

# MEMORANDUM

Our reference: File number if relevant

**To: Elected Members**

**Copy: Council CLT**

**From: Damon Simmons, Traffic Asset Manager**

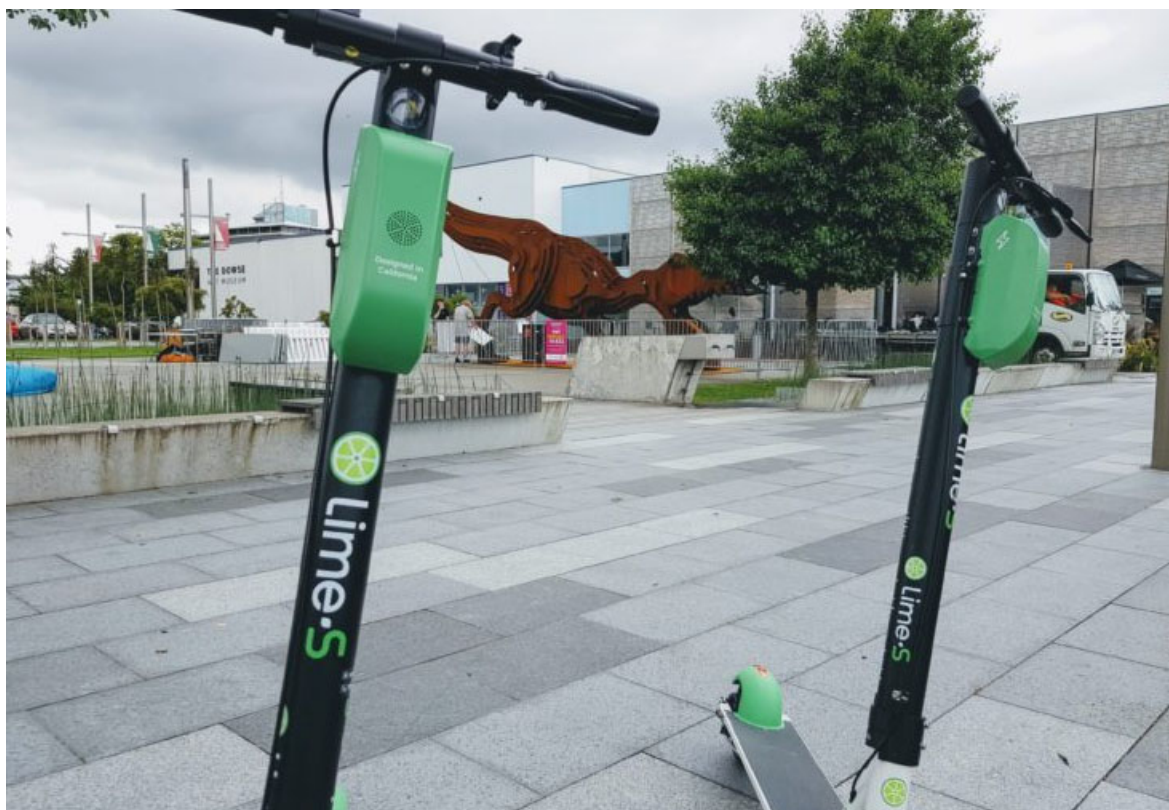
**Date: 18 November 2021**

**SUBJECT: RE-INTRODUCTION OF E-SCOOTERS TO THE HUTT VALLEY 2020**

## Background

Lime Technologies (Lime) previously operated a micro-mobility (E-Scooter) hire service in the Hutt Valley between December 2018 and June 2019. That service was suspended in June 2019 as low seasonal demand resulted in the service being uneconomic (less users ride scooters in winter). There were also some issues around users damaging scooters, and Lime missing out on the Wellington City E-scooter trial which may have contributed to their decision to suspend services.

Lime recently purchased the 'Jump' micro mobility service from Uber and is therefore operating their micro-mobility (E-Scooter) hire service in Wellington city under the Jump brand. It is understood that partial or full rebranding to the Lime brand will occur in the future.



In September 2020 Lime approached the Hutt Valley Mayors (Mayor's Barry and Guppy) to start a conversation about reintroducing their micro-mobility (E-Scooter) hire service to the Hutt Valley.

Since September, officers have been in discussion with Lime representatives to discuss any issues that were experienced during their operation in Summer 2018/ 2019 and identify mitigations to ensure a smooth re-introduction.

The benefits of the E scooter hire service include:

- More travel options – particularly for first and last kilometre travel;
- A relatively cheap travel option;
- Non fossil fuel travel;
- Less cars on the road;
- Less demand for car parking spaces;
- Facilitates car-less inner city living;
- An abundance of travel data is available.

In 2019 officers undertook an evaluation of e-scooters to understand how the scooters were being used and to understand the experiences of users and non-users. This evaluation is still in draft form but is attached as Appendix A to this report.

The main issues identified during previous operation were:

- Due to the newness of the technology for local residents, Council received a reasonable volume of complaints which took officer's time to resolve. Many related to perceived 'near misses';
- The introduction of the scooters caught the public by surprise – many people didn't know what they were or why they were there;
- There were safety concerns related to both footpath and road riding and the speed at which the scooters could travel (up to 30 km/h in favourable conditions);
- There were safety concerns related to software and hardware issues (many related to unexpected locking of the front wheel);
- Inconsiderate deployment and trip-end parking could obstruct footpath space;
- Scooters which fall over on the footpath pose a trip hazard to the sight impaired;
- Scooter torque/ power restricts use in hilly areas/ steep grades;
- Legislation regarding scooter and helmet use lags behind the introduction of the technology.

There have been significant advances in scooter hardware and software technology since 2019 which mitigates many of these issues, in particular:

- Each scooter has contact details for the Lime contact centre so that residents can complain directly to Lime. Council's call centre will be able to direct any complaints directly to Lime to minimise any demands on officer time.
- The scooters can have their speed restricted (for example to 15 km/h) within areas with high concentrations of pedestrians;
- The software and hardware issues related to front wheel lockup have been resolved;
- It is possible to identify areas where trips cannot be ended and thus prevent scooter parking;

- It is possible to identify preferred parking areas to promote considerate trip end parking;
- Lime educates and monitors their 'Juicers' so that scooters are deployed appropriately;
- Lime monitors end trip parking and sends in-app warnings to repeat offenders;
- Lime can remotely detect where scooters have fallen over and has people available to collect scooters if they are in areas of concern.

Scooter torque/ power is still such that their usefulness on steep paths is compromised. Such areas will be excluded from the operating zone (for example, the western hills and Wainuiomata Hill Road).

It is understood that NZTA are still working on updating legislation related to scooters, however they still operate under the 'Low Powered Vehicle' rules which mean they can be ridden on both the road and the footpath, must be operated in a careful and considerate manner, must be operated at a speed which does not put other footpath users at risk and must give way to both pedestrians and drivers of mobility devices. A helmet is not legally required to be worn, but is recommended.

Lime currently operate in six New Zealand cities: Auckland, Wellington, Christchurch, Dunedin, Hamilton and Tauranga.

### **The Current Proposal**

Lime's current proposal for Hutt City is summarised in Appendix B.

In summary, the proposal includes:

- Co-ordinated comms in association with Hutt City to advise the community in advance of the launch;
- A staged deployment approach (Initially launch 150 – 200 scooters in December 2020 and then up to 400 scooters in the new year depending on demand);
- In- app rider training which covers safe riding and parking and local rules and regulations;
- A local operations team and 24/ 7 contact;
- A geo-fenced operational area which excludes the western hills, Wainuiomata Hill and Wainuiomata;
- Tailored no park zones, preferred parking zones, low speed zones, parking validation and end of trip photos and incentives to improve parking behaviour.
- Fining and deactivation policy;
- Incident reporting and investigation.

In conjunction with Lime, and as a result of engagement with Jackson Street Programme and the Southend Business Group, we have identified three areas where a 15 km/h speed restriction would initially be applied:

- Jackson Street between Victoria Street and Cuba Street; and
- The Esplanade shared path between Honiara Te Puni Reserve and McEwan Park; and
- Lower Hutt CBD (partial as shown below).

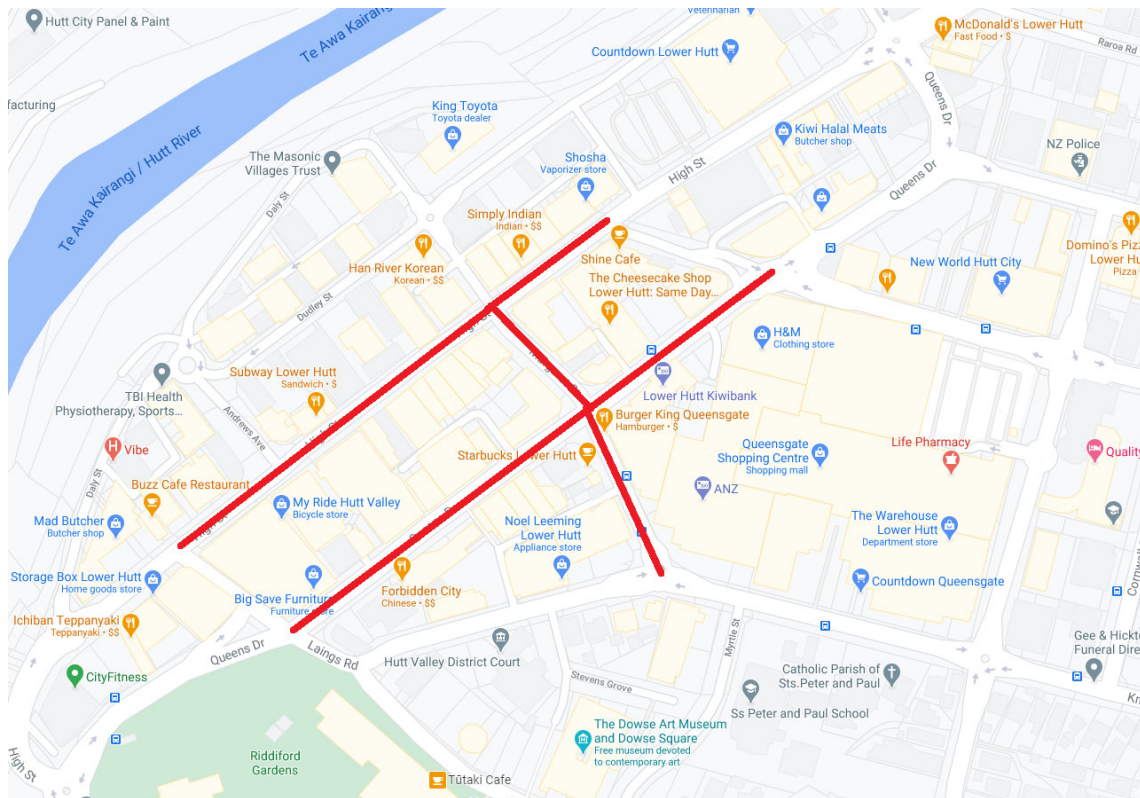


Figure 1 Extent of proposed 15 km/h low speed zone for Lower Hutt CBD

## Engagement

Council officers have met with representatives of Jackson Street Programme (JSP) and the Southend Business Group. We also attempted contact with the Business Roundtable but have not had any correspondence to date.

