapid Response Team:** This team begins with 2-4 people and will be available for 12 hours each day on weekdays and weekends. Their job is to respond to all customer complaints within 2 hours and help manage, remove and re-park vehicles in question. In addition, they proactively monitor the system to identify any issues that may arise.

- **Local Brand Ambassadors:** In addition to leveraging the Lime Marketing Team, we hire part-time Brand Ambassadors to help educate, promote, and integrate into the local community.
- **Customer Service Team:** When a rider calls 1-866-948-9678 (customer service available in English or French), we can assure 95 percent of calls are answered within 30 seconds and 95 percent of emails are answered within 24 hours. Riders can also contact customer service within the app. When damaged vehicles are reported to our customer service team, a customer service agent puts the scooter in maintenance mode to prevent another user from riding it. From there, the issue is dispatched to our local operations team who then inspects it within 2 business hours and either fixes it on site or if it is a critical issue, brings the scooter back to the local warehouse.

Reporting Damaged Vehicles

LimeBike riders can now quickly and easily report damaged, malfunctioning, and improperly parked bikes with the touch of a button. To submit a report, simply pull open the map and tap on the exclamation point (!) icon located in the bottom right corner. When activated, a menu will appear allowing you to choose the issue you're currently experiencing and immediately send a notification to our team. More information at [LimeBike's Updated In-App Reporting Feature](#)

Lime is also working to add even more new features to our app to encourage responsible riding, including prompted safety tutorials and regular reminders with tips best practices. Lime runs regular diagnostics on our scooters, bikes and e-bikes to ensure the health of our fleet. We proactively take our scooters off the streets for maintenance and inspection. Vehicles that don't meet our standards are quickly removed by our trained mechanics for repair.

Parking

E-scooters are parked on sidewalks (sidewalk edge or street furniture zone) so as not to impede sidewalk traffic for pedestrians.

According to findings from a recent study re "[Where Do Riders Park Dockless, Shared Electric Scooters?](#)"

- The vast majority of scooters—72%—were parked on sidewalks. Most of the rest (23%) were parked off the streetscape on adjacent properties. These scooters tended to be just off the sidewalk, in the setback between sidewalks and buildings. More than half of these scooters (15% of the overall total) were parked on off-street private property (e.g., business and residential properties or off-street parking lots for private properties). Five percent of observed scooters were on a pedestrian street running through part of downtown. Fewer than 1% were parked on the vehicular right-of-way of streets.
- Of the scooters parked on sidewalks, 90% did not overtly disrupt pedestrian traffic. For a majority of these, some portion of the scooter was within a foot of the edge of the sidewalk. The rest were in the "street furniture zone," along with objects such as benches, newspaper racks, and planter boxes.

Since the street furniture zone is already filled with obstacles, scooters parked here do not create a new obstacle to pedestrian through-flow along the sidewalk, although the scooters could obstruct cross-flow, such as for people exiting parked cars.

- Even among the 10% of sidewalk-parked scooters that failed to be tidily parked on the sidewalk edge or in the street furniture zone, most did not actually impede pedestrian traffic. An extremely small number of scooters—just 11—were observed blocking pedestrian travel in any way.
- Virtually all scooters—97% —were parked upright, as required by California state law.
- Most users avoided parking scooters in the middle of open spaces. Seventy-two percent of scooters were parked within a foot of some other vertical object, such as a wall or street furniture.
- Fewer than 2% of scooters were parked in automobile parking spaces. Of these, most were observed in a small off-street parking lot belonging to an out-of-business restaurant. E-scooters are parked on sidewalks (sidewalk edge or street furniture zone) so as not to impede sidewalk traffic for pedestrians.

A new in-app feature called “Parked or Not,” designed to facilitate smarter scooter parking. Lime asks riders to snap photos of their Lime-S scooters before ending their rides. This has enabled us to begin analyzing how well our community understands and follows the rules. Using the information collected through this intuitive new feature, the team at Lime will be able to:

- Identify users who park scooters incorrectly, provide feedback on their parking and offer additional resources to help them understand how to properly park a scooter
- Encourage engaged riders to take an active role in educating fellow users in their communities
- Use statistical models to provide real-time feedback and develop machine learning to enhance the accuracy of future ratings

The new "Parked or Not" feature will make its debut in select Lime-S scooter markets before rolling out across the platform. For more information, see [New Parked Or Not Feature Lets Riders Rate Proper Scooter Parking](#)

With respect to Lock-to technology:

- **Maintain Destination Flexibility:** Mandating specific parking locations undermines the core utility of dockless service for riders.
- **Don't Compromise Equity:** Lock-To infrastructure is not evenly distributed in many underserved residential areas
- **Regulate Outcomes not Tools:** Allow companies to innovate and try varying technologies to deliver parking compliance, then measure results.

The above is in addition to in-app education and implementing in-app geofencing to help curb improper parking in cities and technology that informs Lime when a

scooter or bike is tipped over. Geofencing certain areas in cities as off limits for parking mean that if a rider attempts to park a vehicle in that area, they will be unable to end their trip and stop accruing charges on their Lime account until the bike or scooter is removed from that area.

