

# KANTAR

## Insights into e-micromobility incidents in Auckland

Prepared for Abley

April 2021



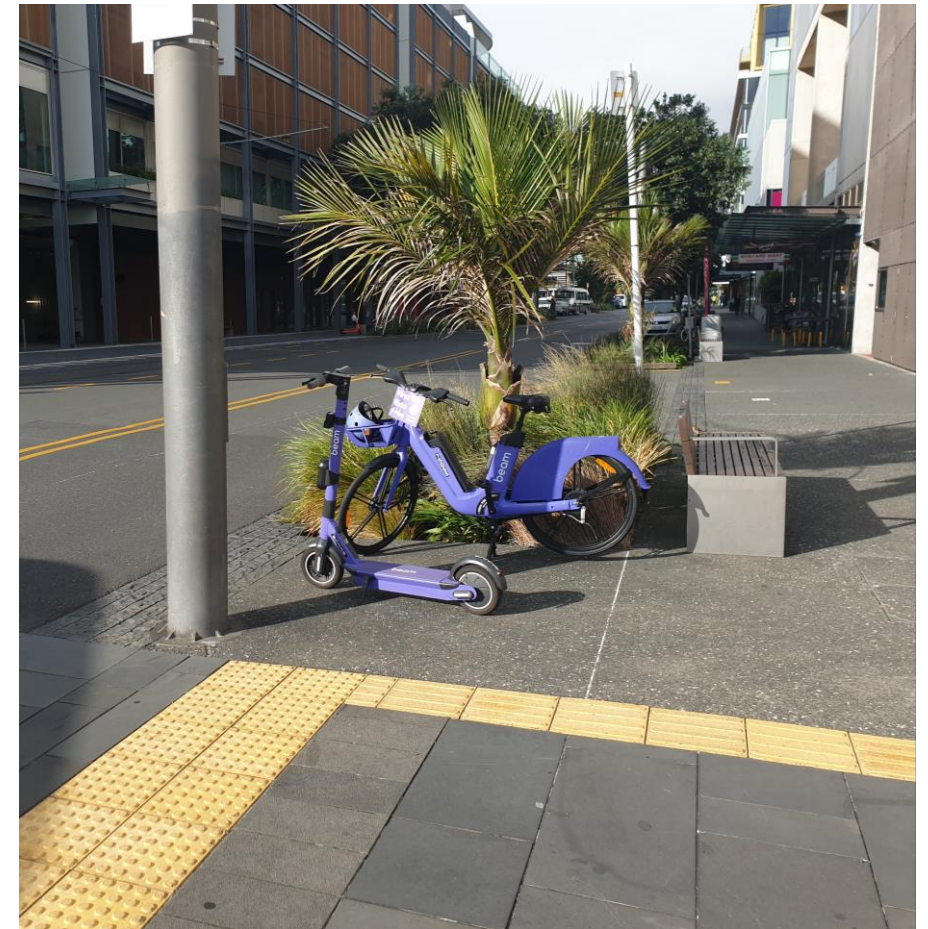
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# Objective and methodology overview

## Objective

Abley employed Kantar to conduct a survey to gain insights into incidents involving e-micromobility vehicles in Auckland defined as:

- Collision or near miss between a moving e-micromobility rider and another road user
- Collision or near miss between a moving e-micromobility rider and a stationary object
- A rider falling or nearly falling from an e-micromobility vehicle
- Collision or near miss between another road user with a stationary / parked e-micromobility vehicle

### **Respondents were asked to provide details of one**

Note that e-micromobility vehicles have been defined as e-powered small vehicles (i.e. powered by battery / electricity) including e-scooters, e-bikes and e-skateboards

## Respondent definition

Auckland residents aged 15 plus who have either been involved in an e-micromobility vehicle incident, either as the rider or as another road user, or have witnessed an incident within the Auckland region in the last 3 years

## Sample

A total of 810 surveys were completed as follows:

- Links to the survey were sent to organisations to post and encourage followers and members to complete. 179 surveys were completed through these links, predominantly from an Auckland Transport post, as well as Living Streets Aotearoa and Abley personal networks
- 631 surveys were completed using the Kantar online consumer panels by inviting panel members to the survey and screening for involvement in e-micromobility vehicle incidents

Just over half of all reported incidents were from witnesses.

Around a half were near misses, a quarter were crashes, and the other quarter were e-riders falling or nearly falling off their e-micromobility vehicle.

## Caveat

Respondents were asked to choose an incident from the past 3 years that was one of the most serious and that they could remember in detail

As such, the results within this survey are not designed to be representative of all incidents involving e-micromobility vehicles that occur in Auckland but rather an insight into the types of incidents that occur

Due to the nature of the data collection, the sample also cannot be considered completely representative of Auckland residents. However, some indications of incidence rates have been included by using the online consumer panel surveys, including those not involved in incidents (that were screened out), and weighted to be representative of Auckland residents in terms of gender and age





## Executive summary

This report highlights a significant tension between e-micromobility riders and other road users. E-scooters are the most common target of this irritation (as noted from verbatim comments) and are over represented in incident statistics. While usage is similar between e-scooters and e-cycles, e-scooters made up 79% of the incidents reported in this research. One in three reported collisions resulted in injury, and around half of those result in time off work.

Solutions appear to fall into two main areas – changes to infrastructure and improving e-scooter rider behaviour.

### Infrastructure

Many incidents are a result of poor surfaces (uneven, slippery), moving between types of infrastructure and a lack of places for e-micromobility riders to safely ride, especially when pedestrian traffic is high at busy times of day. E-scooters in particular struggle to find places to safely ride, where they are separated from both motor vehicles and pedestrians. They tend to default to the footpath, as they feel it is the safest place, but this results in collisions and near misses with pedestrians and non-moving objects

### Improving e-scooter rider behaviour

E-scooter riders are over represented among younger males. Many have reported concern about their speed, although there is little evidence of speed being a significant factor in incidents. Additional policing and education at hot spots and in busy times could be considered. Two thirds of e-scooters involved in these incidents were rented, so rental companies could be included in solutions.



# Key insights

- The majority of reported incidents include e-scooters, rather than other e-micromobility vehicles – generally rented ones.
- Incidents involving e-micromobility vehicles with other road users are the most commonly reported, and these are generally with pedestrians (60%), although cars were also involved (in around a third).
- Although relatively fewer, incidents involving non-moving objects are usually with a permanent street object (51%).
- Incidents with stationary e-micromobility vehicles are most commonly between pedestrians and rented e-scooters.
- The footpath is the most common place for an incident (both a crash or a near miss) involving an e-scooter to occur. Incidents involving e-bikes are more likely to happen on the road.
- Collisions and falls often occur when moving between different types of infrastructure, for example from a footpath to the road.
- While most incidents occurred in the daytime, on sunny days, collisions especially between e-mobility vehicles and non-moving objects occur more often in partial light and in wet conditions
- Incidents (collisions and near misses) involving moving e-micromobility and other road users are most commonly felt to be as a result of the behaviour of the e-mobility rider.
- Incidents involving moving e-micromobility vehicles and non-moving objects were often as a result of issues with the environment, especially surfaces and road features. Near misses also were commonly attributed to busy locations and times. E-rider experience and behaviour was also often considered a factor.
- E-riders falling off, or nearly falling off was most often caused by environment (road surface, busy places and road features), followed by e-rider behaviour.
- Speed and impairment (drugs, alcohol) are not factors in many incidents, but user inexperience is common in e-scooter incidents.
- Injuries occur in one in three collisions or falls, generally to the upper and lower body (as opposed to head and face). Around half of injuries require medical attention and time off work.





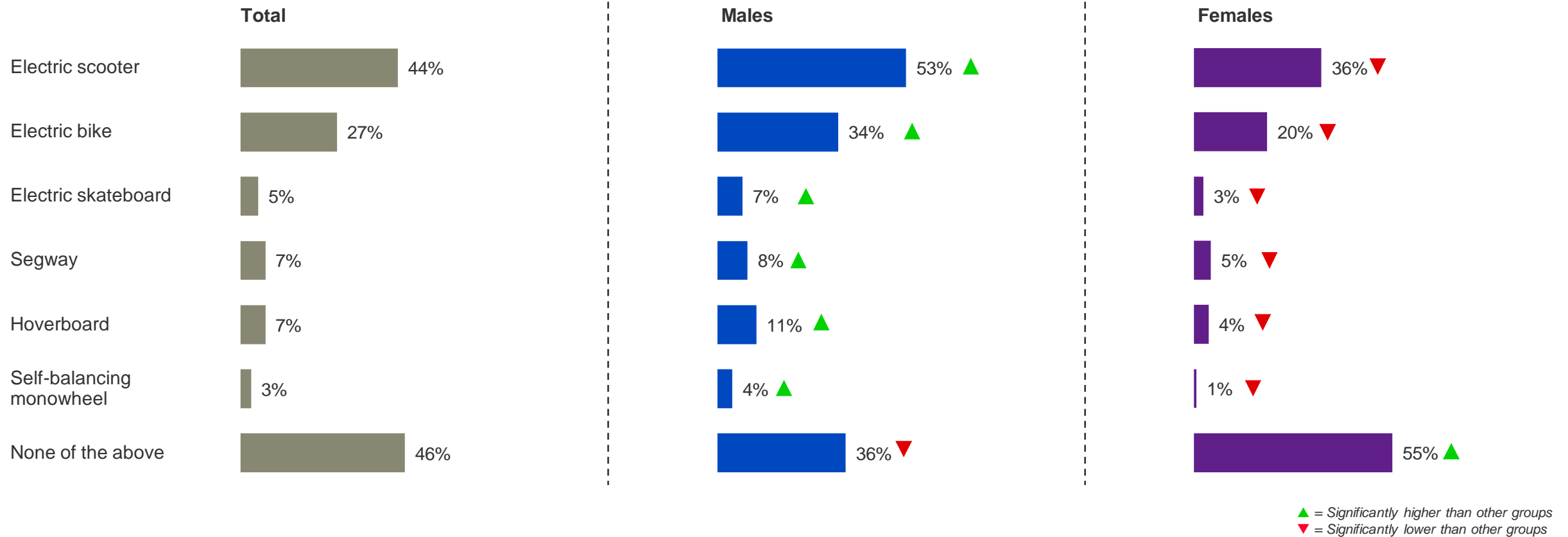
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Context



# Around half of Aucklanders have tried an electric micromobility vehicle, with e-scooters the most popular and a significant usage skew towards males

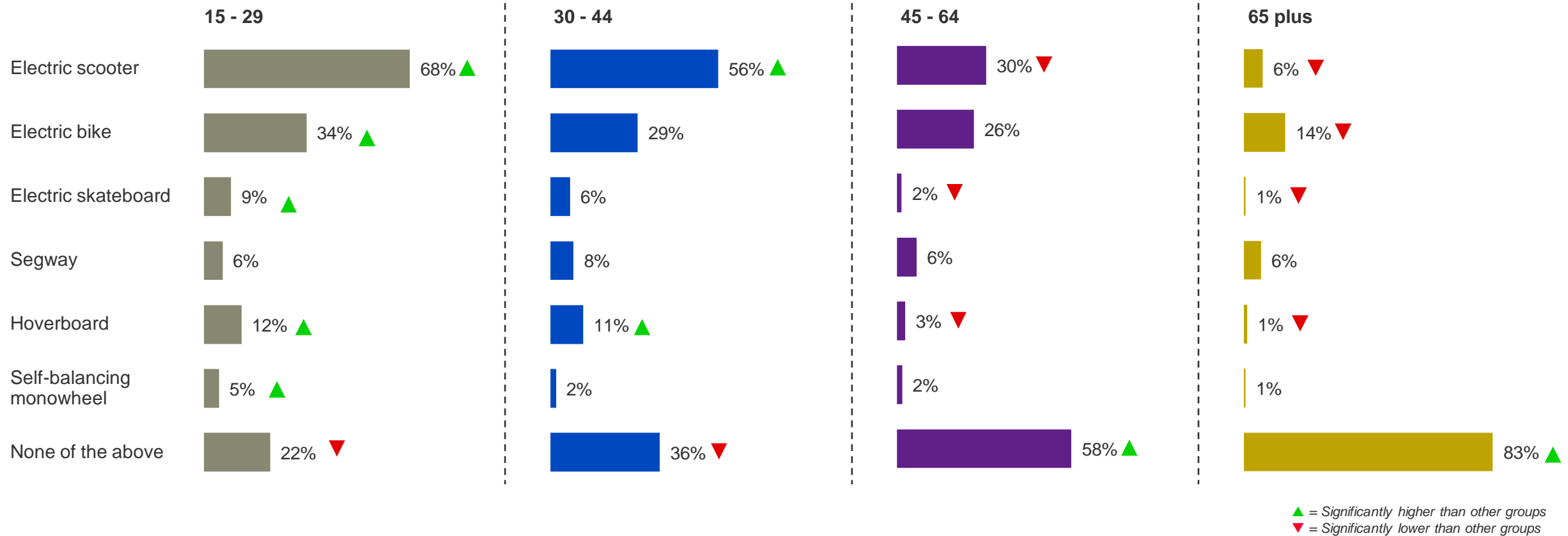
Electric micromobility vehicles ever used and by gender (% Total Auckland residents)





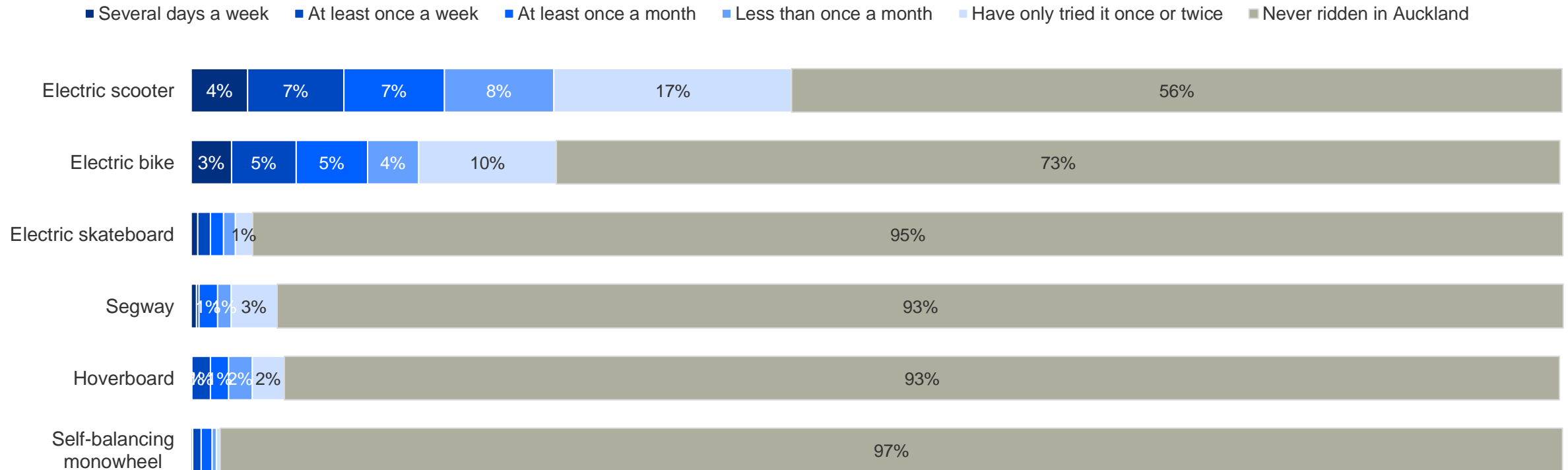
# Trial of e-micromobility vehicles linked to age with almost 4 in 5 under 30's having trialled at least one type compared to 3 in 5 among 30 to 44 year olds and 2 in 5 among 45 to 64 year olds

Electric micromobility vehicles ever used by age (% Total Auckland residents)



# E-scooters are ridden weekly by 11% of Auckland residents and e-bikes by 8%

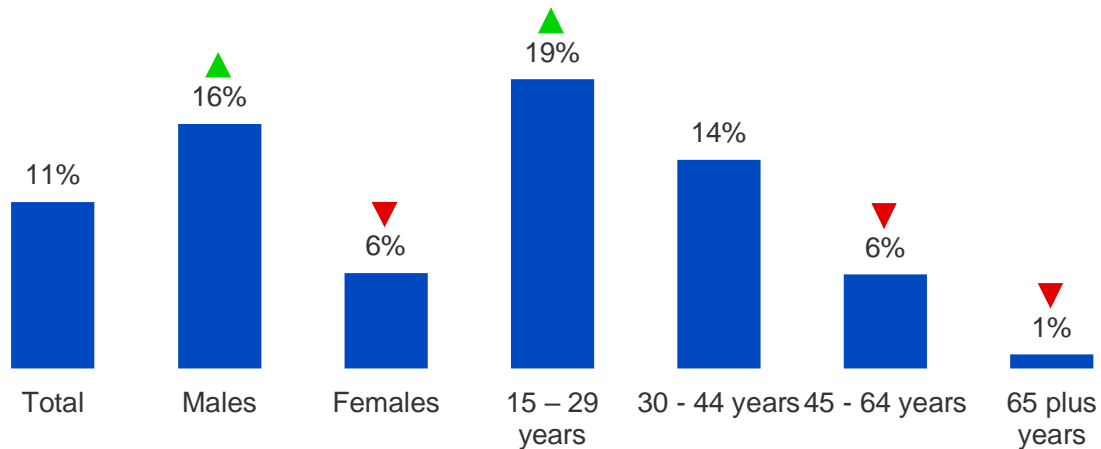
Frequency ride e-micromobility vehicles in Auckland (% Total Auckland residents)