At a recent meeting with JSP some suggestions were made which Lime are happy to implement, namely a low speed zone on Jackson Street, a no parking zone on Jackson Street at the central bus stop and the identification of several preferred parking zones. JSP indicated that they had emailed more than 200 members on their mailing list and had not received any objections to the proposed re-deployment.

Officers engagement with the Southend Business Group indicated support for the proposal, especially with the low speed zone suggested by officers.

Other low speed zones, no parking areas and preferred parking areas could be established in the future in response to any issues identified.

During the e-scooter review undertaken by officers in 2019 engagement was undertaken with a variety of user groups including representatives of the disability community. More information in regards to this engagement can be provided verbally during the briefing.

## Communications

Officers will work with Lime to coordinate public information and communications prior to the December launch.

Lime already have extensive collateral so the demand on officer time is expected to be limited this time round.

**Commercial**

Council's Trading in Public Places Bylaw 2018 does not provide a pathway for Council to block the scooter deployment.

Officers and Lime therefore prefer a Memorandum of Understanding (MOU) approach rather than a contractual approach to the deployment. Essentially, Council won't be 'approving' the operation rather we will be working collaboratively with a commercial operator to help make the operation as smooth as possible and mitigate any negative effects on our customers.

To support this approach, we do not propose imposing any financial implications on Lime – i.e. we don't propose 'clipping the ticket', as to do so ties us commercially to the operator.

Lime have also indicated that due to the limited deployment numbers for a city of our size, any financial considerations might make the operation uneconomical.

Officers are currently working through the details of the MOU with Lime, which will include any performance indicators and a 12 month operational review.

The MOU will also cover issues such as the minimum notice period to end the operation and infrastructure requirements such as scooter stands etc.

**Conclusion**

Officers believe that there is a place for micro-mobility in Lower Hutt's transport offering, particularly with some conditions imposed around speed, parking and deployment in areas with higher concentrations of pedestrians.

Lime's improved technology and customer and safety orientation appear to have improved significantly since the summer 2018/ 2019 deployment which provides some degree of confidence that the issues experienced last time will not be repeated.

There will no doubt be detractors, as there is with most new technology, but the opportunity to increase travel options is too good to overlook. When considering the removal of parking minimums recently introduced by the NPS, we need to remain open to all alternatives to car travel.

With the ability to better control and influence user behaviour it is hoped that the public will be supportive. Initial engagement with retail representatives supports this view.

Lime are already deployed in the six largest markets in New Zealand and we are the seventh. By accommodating innovative new transport technology we will reinforce our Hutt City's image as being supportive of new technology initiatives.

**Damon Simmons****Traffic Asset Manager****Appendix A      Hutt City E-Scooter Evaluation (Draft)****Appendix B      Lime Proposal for Hutt City**

# **Appendix A**

## **Hutt City E-Scooter Evaluation**

## Introduction

E-scooters, and the wider micromobility<sup>1</sup> category of transport modes, are becoming more popular worldwide. These transport modes are seen as potentially having economic, environmental and personal health benefits when compared with traditional fossil fuel modes of transport. Micromobility solutions gained momentum in the late 2010's as a solution to the "last mile" of personal transportation. The introduction and facilitated use of e-scooters as a mode of transport in Lower Hutt has the potential to contribute to the local 'first mile' and 'last mile' solution and thus contributing to a number of Council's community outcomes.

## Background

In December 2018, Lime Technology Limited (Lime) was issued a 'permit to trade in a public place' by Hutt City Council to operate up to 600 electrically-assisted scooters (e-scooters). A large number of shared dockless e-scooter schemes were deployed in cities worldwide in 2018 and 2019. In many cases there was no communication between the companies and the cities in which they were deployed. In other cities, including Lower Hutt, communication existed but the cities had no or little policy or regulations to guide their implementation. Given their 'newness' there was, and still is, a lack of data and research on e-scooters that could be drawn on to assist local authorities.

## Purpose

We need to evaluate these new modes of transport carefully to establish how they fit alongside existing transport modes, and how they can contribute to a healthy, happy and fair city. We also need to understand if, and how, the Lower Hutt City experience could help shape regulation and public spaces to best accommodate new transport technologies like e-scooters.

As part of Council's evaluation of e-scooters, we are interested in understanding how e-scooters, including Lime scooters, are being used and hearing the experiences of users and non-users.

## Objectives

The introduction of the shared Lime e-scooters in Lower Hutt has given the city the opportunity to:

1. Test whether these types of transport modes can assist in achieving Council's community outcomes, to what extent they might assist in achieving the outcomes and what are the barriers or issues preventing them from contributing to the solution.
2. Use its experience to add to the increasing, but still limited, literature and evidence that is helping guide
  - i. Regulations and policy
  - ii. Urban planning

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<sup>1</sup> Micromobility is a category of modes of transport that are provided by very light vehicles such as electric scooters, electric skateboards, shared bicycles and electric pedal assisted, pedelec bicycles

## Council Outcomes

The table below lists the relevant outcomes and the link to e-scooters and the measures that will be evaluated using the evidence collected from a number of sources.

Outcome	E-scooter contribution	Evidence (examples)
A strong and diverse economy	Number of new local businesses selling e-scooters Increased number of employees in e-scooter related businesses related to e-scooter transactions	Retail sales New businesses Increased FTE count at relevant businesses
An accessible and connected city	E-scooters are taken on trips not catered for by public transport E-scooters increase the mobility of residents The infrastructure for e-scooters exists	Residents reporting using e-scooters for trips they could not otherwise take  Volume less than capacity on existing infrastructure used by e-scooter riders Low number of shared e-scooters left in a dangerous or hazardous location Footpaths are suitably maintained to facilitate e-scooter use.
Healthy People	E-scooters used for trips that would otherwise have been taken in a motor vehicle E-scooters used for recreation time that would otherwise have been spent undertaking a passive activity	Residents reporting using a scooter for a trip where the alternative transport mode was a motor vehicle Residents reporting the alternative recreational activity to an e-scooter trip as: gaming, watching t.v. or another passive activity
Strong and Inclusive communities	E-scooters enable residents to participate in more activities	Residents reporting using e-scooters for trips they could not otherwise take Residents feel safe using e-scooters

Add to the literature and evidence



# Findings

Between 13 December 2018 and 16 June 2019 a total of 228,279 lime scooter trips were recorded in the Hutt Valley, of these 218,904 trips were recorded as having gone at least 1 metre. These trips were spread out fairly evenly across the days of the week with a slight peak occurring on Thursday to Saturday. However in terms of time of day nearly half (49%) of the trips taken on Lime scooters were started between 6pm and midnight. Nearly half of the trips (47%) were less than 1km in distance and a further quarter (25%) between 1km and 2km in distance.

Figure 1: A slightly higher proportion of trips occurred on Fridays than on any other day of the week

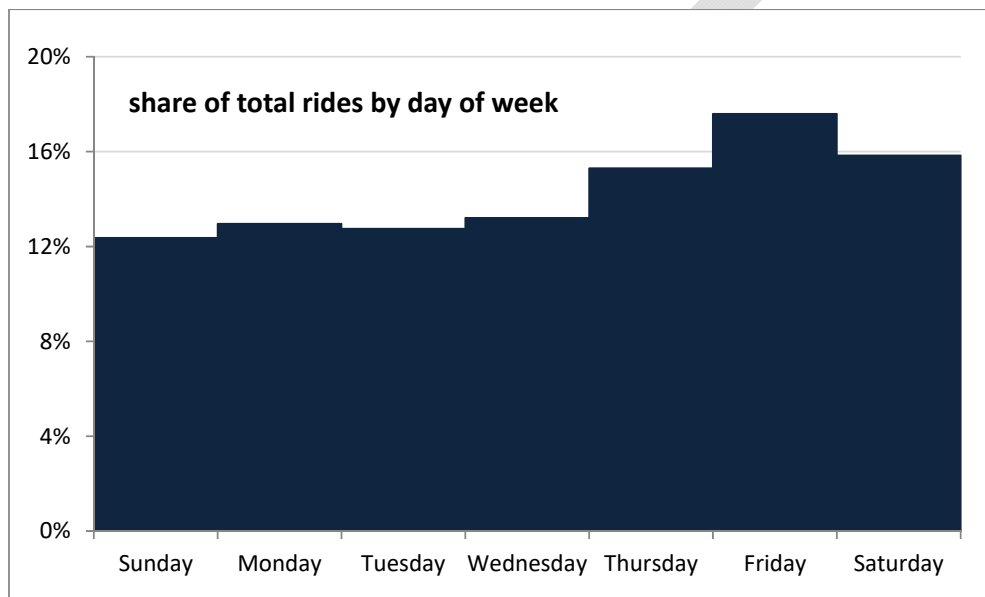


Figure 2: The most popular start times were between 6pm and 10pm

*"I like to use lime scooters when it's dark - I feel safer as a woman on the scooter than walking."*