Keeping Lime Vehicles Parked Upright

Without docking stations, how can companies ensure that their vehicles are upright? Bikes and scooters that have been knocked over by the wind or intentionally pushed to the ground aren't just an eyesore for the city; they can block sidewalk access and cause mobility disruptions for pedestrians and the handicapped.

At Lime, we take these concerns seriously, which is why we're using technology to lead the charge in making them right. Beyond kickstands that keep vehicles upright, Lime's fleet-wide orientation alert system is important. It sends a notification to our local operations team the moment a bike or scooter has been knocked over, allowing us to quickly dispatch nearby specialists to correct the issue. "All of our bikes and scooters have a sensor inside of them," explains Aash Anand, senior data analyst at Lime. "This sensor tells us not just the location and elevation of the vehicles, but also how they're oriented."

For more information: [New Tech Is Helping Lime Keep Bikes And Electric Scooters Upright](#)

Fleet Size

Lime makes getting around without a car greener, easier and more fun. To have the greatest positive impact on cities, bikes, ebikes and scooters must be easy to locate, unlock, ride and rent. We have the tech side covered, but a city's decision for how to rollout the fleet determines who has access to the devices (accessibility). With the right policy in place, officials can support a dramatic shift in consumer behaviour from cars to more equitable, sustainable micro-mobility.

In our work with cities across the country, we found the best way to ensure a strong network in all neighbourhoods is to launch with no maximum fleet size, which means Lime can grow with demand.

Why does this work best?

- Fleets are able to grow at the speed of demand.
- Cities maintain control with other permit requirements, giving them leverage to act if problems arise.
- Dockless transit options reach further to meet community needs, ensuring greater equity in device access.

However, sometimes cities prefer a slower approach, and in this case, creating a Dynamic Cap can be useful:

- Pros:

- Sets minimum threshold for daily vehicle use to limit excess supply
- Short intervals allow data-based adjustments to meet growing demand
- Establishes transparent criteria for fleet increases
- Cons:
 - Equity is not prioritized. While the fleet grows to meet demand, some riders are left out.

What doesn't work?

Some cities create an artificial - and often arbitrary - cap on the number of scooters and bikes available to riders. While it seems controlled, this approach actually limits equity and stalls usage. Why does this happen?

- Service levels deteriorate rapidly as demand grows.
- Making changes to the cap typically becomes difficult, if not impossible.
- It fails to harness the opportunity for behaviour change at scale.

Fees

Lime appreciates that while they do not seek funding from cities for the cost of providing an electric dockless electric bike or scooter share program, cities may experience some costs related to compliance or right of way. Lime welcomes conversations around:

- **Nexus with Real Program Costs:**
 - Fee levels must have a basis in expected enforcement and administration costs
 - Excessive fees may constitute taxes
 - High unit costs reduce viability in low-demand areas
- **Reinvest Revenue:**
 - Dedicate revenue from surplus fees to support bike lanes and dockless parking infrastructure
 - Using dockless as a piggy bank forces riders to subsidize general fund
- **Align with Policy Benefits:**
 - Fees should be equitable when compared to other transportation modes
 - Modes that align with city sustainability, equity, mobility, and safety priorities should be incentivized.

Smart Cities

Fifteen of the world's leading transport and technology companies signed the Shared Mobility Principles for Liveable Cities today, pledging to prioritize people over vehicles, lower emissions, promote equity and encourage data sharing, among other goals. See: [Shared Mobility Principles for Livable Cities](#)

Community and Equity

At Lime, we believe in providing mobility for all. That's why we've created Lime Access - an affordable way to use Lime in the USA (to date). Lime is proud to partner with [PayNearMe](#) and to support a text-to-unlock feature, both of which promote equitable mobility by removing the barrier of smartphone and credit card

ownership. PayNearMe brings nationwide Lime pedal bike access at a 95% discount to the unbanked and those without smartphones and 50% off of Lime's entire fleet of electric vehicles.

Giving back to communities is also important at Lime. With the beta launch of Lime's new donation module, Lime Hero, now every ride on one of our smart mobility vehicles is a chance to give back to the community. The program offers bike and scooter riders the opportunity to add a small additional percentage to the cost of their trip in support of great local organizations. The initiative is the first of its kind in the smart mobility industry, and one that has the potential to make a significant and positive impact by raising awareness of nonprofit organizations across the country.

To learn more, see:

[New Lime Hero Donation Module Lets Riders Give Back to the Community](#)

Other studies/articles related to equity:

- A [Virginia Tech study](#) found that dockless bikeshare in Washington, DC attracted a greater proportion of lower-income and minority riders than traditional bikeshare, as well as covering a greater proportion of the city.
- A [CityLab article](#) argues that dockless bikeshare may be more attractive to traditionally underserved groups and neighborhoods due to its affordable cost, lack of annual membership fee, and free-floating characteristics.
- [Article](#): "Lime dockless bike share is more popular with women and lower income and non-white riders" (New York)

Environment

Lime recently announced the launch of "Lime Green," an initiative that will encompass the full range of our sustainability efforts. Chief among these is our commitment to operating a completely carbon neutral fleet.

