OCTOBER 2022

lime

LIME SAFETY REPORT FOR SCOOTERS IN PARIS

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LIME SAFETY REPORT FOR SCOOTERS IN PARIS

SUMMARY

As electric scooters are a new mode of transportation, there is little public data on crashes involving them. Today, the only public source in France of data on electric scooter crashes, both private and shared, is the National Interministerial Road Safety Observatory (ONISR). However, as the ONISR categorizes these data with those of all other Personal Motorized Travel Devices (EDPMs), such as hoverboards, gyropods and motorized skateboards, understanding the volume, causes and implications of crashes involving shared electric scooters remains limited. To help inform the debate and provide transparency, Lime is publishing the industry's first safety report on its shared electric scooters in Paris.

The analyses presented in this report are based on Lime's safety incident data, in Paris, between January 2020 and June 2022, as well as reliable external sources that allow us to put these data into perspective with crash data for other modes of transport. During this period, more than 16 million Lime electric scooter trips and 1,261 incidents of varying severity were recorded.

Six main conclusions emerge from this assessment:

1. Lime scooters are a safe way to travel. Over 99.99% of trips were safety incident free, and of the 0.01% of trips with safety incidents, 87% were minor incidents with no medical attention needed.

2. Lime scooters pose little danger to the safety of other road users. Of the 0.01% of trips with safety incidents, 79% were single vehicle falls and only 2% involved a collision with a pedestrian.

3. Lime scooter crashes are correlated to the lack of cycling infrastructure. On streets without cycling infrastructure in Paris, incidents are three times more frequent with 36 incidents per million kilometers traveled (compared to 11 incidents per million kilometers on roads with protected cycling infrastructure).

4. Lime scooters are as safe a mode of transportation as bicycles in Paris. Because fatalities are so rare on Lime scooters, here we have expanded the time frame of our data analysis back to the launch of our scooters in Paris in 2018. During this period two fatalities were recorded, resulting in a Lime scooter fatality rate 5.36 per 100 million rides. The Paris bike fatality rate between 2018 and 2021 was 5.48 per 100 million rides.

5. Lime scooters are a safer mode of transportation than mopeds. The fatality rate for mopeds in Paris is 39.7 per 100 million trips, while the rate for Lime scooter users is 5.36 per 100 million trips.

6. Motor vehicles are the most dangerous mode of transport for pedestrians, cyclists and electric scooter users. Collisions with motor vehicles account for the majority of fatal incidents involving vulnerable road users, namely pedestrians (94%), cyclists (71%) and Lime electric scooter users (70%).

[1]Lime collects safety incident data in a number of ways. When users are involved in a crash, they are encouraged to report it directly on the app or to call us. An additional form is available online for anyone, other than an active user, who is involved in an incident with a Lime vehicle. Our safety teams manually review each safety report and classify them according to our internal taxonomy and protocol. Lime also works with the police in the event of a crash or dispute.
[2]External data on bicycle fatalities in 2022 were not yet available at the time of this analysis.

INTRODUCTION

The City of Paris' transport policy has truly transformed our relationship with public space and shown the world how to build a city centered around people. Recent measures such as the 30km/h speed limit in most of the city, the implementation of Low Emission Zones or the perpetuation of "coronapistes" have accelerated the rebalancing of public space, to the benefit of pedestrians and users of micromobility, resulting in a record 60% increase in bicycle use since 2019.[3]

The integration of shared electric scooters into the transportation mix is fully part of these innovative transport policies that have accelerated the transition to a more peaceful Paris. Since their launch in Paris in 2018, Lime electric scooters have completed more than 37 million trips, avoiding a total of 5.5 million motor vehicle trips, in addition to reducing noise pollution. Between May and September 2022, Lime had an average of 261,000 unique users per month, making an average of 834,000 trips per month. In Paris, a Lime scooter ride starts every four seconds and demand for the mode of transport continues to grow with the number of monthly kilometers traveled increasing by 50% between the period before Covid's arrival in 2019 and the peak of trips in 2022.

If shared electric scooters have established themselves as an essential means of transport, both to meet the travel needs of Parisians and to carry out the vision of a "peaceful city", what about their safety? How many safety incidents are there with shared electric scooters and who is involved? How do these figures compare to other modes of transport in the Paris transport system?