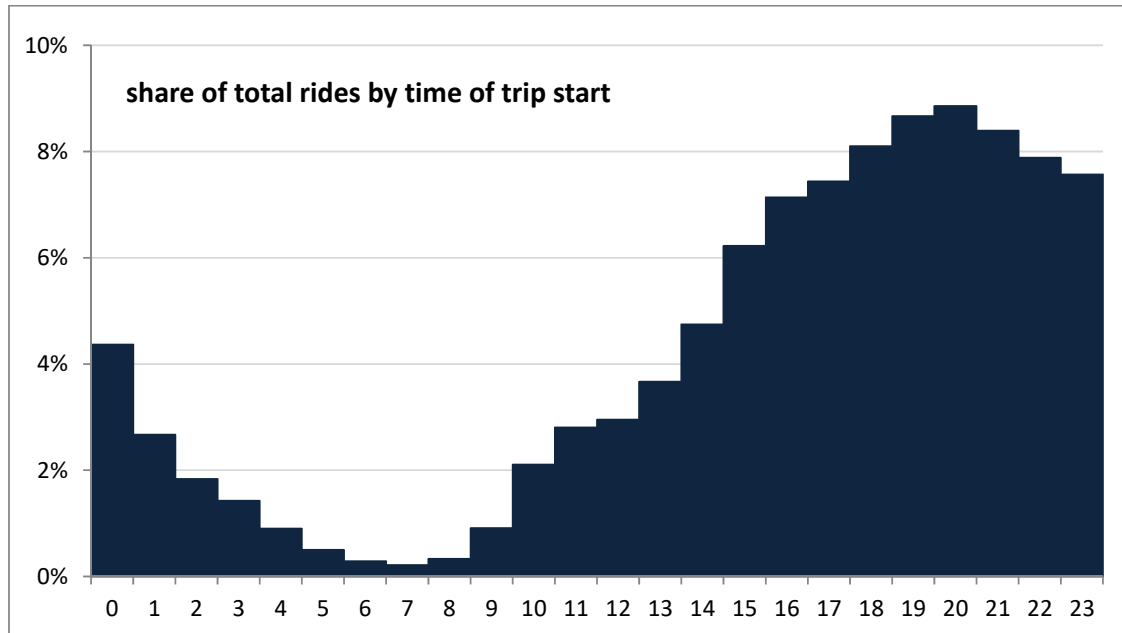
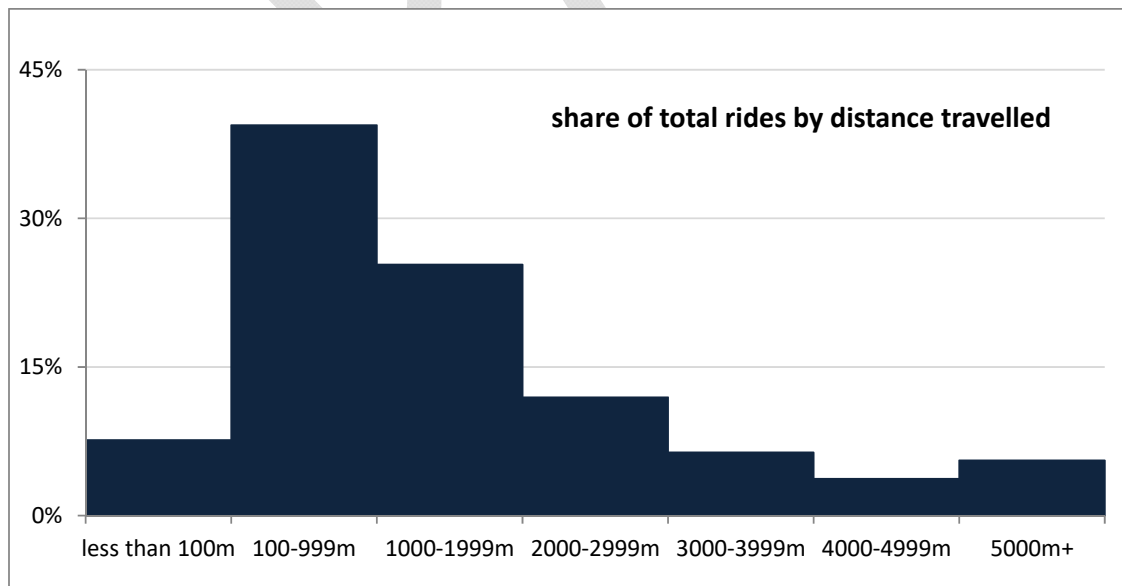


Figure 3: More than half of the trips taken were less than 2km in distance

*"I think of e-scooters (and hire bikes like Onzo) as last-mile trips - too long to comfortably walk (in a reasonable time frame) and where driving is the next easiest option but due to congestion that is a frustrating option."*



The main routes taken were: Knights Road, Waterloo Road, the Rivertrail, across Ewen Bridge,

Key dropping off spots – Seaview around industrial businesses, Petone and Waterloo railway stations and other stations during the day.

In the survey three groups of users appeared:

- One off users who took a fun/recreational ride
- Occasional users who would most likely replace a foot or public transport trip
- Regular users who used them as a mode of transport for multiple purposes including to get to and from work or education, for work appointments and to get to social or sporting activities. All e-scooter owners fell into this group.

When riding e-scooters respondents to the survey felt safest using areas that were separate from cars, that is, cycle paths, shared paths and footpaths. However, there were many comments left about the safety for other footpath users with e-scooters sharing this space.

Of those non-users who reported experiencing an incident with an e-scooter most had been on foot when the incident occurred. The ACC data for the months of December 2018 through to, and including, May 2019 shows that 163 claims involving e-scooters were received by ACC from Hutt Valley residents. Less than four of these claims were made by pedestrians.

The use of footpaths for parking shared e-scooters was also noted both in the survey and in the complaints received by Council's contact centre.

How the LH results align with others from NZ and overseas... to add in

# Conclusions and Considerations

Outcome	E-scooter contribution	Evidence (examples)	Conclusion
A strong and diverse economy	Number of new local businesses selling e-scooters	Retail sales New businesses	Somewhat
	Increased number of employees in e-scooter related businesses due to e-scooter transactions	Increased FTE count at relevant businesses	No
An accessible and connected city	E-scooters are taken on trips not catered for by public transport	Residents reporting using e-scooters for trips they could not otherwise take	Yes
	E-scooters increase the mobility of residents		Somewhat
	The infrastructure for e-scooters exists	Volume less than capacity on existing infrastructure used by e-scooter riders	Somewhat
		Low number of shared e-scooters left in a dangerous or hazardous location	No
Footpaths are suitably maintained to facilitate e-scooter use.	No		
Healthy People	E-scooters used for trips that would otherwise have been taken in a motor vehicle	Residents reporting using a scooter for a trip where the alternative transport mode was a motor vehicle	Yes
	E-scooters used for recreation time that would otherwise have been spent undertaking a passive activity	Residents reporting the alternative recreational activity to an e-scooter trip as: gaming, watching television or another passive activity	Somewhat
Strong and Inclusive communities	E-scooters enable residents to participate in more activities	Residents reporting using e-scooters for trips they could not otherwise take	Somewhat
		Residents feel safe using e-scooters	No

## Considerations for the use of e-scooters as a mode of transport

### Footpath maintenance

This is relevant not only to the use of e-scooters on the footpaths but also to mobility scooters, kick scooters, skateboards, hoverboards, pedlecs.

Some key areas to focus on are high traffic areas and key routes around public transport and between public transport and areas of employment or education especially where no or limited public transport exists e.g. Petone railway station to Seaview industrial area.

### Footpath speed limit

While/where multiple forms of transport are able to use footpaths that a footpath speed limit be considered – suggested limits range between 10 and 15kpm/h.

### Permitted torque/power of e-scooters

That the typography of areas especially those poorly serviced by public transport facilitates the need for higher powered forms of micromobility transport modes. However, increased power needs to be matched with the relevant braking capability.

### Connected third way

A connected pathway that would separate micromobility forms of transport from cars and from those on foot. A connected network is needed to allow users to get from point to point. A clearly delineated footpath would be better than the current situation. Needs to prioritise problem areas and key hot spots.

### Right of Way

Education and signage about who has right of way. Promotion of the current NZTA pedestrian campaign for example. Signage reminding footpath users that pedestrians have the right of way in key 'trouble' areas e.g. river path and Petone Esplanade.

### Helmets

The evidence indicates that the use of helmets especially when travelling in spaces used by equal or faster transport modes is supported by users. However, making them mandatory is not.

### Education

Educating children on forms of micromobility as is currently done with bicycles might be a way to 'normalise' their use

## Shared Scooter Scheme

### Scooter parking

That space for parking bays and/or docking stations be provided at key locations. That correct parking practice be part of any advertising and education campaign run by private provider.

### Speed limit

That a speed limit be placed on the scooters. The limit should be determined by where e-scooters are permitted to travel. While footpaths are the main carriageway the limit should be between 10-15km/h as suggested by the NZTA XX report. This could be reviewed if and when suitable cycle and shared paths are created.

### Higher Torque

That higher powered e-scooter be allowed to operate as long as scooters have sufficient braking systems to handle the relevant power level. This is to enable use on the western hills areas in particular where residents are not as well serviced by other public transport options. Regardless of power level all e-scooters should still comply with any speed limit imposed.

### Education

That any provider setting up in Lower Hutt be required to provide educational material on how to use their e-scooters safely including how to safely park them.

### Helmets

The provision of a helmet for each scooter and each ride, by a shared e-scooter company, is problematic. The provider should however encourage the use of helmets when riding.

### Unique Number

That each e-scooter in the fleet have a visible unique number so that reckless and dangerous behaviour can be reported and attributed to a user.

### Bond

That a refundable bond be required from users when initially signing up to the providers app as a way of reducing the number of one off recreational users while not being a barrier to those wanting to use regularly

## Appendix One

### Methodology/Data Sources

Measure		Source
Mode of transport		
Who	Who is using e-scooters as a means of transport to get from A to B	Survey Lime scooter data
When	When are they using them for A to B trips	Survey Lime scooter data
Where	Where are they using them for A to B trips	Survey Lime scooter data
Trade-off	How would they get from a to B if e-scooter not available	Survey Lime scooter data
Barriers	What prevents users and non-users using e-scooters	Survey
Recreational activity		
Who	Who is using e-scooters as a form of recreation	Survey Lime scooter data
When	When are they using them for recreation	Survey Lime scooter data
Where	Where are they using them on recreational trips	Survey Lime scooter data
Trade-off	What would they be doing for recreation if not out on an electric scooter	Survey Lime scooter data
Barriers	What prevents users and non-users using e-scooters	Survey
Impact on other users		
Number of incidents	Number of reported incidents involving an e-scooter in Lower Hutt	ACC Survey Hutt City Council call centre Lime Scooter data
Severity of incident	Number of incidents at each point on scale from “a fright” to “immediate medical attention/hospital required”	ACC Survey Hutt City Council call centre Lime Scooter data
Nature of incident	Who/what else was involved in incident <ul style="list-style-type: none"> <li>• Pedestrian/bike/car</li> <li>• Speed/alcohol/faulty scooter</li> </ul>	ACC Survey Hutt City Council call centre Lime Scooter data
Impact on infrastructure		
Volume	What streets have the heaviest use of lime scooters	Lime scooter data
Capacity	Are there heavy volumes of e-scooters in areas where infrastructure capacity is low	Lower Hutt City Council  Lime scooter data
Private ownership	Has the Lime scooter trial encouraged the purchase of e-scooters	Retail sales data

# Literature

Media articles

Transport Agency Admits it rushed e-scooter process

Radio New Zealand – 29 May 2019

E-scooters between ‘rock of the footpath... hard place of the road’

Radio New Zealand – 14 July 2019

Byrnes, Evan; Juliet Hall; Chris McMahon; Dana Pontius and Josh Watts

Identifying best practice for management of e-scooters

Ohio State University

Herman, Mason

A comprehensive guide to electric scooter regulation practices

Kansas State University; Manhattan, Kansas; 2019

Trivedi, Tarak K., Charles Liu, Anna Liza M. Antonio, Natasha Wheaton, Vanessa Kreger, Anna Yap, David Schriger, Joann G. Elmore

Injuries associated with standing electric scooter use

([link](#))

Susan Shaheen and Adam Cohen

1 April 2019

Shared micromobility policy toolkit: Docked and dockless bike and scooter sharing

UC Berkley (doc number)



Kantar TNS

Public response to shared e-scooters in Auckland and Christchurch

January 2019

Witzel, Sandra

How micromobility solves multiple problems in congested cities

July 14 2018 (weblink)

Accessed on 4 July 2019

Brown, Marcus

Micromobility: Safety problem or transport solution?