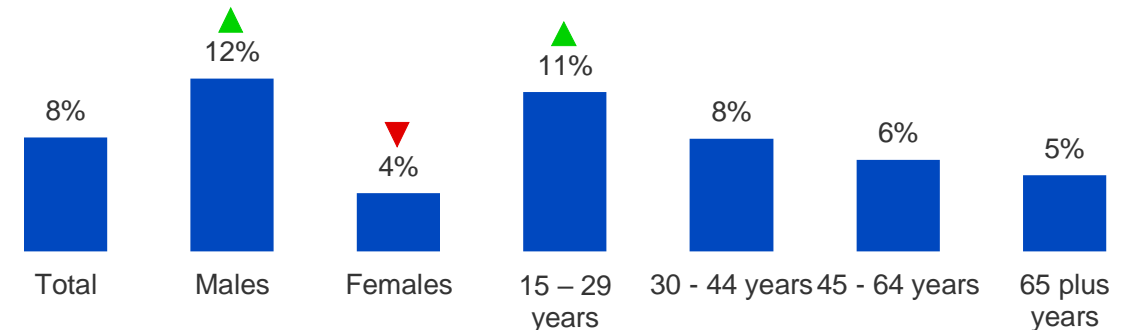


# Among under 30's, one in five ride e-scooters at least weekly and one in ten ride e-bikes and there is also quite a male skew in usage

Profile of weekly e-scooter riders (% Total Auckland residents)

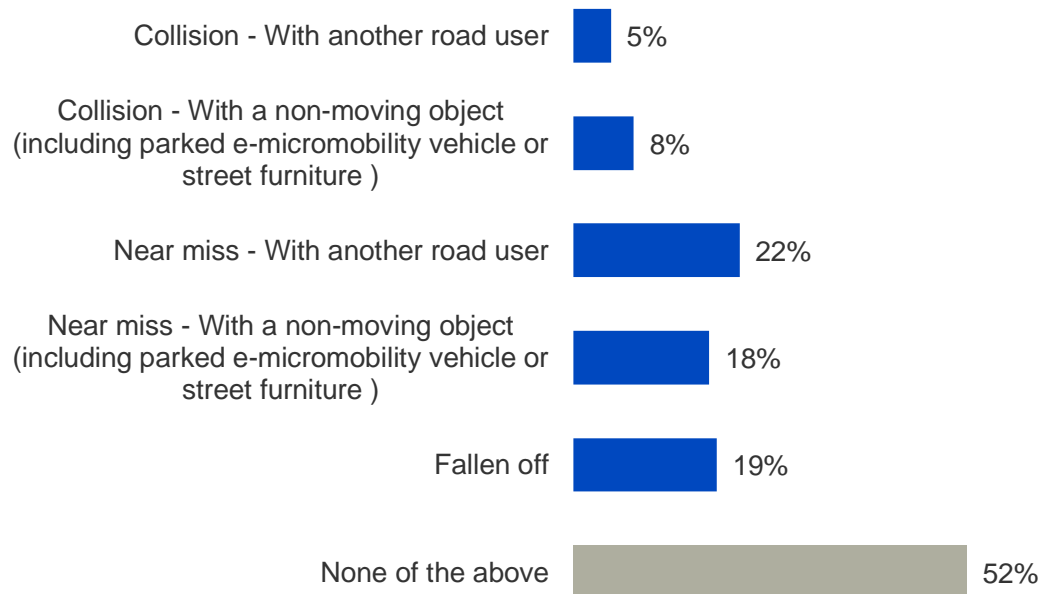


Profile of weekly e-bike riders (% Total Auckland residents)



# One in two Auckland e-micromobility riders have experienced an incident in the past 3 years, most commonly near misses or falling off with only 5% having collided with another road user

Incidents experienced in the last 3 years while riding an e-micromobility vehicle (% ever ridden an e-micromobility vehicle in Auckland)

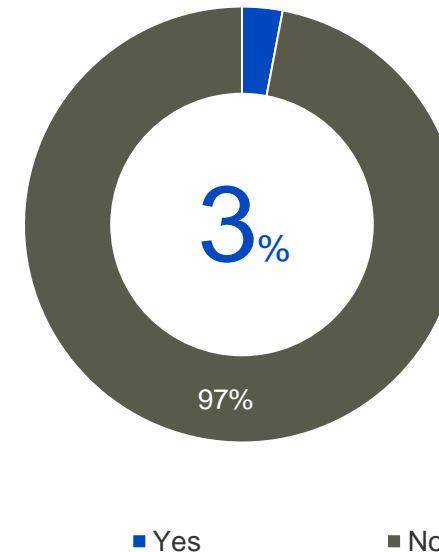
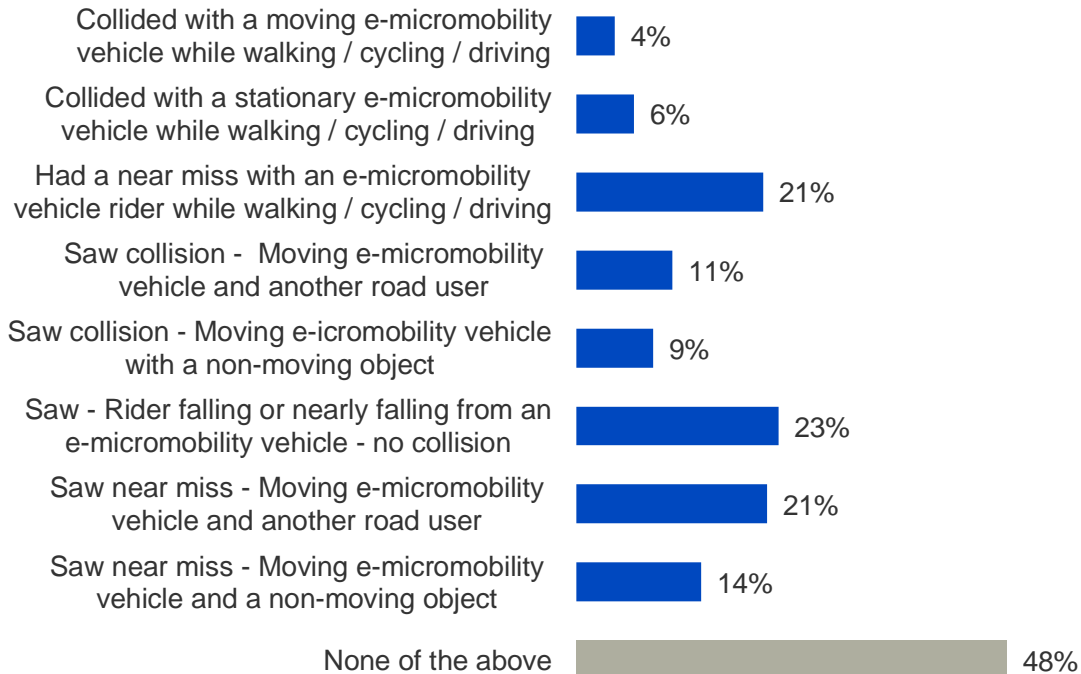




# Although many road users have seen incidents and one in five have had a near miss, only 4% have collided with a moving e-micromobility vehicle over the last 3 years and 6% with a stationary vehicle

Incidents involving e-micromobility vehicles experienced or witnessed in the last 3 years as other road user (% , Total Auckland residents)

Collision or crash as a result of avoiding an e-micromobility vehicle (% , Total Auckland residents)







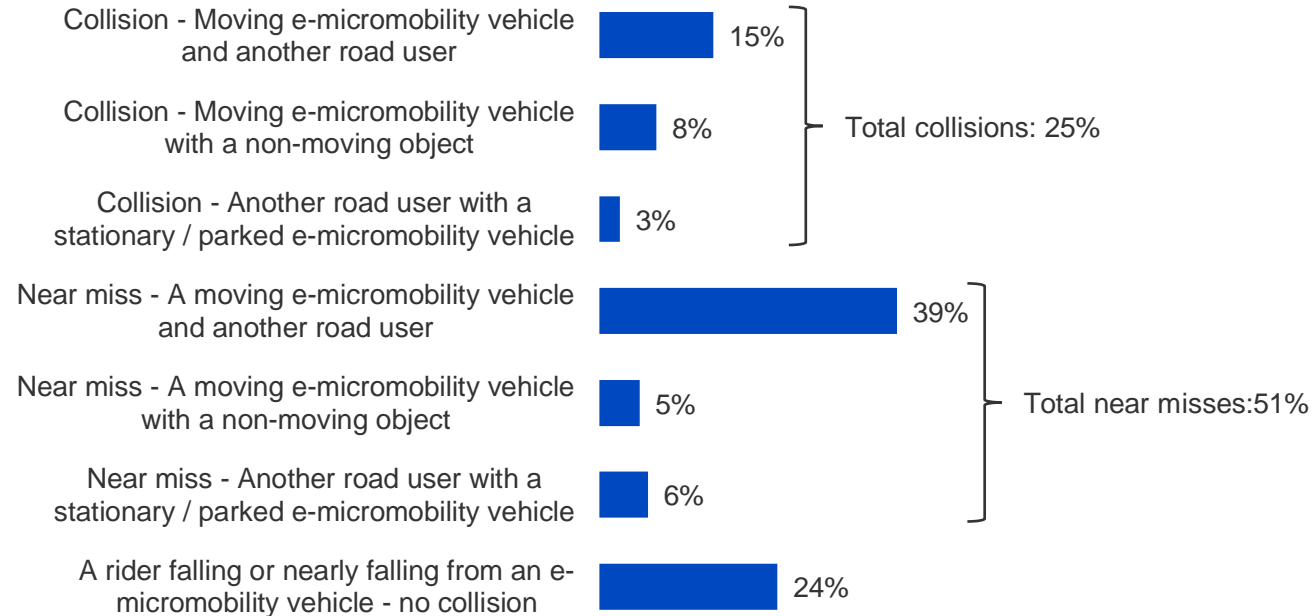
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## Incident overview

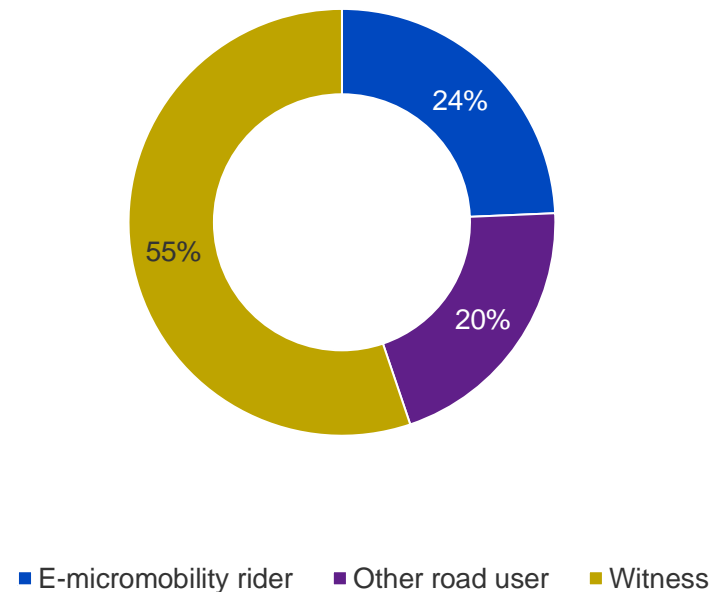


# Half the reported incidents were near misses, one in four were collisions and one in four were rider falls or near falls; Just under half were reported by someone personally involved in the incident

Incident selected for reporting (% Total incidents reported)

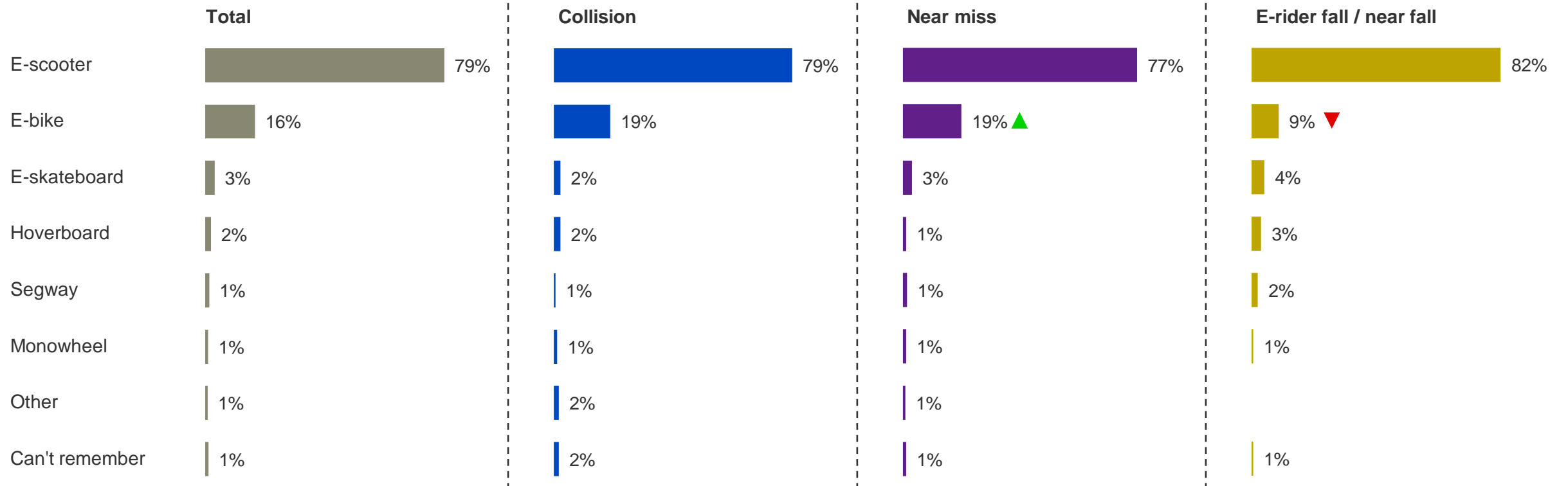


Personal involvement in the incident %, Total incidents reported)



# The majority of reported incidents involved e-scooters with 16% involving e-bikes and 8% involving other types of e-micromobility vehicles

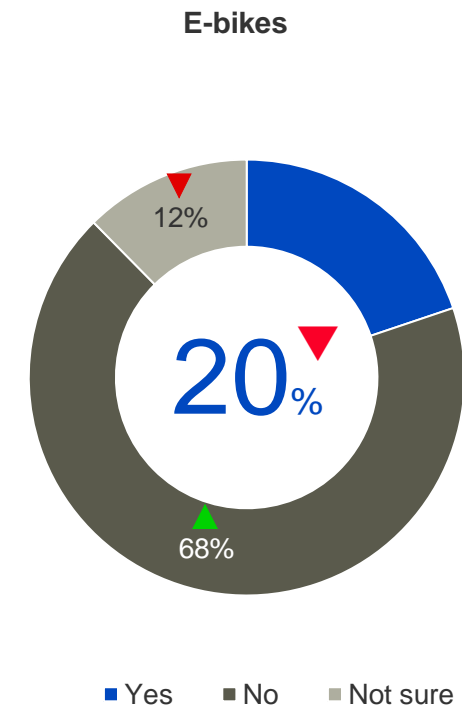
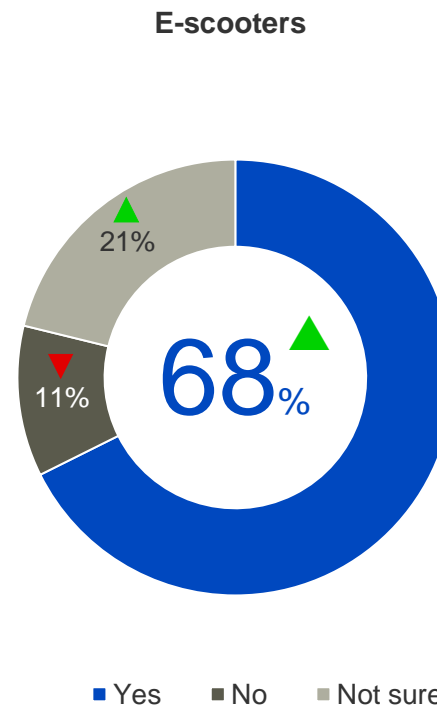
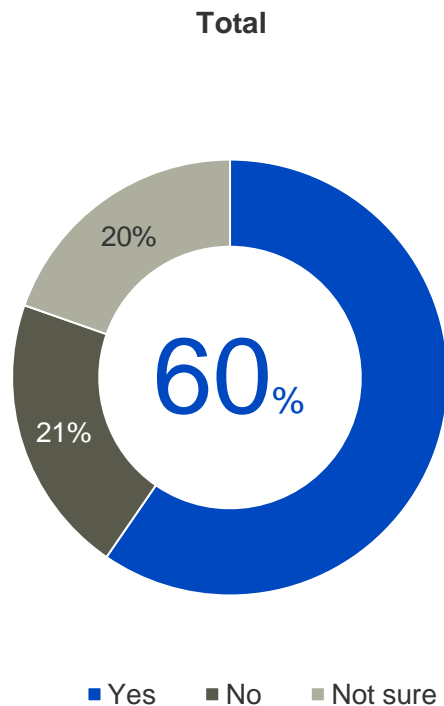
Types of moving e-micromobility vehicles involved in the incident (% of incidents involving e-micromobility riders)



▲ = Significantly higher than other groups  
▼ = Significantly lower than other groups

# Two in three incidents with e-scooter riders involved rental or shared e-scooters compared to only 20% of incidents involving e-bikes

Rental / shared e-scooter or e-bike involved? (% of incidents involving e-scooter or e-bike riders)