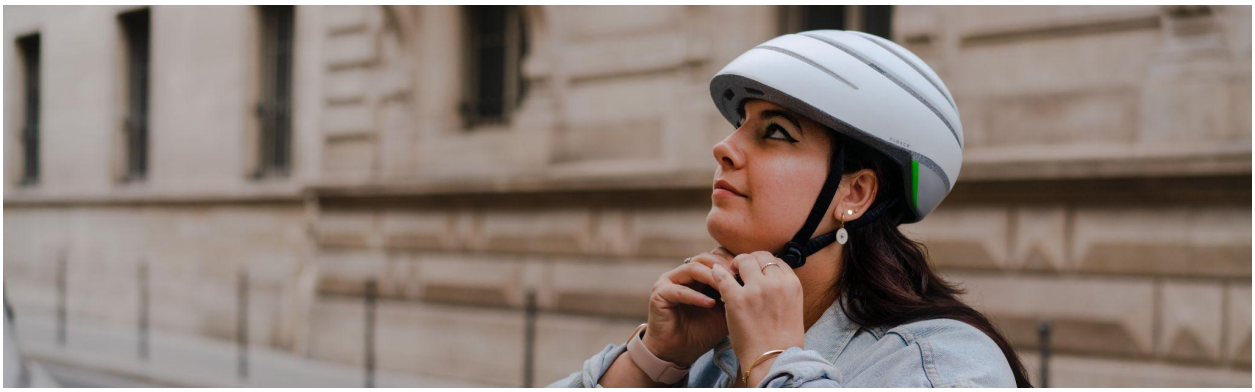
Since electric scooters are a recent mode of transportation, there is little public data on incidents in which they are involved. Today, the only public source in France of data on electric scooter crashes, both private and shared, is the National Interministerial Road Safety Observatory (ONISR). However, as the ONISR categorizes these data with those of all other Personal Motorized Travel Devices (EDPMs), such as hoverboards, gyropods and motorized skateboards, understanding the volume, causes and implications of crashes involving shared electric scooters remains limited.

The safety of Lime riders and other road users is one of our top priorities as a shared scooter and bike operator. Every safety incident is one too many. By publishing, for the first time in the industry, a report on the safety incident rate for shared electric scooters in Paris, we wanted to shed precise and factual light on the volume of crashes and their implications on the safety of road users in order to rationalize the debate and inform road safety policy.

With this first review, Lime wishes to initiate a more formal, structured and systematic sharing of data related to the safety of its vehicles between private operators and the city of Paris in order to work together to make public spaces safer and more peaceful.

[3] Source: Paris City Council, Paris Travel Report, 2021: https://www.paris.fr/pages/bilan-des-deplacements-a-paris-en-2021-21167

More generally, Lime is committed to sharing data related to its business in a transparent manner to help build safer and more sustainable cities. Notably, today, Lime is the only micro mobility company to provide public GBFS data[4] , making data about our electric scooter fleet in Paris accessible to all.



LIME ELECTRIC SCOOTERS ARE A SAFE WAY TO TRAVEL

Since their launch in Paris in 2018, Lime electric scooters have completed over 37 million trips, enabling 12.5 million connections to public transit and avoiding a total of 5.5 million motor vehicle trips. Between May and September 2022, Lime had an average of 261,000 unique users per month, making an average of 834,000 trips per month. In Paris, a Lime scooter trip starts every four seconds and demand for Lime scooters continues to grow with the number of monthly kilometers traveled increasing by 50% between the period before Covid's arrival in 2019 and the peak of trips in 2022.

These numbers show that Lime meets the needs of Parisians as well as a diverse audience. 61% of users surveyed in Paris earn less than the median income, 33% are women, the average age is 33 and 19% are over 45. In addition to replacing motor vehicle trips, Lime also facilitates intermodality with 73% of our users stating that they use public transport more.

Over 99.99% of Lime Scooter Trips In Paris Are Incident Free

This analysis looks at safety incident data for Lime scooters in Paris between January 2020 and June 2022. During this period, 16 million Lime electric scooter trips were made and 1,261 incidents were recorded. It is worth noting that Lime vehicles are frequently used: our electric scooters are used 3 to 4 times more often per day than those of other operators. As a result, we record more trips and safety incidents. Therefore, to understand the safety impact of this mode of transportation, it is more useful to look at the safety incident rates. In Paris, we find that 99.99% of trips were incident free.

[4] Source: Transport.data.gouv.fr, Lime -Flux GBFS public, Paris https://transport.beta.gouv.fr/datasets/gbfs-paris/?locale=en

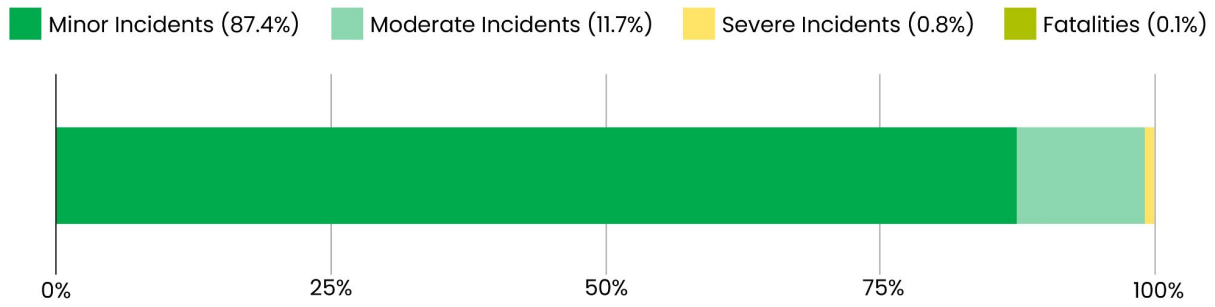
Lime collects safety incident data in a number of ways. When users are involved in an incident, they are encouraged to report it directly on the app or to contact Lime by phone. An additional form is available on our website for any third party involved in a safety incident with a Lime vehicle. Lime also works with the police in the event of a safety incident to report and retrieve incident data involving its vehicles.