12 April 2019 (weblink)

Accessed on 4 July 2019

Reynolds, Patrick

(not sure)

29 April 2019 (weblink)

Accessed on 4 July 2019

Denver Public Works

Electric scooter data and survey results

8 March 2019 (weblink)

Accessed on 26 March 2019

Lime Scooter

Year-end report 2018

?? (weblink)

Christchurch City Council: Infrastructure, Transport and Environment Committee

Lime e-scooter: Pilot update

7 November 2018

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## To test the NZTA recommendations

In July 2017 the New Zealand Transport Agency (NZTA) published a research report that looked at the 'regulations and safety for electric bicycles and other low powered vehicles'. The report came up with the following summary of conclusions and recommendations along with a more detailed list.

- E-bikes and other LPV's have the ability to broaden the appeal of travel choices which contribute to public health benefits and reductions in congestion.
- E-bike sales have grown rapidly over the last three years, exceeding 13,000 in 2016. It is expected that sales will continue to grow rapidly for some time. Sales of other low-powered vehicles are relatively low.
- There is scope for greater use of footpaths and shared paths by some LPVs.
- Speed is a better determinant for safety than motor power.
- Limitations on user behaviour are an important factor for minimising negative impacts on other path and roadway users.
  
- A maximum power-assisted speed and size for vehicles using footpaths
  - Recommendation 6: Investigate a national guideline for advisory speeds on and access to shared roads
  - Recommendation 23: Consider a maximum motor-assisted speed for LPV's other than mobility scooters
  - Recommendation 24: Consider including a maximum speed of 15km/h for use of LPVs on footpaths
  - Recommendation 25: Contingent on adoption of the maximum device speed, consider removal of the 300W power limit for wheeled recreational devices and any other LPV class to be introduced
  - Recommendation 27: Add the requirement that an LPV 'must have an effective stopping system including brakes and/or motor control' to legislation and/or rules.
  - Recommendation 36: Consider allowing all LPV's to use footpaths if a listed speed reduction measure is engaged or the motor assistance is off.
- Relaxing maximum power limits for e-bikes and other LPVs designed for road use
- Minimum age limits and driver licensing for higher speed e-bikes and LPVs.
- Helmet wearing by LPV users depending on speed capability
  - Recommendation 35: Consider the efficacy of mandatory helmet legislation in the first instance. Then, consider whether LPV's permitted to use the road should be subject to the same helmet wearing requirement as pedal cyclists. The issues to be taken into consideration could include user age, device stability, and speed capability.
- Further promotion of user behaviours that minimise conflict with existing path and roadway users

- Recommendation 20: Continue educational efforts and consider enhanced materials such as a safety information template for supplier and retailer adoption and distribution
- Recommendation 21: Consider further means of improving local transport infrastructure

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# **Appendix B**

## **Lime Proposal for Hutt City**

30 September, 2020

Wayne Guppy, Mayor, Upper Hutt  
Campbell Barry, Mayor, Lower Hutt

Kia ora koutou,

Thank you for the opportunity to provide information in order to resume our services in Upper and Lower Hutt.

It was always our wish to return to the Hutt Valley to provide the wider region with a viable micromobility transport service.

Since we paused our operations in mid-2019, Lime has developed more advanced deployment models, created more robust customer service processes and improved our capability to provide the most accurate geofencing. We have piloted footpath riding detection, we have developed a special rider safety training programme, and we have created live scooter maps to show any toppled over scooters. We are always learning and experimenting new ways to help reduce reliance on cars for short trips.

Throughout this proposal we reference the many ways in which we use our technology capability, hardware and software to ensure a safe experience for riders and non-riders alike.

We apply these principles in 130 cities around the world, including six New Zealand markets where we have built strong, collaborative working relationships. We offer our commitment to taking the same approach in Upper and Lower Hutt, and we would be privileged to offer our service again.

We look forward to returning to the Hutt Valley and to further discussion about our proposed operations. Please do not hesitate to contact me if you require additional information.

Ngā mihi nui,

A handwritten signature in black ink, appearing to read "Lauren Mentjox".

Lauren Mentjox  
Public Affairs and Government Relations Manager, New Zealand

## Hutt Valley Proposed Fleet

We propose to operate a fleet of 400 Lime Generation 2.5 scooters in the Hutt Valley. We are fortunate to have significant data from our previous service in Upper and Lower Hutt. We will use this to establish a shared scooter model that is safe, convenient and focussed on matching demand with supply.

Initially we would re-launch with a fleet of **250 scooters** with 150 in Lower Hutt and 100 in Upper Hutt. Deployment would happen gradually using a combination of our operations team and local juicers. Scooters would be deployed at locations that had the most trips during our previous operation in those areas. After several weeks we would have fresh, accurate data which could confirm our assumptions around rider patterns, demand and behaviour.

Our maintenance programme would start from day one to ensure every scooter receives a mechanical check every 14 days. Of course on top of this, any scooter that is reported by a customer to have issues is picked up and brought back to the warehouse for inspection and repair.

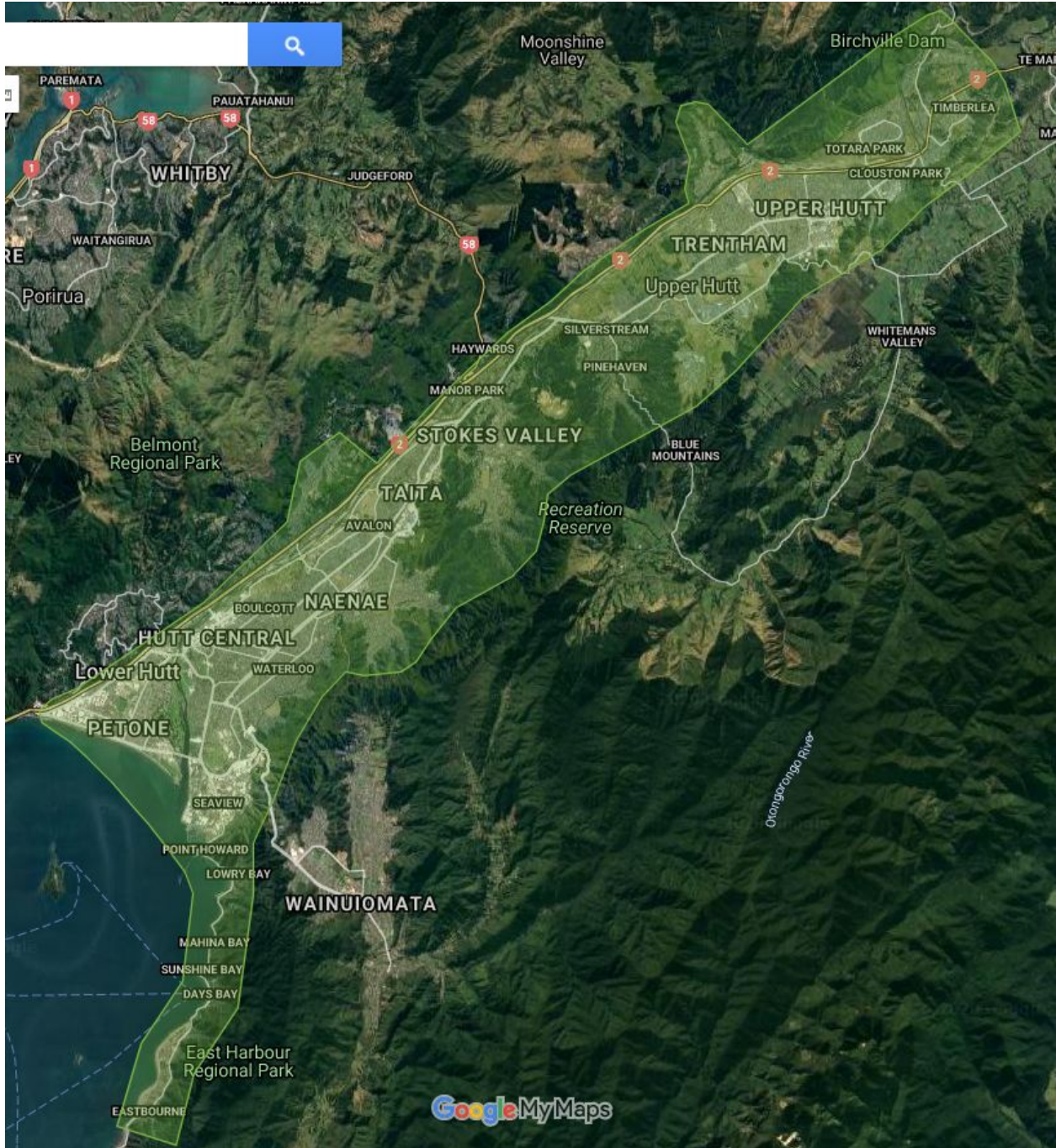
During the initial operating period, we would gauge feedback from riders and residents in the Hutt Valley, and resolve any issues that we were unable to preempt.

Once we have established consistent ridership and minimised the chances of any unforeseen issues, we would evaluate supply levels and may increase the places where scooters are positioned or expand the fleet.

If we need to increase the fleet size, we would deploy up to an additional 150 scooters in areas that were undersupplied, or where demand was untested.

The area we intend to allow our customers to ride in is indicated as below in green. We have deliberately avoided the eastern hills due to hardware constraints and safety concerns, but have tried to maximise connections between public transport modes (bus and rail links) and the places of work, play and rest.

Please see the map of our intended service zone below.



(Above) Intended Hutt Valley Service Zone.



## Contact details

Our local operations team is based in Wellington and will be available 24/7. You can contact operations manager Hamish Ellis on 021 266 2851 or [hamish.ellis@li.me](mailto:hamish.ellis@li.me) regarding any operational issues or queries.

**Customer enquiries:** Concerns can be reported via our local helpline 0800 467 001 and email [support+nz@li.me](mailto:support+nz@li.me). These contact channels are clearly labelled on our scooters.

**Through the app:** Lime has a safety centre available on the left-hand side of the home screen for easy reporting. Anyone with the app can use this function, regardless of whether they are on a trip. Riders are also prompted at the end of each ride to report any issues.

**On our website:** Help and safety information is available through our Trust and Safety Portal, and a form for submission is at <https://help.li.me/hc/en-us>.