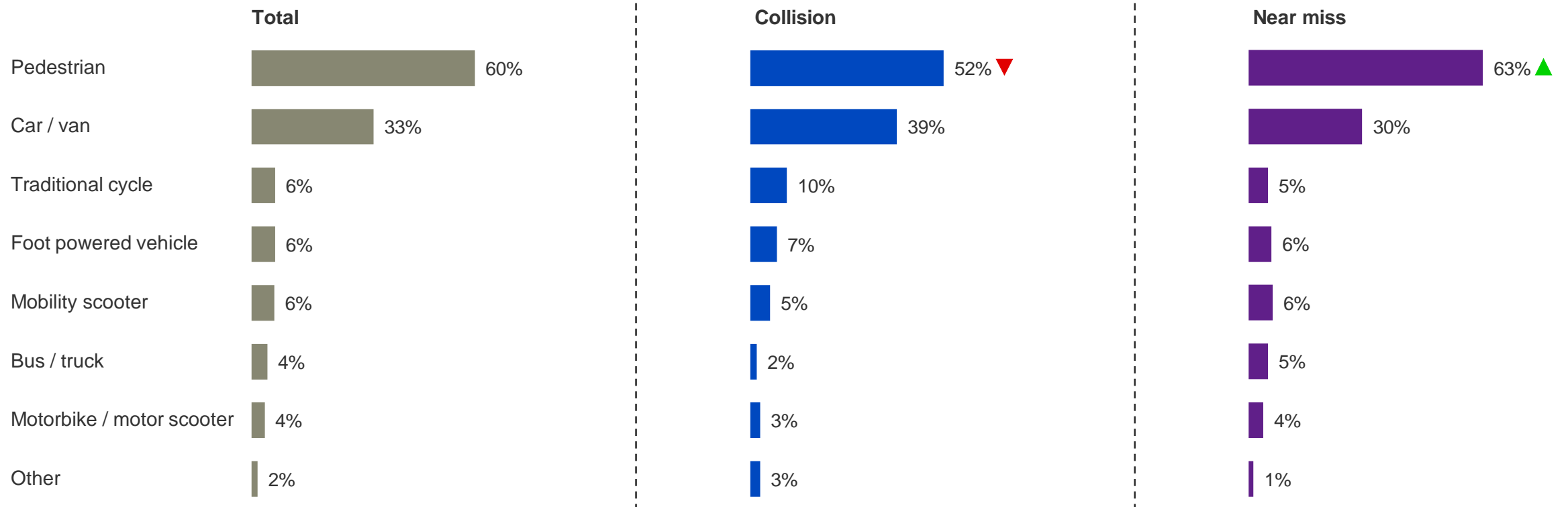


▲ = Significantly higher than other groups  
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# Reported incidents between e-micromobility riders and other road users most commonly involved pedestrians however one third involved a car or van

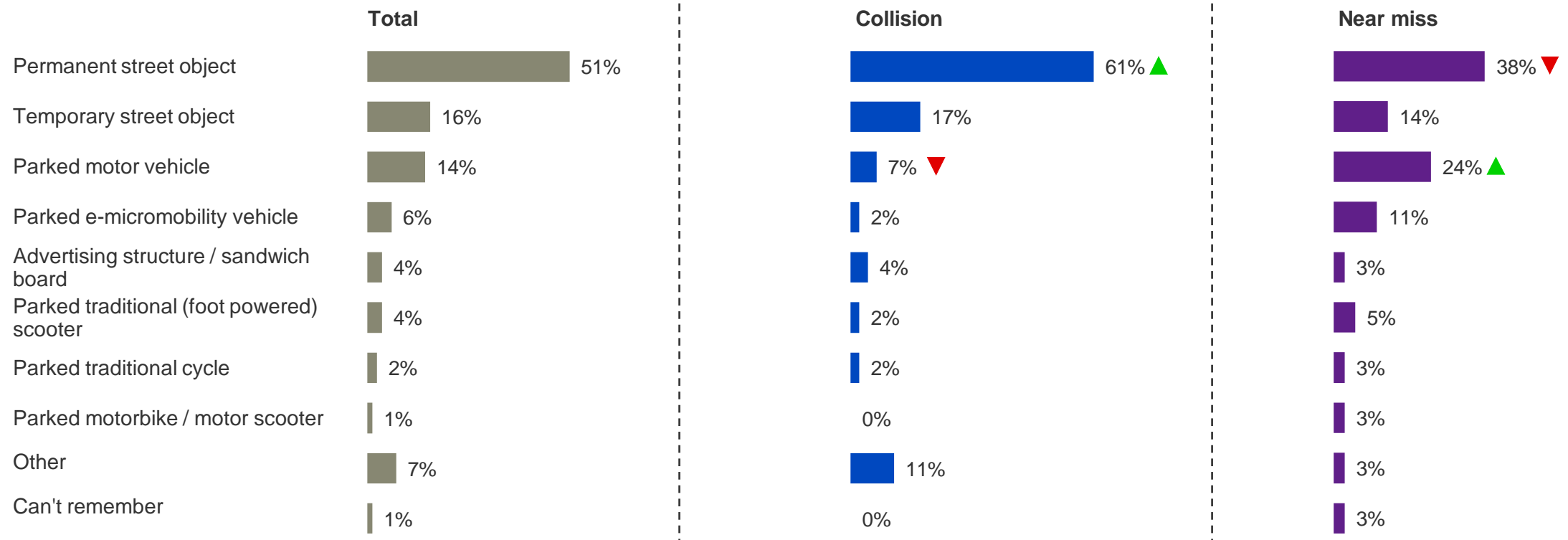
Other road users involved in the incident (% , Incidents involving e-micromobility riders and other road users)



▲ = Significantly higher than other groups  
▼ = Significantly lower than other groups

# Reported incidents between e-micromobility riders and non moving objects were most commonly with permanent street objects followed by a wide range of other types including temporary street objects and motor vehicles

Non moving objects involved in incidents with e-micromobility riders (% , Incidents involving e-micromobility riders and non moving objects)

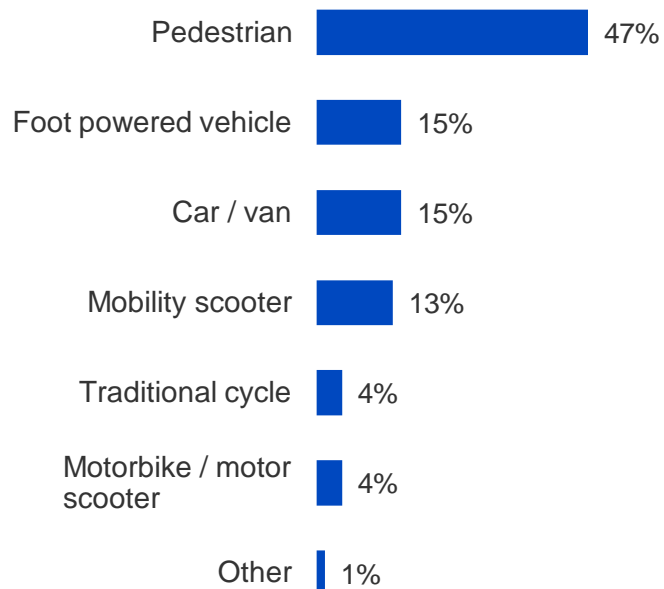


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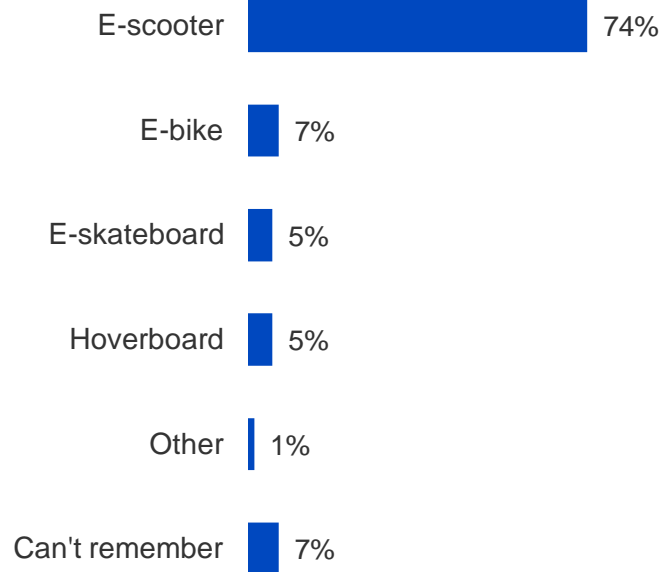
# Pedestrians account for half the reported incidents between other road users and stationary e-micromobility vehicles, most commonly being rental e-scooters

Incidents between other road users and stationary or parked e-micromobility vehicles (% , Incidents involving other road users and stationary e-micromobility vehicles)

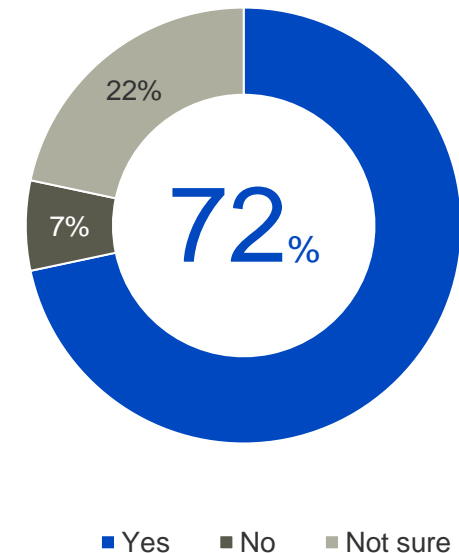
## Other road user involved



## Stationary e-micromobility vehicle



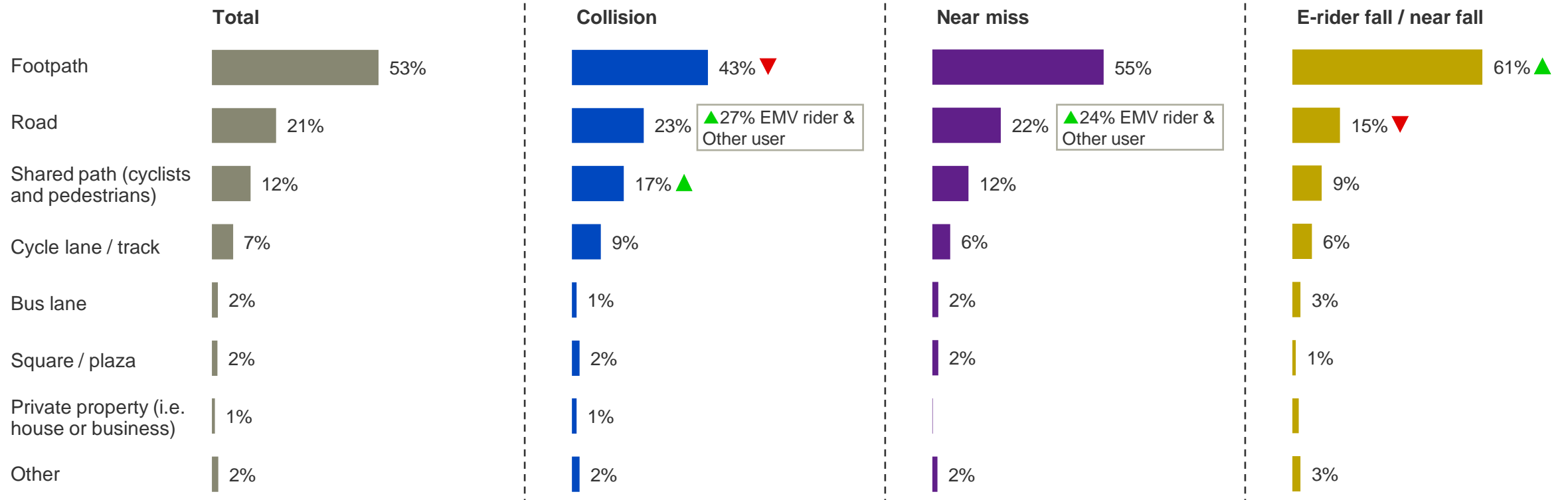
## Rental or shared e-scooter / e-bike?





# Almost 2 in 3 (65%) reported incidents occurred on a footpath, including shared paths, however around 1 in 4 incidents between e-micromobility riders and other road users occurred on the road

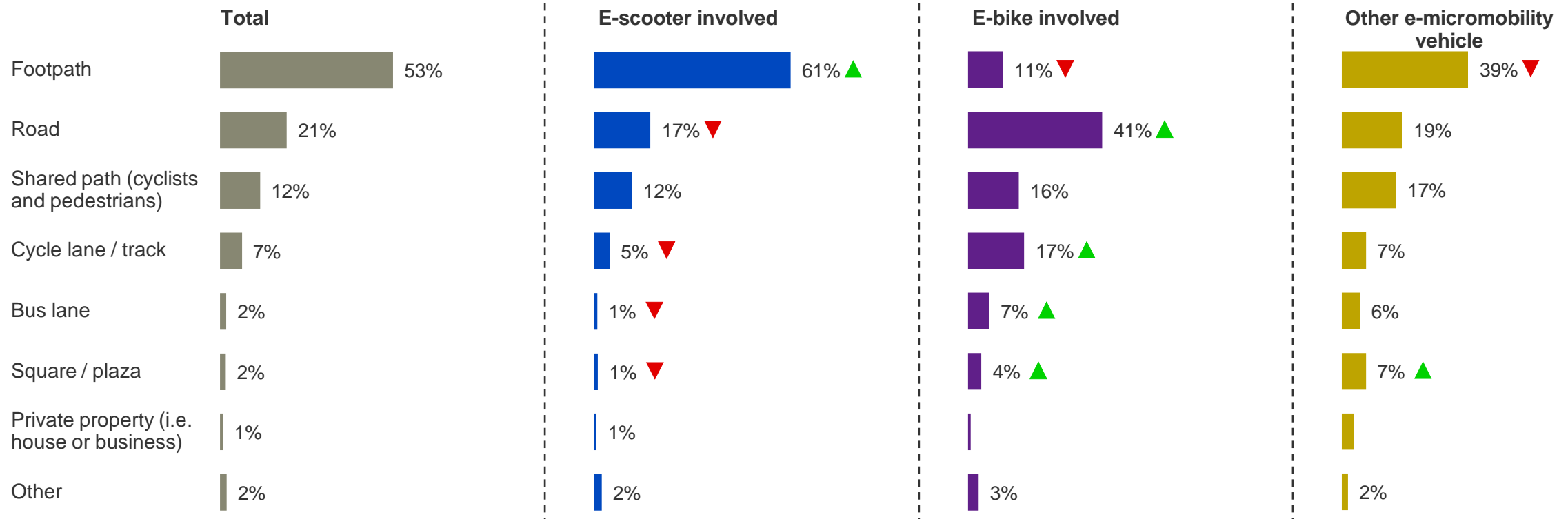
Type of place where the incident happened (% Total incidents)



▲ = Significantly higher than other groups  
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# Type of place does however differ between the types of e-micromobility vehicle involved with e-scooter incidents typically occurring on a path and e-bikes mixed between the road, paths, cycle lanes and bus lanes

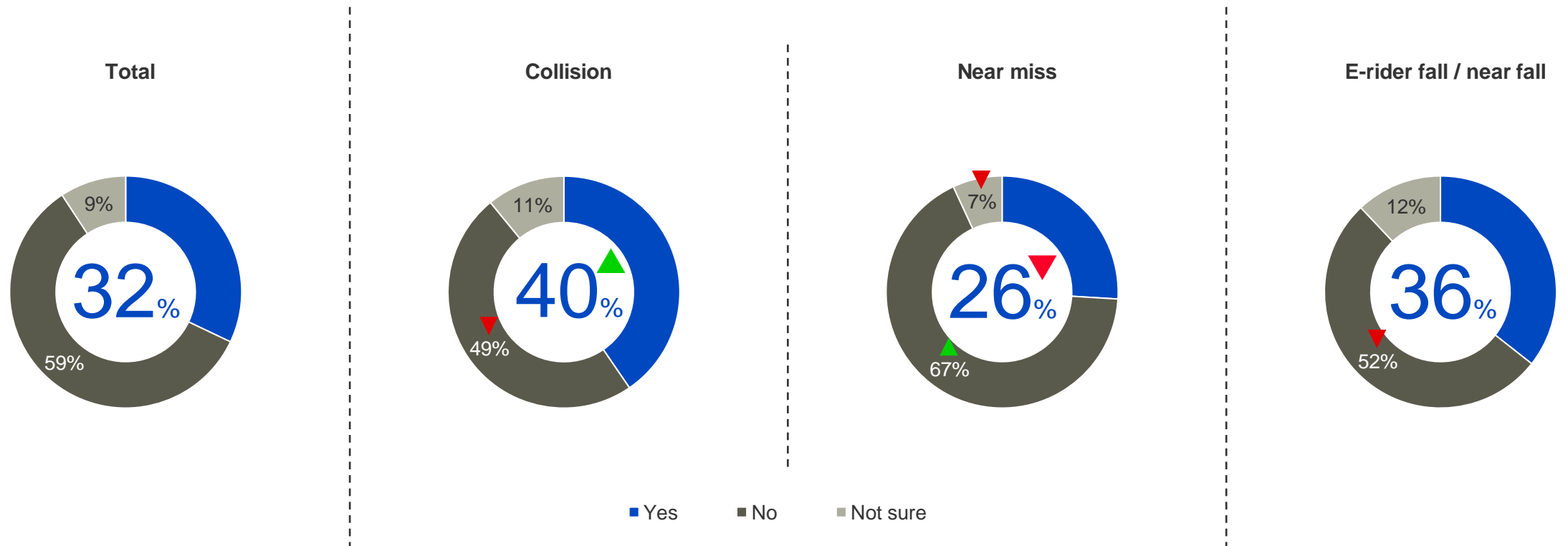
Type of place where the incident happened (% Total incidents)



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# One in three incidents involving e-micromobility riders occurred as they were moving between different types of infrastructure

Did it involve an e-micromobility rider moving between different types of infrastructure? (% , Incidents involving e-micromobility riders)