Lime classifies safety incidents according to their severity and categorizes them into the following four groups:

- **Minor** - an incident where no medical attention was needed,
- **Moderate** - an incident where either rider or involved third party reports seeking professional medical care, usually a regular doctor or emergency room visit,
- **Severe** - an incident where either rider or involved third party sought professional medical care and it involved over 24 hours of hospitalization,
- **Fatality / Coma** - an incident where a person involved in the incident either has been confirmed to pass away or remains in a coma.

Over the period analyzed (January 2020 - June 2022), less than 0.01% of Lime electric scooter trips resulted in a safety incident. Of these incidents, 87% did not require medical attention as illustrated in **Figure 1**. More serious incidents are rare: 11.7%are moderate, 0.8% are serious and 0.1% are fatal.

FIGURE 1 - LIME SCOOTER INCIDENTS BY SEVERITY

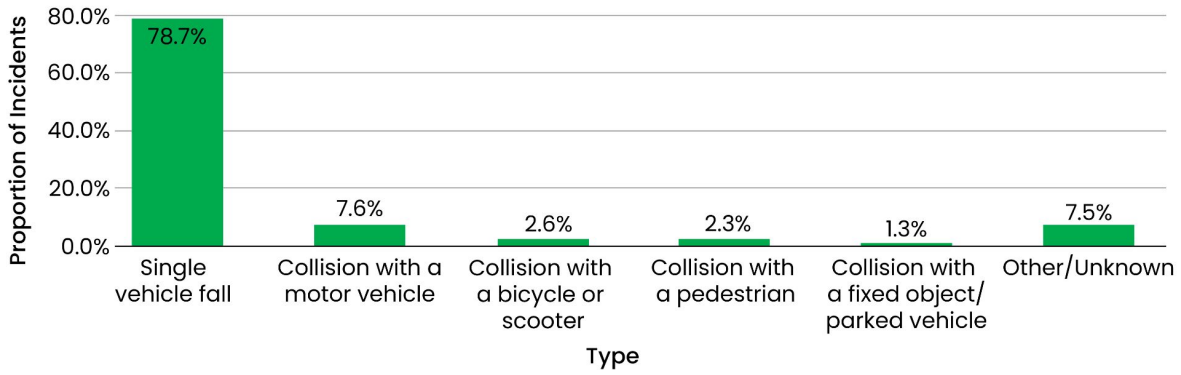


Our analysis revealed that the vast majority of Lime electric scooter trips are incident free, but also that incidents occur in greater proportion on users' first trips. In Paris, 11% of incidents occur on the first trip on an electric scooter, which is why we have put in place a robust system to educate and train users on how to ride electric scooters and the rules of the road. Starting in 2018, Lime offered free training sessions open to the public every week in Paris: the Lime Academy. More recently, Lime introduced a "beginner mode" in the app that allows users to learn how to use the scooter at low speed. Lime has also launched several poster campaigns in Paris and its public transport system to raise awareness on a large scale, and distributed thousands of helmets in partnership with Allianz.

Lime Scooters Pose Little Danger to the Safety of Other Road Users

The data presented above demonstrates that Lime electric scooters are a safe means of transportation for our users in Paris. However, it is important to consider the impact of this mode of transportation on the safety of other road users. Analysis of our incident data indicates that 79% of Lime scooter incidents are single falls, meaning that the vast majority of incidents are limited to the user and do not involve other road users. When incidents do occur between a Lime electric scooter and another road user, it is most often a collision with a motor vehicle. Pedestrians account for only 2% of incidents involving a Lime scooter, as shown in **Figure 2** below.

FIGURE 2 - LIME SCOOTER INCIDENTS BY TYPE



The impact of Lime scooters on pedestrian safety

Over the period analyzed, pedestrian collisions accounted for 2% of Lime scooter incidents recorded, or 29 crashes between January 2020 and June 2022. To better understand the impact of Lime scooters on pedestrian safety, we examined these 29 collisions in detail.

72% of these collisions were classified as "minor incidents", requiring no medical attention. Serious injuries are less common, with 21% moderate incidents, 3% severe incidents and 3% fatal incidents. There is one fatal crash in 2021 and 0 in 2022 to date (October 2022).