We also have a dedicated Trust and Safety website <https://safety.li.me/3/>

We also have a dedicated global trust and safety team for urgent safety incidents who are trained in emergency response.

**On social media:** Anyone can tag @\_LimeAid on Twitter for customer service.

## Daily Operations Plan

Our daily operations plan is based on best practice gained from our experiences in other New Zealand markets. We will also use our previous experience in Lower and Upper Hutt to look at popular routes, ridership, deployment locations and demand to determine how we operate.

## Operating hours

We operate 24/7 and our local operations team will be available around the clock, including holidays and weekends, to deploy, maintain, repair, rebalance, charge, and deploy our fleet.

Additionally, we enable a “quiet mode” between 1:00am and 5:00am to ensure scooters do not make any noise at night when they are being retrieved.

We will work with you to make any changes to our operating hours as needed to help to minimise risk during special events.

**Special events:** We have standard procedures in place to manage major events, including implementing special parking zones, no ride or low speed zones and fleet size. We can also incentivise riders to take a scooter to a big event rather than a private car. We will coordinate with the city on any proposed measures.

## Daily Deployment Plan

Our operation is made up of three key distribution phases: Deployment, patrol and rebalancing, and retrieval and charging.

### Phase one

Our daily deployment mostly takes place between 5:00am and 7:00am. Our operations team deploys scooters that have been repaired and charged overnight. Juicers deploy scooters that have been charged overnight so that they are ready for the morning commute.

**Hotspots:** Operations specialists and juicers deploy scooters at designated “hotspots” in groups of a maximum of six. Scooters must be deployed in an appropriate manner so they do not cause a danger or nuisance to other people

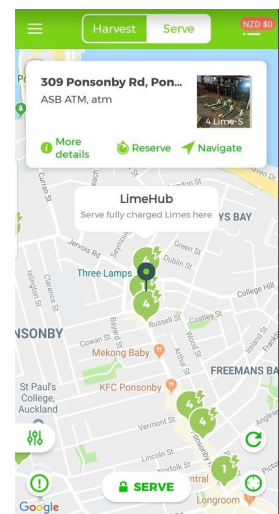
Select hotspots will be identified for deployment based on our proprietary “Hotspot Optimiser”. This is a predictive algorithm that builds up and uses historical demand to identify where to place scooters to best meet local needs, and how many to deploy at each location at different times of the day.

**Public Transport hubs:** Our deployment strategy includes providing regular, reliable scooter supply at public transport hubs so riders can connect with public transport for the first and last leg of their commute.

**Deployment Tools:** Our operations specialists and juicers use a mobile app to ensure each scooter is correctly distributed and parked well. The app provides information about the hotspot and the number of scooters permitted, as well as a photo of the hotspot and specific deployment instructions (see image at right).

Once the maximum number of scooters has been reached, the location disappears from the app to avoid overcrowding.

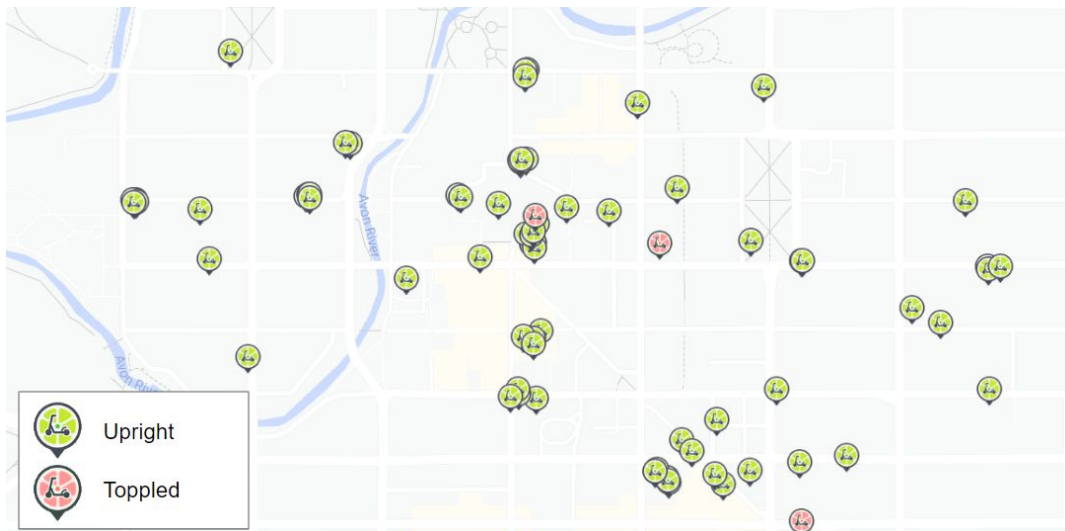
All juicer deployments must be photographed. Our compliance team audits the photos and if the deployment is not compliant, juicers are given additional feedback and training. In the event of a repeat offense, more stringent measures will be applied, including termination or withdrawal of charging privileges.



**Subregional minimums:** We are also able to set a minimum deployment number at a suburban level. This can be used to ensure the spread of deployment across different suburbs and can be used to override the hotspot optimiser to achieve transport equity goals.

## Phase 2 - Patrol and Rebalancing

We monitor scooter location performance throughout the day with automated tools, multi-channel feedback and hands-on field support to ensure scooters remain appropriately parked, charged and in good repair. Real-time dashboards allow us to dispatch team members to rebalance scooters immediately and track trends to plan for fleet deployment in the future.



*Screenshot of live topped scooter tool*

The field operations team and juicers work to relocate the fleet to better address demand and ensure that scooters are not overcrowding the public right of way in certain areas. They move improperly parked vehicles, minimise obstructions and ensure the right number of devices are deployed in each area.

Our scooters have the latest smart technology, which includes GPS for both maintenance and re-balancing. We are able to identify the scooter's exact location at all times, status, number of kilometres travelled and trips taken. This custom technology means that certain events automatically create a trigger to notify the operations team for action. These events include:

- Losing GPS signal
- Located in a “no parking” zone or outside the service area - When a scooter

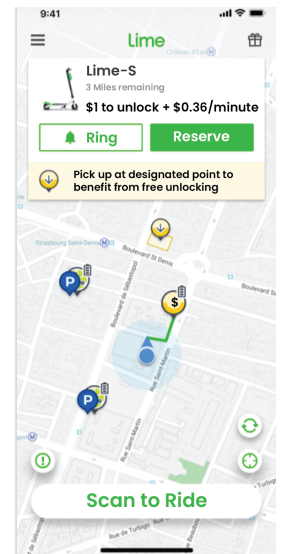
leaves the service area it goes into “maintenance mode.” The scooter will not appear on the app, and riders will not be able to start a ride.

- Low battery (less than 15%) As described above in **phase 3** of our daily deployment, this activity typically occurs outside the peak commute or business hours.
- Receiving one low rated ride with a damage issue tag
- Receiving three consecutive low rated rides with no tags
- Scooters reported in the app as damaged
- Customer service report of hardware issue
- Toppled over

Scooters that are reported to be damaged or inoperable, including low battery levels, are put into maintenance mode and cannot be hired. Field staff and juicers also proactively inspect any device they encounter for any damage and, if applicable, they will remove the scooter from service and return it for maintenance.

**NEW in 2020 Incentivised rebalancing/redistribution:** The “bonus scooter” feature encourages riders to move scooters from a less desirable to more desirable locations (see image at right). We can activate this feature to reduce oversupply of scooters, move improperly parked scooters, or return scooters that are outside the service area.

We replace the scooter icon for scooters we want moved with a dollar sign in the app. Riders who take those scooters and ride them to a low scooter density area will be awarded with ride credits.



### Phase 3: evening retrieval and maintenance

Scooter retrieval typically starts at 10:00pm, when juicers are able to collect scooters from the streets. Juicers collect about 65% of scooters each day. Our operations team retrieves designated scooters for scheduled inspection and maintenance needs or to perform repairs.

**Charging:** Our operations team and juicers recharge our scooters. We always know when scooters need to be charged through the battery percentage display within our operations back-end systems and mobile app. Juicers can also see low battery scooters available for retrieval.

Juicers retrieve scooters for charging throughout the day once the battery drops below 15%, the day time battery threshold. In the evening, Juicers collect any scooters under the night time battery threshold. Juicers take the scooters home or to a powered location and charge them



before deploying them before 7.00am to ensure that scooters are available for the morning commute.

Our operations software allows us to constantly monitor scooter charge. Our batteries have a lifespan of nearly three years. Through our battery management system (BMS), we are able to maximise the possible life of our batteries, reducing our waste while providing a consistent rider experience.

When the charge falls below our designated charge level, the system automatically places the scooter into maintenance mode which means it is unavailable to be ridden until charged.

We also have the ability via our operations app and administrative systems to shut down one or more scooters remotely if needed.

## Influencing behaviour

Electric scooter share schemes should not cause disruption or nuisance for other users of the road network. We use a number of tools to help our scooters fit seamlessly into the cities we serve and to support our operational team's efforts.

### Geofencing

Geofencing creates virtual boundaries that limit rider action in sensitive areas. We can adjust zones based on Upper Hutt and Lower Hutt's unique needs, special events and requests from private landowners.

**NEW in 2020:** Lime has invested in new patent-pending "rapid zone detection" geofencing technology. This industry-leading capability allows scooters to implement geofence zone commands much faster and more accurately.

Our server now contains all zone maps and compares these to the scooter's GPS coordinates to determine whether the scooter is in a zone or not. When a new zone is identified, the server will send corresponding commands (e.g. slow down, stop, prevent ride ends) to the scooter within three to five seconds. We added on-board mapping to our scooters and used the mapping to trigger when the scooter connected with our server to receive zone information.

**As a result, our scooters now detect and implement geofences 90% faster than they did in 2019, and with 30% more accuracy.**

**Service Zone (Boundary Limits)** - This is the area where scooters can be used. Riders can clearly see the service area when they open the Lime app. Riders who go outside the service area will not be able to end a trip, and will continue to be charged until the scooter is back

inside the service area.

If a scooter is moved outside the service area and abandoned it will automatically go into maintenance mode. This means it can't be ridden. It will trigger a signal to be retrieved.

**No-Park Zone** - Lime's system prevents a rider from ending their ride in a no-park zone. We use this zone type where parking is prohibited and it is shown in red in the app so that riders can clearly see where the scooters are not able to be parked.