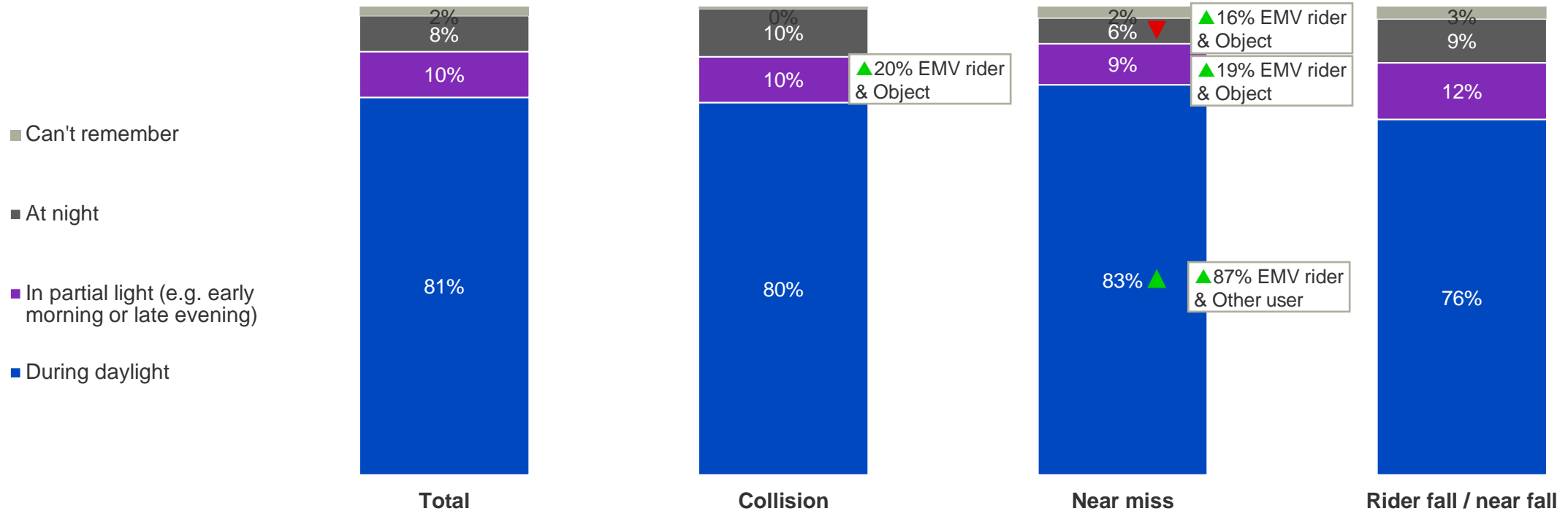


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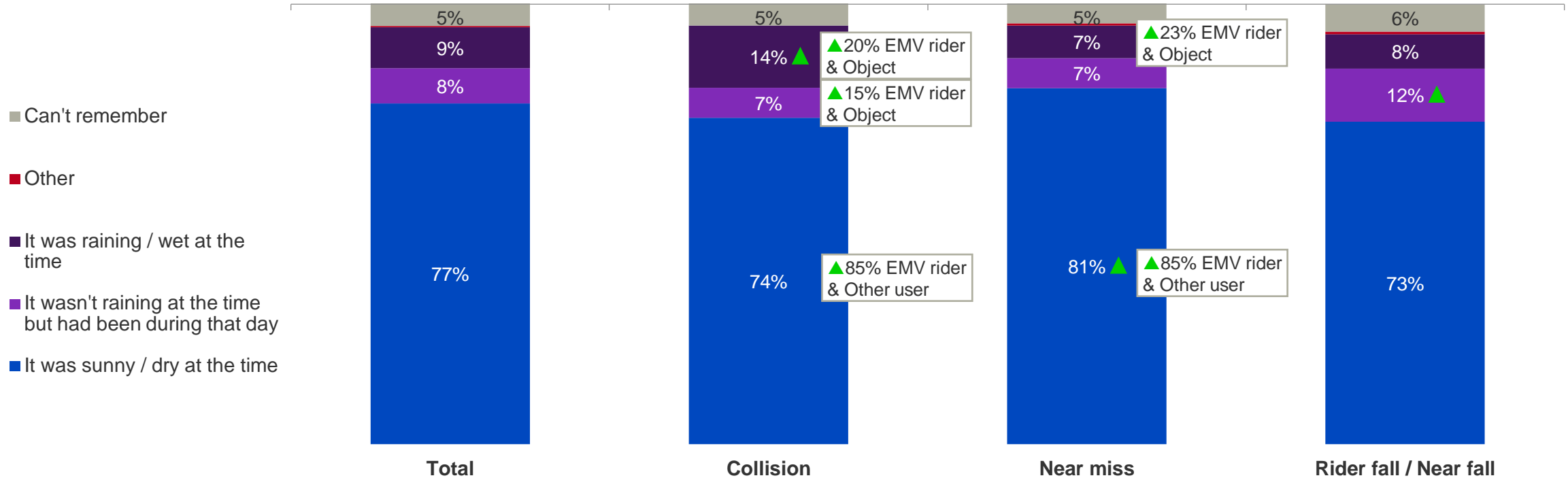
# The majority of incidents occurred during daylight with incidents at night or in partial light more common if involving e-micromobility riders and stationary objects

Time of day incident occurred (% Total incidents)



# The majority of incidents occurred on sunny days with incidents on rainy days more common if involving e-micromobility riders and stationary objects

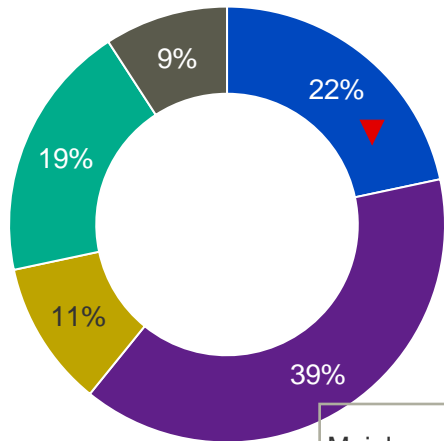
Weather at the time of the incident (% Total incidents)



# Environment factors, such as road surface, are the leading cause of e-rider collisions with non-moving objects, while collisions with others are often blamed on rider behaviour

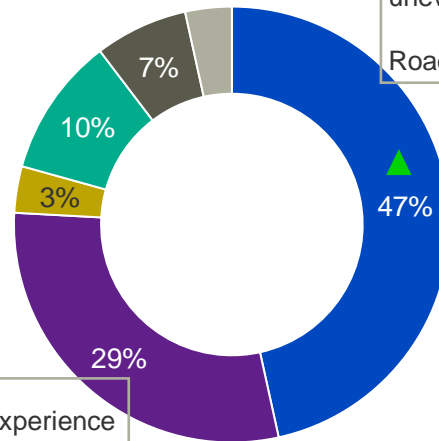
Main cause of collisions between... (% Total incidents of this type)

Moving e-micromobility vehicle and another road user



Mainly e-rider behaviour

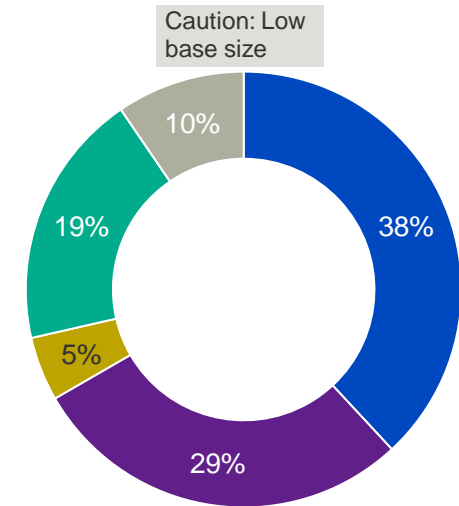
Moving e-micromobility vehicle and non moving object



Slippery, bumpy, uneven surface  
Road feature

Lack of experience and e-rider behaviour

Other road user with stationary e-micromobility vehicle (indicative)



Caution: Low base size

■ Environment

■ Behaviour / experience e-rider

■ Behaviour / experience of others

■ Mistake / error

■ Other

■ Don't know

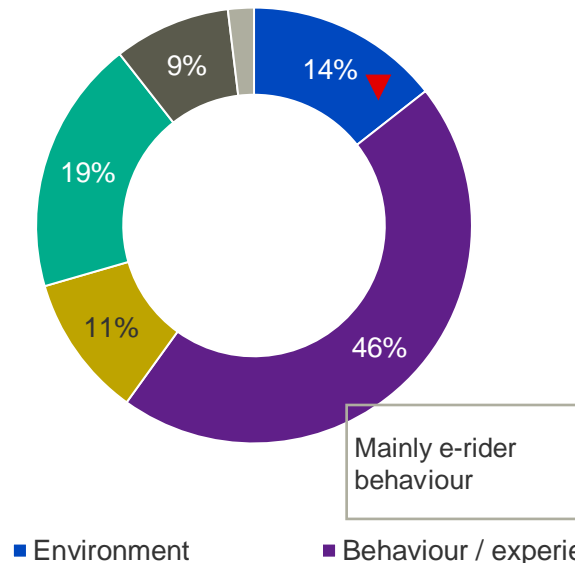
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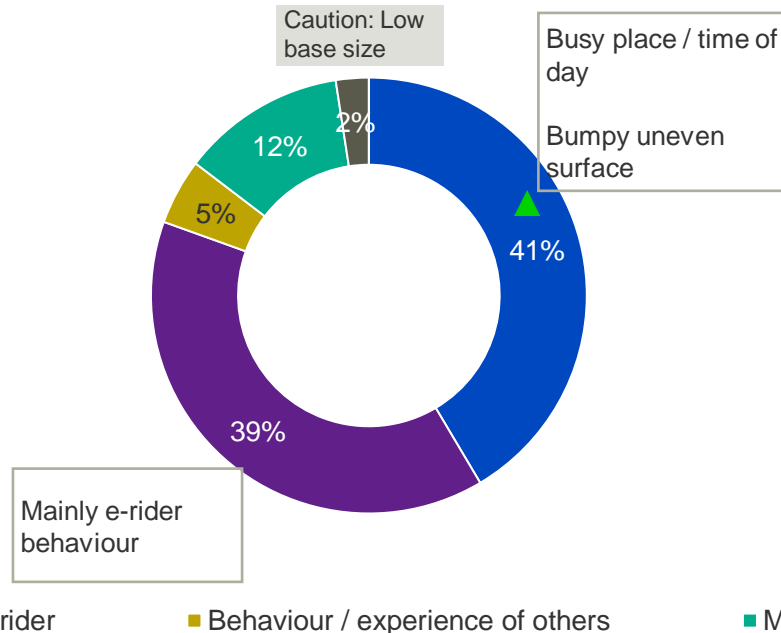
# The causes are similar for near misses, with behaviour of e-riders felt to be the main cause, but some environmental reasons (such as a busy street and poor surface) a factor in near misses with non-moving objects

Main cause of near misses between... (% , Total incidents of this type)

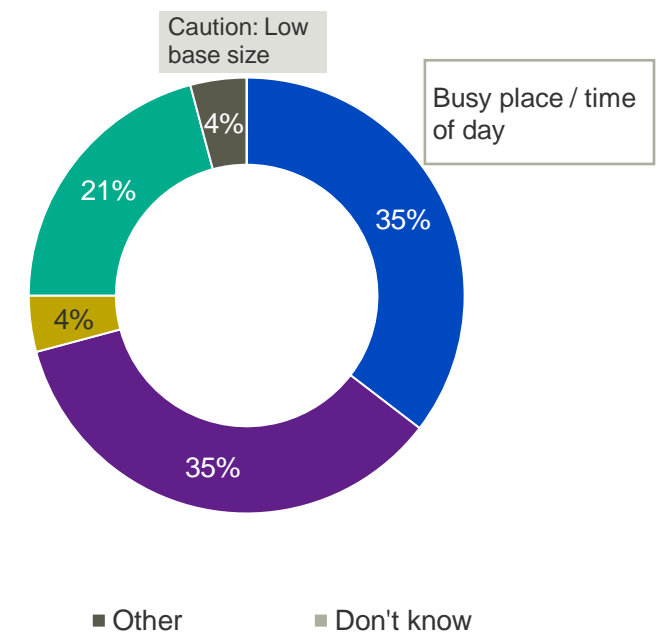
Moving e-micromobility vehicle and another road user



Moving e-micromobility vehicle and non moving object (indicative)



Other road user with stationary e-micromobility vehicle (indicative)

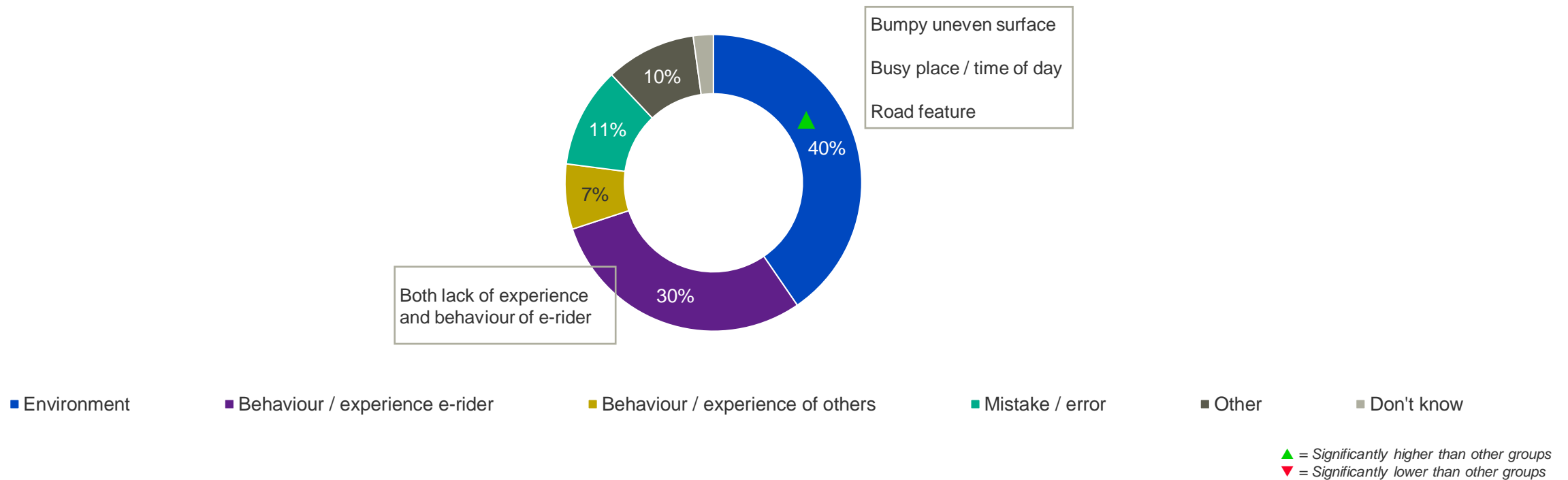


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# Falls off e-micromobility vehicles are generally caused by environment, plus a mix of inexperience and poor behaviour on the e-rider's part

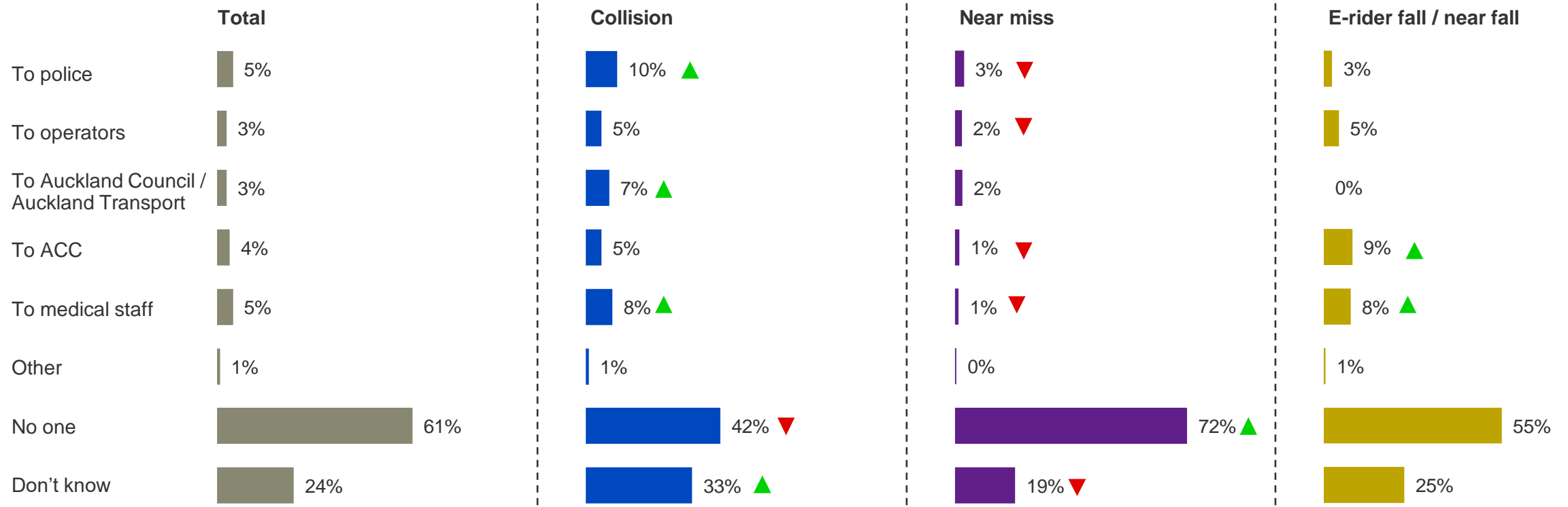
Main cause of falls / near falls (% , Total incidents of this type)

Rider falling / nearly falling from moving e-micromobility vehicle (no collision)



# Most incidents are unreported – collisions are more likely to be reported to police and authorities, while reporting for falls is mainly limited to medical staff