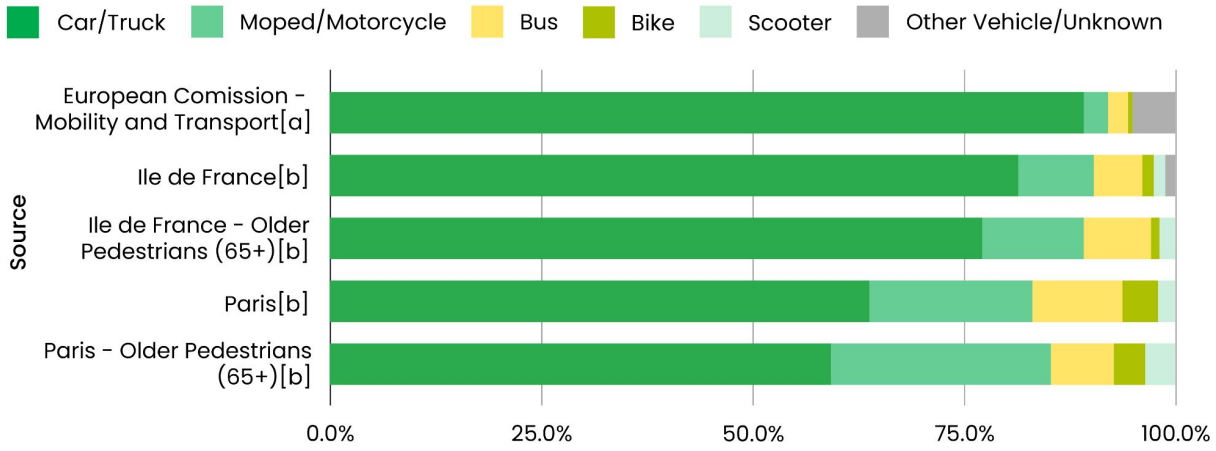
To identify the main threats to pedestrian safety, we examined the responsibility of other modes of transport in pedestrian fatalities using data collected by the European Commission's Mobility and Transport Department[5] and those of the ONISR[6] for the Ile-de-France as shown in **Figure 3**. At the European Union level, in the Ile-de-France region and in Paris, motor vehicles, particularly cars and trucks, are responsible for the vast majority of fatal pedestrian incidents. In Paris, cars and trucks account for 64% of fatal pedestrian incidents (59% for older pedestrians) according to the ONISR.[7]

[5]Source: Road Traffic Fatalities in the EU in 2020 by road user and (other) 'main vehicle' involved in the crash, European Commission Mobility and Transport Service, 2020:
https://road-safety.transport.ec.europa.eu/system/files/2022-08/road_traffic_fatalities_in_the_eu_in_2020_total.pdf
[6]Source: ONISR data https://www.onisr.securite-routiere.gouv.fr/en/crash-statistics
[7] Source: ONISR data https://www.onisr.securite-routiere.gouv.fr/en/crash-statistics

Mopeds/motorcycles and buses account for a larger proportion of fatal incidents in Paris than in the Ile-de-France (19% in Paris compared with 9% in the Ile-de-France). When combined, motor vehicles were responsible for 96% of fatal pedestrian incidents in Ile-de-France and 94% in Paris. While bicycles and scooters represent a small percentage of pedestrian fatalities (between 1% and 4%) in both Ile-de-France and Paris.

This analysis shows that heavier, faster vehicles such as cars and trucks account for the largest portion of pedestrian fatalities, followed by mopeds/motorcycles, while bicycles and scooters account for a marginal portion.

FIGURE 3 - PEDESTRIAN FATALITIES INVOLVING OTHER ROAD USERS



[a] European Commission - Mobility and Transport (2020)

[b] ONISR Data (2018-2020)

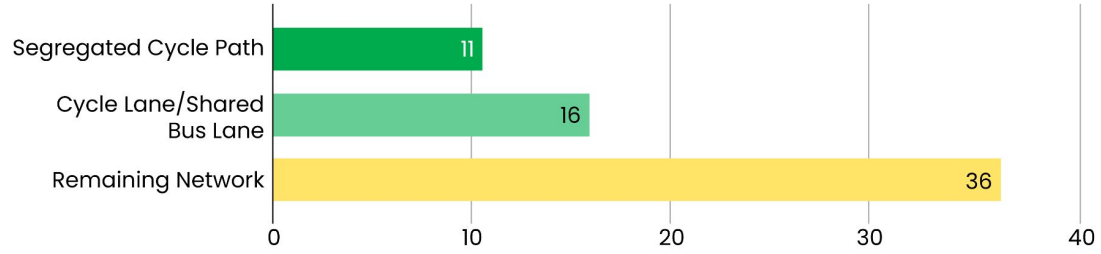
Strong correlation between Lime scooter incidents and lack of cycling infrastructure

In previous research,[8] we found that the introduction of new bicycle lanes and paths in Paris and other cities led to increased Lime ridership on those facilities. Taking that analysis further, we examined the impact of the Paris cycling network influenced the frequency of Lime scooter safety incidents. We found that incident rates on streets with separated cycle paths were significantly lower, with 11 safety incidents per million kilometers traveled. In contrast, streets with no cycling infrastructure saw safety incidents occur over three times as often: 36 safety incidents per million km (**Figure 4**). These statistics align with our riders' perceptions and preferences: 73% of riders say they prefer to ride on dedicated cycling infrastructure. This analysis highlights the need to add protected bike lanes to reduce the number of scooter and bike incidents. The City of Paris is working on this effectively and by 2022 it will have over 1,000km of cycle facilities and 52km of "coronapistes" .[9]