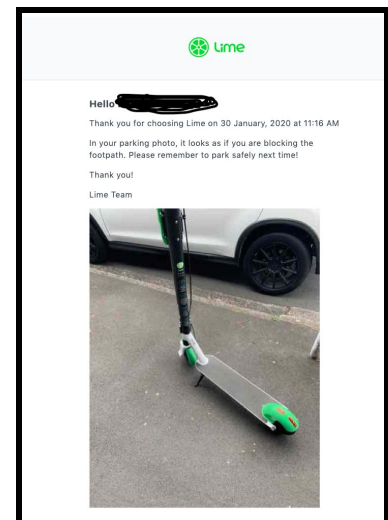
**Preferred Parking Zone** - Lime uses geofencing to create areas where riders are encouraged to park, Preferred parking zones are shown in blue on the app and are often combined with no parking zones to encourage responsible and safe parking behaviour in particularly sensitive areas. We can incentivise riders to park in these zones with ride credits.

**Low-Speed Zone** - In low-speed zones, we cap the scooter's top speed at a specified level, and the speed is automatically reduced to that level when the rider enters the low-speed zone.

**Parking validation:** The app includes a parking confirmation screen that will require a rider to manually confirm that the scooter is properly locked. "Yes" will allow the trip to end, "No" will route the user back to the map view, and the trip will continue until the user affirms that the scooter is properly parked.

**End of trip photo:** At the end of each ride, riders submit a photo showing their correctly parked scooter. Lime reviews the photos and contacts riders after their trips to

thank them for parking correctly and may offer credits for doing so. Alternatively, we ask riders to park more responsibly next time. We take action against rider accounts for repeat violations. This could include a fine or account suspension.



**Incentives:** We offer an incentive programme to improve parking behaviour. Using in-app messaging and direct emails, we offer riders who park in preferred parking zones the chance to win \$100 in Lime credit. These incentives have improved parking behaviour in other cities, such as Santa Monica.

**NEW in 2020 Comfort mode:** We have developed a speed control toggle called "comfort mode". This enables riders to set the scooter's maximum speed lower than the area's maximum speed, or to the rider's desired level of comfort. This feature empowers riders with the option to set the maximum speed for their ride (currently 17 km/h) and is an additionally convenient way for them to feel both safe and comfortable on our scooters.

**Enforcement:** We encourage riders to use our product in a manner that is safe for all members of the public and do this via direct rider communication and in-app messaging.

**Fining and deactivation policy:** We are able to fine riders for failing to adhere to rules and regulations or for violations of our terms of service. In addition, we can automatically implement fines for parking outside of the service zone. Riders can have their account revoked for repeated poor behaviour, vandalism, and other violations. In addition, in cases of confirmed underage riding, the rider account will be immediately suspended or terminated.

**NEW in 2020 First-in-kind footpath riding detection technology:** In San Jose, California, we introduced our first of its kind footpath detection technology. The technology works by collecting accelerometer and speed data from the scooter, and detecting the vibration of the underlying riding surface (e.g. a road or footpath). We use the information to educate the rider about proper riding etiquette in San Jose, where footpath riding is not permitted. The aggregate footpath riding data will be used to let the city know where additional investment in protected lanes is needed. While not yet available in New Zealand, we continue to innovate as a company.

## Servicing and repairs

Lime engages in extensive product testing and quality assurance protocols to ensure that our scooters provide a safe riding experience. Quality assurance happens at the time of manufacturing, via independent field testing before deployment and through routine maintenance checks of our scooters once they are in operation.

Once they are operational, our scooters are regularly serviced and repaired. The maintenance process starts with a full inspection at the warehouse by a Lime technician. The following are all inspection triggers:

- **Preventative Maintenance:** We believe a distance based approach to preventative maintenance is the best. This is because scooters and bikes are not used evenly so prioritising by trips or distance means that we are always servicing the scooters that have been used the most.

If a scooter has not had an inspection in 14 days or 50 trips, it is flagged for immediate retrieval for service. There are also many other touchpoints at which scooters are maintained or flagged for retrieval and servicing.

- **Rebalancing:** Our operations team inspects each scooter being rebalanced.
- **Deployment:** Our team inspects any scooters collected and maintenance is performed before morning deployment.
- **Customer Service Reports:** Scooters relating to any issue reported to our customer

service line are flagged for immediate retrieval and inspection.

- **In-app Rider Reports:** Scooters that are poorly rated for three rides in a row or marked in the app as damaged are immediately flagged for retrieval.
- **Self-Reporting:** Our scooters automatically notify the operations team for inspection upon certain events that can signal faulty, damaged, or vandalised scooters. Each issue has a specific error code that the operations team recognises. Issues can include, idling for more than 24 hours, losing GPS signal, low battery (less than 25%), successive failed unlocks, etc.

Any scooter flagged for inspection or repair is automatically placed in “maintenance mode.” The operations team is notified and the scooter cannot be rented until it has been inspected.

If at any time a scooter shows signs of ineffective, broken, or damaged parts, it is immediately removed from circulation and repaired or retired. If we cannot fix a scooter to a safe and operable condition, we break it down and recycle parts.

### **Maintenance and Repair Process**

All scooters that are brought back to the warehouse go through a three-step maintenance protocol:

1. Entry diagnosis
2. Repair and reconditioning of used spare parts
3. QC/Redeployment

**Step 1:** The scooters are unloaded and placed into “Triage 1”. Our technician shift lead inspects the entire scooter before placing it in the “repair queue” using the diagnostic functions in the operations app. Scooter inspections include a full 65-point evaluation: screws, brakes, handlebars, grips, battery damage or wear, lights, cleanliness, test ride, and more. The inspection is done in accordance with our Standard Operating Procedures (SOP) in the operations app.

**Step 2:** Each technician takes one scooter at a time from the repair queue using the FIFO Method (first in, first out). This method allows us to ensure that every scooter is handled in a timely manner and no scooter is overlooked. Once they move the scooter back to their technician station they will complete another diagnostic.

**Step 3:** After diagnostics, technicians will repair the scooter if necessary. Every technician station is equipped with the necessary tools and parts to complete every kind of repair. In addition, the shift lead audits the repairs (Triage 2) and provides guidance to our technicians if



needed.

**Step 4:** After the scooter has been repaired, the shift lead will do an additional quality control check to ensure that the repairs have been done correctly and that the scooter meets quality and safety standards before being moved to a charging station.

**Step 5:** After charging, the shift lead inspects each scooter before moving it to the “deployment zone”. This provides an additional quality check for every scooter that leaves the charging station.

**Deploying Scooters:** The operations specialist then checks out the scooters stationed in the deployment zone. Before loading into a van, the operations specialist will perform a fifth and final quality check before deployment. After the final check, the scooters are redeployed into the fleet.

## Communication and education

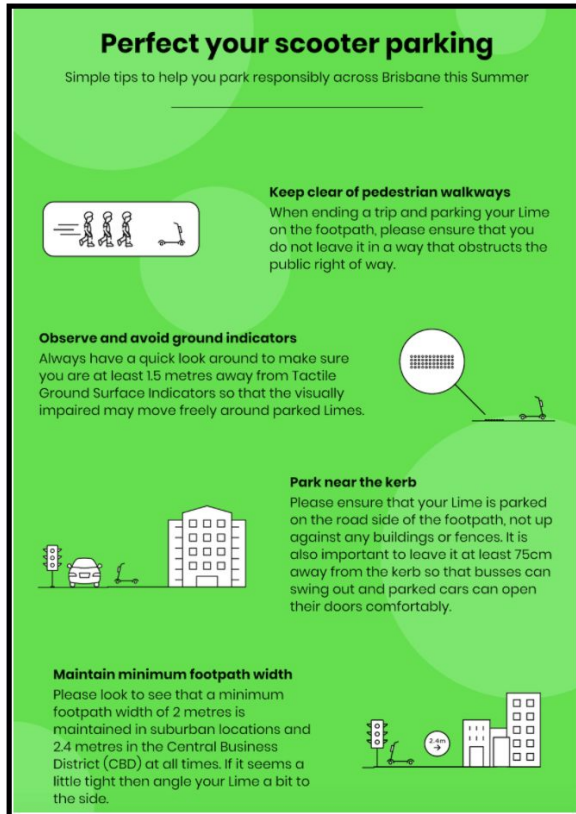
Before we start operating Lime scooters in the Hutt Valley, we will email all local riders on our database to let them know that we are returning. We will also have an in app-message and send a push notification to our database.

Once we are operating, we will include safety messaging and tips reminding riders to look out for others. We are happy to engage with any stakeholders you believe we should meet with in advance of launching scooters. This could include the local business associations, schools, advocacy groups etc.

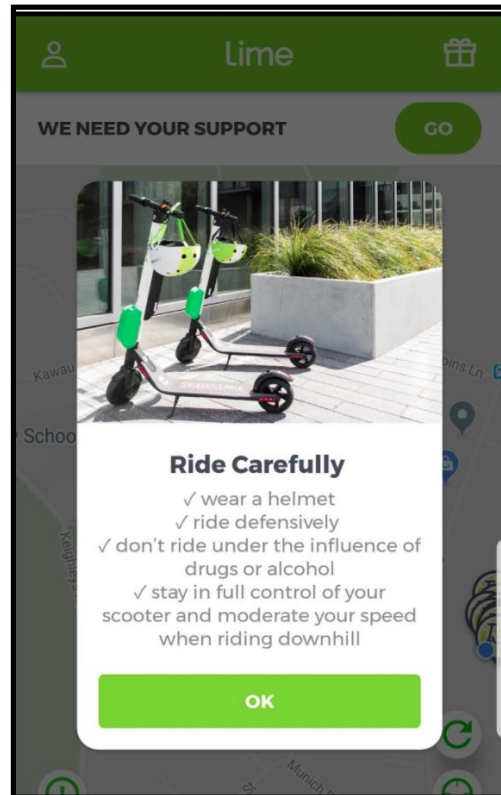
We would also work with the Council communications teams to provide FAQs and any other messaging and information that may be useful.

More generally, Lime uses a number of channels to encourage safe experiences for our riders and residents in cities where we operate. These include:

- In-app training tutorial upon sign up showing safe riding and good parking behaviour
- Event partnerships e.g. sporting or music events
- On-scooter messaging
- Regular direct communication with riders through in-app messages, push notifications, social media, and emails
- Community events
- Instructional video highlighting some simple rules that will help keep the community safe while riding <https://www.li.me/how-to-lime>.