## Reporting of incidents (% Total incidents)

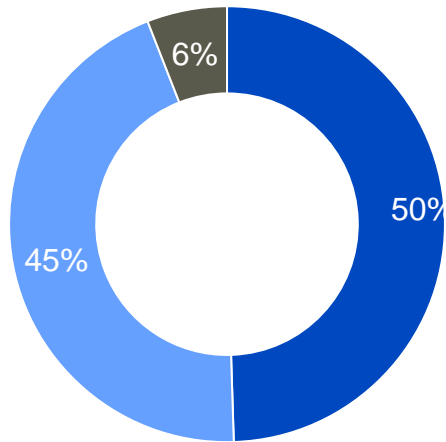


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# Nearly half of people reporting incidents felt very annoyed about it, especially if they were personally involved as another road user

How did the incident make you feel (% Total incidents)



- Mild annoyance / no different
- More extreme emotion (anger, scared etc or altered behaviour)
- Not sure

## Incidents more likely to only feel mild annoyance

Rider falling off or nearly falling off (62%)

When person reporting was only a witness, not personally involved (56%)

## Incidents more likely to feel strong emotions

Near miss incidents (50%) – especially involving other road users (52%) and e-scooters (55%)

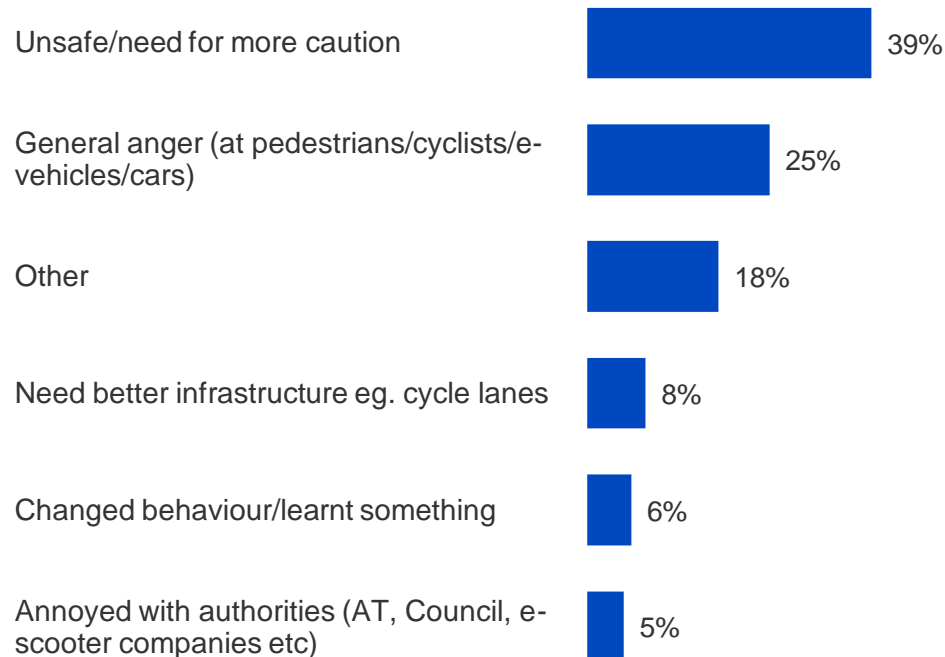
Incidents involving other road users (51%)

When pedestrians (54%) were other road users involved

When personally involved, especially as another road user (57%)

# Incidents bring a range of emotions, with many people feeling more cautious as a result

How did the incident make you feel about how you travel in Auckland? (% , Total incidents)



## Unsafe/need for more caution

*That e scooters are not a safe mode of transport, that riders should be wearing protective gear or should be licenced.*

*Scooters need a speed restriction. I'd be terrified if I knew this person was on the footpath and sharing that space with my very able and fit 89 year old mother... Let alone me.*

*It made me uneasy but still continued to use the e-scooter after this incident*

*Reinforced the importance to stay aware of which route to take when traveling*

*Very reluctant to bike/scooter on roads without a dedicated bike lane. Also made me nervous to travel near bus routes.*

*It is normal to be hit by cars, I am used to it, it will happen again, cars will kill more people this week then e scooters will ever.*

*It reinforced how dangerous e-vehicles are, when their operators have no idea of the Road Rules.*

*A little more cautious about walking along Fort Street around 5.10pm when people are leaving work*

*It is unsafe for cyclists and other active modes. Too much of our transport spending is for cars and larger vehicles. We aren't doing anything to address the climate emergency.*



# Many feel considerable anger, often directed at e-scooter riders, but the need for better infrastructure for e-micromobility vehicles is also mentioned by



## General anger (at pedestrians/cyclists/e-vehicles/cars)

*There are adults who are foolish and it creates dangerous situations for everyone.*

*That e scooters are not a safe mode of transport, that riders should be wearing protective gear or should be licenced.*

*That scooter riders need to understand courtesy and be more careful in high traffic areas. An understanding of how to ride well in pedestrian spaces.*

*Motorists believe they are entitled to the roads, not enough emphasis and funding is put into developing public transport and pedestrianisation of the city and surrounding centres.*

*I was rather annoyed. The number of close calls I've personally had with e-scooters has been concerning for my safety, especially in the viaduct area where there is some risk of being struck and either losing items to the water or falling over the railing.*

*Micro mobility devices should be banned from the footpath. Often the drivers fail to give way or to stop for pedestrians crossing the footpath.*

*It upsets me to discover that some drivers are so impatient and entitled that they would rather run down a person than skip the chance to get ahead. If there had been a parked or turning car on my lane, they would never have attempted to squeeze past. But a person on a scooter is disposable.*



## Need better infrastructure

*Through riding an e-scooter on footpaths I learned how bad Auckland's footpaths are. I now scoot on the road which is faster (better intersection LOS when pretending to be a vehicle), comfortable (the surface is much smoother), and perceived safer (yes, you are in a higher speed environment, but less vehicle crossings, bumps and other obstacles to traverse)*

*Cycling infrastructure in Auckland is poorly designed and in many cases poorly implemented. Especially intersections and crossings! Many incidents and injuries could be avoided by proper design and implementation.*

*The footpaths in Auckland are in a terrible condition, either from lack of maintenance and/or due to trees pushing the surface up. It makes it dangerous to ride a bike / scooter or even run.*

*The bike routes are poorly surfaced on most of the stretch to mission bay. Some post was nice and wide but dodging tree roots, tree branches sticking out, broken surfaces, pedestrians, other bike users and car doors opening into bike lanes is very dangerous and doesn't give me any confidence (already low confidence bike rider). It is very very crowded.*

*That more cycle paths separate from pedestrian paths are needed as often pedestrians don't hear cyclists warnings of approach or cyclists don't warn pedestrians. I've been on both sides as a pedestrian and ebike cyclist.*

*I wish there were protected cycleways I could ride an e scooter on. For balance, you need to go a certain speed, but it's irresponsible to go too fast on footpaths, and I don't feel safe to ride on the road with cars.*





# Some have learnt or changed their behaviour as a result of the incident, which others are annoyed with authorities



## Changed behaviour / learnt something

*Probably wouldn't use an e-scooter in that situation again*

*Stopped taking e skateboard and now just get the bus. Without more cycle lanes I wont ride e-skiatboard or e-scooter again as they are to fast for the footpath but I dont want to get hit by cars.*

*More aware of surfaces I ride on.*

*I previously used e-scooters on a regular basis but have not ridden one in the 18 months since the accident occurred.*

*I have not been on a lime scooter since, i now own an E bike and make sure that i wear all the safety gear, but the way traffic is so unpredictable and cars and other motor vehicles do not respect bikes and scooters, it make me a little nervous on the roads. I feel safer on the bike paths.*

*Don't drive scooters in the wet*

*It made me hesitant to ride e-scooters when the road was slippery as the breaking became more hazardous. It also mace me think it can be difficult to ride e-scooters in the CBD during rush-hour when there are many cars on the road and many people on the pathways.*



## Annoyed with authorities (AT, Council, e-scooter companies etc)

*Auckland transport must do more to discourage drivers and encourage active modes. Currently there's hardly any innovation. You could create amazing spaces using pop up bollards etc. Drivers will either adapt or change modes. Just be brave about it.*

*The introduction of 50 km per hour scooters on a cycle lane is irresponsible and must be governed.*

*It made me feel like Auckland Transport is not committed to Vision Zero and safely designing roads for vulnerable road users.*

*Bike riding is restricted by lack of interest by AT*

*Wish AT would think more about people on scooters or bikes. They have just re-done Chester Ave kerbs and driveways and replaced them with massive driveway drops. Will be uncomfortable or dangerous on scooters and bikes.*

*It made me anxious about the lack of regulation for small e mobility devices as I've seen a number of accidents and many near misses. I work near the university and at times it has been very difficult for pedestrians to safely walk along the footpath.*

*People are idiots so the government has to implement some new rules for such kinds of vehicles.*

*Use of escooters needs to be licensed with training required as the rider could have been seriously injured but for the actions of the vehicle drivers.*

*Yet again Auckland councils lack of foresight in making the city footpaths unsuitable for pedestrians to use.*





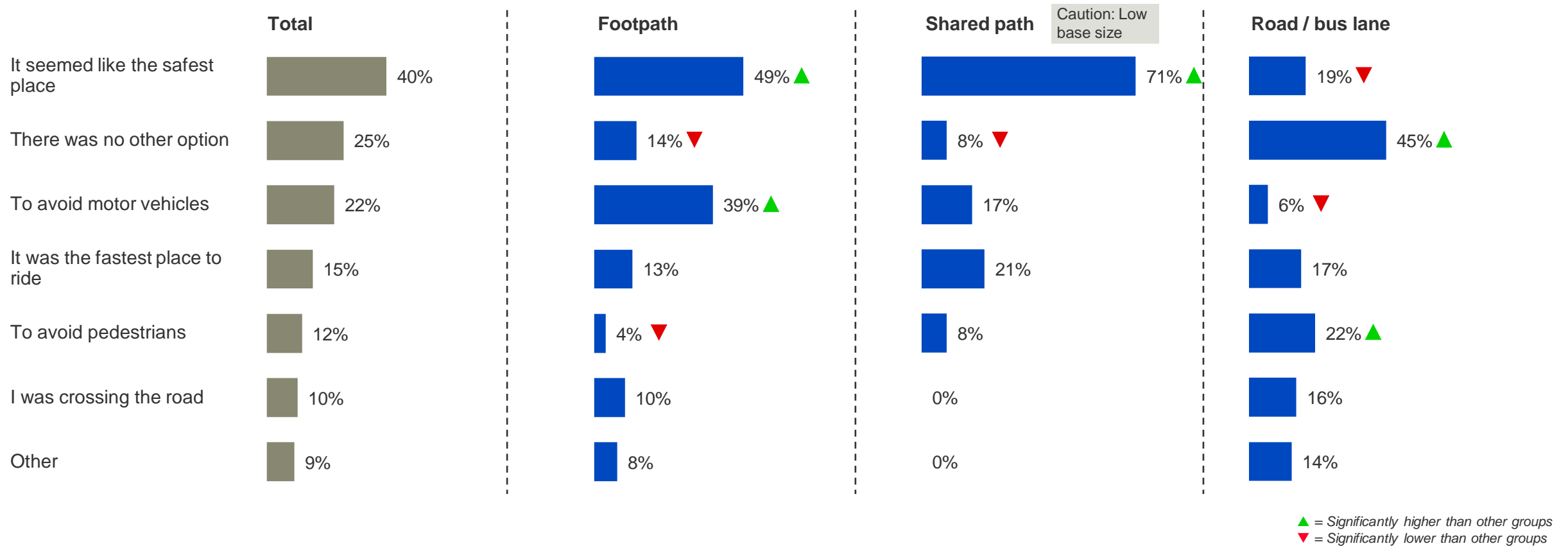


### 3 | Focusing on the e-micromobility rider



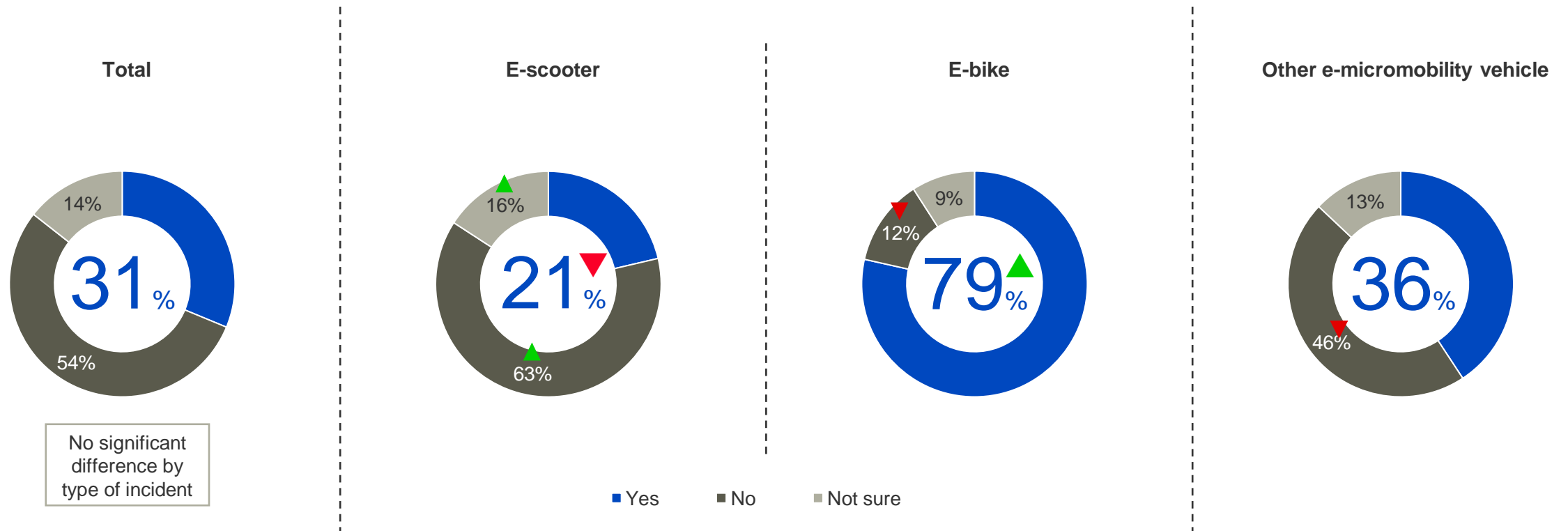
# Safety, to avoid motor vehicles and being no other option are the main reasons for deciding where to ride

Reason for type of place where riding when incident occurred (% , Incidents reported by e-micromobility riders)



# The majority of e-bike riders were wearing a helmet but only one in five e-scooter riders

Was the e-micromobility rider wearing a helmet? (% of Incidents involving e-micromobility riders)

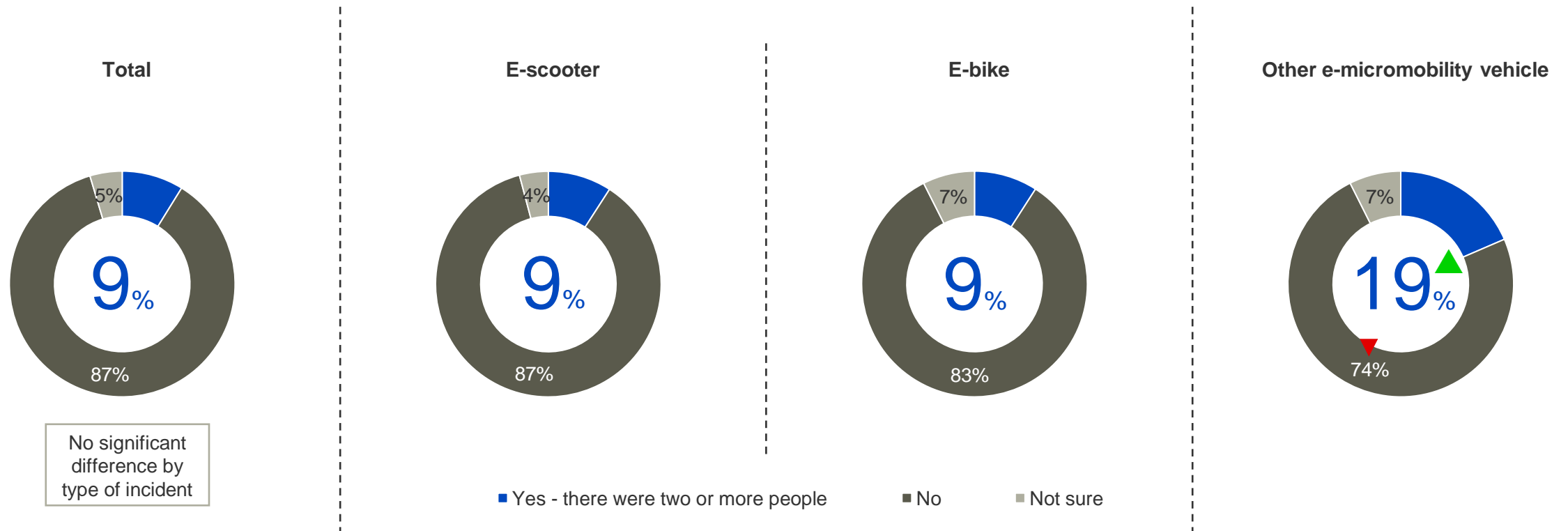


▲ = Significantly higher than other groups  
▼ = Significantly lower than other groups



# Almost one in ten incidents were claimed to involve a double riding e-micromobility rider (Caution: Possible confusion with two vehicles being involved)