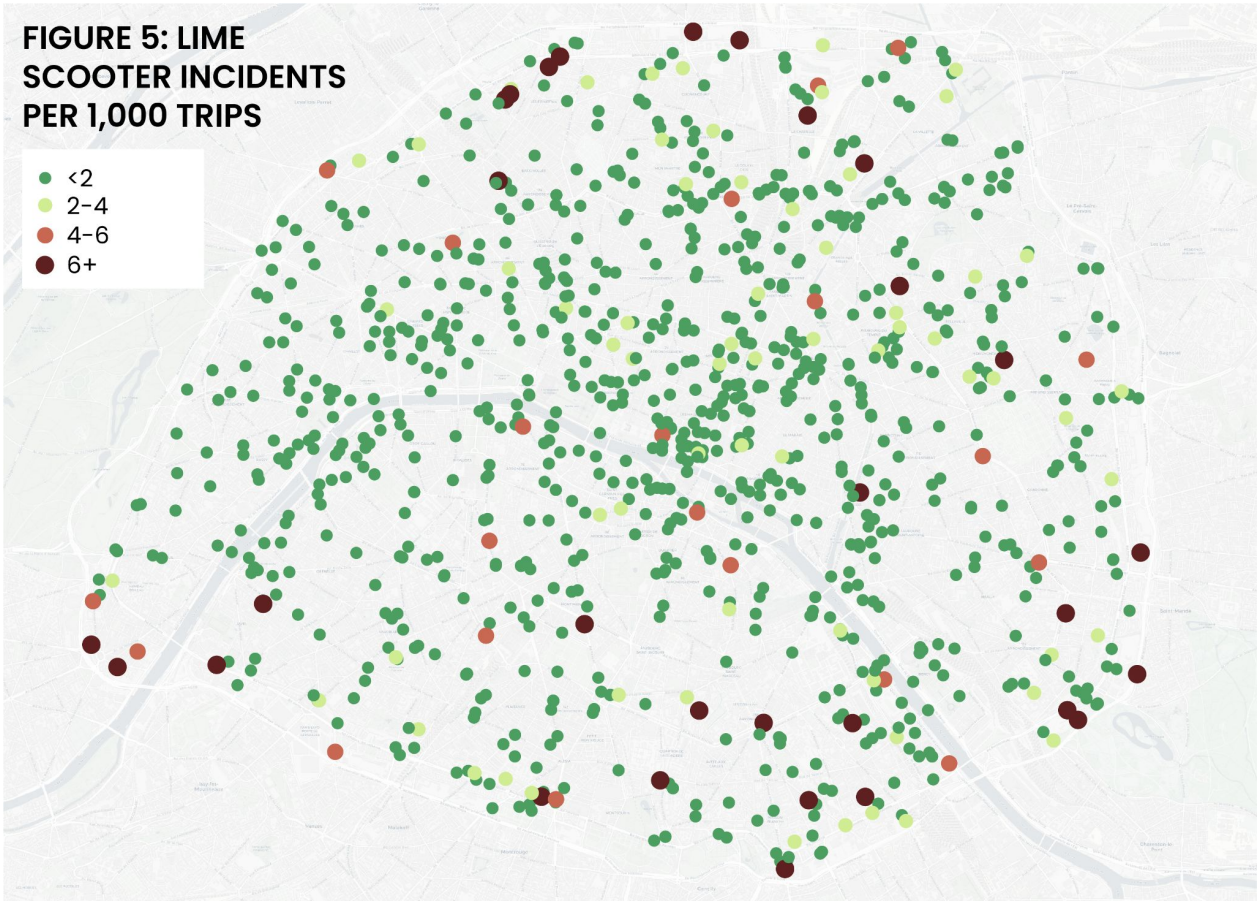
[8] If You Build Them, They Will Ride. Lime Blog Post, 2020. Source: https://www.li.me/blog/if-you-build-them-they-will-ride

[9] Source: "Where are we on the development of new cycle paths?", Paris City Council, June 2022 https://www.paris.fr/pages/les-pistes-cyclables-provisoires-vont-devenir-perennes-18264

FIGURE 4 - LIME SAFETY INCIDENTS PER MILLION KILOMETERS TRAVELED



Moreover, there is a tendency for safety incidents to be concentrated in the outlying areas of Paris (**Figure 5**), which tend to have less cycling facilities. In order to weight the geographical distribution of incidents in Paris according to the frequency of use of the various roads, we have taken into account the rate of incidents per 1,000 trips.

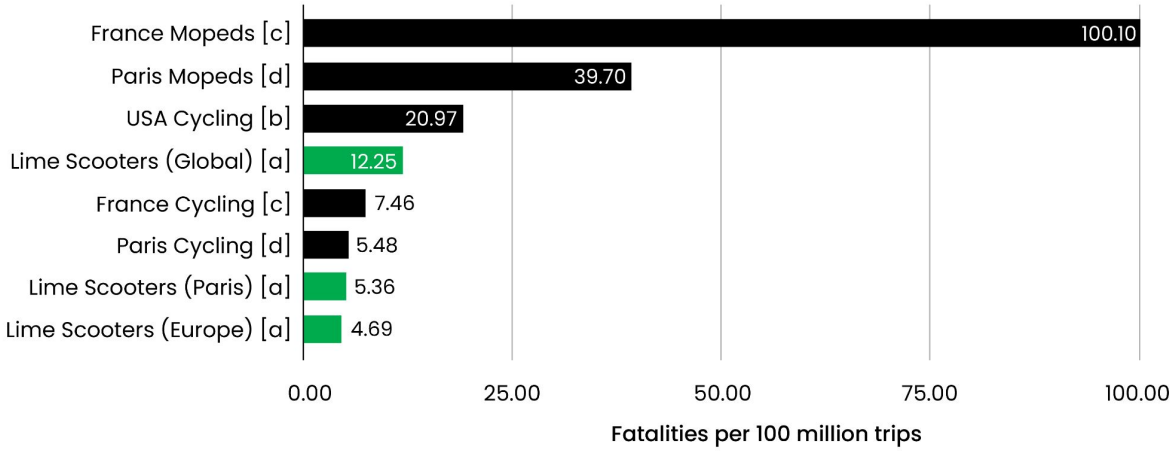


LIME E-SCOOTERS ARE AS SAFE AS CYCLING IN PARIS

Of the more than 37 million Lime scooter rides since June 2018, there have been two fatal incidents, a fatality rate of 5.36 per 100 million trips. In comparison:

- Cycling in Paris has a fatality rate of 5.48 per 100 million trips, over the same period.[10]
- Cycling in France has a fatality rate of 7.46 per 100 million trips[11]
- On a European scale, it is interesting to note that the fatality rate for Lime scooters is even lower (4.69 fatal incidents per 100 million trips).

FIGURE 6 - FATALITY RATE BY MODE



aLime Scooter Data (2018-2022) | **b**Beck, Dellenger, O'Neil (1999-2003)[12] | **C** Mohamed Mouloud Haddak, (2007-2008)[13] | **d** Estimated from Enquête Globale Transport 2018[14], Baromètres mensuels de l'accidentalité[15] and Le Bilan des déplacements à Paris 2018-2020,[16] 2021.[17]

[10] Source: Calculation based on data from Global Transport Survey 2018# Monthly accident barometers# and Le Bilan des déplacements à Paris 2018-2020#, 2021#.
[11] Source: Exposure-based Road Traffic Fatality rates by Mode of Travel in France, Mohamed Mouloud Haddak

Lime scooters are a safer way to travel than mopeds

Lime scooters are much safer than mopeds & motorcycles. In France, there are 100.1 fatal moped & motorcycle incidents per 100 million trips and in Paris 39.7 per 100 million trips[18] while Lime scooters in Paris have a much lower rate with 5.36 fatal incidents per 100 million trips. Mopeds & motorcycles are also involved in more incidents with pedestrians. According to 2021 data from ONISR[19], 27 non-motorcyclists died in an incident involving a moped or motorcycle, including 16 pedestrians.

Speed plays an important role in fatal incidents involving mopeds & motorcycles. ONISR data from 2019-2021 showed that 38% of fatal incidents involving a moped or motorcycle were speed-related. This is one of the reasons why the City of Paris' 30 km/h speed limit is so important to ensure the safety of all road users.

Collisions with cars are the most dangerous incidents for both bikes and scooters

To compare Lime scooter crash types with other modes of transportation, we put Lime scooter fatality rates in perspective with private bicycle fatality rates. Because fatal crashes on Lime scooters are extremely rare, in this section we extended our analysis to Lime's overall incident data over the period September 2018 to August 2022. We then put this data into perspective with data on fatal cycling incidents collected by the European Commission - Mobility and Transport (ECMT)[20] and the International Transport Forum (ITF).[21] Our analysis leads to the conclusion that safety incidents for bicycles and scooters are similar, both in frequency and in the types of collision.

Collisions with motor vehicles are the most dangerous incidents for electric scooter users and cyclists. According to the European Commission (ECMT), 71% of fatal bicycle incidents are related to a collision with a motor vehicle. This figure echoes Lime's global incident data for electric scooters: 70% of fatal incidents involve a motor vehicle as shown in **Figure 7** below.

[12] Motor Vehicle Crash Injury Rates by Mode of Travel, United States: UsingExposure-Based Methods to Quantify Differences, 2007. Source: https://www.researchgate.net/publication/6378823_Motor_Vehicle_Crash_Injury_Rates_by_Mode_of_Travel_United_States_Using_Exposure-Based_Methods_to_Quantify_Differences

[13] Exposure-based Road Traffic Fatality Rates by Mode of Travel in France. Mohamed Mouloud Haddak, 2016. Source: https://www.sciencedirect.com/science/article/pii/S2352146516301715?ref=pdf_download&fr=RR-2&rr=751c00999b5cb870

[14] Enquête Globale Transport 2018. Observatoire de la mobilité en Île-de-France Source: https://www.omnil.fr/IMG/pdf/resultats_detailles_egt_2018_vfinale-2.pdf

[15] Baromètres mensuels de l'accidentalité. DRIEAT. Source: https://www.drieat.ile-de-france.developpement-durable.gouv.fr/barometres-mensuels-de-l-accidentalite-2007-2022-a11231.html

[16] Le Bilan des déplacements à Paris 2018-2020. Source: https://www.onisr.securite-routiere.gouv.fr/etudes-et-recherches/analyses-territoriales/communes-et-intercommunalites/bilan-securite-routiere-ville-de-paris

[17] Le Bilan des déplacements à Paris 2021. Source: https://www.paris.fr/pages/bilan-des-deplacements-a-paris-en-2021-21167#:~:text=La%20Circulation%20automobile%20dans%20Paris,la%20vitesse%20de%20%2D6%25.