*Example infographic - parking education (email)*

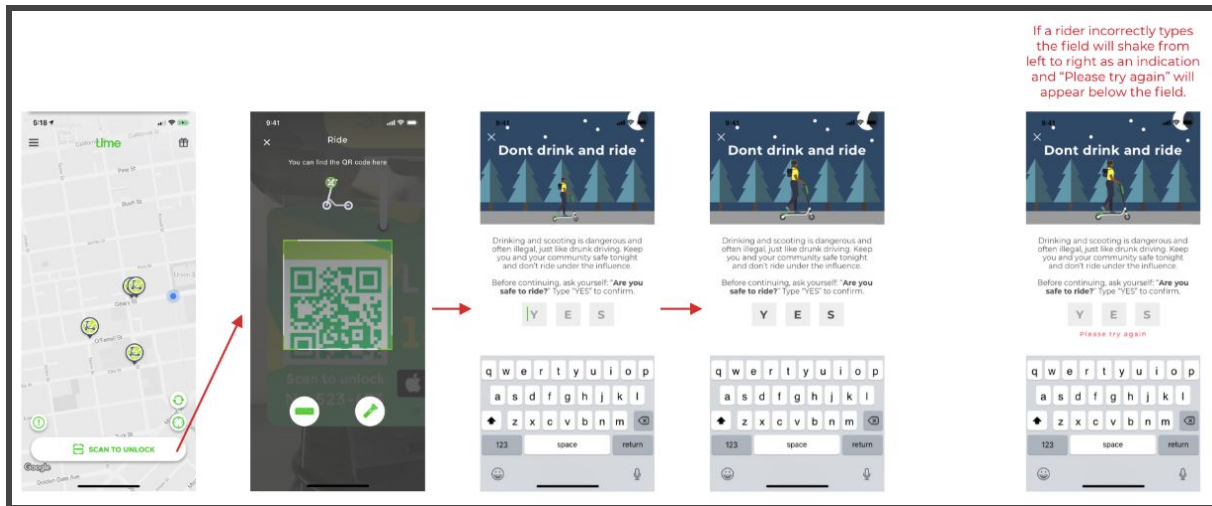


*Example infographic - parking education (In-app)*

**First Ride Events:** In 2019, we developed our First Ride programme, which consists of a 30-minute interactive and hands-on scooter safety course for riders to learn the rules of the road and ride a Lime scooter in a safe and contained environment. We also distribute helmets at these events.

**Sober riding validation:** Lime requires all users to perform a cognitive task before being able to unlock a scooter after 10.00pm each day. A screen pops up every evening that requires additional validation by having a rider explicitly type “YES” to unlock a scooter as shown in the screenshots below.

Lime is developing technology to further discourage drinking and riding as well as working to raise awareness at events to remind customers “if you wouldn’t drive, you shouldn’t ride”.



**Google Maps integration:** Through our Google Maps partnership, users can access the location of Lime scooters, their battery level, the estimated price of the journey depending on the destination, the recommended route (including bike paths) and the options for combining with public transport.

## Customer service

Lime provides 24/7 customer support. Lime users and non-users can contact us with questions or to provide feedback before, during, or after a trip using contact information found in the mobile app, on our website, and on the scooter.

Issues requiring on-the-ground attention are immediately relayed to our operations team to be addressed within two hours. A scooter is automatically put into maintenance mode (meaning it cannot be rented) if there is any report of a safety or maintenance issue.

Customer support technicians track all inbound messages as “tickets”. Each ticket is categorised and a procedure for resolving the issue is initiated. Our customer support team is trained to deal with various situations and resolutions to ensure that inbound messages are treated consistently.

When customer support identifies riders who have improperly parked a scooter they follow up with educational messaging and work with local operations to arrange collection. Repeat offenders may be subject to a fee, account, suspension, or account termination.

Lime aims to resolve all customer service concerns in less than 24 hours. We have a dedicated in-house Trust and Safety team for safety related incidents where the team are trained specifically for sensitive handling of emergencies.

When reviewing incidents we may consider data analysis, verbatim feedback and established patterns of behaviour. Outcomes from incident reviews include warnings or users being removed from the app in line with our terms of service.

Our system manages, categorises, and tracks all customer interactions, allowing us to create reports for various issue types, including response times.

## Incident reporting and investigation

At Lime, rider safety is paramount. To ensure our fleet's safety and to mitigate against any potential hardware safety concerns, we commit to a rigorous identification, validation, and testing process for all our scooters before introducing them into the field. We also conduct regular servicing, preventative maintenance and safety monitoring of our fleet when deployed, as described above.

If we learn of a serious injury from customer support, police, media, or any other channel, we activate our emergency response and trust and safety teams. These teams are specially trained for sensitive handling of emergencies. Our emergency response procedure includes:

**Gather Incident Details and Plan:** Upon learning of an incident, we identify the rider and scooter involved, gather other details about the incident and create a tailored response plan. The scooter automatically uploads its telemetry data to our servers to ensure that no data is lost.

**Outreach and Support:** We offer our support as appropriate to those directly affected by the incident, the police, and local officials to ensure each group is properly taken care of. For police, this includes guiding them through how to submit requests to our Law Enforcement Portal to provide the appropriate information. See below.

**Scooter Retrieval:** Once identifying the scooter involved, we create an "Urgent Retrieval Ticket," which tells our local operations team to collect the scooter before performing other tasks and securely store the scooter as-is in our warehouse, making it available to local authorities as appropriate. We do not re-deploy or modify the scooter until after the incident is fully resolved other than to ensure the scooter does not cause harm to anyone while in storage (e.g. ensure the battery does not short if it was damaged).

**Scooter Analysis:** We use all available data including telemetry logs pulled from the scooter to best aid investigations and to help flag potential issues. After any reported incident, our



engineers will analyse this data along with our trust and safety team to learn from the incident and make any improvements as necessary.

A comprehensive analysis may have many outcomes, including working with the hardware and engineering teams to design an improved component or sourcing a more reliable part from a new vendor. This process includes reviewing past maintenance records to identify patterns and failure rates to determine if they are in-line with the norm, or if they constitute outliers.

**Law Enforcement Response:** Lime has a dedicated Law Enforcement Response Team (LERT) to handle data and safety requests. In addition to the existing approach for receiving and complying with law enforcement data requests, Lime uses the [portal](#) to receive, handle, and comply with law enforcement data and safety requests.

**Insurance:** Lime has partnered with leading global insurance provider Allianz in an industry first to focus on improving the safety of electric scooters. Using Allianz and Lime’s respective expertise, this partnership aims to promote and accelerate the transition to new forms of sustainable mobility and the sharing economy by tackling the most important problem in solve: security. The collaboration will focus on tactical developments that directly and indirectly improve security. These initiatives include:

- Awareness campaigns on the benefits of wearing helmets
- Additional reductions in the cost of purchasing certain helmets
- Education campaigns for new users of electric two-wheelers
- Technological cooperation to develop new software and programmes even reducing the risk of accidents, upstream, during and after journeys.
- Collaboration to conduct surveys and better understand where micromobility users are most vulnerable

Lime holds public and products liability insurance of US\$2,000,000 for any one occurrence and US\$2,000,000 in the aggregate with Chubb Insurance New Zealand Limited.

## Data requirements and reporting

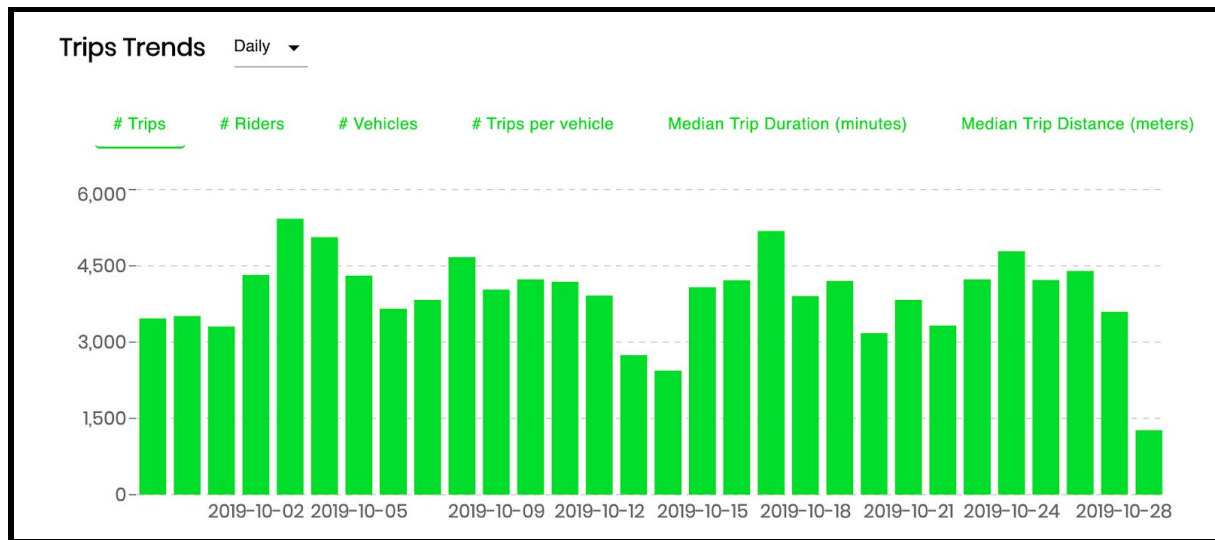
Lime has one of the most robust data compliance and research teams in the micromobility industry. Lime supports the Mobility Data Specification (MDS) standard in sharing data with cities. MDS offers access to the following data sets and can be exported as Excel or CSV file.

**Trips:** Including the entire trip route in GeoJSON format (usable in nearly all GIS tools) Vehicle List: By status, including details on why a scooter is unavailable. **GBFS:** An older format that lists all available vehicles in an easily consumed format **MDS API:** MDS allows continuous,

accurate data monitoring and compliance, and the data shown is the same that powers all of our applications.

**Insights dashboard:** Lime provides access to a visual data insights dashboard (sample screenshots provided below) that includes the following information:

- # of trips
- # of vehicles
- # of riders
- # of trips per vehicle
- Median trip duration (minutes)
- Median trip distance (metres)
- Heatmaps of ride routes
- Aggregate summary of distribution and GPS-based natural movement



This data refreshes every hour and can be visualised daily, weekly and monthly. Also available is a downloadable report that provides trip-level detail.

**Ride Report:** We proudly partner with Ride Report and share our API data feed with them as well.

**Customised data:** We also provide additional data such as survey results and other information such as the use of our programmes including Lime Pass, (offering daily, weekly and monthly ride bundles).

**We note that Lime protects its riders' personal information and anonymises and/or**

**aggregates information provided in any data or reports it shares with the city.**

## Sustainability

Lime is the first micromobility provider in the world globally to commit to charging all of our products on renewable energy. We are always looking for ways to improve our operations to reduce our effect on the environment.

In February 2020, we announced our commitment to transitioning our operations fleet vehicles to be 100% zero-emissions by 2030. As part of our commitment to this goal, Lime will become the first global micromobility provider to join The Climate Group's EV100.

Lime's commitment through the EV100 includes annual reporting requirements. The Climate Group requires members to submit an electrification roadmap within a year of joining, with regular updates and accountability required for meeting the target of full electrification by 2030 or sooner. We expect to complete the full transition well ahead of the 2030 EV100 target.

**Scooter lifespan:** An important part of Lime's commitment to being the world's most sustainable scooter company is ensuring that every scooter we manufacture and deploy has a long lifespan. This is currently **in excess of 18 months** based on verified field data, rather than lifespan estimates from the manufacturer.