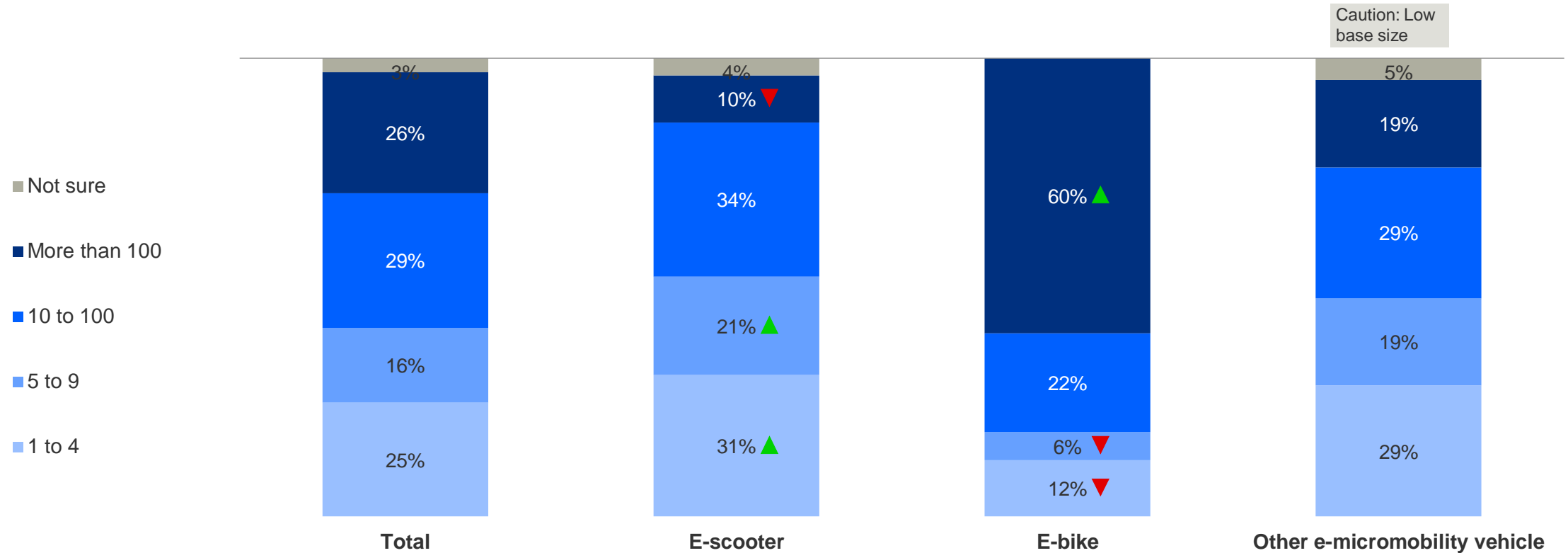
Were they double riding? (% of Incidents involving e-micromobility riders)



▲ = Significantly higher than other groups  
▼ = Significantly lower than other groups

# Most e-bike riders involved in incidents are experienced riders however half the e-scooter riders had ridden one fewer than 10 times

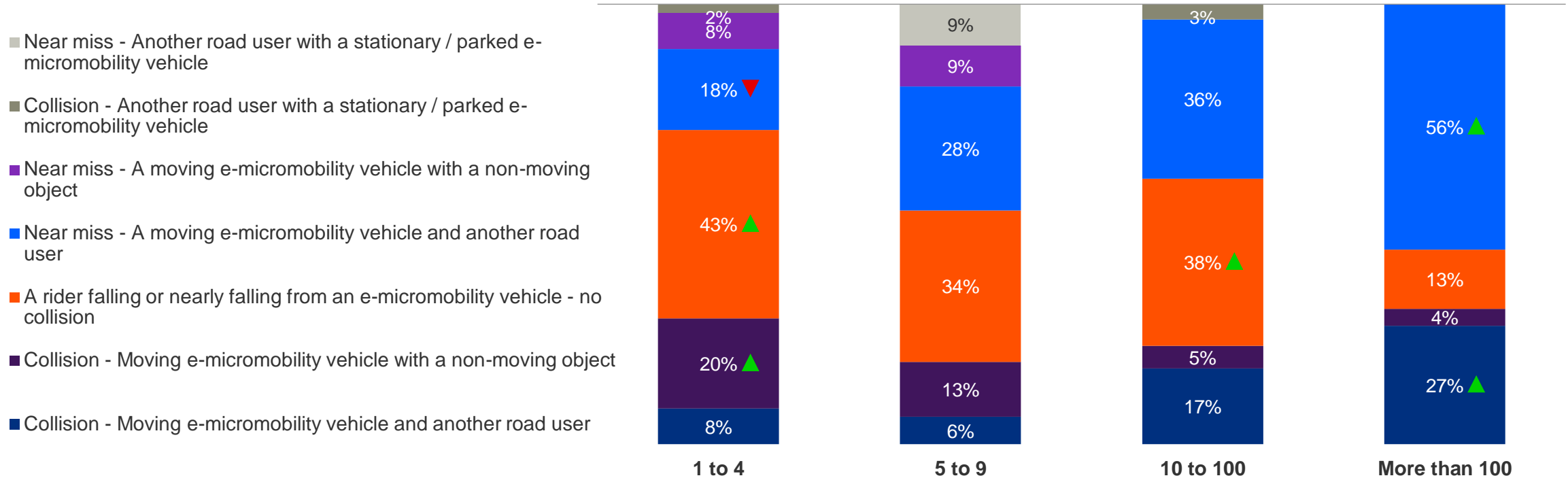
Number of times have ridden this type of e-micromobility vehicle before the incident (% , Incidents involving e-micromobility riders)



# Inexperienced riders are more likely to have reported incidents they were involved in that were falls or near falls off the e-micromobility vehicle or collisions with non-moving objects, while experienced riders are more likely to have reported on incidents involving other road users

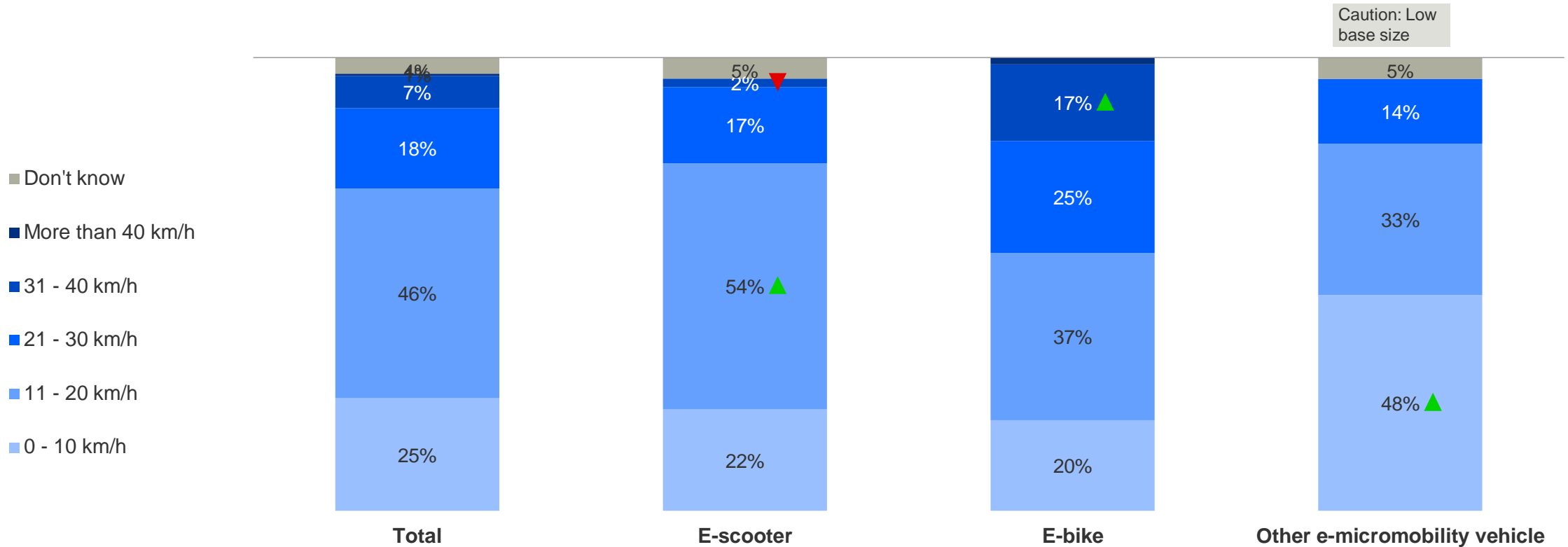
Caution: Low base size

Number of times have ridden this type of e-micromobility vehicle before the incident by type of incident reported (% , Incidents involving e-micromobility riders)



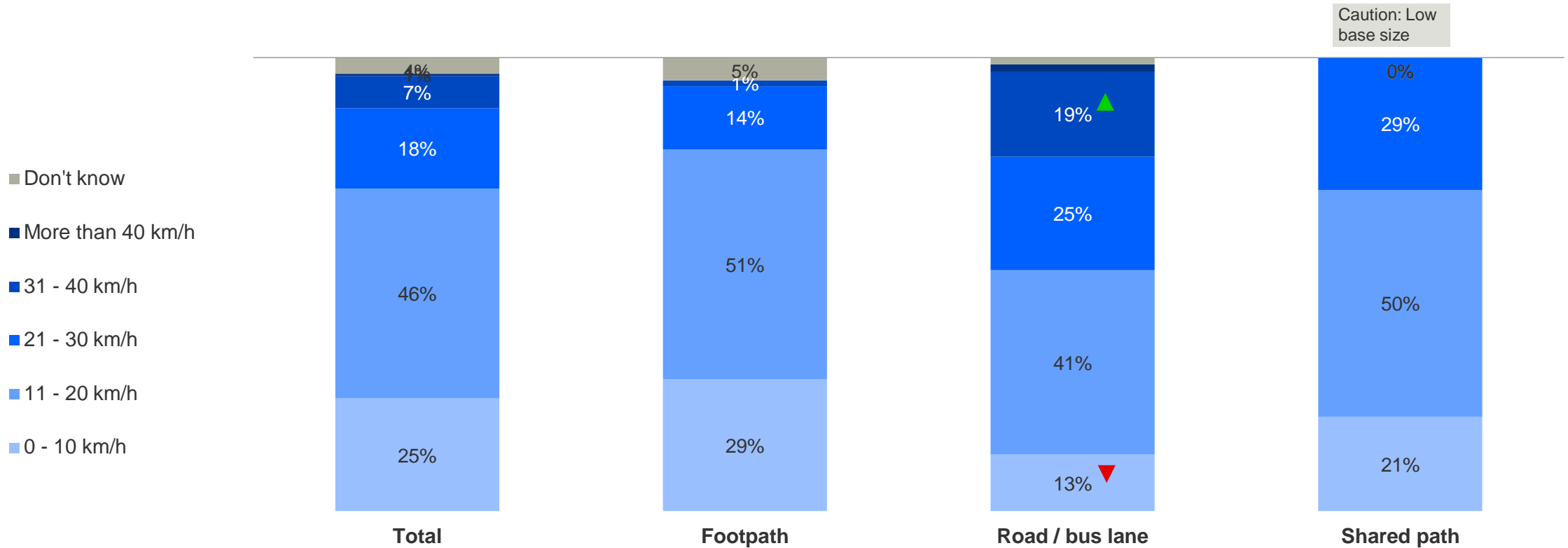
# One in five e-scooter riders estimated that there were travelling in excess of 20 km/h at the time of the incident and two in five e-bike riders

Estimated speed just before the incident (% , Incidents involving e-micromobility riders)



# Incidents occurring on roads and bus lanes tend to be at higher speeds, but this is likely to be due to the higher number of e-bikes on roads

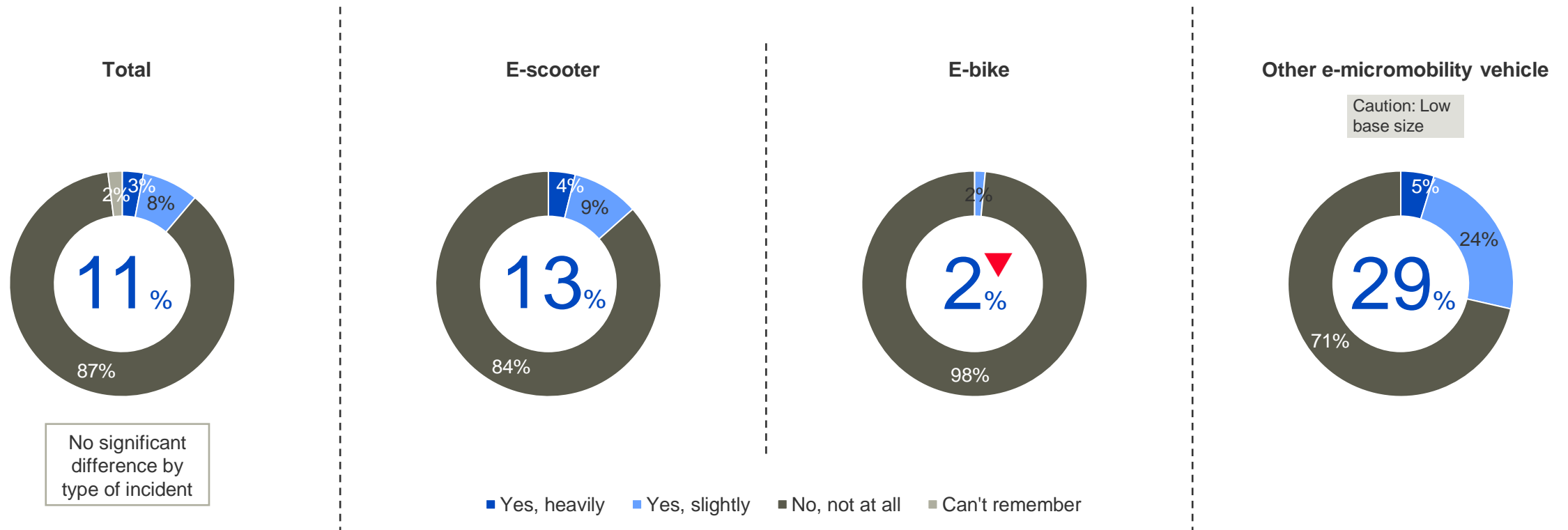
Estimated speed just before the incident on different surfaces (% of incidents involving e-micromobility riders)





# Few e-bike riders were affected by either alcohol or drugs at the time of the incident however 13% of e-scooter riders were at least slightly affected

Affected by either alcohol or drugs at the time of the incident? (% of incidents involving e-micromobility riders)



▲ = Significantly higher than other groups  
▼ = Significantly lower than other groups

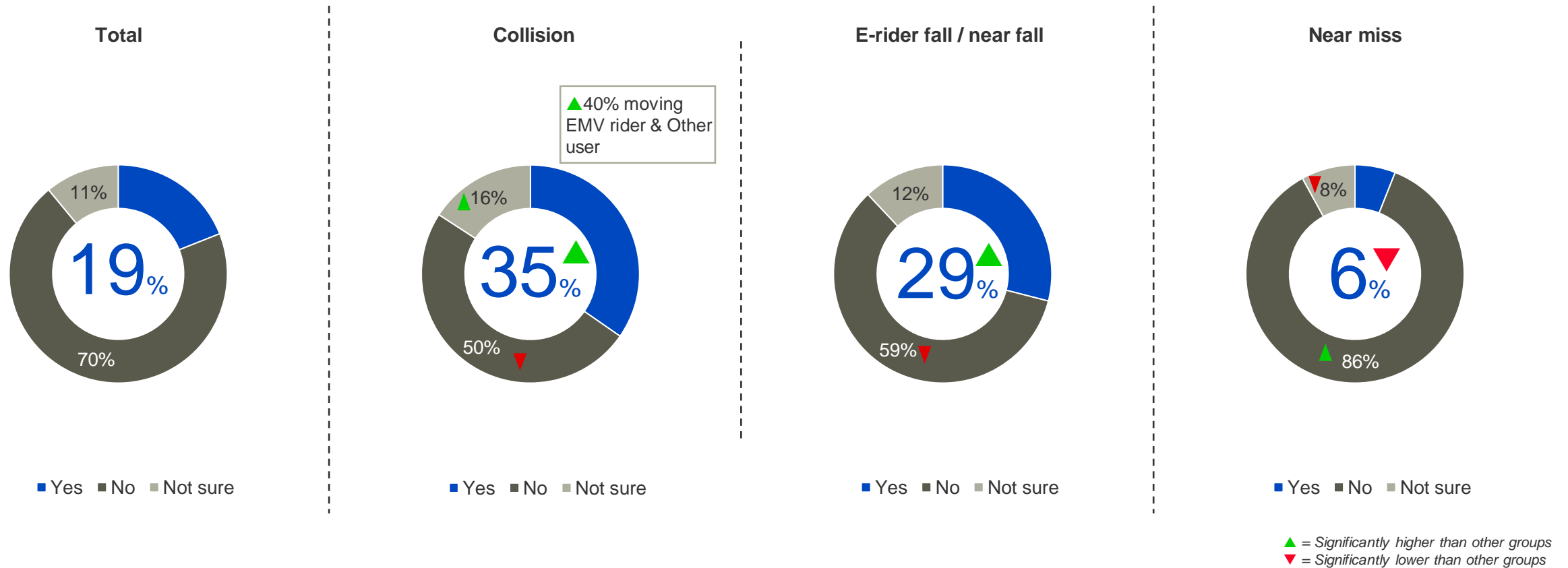


4

Injuries

# Around 19% of incidents result in an injury, with roughly a third of collisions and falls off e-micromobility vehicles causing some harm

Was anyone injured in the incident? (% Total incidents)



# The type of e-micromobility vehicle involved doesn't impact the rate of injury, although incidents involving other road users (most commonly pedestrians) were less likely to result in an injury