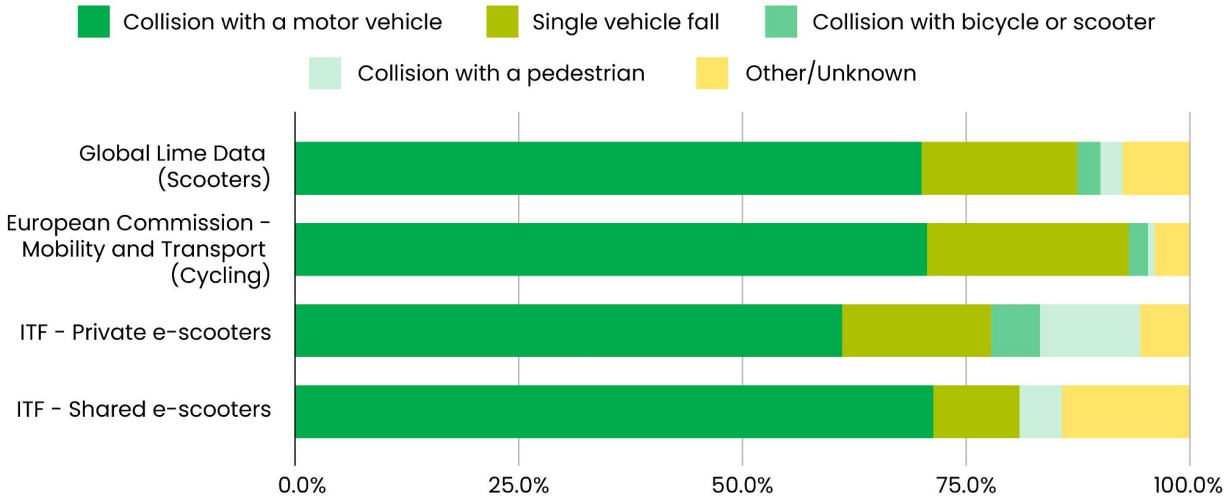
[18] Source: Exposure-based Road Traffic Fatality Rates by Mode of Travel in France, Mohamed Mouloud Haddak, 2016: https://www.sciencedirect.com/science/article/pii/S2352146516301715?ref=pdf_download&fr=RR-2&rr=751c00999b5cb870

[19] Source: La sécurité routière en France Bilan de l'accidentalité de l'année 2021, ONISR 2022 https://www.onisr.securite-routiere.gouv.fr/sites/default/files/2022-09/ONISR_Bilan_Accidentalit%C3%A9_2021_0.pdf

[20] Road Traffic Fatalities in the EU in 2020 by road user and (other) 'main vehicle' involved in the crash. European Commission - Mobility and Transport, 2020. Source: https://road-safety.transport.ec.europa.eu/system/files/2022-08/road_traffic_fatalities_in_the_eu_in_2020_total.pdf

[21] Safe Micromobility. International Transport Forum, 2020. Source: https://www.itf-oecd.org/sites/default/files/docs/safe-micromobility_1.pdf

FIGURE 7: CLASSIFICATION OF FATALITIES BETWEEN CYCLING, PRIVATE E-SCOOTERS, AND SHARED E-SCOOTERS



Lime scooters are a safer way to travel than private electric scooters

According to the International Transport Forum(ITF) study on micromobility, fatal collisions between pedestrians and electric scooters are rare and even less frequent for shared electric scooters. The ITF study looked at 39 fatal incidents involving electric scooters. Some of these incidents occurred with private electric scooters (18) and some with shared electric scooters (21). The 2 pedestrians who died were using private electric scooters, so they were responsible for 11% of fatal incidents. In comparison, in Paris, only 2% of fatal incidents involving Lime scooters involve pedestrians. Notably, the ITF report indicates that neither of the two private electric scooters was equipped with a speed limiter. This highlights a major difference in the safety of shared electric scooters and private electric scooters, mainly related to the lack of regulation of the latter.

Indeed, in collaboration with municipal authorities, shared electric scooter operators implement maximum speed limits. They can also restrict speed in high-traffic pedestrian areas through geofencing, as well as implement in-app solutions that allow the user to adjust their speed, such as Lime's "beginner mode." This is not the case for private electric scooters, over which authorities have limited regulatory power.

Numerous studies have shown that speed is a significant factor in crashes involving electric scooters. A recent UK study[22] found that 42.2% of users with orthopedic injuries were found to be traveling over the legal speed limit (25km/h). Similarly, 37% of riders in a US study[23] cited excessive speed as a factor in their crash. The UK Parliamentary Advisory Council for Transport Safety (PACTS) highlighted in its recent report on 'The Safety of Private E-Scooters in the UK'[24] that the speed of private electric scooters is typically