**Recycling and End of Life:** When the scooter reaches the end of its life, we achieve nearly 100% landfill diversion. More than 96% of the material is recycled, and the very small remaining components can be used for waste energy recovery. We follow these procedures:

- All steel/aluminium alloy metals are recycled with our local recycling partner.
- Unusable batteries are recycled through our local recycling partner, ensuring that we follow appropriate environmental procedures for this waste.

In the North Island, we have partnered with the [Abilities Group](#) to manage waste and minimise our effect on the environment. Abilities is a non-profit, incorporated society dedicated to enriching the lives of people with disabilities through meaningful work.

Their work involves resource recovery and recycling of paper and cardboard, metals, plastics and waste electronic components. Abilities Group holds relevant "Basel Permits" issued by the Ministry for the Environment, to enable export of residual hazardous components for recycling at approved facilities overseas.

Abilities Group looks after all of our general waste and recycling, including recycling all steel and aluminium alloy metals, all plastics and packaging and unusable batteries.



**Batteries and recycling:** Lime scooter batteries comply with UN 38.3, an international safety standard that addresses the quality and safety of lithium ion batteries. One of the criteria of this is rigorous testing for battery leakage in various situations, including testing to ensure integrity when submerged.

**Environmental impact:** We always treat our scooters as precious assets that should do more environmental good than harm. But some people still treat them inappropriately. Lime will work with Upper Hutt City and Hutt City Council and local agencies to mitigate this risk as much as practicable to ensure our scooters do not negatively affect sites of cultural importance and/or end up in the water.

In the unfortunate circumstance that scooters are in the water, our teams are equipped with tools for easy recovery of scooters near the shore and where recovery will not endanger vulnerable ecosystems or sensitive parklands. Should this not be possible, we partner with local dive or rowing/boating organisations and community groups to safely recover the scooter(s).

Our operations managers monitor fleets to ensure they are used within the agreed on service zones and retrieve scooters that fall outside this area.

**Charging with renewable energy:** Our scooters are charged with 100% renewable energy from around the world. We buy renewable energy through direct utility contracts (Germany, France, San Francisco) or the purchase of certified Renewable Energy Certificates (RECs) for all charging, globally. We are currently in negotiations with a local energy company on an agreement that will mean all New Zealand warehouses are charged with renewable energy and we will look forward to sharing these details with you soon.

**Carbon emission savings:** Lime is proud of the carbon savings it has achieved from its programmes to-date. For our current total of over 160 million km travelled, based on our rider surveys to determine mode-shift from vehicles, we estimate saving more than 64 million km travelled by car and 16,000+ metric tons of CO2 reduced. This is equivalent to 6.8 million litres of petrol, or taking 3,200 passenger vehicles off the road for a year.

**Carbon offsets:** In our operations, we are constantly working toward more efficient, lower carbon operations practices by using carbon-free cargo bikes and electric fleet vehicles. For the emissions that we can't reduce, we neutralise those emissions through carbon offset. We buy verified carbon offsets through NativeEnergy to ensure a carbon neutral fleet of Lime-operated vehicles globally.

Offset projects include a Gold Standard community water filtration project in Ethiopia (designed to follow UNFCCC protocol for low greenhouse gas emitting water purification systems), and a commercial wind facility in the USA, certified by the Verified Carbon Standard (VCS).





**Sustainability advisor:** Lime has added Former Obama White House Climate Director & Clinton EPA Chief Carol M Browner as our sustainability advisor. She has led many environmental initiatives for the US Government globally, including climate negotiations.



# Lime FAQ

## How do I unlock a Lime scooter?

1. View the Lime map to locate available scooters
2. Walk to the nearest scooter
3. Use the Lime or Uber app to scan the vehicle's QR code or enter the 7-digit plate number to unlock the ride. If it is too dark, tap the flashlight icon once you open the QR code scanner.

## How do I download the Lime app?

To download the Lime app, simply click [here](#) and you'll automatically be redirected to the appropriate download page for your mobile device. You can also search "Lime" in both the App and Google Play stores. The sign-up process provides clear instructions in-app on how to find, reserve, unlock and ride.

You can also use Lime scooters through the Uber app. Lime is the only micromobility operator promoting opportunities for riders to avoid taking a car trip in the Uber app and with Google Maps for multimodal journey planning.

## Is there a minimum age requirement to use a Lime scooter?

Customers must agree to Lime's [terms and conditions](#), which include the requirement for users to be 18 years or older before they can set up an account.

## Are there any safety instructions?

Before taking their first trip, all riders must take Lime's in-app "How to Ride" training which covers safe riding and parking, local rules and regulations and instructions on how to check that their e-bike or scooter is ready to ride.

Upon taking their first ride with Lime, each rider receives a dedicated safety email that includes road rules, riding tips and parking tips.

## Do I need to wear a helmet?

You are not legally required to wear a helmet in New Zealand when riding an electric scooter. However, Lime encourages riders to wear one. Lime also offers discounted, Lime branded helmets if you would like to buy your own. They also give away helmets at safety events.

### **Where can scooters be ridden?**

E-scooters can be used on the footpath or the road and on cycle paths, which are physically separated by a barrier or are off the road altogether. Currently, scooters are not allowed to be used in designated cycle lanes, which are lanes painted onto the road surface and have no barrier in between.

### **How far can a scooter go on a single charge?**

Lime scooters have a range of about 30km, depending on use.

### **How fast can scooters go?**

Lime scooters travel a maximum speed of about 25 km/h but there may be speed limits in place in certain areas.

### **How much does a Lime cost?**

Lime charges a fixed rate to unlock a vehicle and then per minute to ride. You can tap the vehicle icon or scan to ride to see the current rate.

If you want to reserve a vehicle before the hire, you will be charged a per minute starting fee from when you press the reservation button until you unlock the reserved vehicle or cancel your reservation.

Charges are rounded up to the nearest minute and rates and promotions may vary by location and time but will be specified in our app.

More information: <https://help.li.me/hc/en-nz>

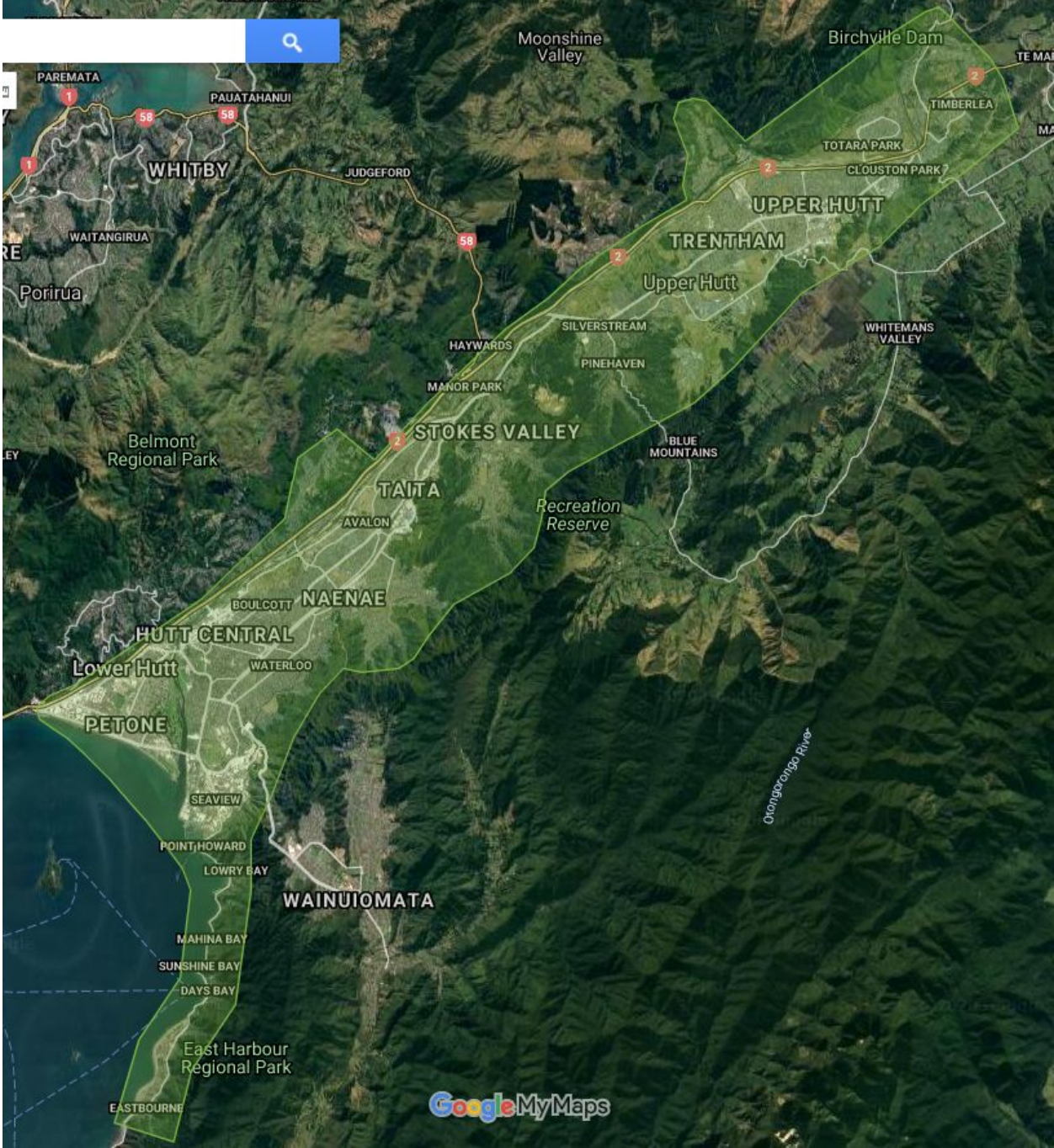
### **How many scooters will be available?**

Lime will initially deploy 250 scooters across the Hutt Valley. Lime actively monitors supply and demand to ensure scooters are available at the right places at the right time. These locations may change slightly over time and depending on the day of the week.

### **Where will the scooters be located?**

Lime will deploy scooters across the service zone in Lower and Upper Hutt (see image below). The scooters will be deployed in groups of no more than four.

If riders try to take the scooters outside the service zone, they won't be able to lock the scooters and they will continue to be charged.



**During what time period will scooters be available?**

Lime scooters will be available to hire between 5am and 1am daily. They will be deactivated outside those hours, which means you won't be able to ride them.

**Lime contact details:** Riders and non-riders can contact Lime at [support+nz@li.me](mailto:support+nz@li.me) or 0800 467 001 or via the help menu on the left hand side of the Lime app home page.

**Media enquiries** can be sent to [press-nz@li.me](mailto:press-nz@li.me)