% of incidents involving each vehicle type resulting in injury



E-scooter

19%



E-bike

23%



Other EMV

17%

15% ▼

of incidents involving other road users resulted in injury

% of incidents involving other vehicles resulting in injury

Traditional cycle

23%

Foot powered vehicle

10%

By foot

14% ▼

Car/van

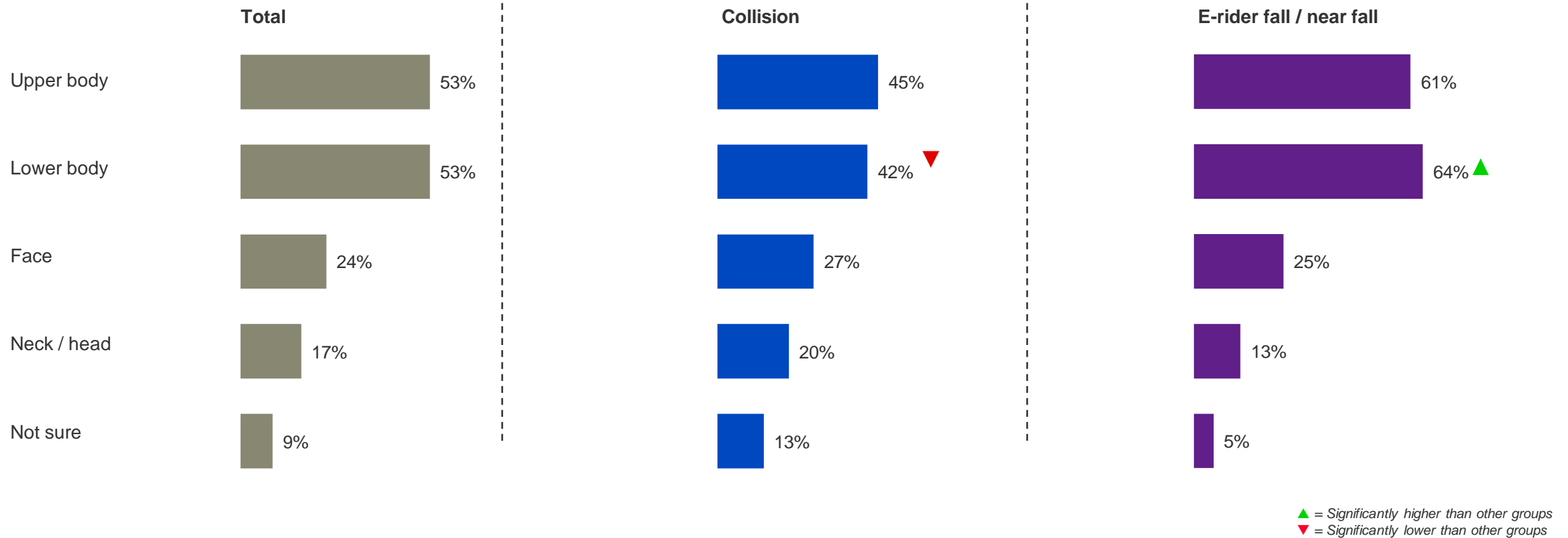
16%

Mobility scooter

16%

# Upper and lower body injuries, rather than head injuries, are the most common type of injury and e-riders falling off result in more of these injuries than a collision

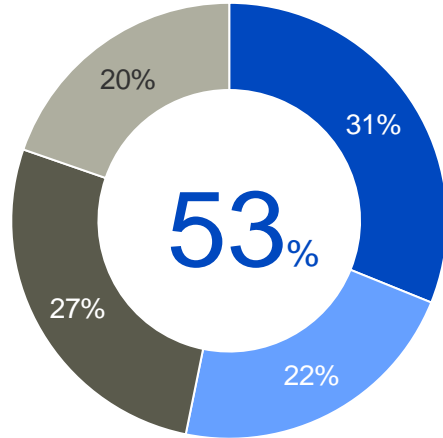
Types of injuries incurred (% of incidents resulting in injury)





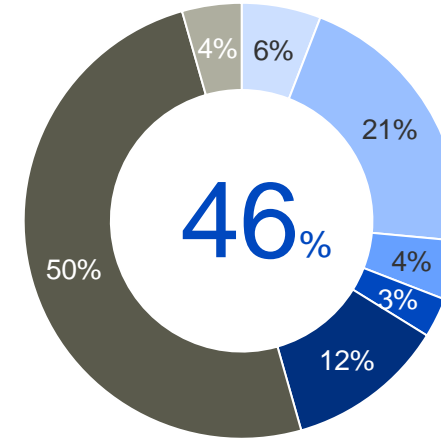
# Around half of the injuries needed medical attention, and a similar proportion resulted in time off work

Medical attention received (% of incidents resulting in injury)



■ Immediately ■ Later ■ No ■ Not sure

Time off work if personal injury (% of incidents resulting in injury among those involved)

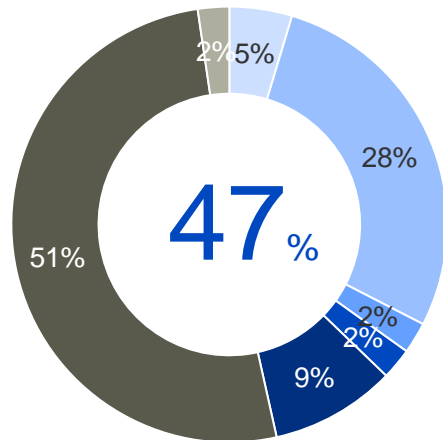


■ < one day ■ 1- 2 days ■ 3 - 4 days ■ 5 - 7 days ■ > a week ■ No ■ N/A

Injuries are just as likely to occur in different locations, but injuries from incidents on footpath are less likely to be serious, while incidents on roads and bus lanes are more likely to require medical attention / time off work

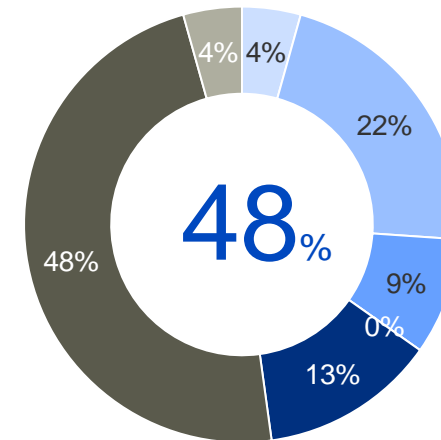
# The need for time off work was similar for incidents involving moving e-scooters and moving e-bikes

Time off work if moving e-scooter involved (% of incidents resulting in injury among those involved)



■ < one day ■ 1-2 days ■ 3-4 days ■ 5-7 days ■ > a week ■ No ■ N/A

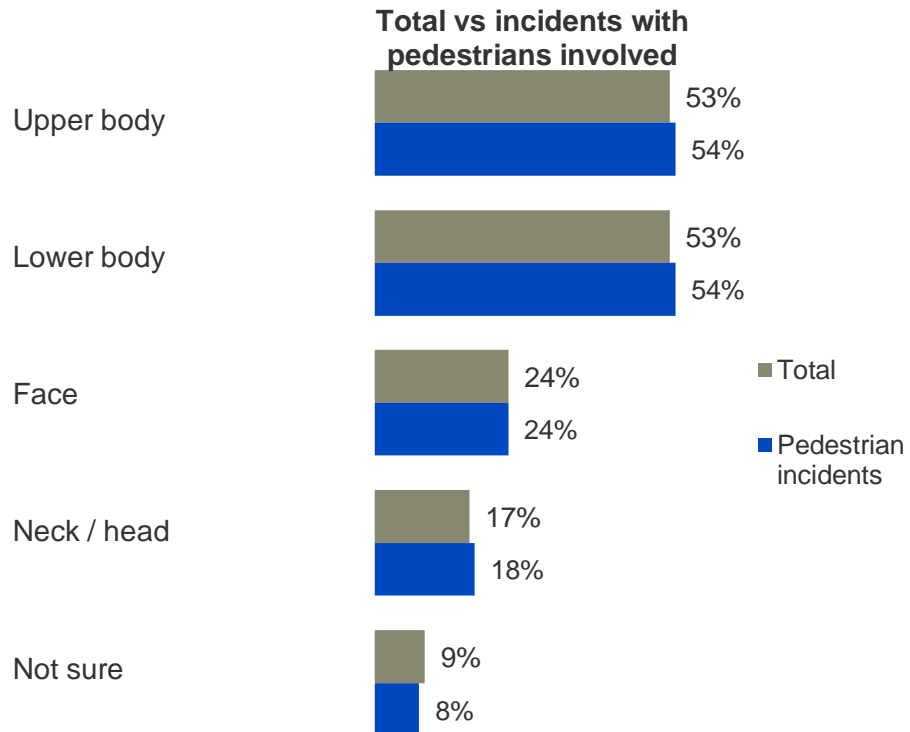
Time off work if moving e-bike involved (% of incidents resulting in injury among those involved)



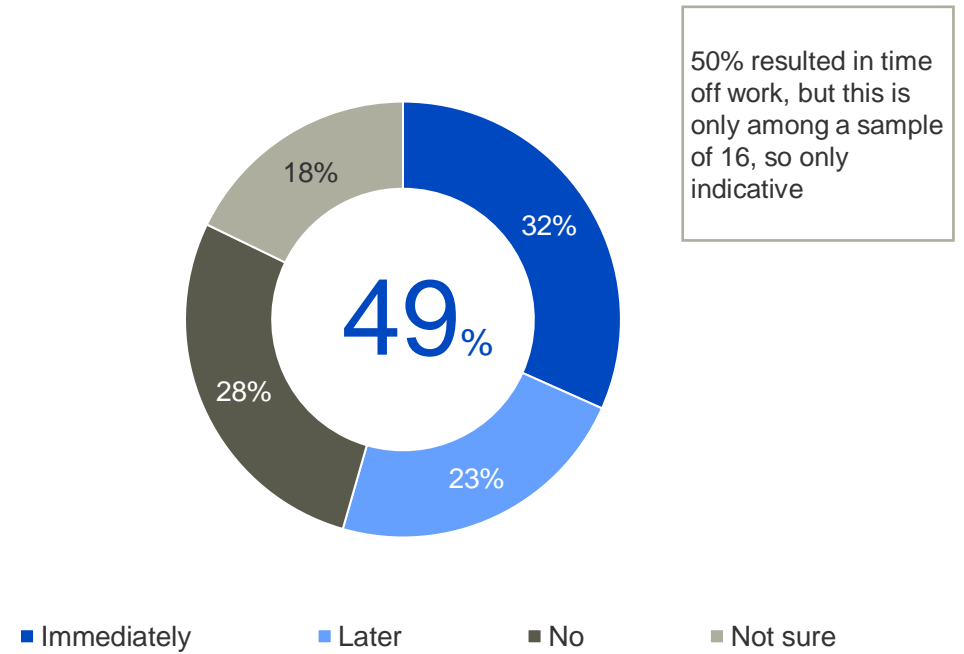
■ < one day ■ 1-2 days ■ 3-4 days ■ 5-7 days ■ > a week ■ No ■ N/A

# Around half of incidents involving pedestrians resulted in an injury

Types of injuries incurred (% of incidents resulting in injury when a pedestrian is involved)



Medical attention received (% of incidents resulting in injury when a pedestrian is involved)



▲ = Significantly higher than other groups  
▼ = Significantly lower than other groups



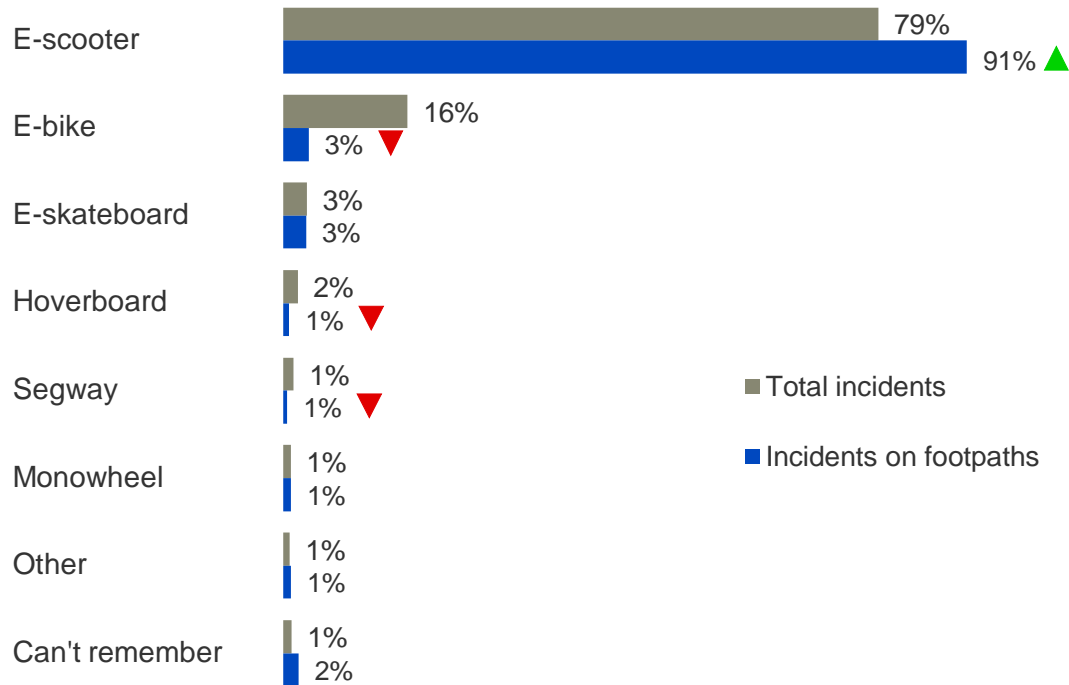


5

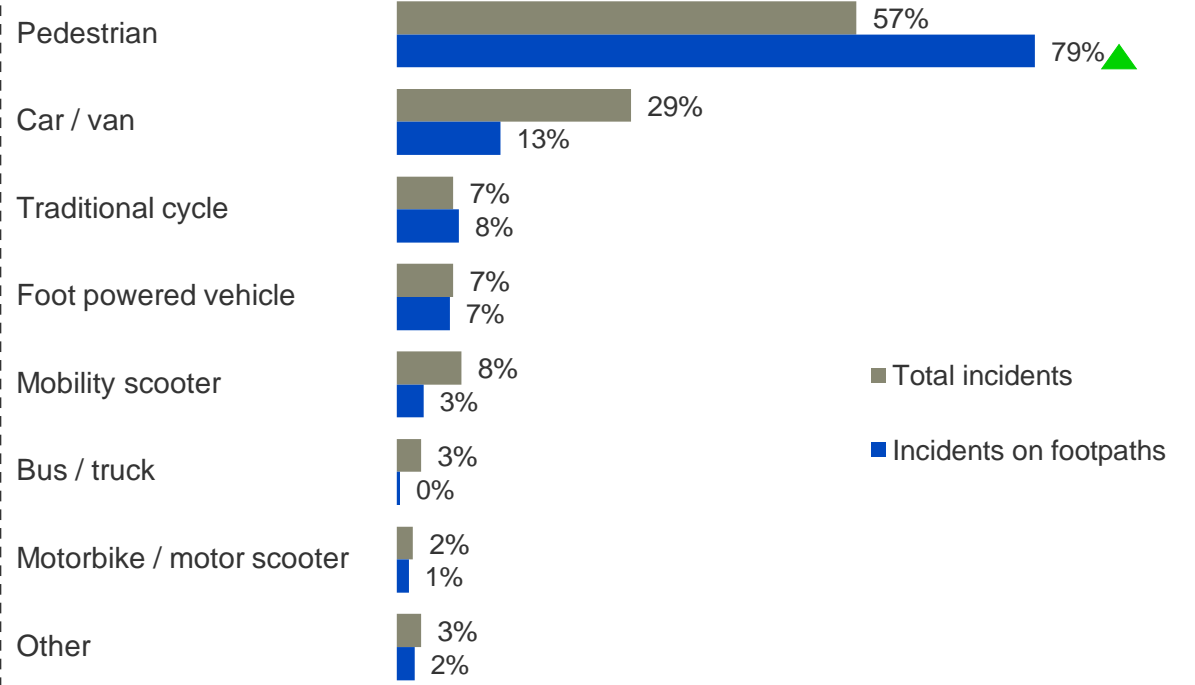
Deep dives - footpaths

# The majority of reported footpath incidents involved e-scooters with 16% involving e-bikes and 8% involving other types of e-micromobility vehicles

Types of e-micromobility vehicles involved (% Total incidents on footpaths)



Other road users involved (% Total incidents on footpaths)

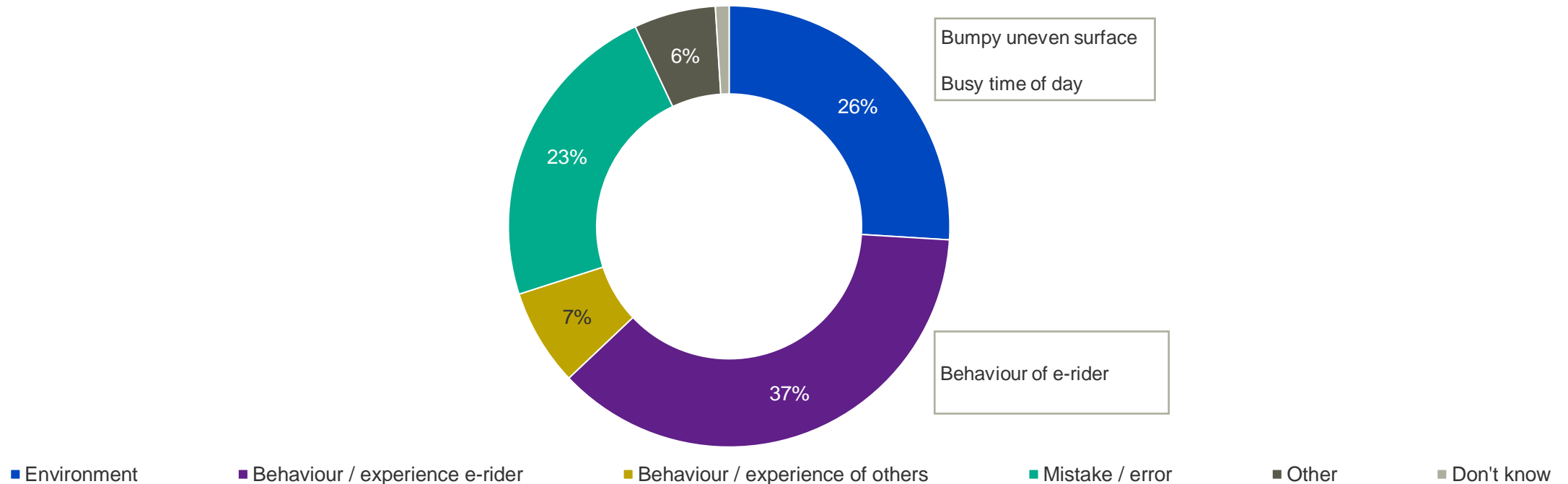


▲ = Significantly higher than other groups  
▼ = Significantly lower than other groups