Lime's goal is to charge 100% of our fleet with 100% renewable energy and to neutralize our operations emissions by supporting carbon offset projects.

According to our estimates, Lime riders saved 540,000 lbs of CO2 across the US in the first three months of 2018. It's equivalent to roughly 28,000 gallons of gas that weren't burned in car engines, or the absorption capacity of an additional 46,000 trees on planet Earth.

In a recent article re "[Let's count the ways e-scooters could save the city](#)", the author discusses how "electric micromobility devices are orders of magnitude cheaper to build, more energy efficient, and more fuel efficient than other alternatives. They require little or no additional infrastructure".

Privacy & Terms of Agreement

Lime takes our riders' data and privacy very seriously. GPS data is always anonymized before sharing with cities. Additionally, we do not sell rider data to

third-party recipients, and a subpoena or other lawful process is required to access rider data in compliance with legal obligations. For more information and to review Lime's privacy policy, see: [Lime Privacy Notice](#)

For Lime's Terms of Agreement (User Agreement), see: [Lime User Agreement](#)

Data Sharing

Lime is committed to proactive data sharing with cities. "Data transparency is a core component of Lime's approach to building trusted city partnerships," according to Emily Warren, Senior Director of Policy and Public Affairs at Lime.

It should also be noted that cities are moving away from General Bikeshare Feed Specification towards Mobility Data Specification (MDS). Similar to a common language, the Mobility Data Specification (MDS) is a data standard and set of vocabulary to help cities enforce, evaluate, and actively manage mobility providers who operate within the public right-of-way. Today, that could be dockless scooters, bikes, taxis, and buses. Tomorrow, that could be autonomous cars, drones, and whatever else the future may hold.

MDS is a very rich format, allowing the city access to deep and, accurate data in real time. Using MDS allows continuous data monitoring and compliance, and the data that is being shown in MDS is the same that powers all of our applications, meaning it is the most accurate representation of Lime vehicles and trips available.

A standard is good for mobility operators too. For companies like Lime, the work of building and maintaining city-based unique data exchange systems is a major resource issue. Custom data formats can also stifle competition because the biggest players will have more capacity to implement city-specific solutions whereas smaller players will have challenges.

MDS is made available through platforms like [Remix](#). According to Remix: "Remix is the platform for designing your city's transportation future. Trusted by 4,000 planners in 300+ cities on three continents, Remix helps cities understand how streets, public transit, and new mobility work together. Remix empowers planners to explore new concepts, make informed decisions with data, and rally people around their vision — so that ultimately cities are safe, accessible, and equitable for everyone."

For more information:

[United for Safer Streets, Scooter and Bike Companies Join Forces with LADOT and Remix to Improve Data Sharing for City Planning](#)

[The scooter data opportunity: Cities can shape their future if they act now](#)

Insurance

Proper insurance is important. Lime has municipal approved insurance in place for our operations in Calgary and Waterloo, Ontario. See the attached Certificate of Insurance for Calgary.

Examples of E-Scooter & Shared Active Transportation Regulation (USA)

Lime operates in over 150 cities globally and regulation is increasingly being passed by jurisdictions to govern electric scooters and shared/active transportation across the USA. In other words, some cities are choosing to focus broadly on shared micro-mobility (that's inclusive of various forms of shared micro-mobility) rather than on a single form of shared micro-mobility such as dockless bike sharing alone. Attached are two examples.

Waterloo Scooter Pilot: Phase 1 2018 Results

In June of 2017, Lime launched our first fleet of pedal bikes in Greensboro, North Carolina. Lime is now in over 100 cities globally, including in Waterloo, Ontario (electric scooter pilot) and Calgary (electric dockless bikeshare pilot) to date.

In terms of the [first phase of our Waterloo, Ontario e-scooter pilot](#), from October 2 to Nov. 30th, 2018:

- Trips completed: 18,080
- Unique riders: 6,342
- Total distance travelled: 19,370 km
- Average trips per rider: 2.83
- Median trip time: 6 minutes
- Median trip length: 0.75 km
- Cumulative trip time: 141 days
- Total CO2 saved: 4,880 kgs
- Driving avoided: 12,877 kms
- Total gas saved: 1,260 litres

Remix: Study examining regulation related to Scooters in U.S. Cities

This [micro-mobility survey](#) analyses 17 cities' dockless e-scooter and bike share policies to identify emerging best practices and themes. Four key 'practice' areas emerged from the research: enforcement, fees, caps, and data sharing.

Recommendations included:

- When writing enforcement language, set clear, unambiguous rules around vehicle parking, service areas and vehicle maintenance.
- When setting fees for micro-mobility, consider establishing modest per-trip fees to pay for program management, enforcement and broader mobility goals such as safer streets, equity and designated parking. Fees to promote safer streets and better parking can help ensure the program is more successful.
- When establishing a cap, implement a utilization threshold to better balance supply with demand rather than accidentally stifling the growth of a program. Additionally, tie performance to opportunity to expand to encourage delivery on other key program goals.
- Establish digital infrastructure that allows for effective management and oversight of your program, as well as future planning efforts, such as building bike lanes or placing street furniture to improve program success.