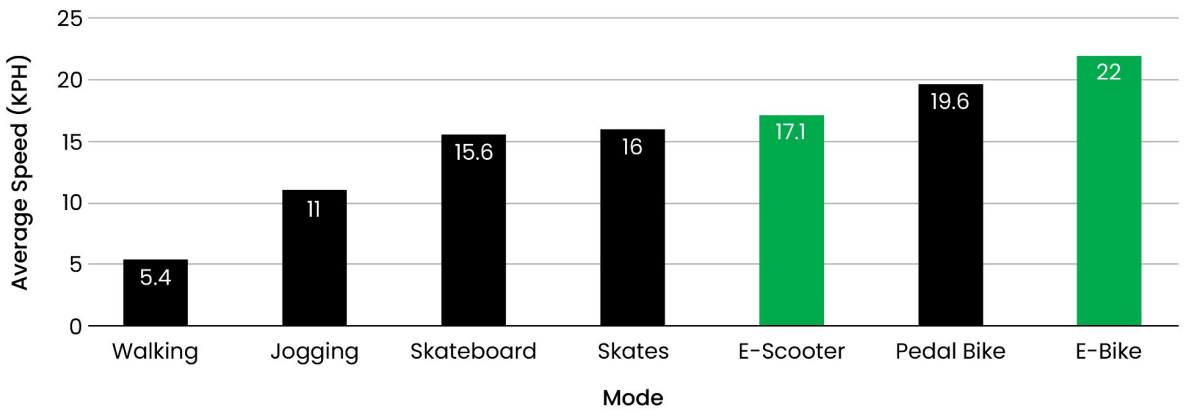
[22]Injury patterns of e-scooter-related orthopaedic trauma in central London: a multicentre study. Cruz et Al., 2022. Source: https://publishing.rcseng.ac.uk/doi/full/10.1308/rcsann.2021.0151
[23]Dockless Electric Scooter - Related Injuries Study. Austin Public Health, 2019. Source: https://www.austintexas.gov/sites/default/files/files/Health/Epidemiology/APH_Dockless_Electric_Scooter_Study_5-2-19.pdf
[24] The Safety of Private E-Scooters in the UK. Parliamentary Advisory Council for Transport Safety, 2022. Source: https://www.pacts.org.uk/wp-content/uploads/PACTS-The-safety-of-private-e-scooters-in-the-UK-Final-Report.pdf

25-32km/h though some devices can exceed 80kph. Lime electric scooters in Paris are currently limited to 20km/h. The PACTS report also highlights that, although not yet fully being legalized in the UK, private electric scooters are involved in 82% of electric scooter casualty collisions, compared to only 18% of shared electric scooters that are subject to legal proceedings. These figures show once again that private electric scooters are more dangerous than shared electric scooters.

Setting the right speed

According to research from Arellano and Fang[25] and shown in **Figure 8**, electric scooters have a lower average speed than pedal bikes and electric bicycles. While electric scooters have similar percentages of users traveling at less than 14 km/h, electric scooters have more users traveling between 14 and 20 km/h and bicyclists have more users traveling at more than 20 km/h. This is likely because many shared scooter operators regulate travel speeds. Private electric scooters, pedal bikes and private electric bikes are all capable of going faster than Lime electric scooters.

FIGURE 8 – OBSERVED TRAVEL SPEEDS BY MODE



We consider that the maximum speed of 20 km/h set in Paris is ideal for shared electric scooters. The speed of 20 km/h corresponds to the average speed of bicycles, which is 19.6 km/h. In addition, electric scooters traveling between 14 and 20 km/h account for 87% of the electric scooter trips in the Arellano and Fang study. Furthermore, speed limits below 20 km/h are likely to encourage users to switch to private electric scooters that are not equipped with speed limiters. According to a survey conducted by Lime in Paris, 68% of users said that a 10 km/h speed limit would make them consider purchasing a personal electric scooter.

[25]Sunday Drivers, or Too Fast and Too Furious?. Arellano and Fang, 2019. Source: https://www.researchgate.net/publication/338238464_Sunday_Drivers_or_Too_Fast_and_Too_Furious

CONCLUSIONS

This report highlights that Lime scooters integrate safely into the Parisian transport system with more than 99.99% of trips having taken place without a safety incident. Lime electric scooters have also proven to pose very little danger to other road users, including vulnerable people. The majority (79%) of crashes were individual falls involving only Lime users and 2% of crashes (29 in total) involved pedestrians, the vast majority of which required no medical attention. In Paris, the fatality rate for Lime scooters (5.36 per 100 million trips) is similar to that of bicycles (5.48 per 100 million trips).

Lime scooters are a safer form of transportation than other lightweight forms of transportation, including mopeds & motorcycles, which have a fatality rate of 39.7 per 100 million rides, and private electric scooters which, according to British studies, are involved in more collisions than shared electric scooters[26] (82% vs. 18%), due to the lack of regulation, particularly on speed.

Motor vehicles remain the main safety issue for pedestrians, cyclists and electric scooter users in Paris, as they are responsible for around 94% of fatal incidents with pedestrians, 71% of fatal incidents with cyclists and 70% of fatal incidents involving electric scooter users.

By reducing travel in motor vehicles, electric scooters reduce noise pollution in Paris but also the number of safety incidents. In view of the growing demand from Parisians for this mode of transport and the development of new cycling infrastructure, shared electric scooters have an exponential capacity to calm public spaces and will be all the more essential in the context of the creation of the peaceful zone by 2024.

In the future, Lime plans to regularly share its safety incident data with the city of Paris. This will not only ensure transparency of Lime's operations, but also allow city officials to better understand the safety risks to vulnerable road users such as pedestrians, cyclists and shared scooters. By sharing this data, Lime aims to create a safer transportation ecosystem for all road users.

[26]Source: "the Safety of Private E-Scooters in the UK". Parliamentary Advisory Council for Transport Safety, 2022. https://www.pacts.org.uk/wp-content/uploads/PACTS-The-safety-of-private-e-scooters-in-the-UK-Final-Report.pdf

THANK YOU