# Incidents on footpaths were most commonly blamed on e-rider behaviour, but a busy time of day, uneven surfaces and mistakes were also often a cause

Main cause of the incident (% Total incidents on footpaths)



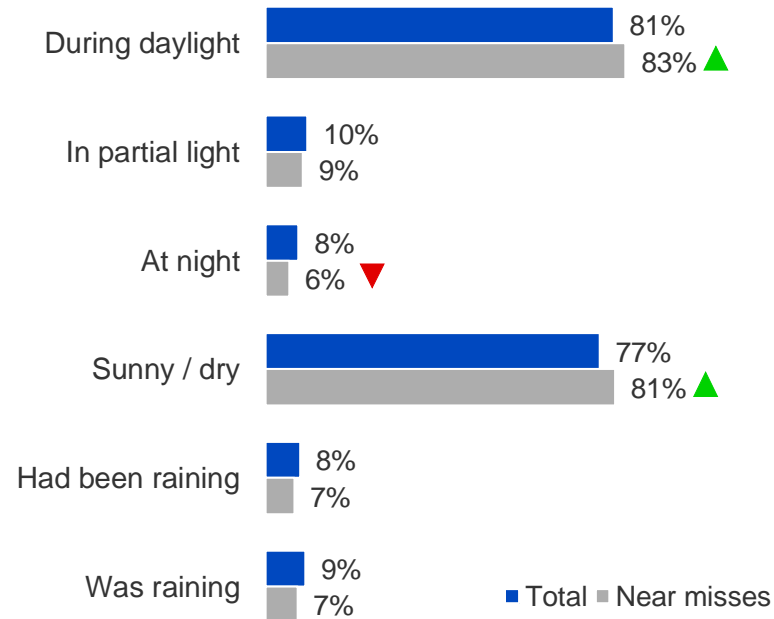


6

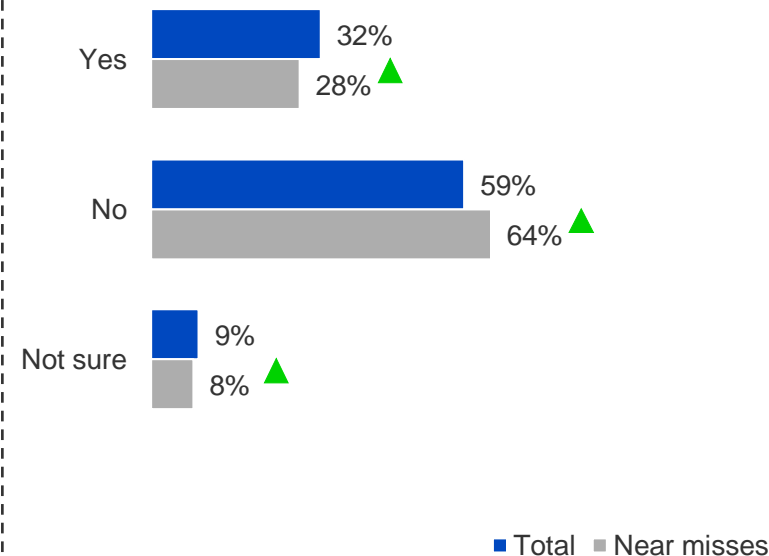
Deep dive – near misses

# Near misses were similar to other incidents, but were slightly more likely to involve pedestrians and occur on sunny days

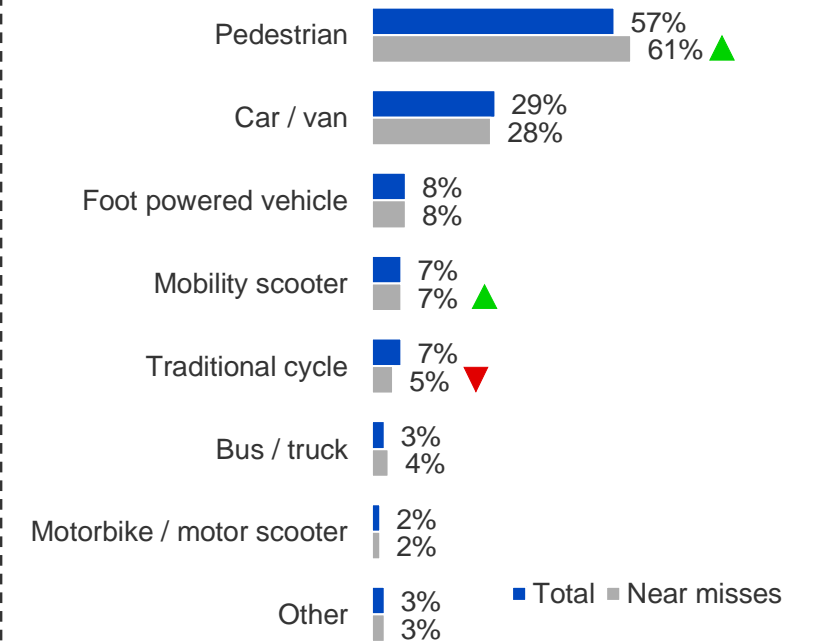
When incident occurred (% Total incidents involving near misses)



Did it involve the e-mobility rider moving between different infrastructure? (% Incidents involving near misses and moving e-micromobility vehicles)



Other road users involved (% Incidents involving near misses and other road users)

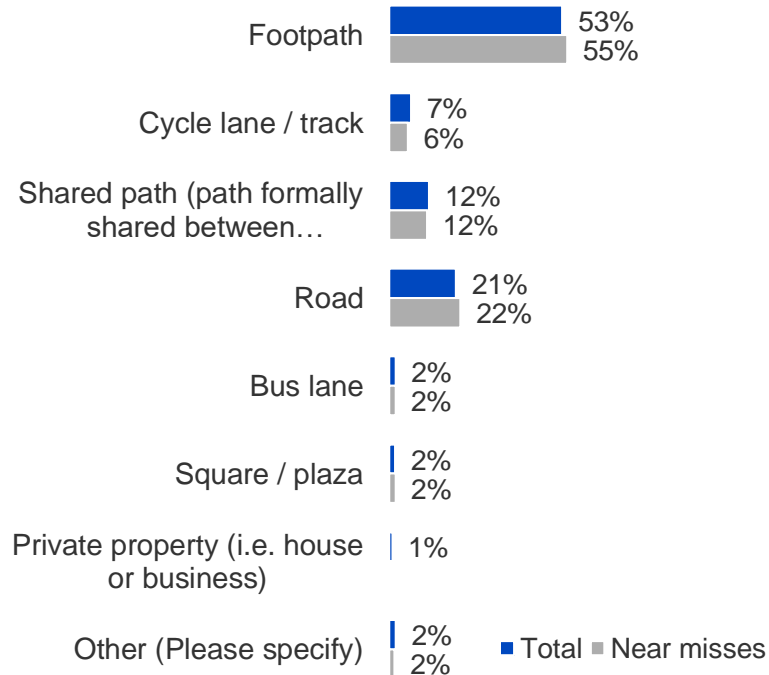


▲ = Significantly higher than other groups  
▼ = Significantly lower than other groups

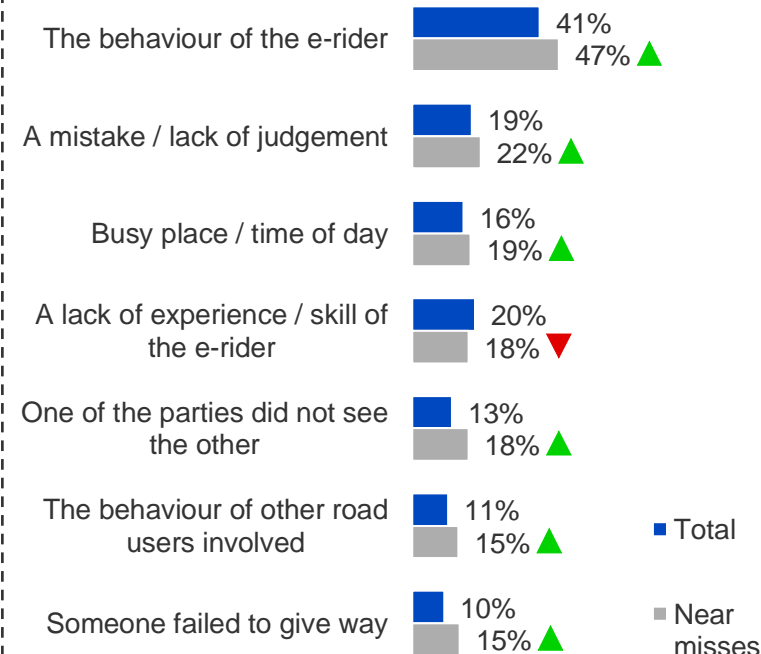


# Near misses were no more likely on any particular infrastructure, but were more often blamed on the behaviour of the e-rider

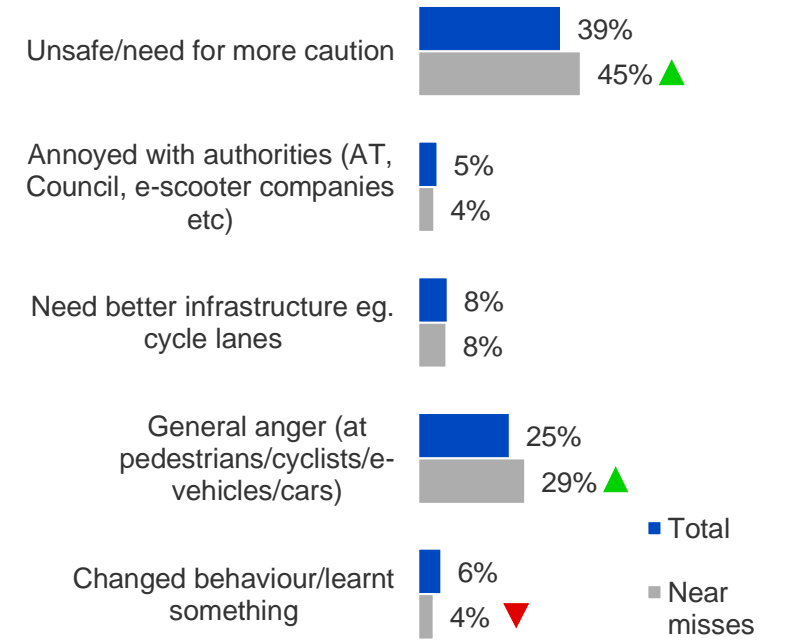
Infrastructure types (% Total incidents involving near misses)



Main cause of the incident (% Total incidents involving near misses)



How felt after the incident (% Total incidents involving near misses)



▲ = Significantly higher than other groups  
▼ = Significantly lower than other groups



7

## Appendix – comments of incidents involving facility condition



## 5% of incident reports mentioned the condition of the road, footpath or other infrastructure as a factor in their incident

Riding through a works area, navigating traffic management kit including a temporary ramp as well trying to avoid other footpath users, I put my foot down while the scooter was moving and the kickstand/wheel arch of the scooter ran up against the inside of my ankle. I was wearing sturdy boots which prevented more serious injury but I still sustained a cut and bruising.

A shadow obscured a broken piece of footpath that I hit at low speed, fell and shattered my elbow

Rider went from road to footpath and hit bump. Went flying and smashed face. Luckily she had helmet on with visor so wasn't as bad as it could have been.

The e-scooter rider was travelling relatively quickly on the left-most part of the road in the CBD during a busy time of day. A bus passed to the right of the scooter causing the space for the rider to narrow. She hit a crack in the curb causing the scooter to stop immediately, flinging the rider onto the pavement. She hit her head hard on a concrete planter box (on Custom Street) causing a deep laceration and heavy bleeding. The rider refused an ambulance, but promised to head to the hospital straight away for stitches.

Was going down the hill on Kyber Pass in the morning. Didn't want to go on the road because the cars and busses go very fast. The footpath narrowed due to a construction sign on the footpath and there was gravel/cracks on the footpath. Went to adjust change direction and due to the gravel the back wheels slid out from under me and I fell over.

Man on e-scooter was traveling too fast and hit an uneven surface and collided into someone walking sending him off the scooter

There was a pot hole in the footpath that was too deep for the wheel, surrounded by many bumps. I underestimated the impact the pothole would have on the small wheels, and got launched off the scooter. The scooter fell and I managed to land on my feet.

## Verbatim comments

Bike skidded on a slippery wooden kerb that was poorly designed. Fell onto outstretched hand with extension injury.

I was commuting to work as usual from Mount Eden to the CBD through Ian McKinnon Drive cycleway. I slowed down on the section where you turn from Dominion road to Ian McKinnon Drive cycleway, but despite a very low speed, I fell off on that right turn because the green painted surface was very slippery. I noticed that green paint in that area was different from what normally used on the cycleways and it is slippery even if it is not wet.

I was travelling along Quay Street footpath (roughly close to McDonalds). Trees roots have pushed the surface off the footpath up several inches, effectively forming a hump. The trees blocked the light from the street lamps, so I did not see the hump on the footpath, which when I hit it, threw me off the scooter. My hands came out in front of me to protect myself and I fractured my wrist

While moving from footpath to road I went over a gutter and one of the scooter wheels started skidding because of the gutter's slope and slippery material. I managed to catch my balance by putting one foot on the ground and stopping without falling.

There was a construction barrier and the cyclist didn't have time to go off the footpath as there were cars. He went over the uneven surface, it was wet and lost the balance. He hit the barrier.

Footpath had too much bumps

The rider fell off the vehicle in a slow motion due to what appears an uneven surface of the footpath plus the riders inexperience.

## Verbatim comments

Two people on e scooter hit a pot hole on a foot/cycle path and fell off; they did not appear to be badly hurt.

Scooter rider was travelling at high speed weaving in and out of traffic and moving between pavement and road. He was behaving erratically and assuming he had right of way on the road. Hit car by swerving to avoid a pot hole

When I want to move from the road to the kerb to avoid fast vehicles driving on the Great North road, the ramp wasn't properly made: instead of smoothly transition between road and kerb, the beginning of the ramp is too high from the road; hence, instead of allowing the e-scooter to transition to the kerb smoothly, it blocked and stopped the e-scooter from moving which in-turn threw me off the e-scooter to the kerb; as well as damaged the scooter.

An adult was riding scooter with a child in front and was possibly going too fast and hit a stone or pothole on footpath which tipped scooter over and child got hurt. We were passing in a car and noticed this. Others went to assist.

Was riding with kids and walking dog home from supermarket with groceries. Trying to carry too much, kids complaining, didn't see bump in footpath. Didn't fall but lost control for a second.

Road is un-even surface

Road condition is not good.

The rider was moving too fast, trying to avoid peds, and uneven surfaces etc.

## Verbatim comments

I was ridding on the footpath and had to move to the road and the surface was uneven so I did fall

My friend and I were going down a footpath and onto a wooden bridge path. The surface was uneven for the transfer and that was when we fell off the e-scooter

Riding along footpath saw a large lip too late. I turned to avoid it, went onto grass and in to a fence

E-scooter hit rough ground on footpath, and fell off. Travelling too quickly.

The rider was coming down the road seemed to of hit a rough patch of ground and hit a rubbish bin.

Uneven ground while travelling low speed.

Riding along on the Lime Scooter on the footpath, and an uneven piece of footpath was jutting up and I hit that and came off the scooter onto the footpath

Rider was traveling at fair speed along pathway, hit edge of raised section of pathway, which destabilized and caused him to fall, landing on his hands and knees and grazing them

Bad surface to ride on and slipped

## Verbatim comments

I saw a young boy on an e scooter hit a pot hole with the front wheel. The whole scooter stopped suddenly and he flew over the handle bars and landed heavily on the footpath. It looked quite scary at the time.

Layering in the footpath

She was with her friend and she slipped on the tram line and fell off

Rode Hoverboard - went over uneven surface and fell off

Rider was transitioning from the road to the pavement via a driveway, the lip between the road and the driveway was high enough to stop the front wheel dead in its tracks, so the rider went over the front handlebars, however landed flat on their back so shaken but not seriously hurt.

Fall off on uneven surface

Uneven surface, with the user going too fast.

Rider flipped over after e-scooter hit a slight bump in surface

No helmet and speed was just too fast...hit some uneven ground and got the speed wobbles

They weren't looking where they were going Uneven services make them crash into a pole

We were a group of four riding along the bike lane from Britomart towards Mission Bay. Just at the point where we were opposite the carwash, there was an ambulance on the road and a scooter rider seriously injured on a fall structure. There was another group of riders there but I think they were the ones who called the ambulance. It didn't look like anyone else was involved but the surface was extremely poor and narrow.



# KANTAR

Thank you



The logo for Abley, featuring a stylized 'A' icon followed by the word 'abley' in a lowercase, sans-serif font.





**KANTAR**

Thank you



**abley**