

AUGUST 2023

FOLKL

Wellington City Council.

Wellington Central Fire Station.
Cycle Lane Behavioural Study.

Absolutely Positively
Wellington City Council

Me Heke Ki Pōneke

FOLKL: PROPRIETARY AND CONFIDENTIAL

Context and Methodology.

Context.

A bi-directional cycle lane has been installed directly in front of the Wellington Central Fire Station, as part of the Newtown to City transitional cycle lane project. This new lane creates a perceived potential risk and conflict area for cyclists, e-scooter riders and pedestrians (users) when fire appliances are entering and/or exiting the station. Two new warning beacons have been installed as part of the project, to alert and stop oncoming users to appliance movements.

Wellington City Council (WCC) wish to understand the compliance with these warning beacons and any other relevant behaviour of users at this location.



It is important to note that data analysed is a sample and is indicative of usage for the sample period only. All FOLKL research is

conducted in accordance with the Research Association New Zealand Code of Practice.

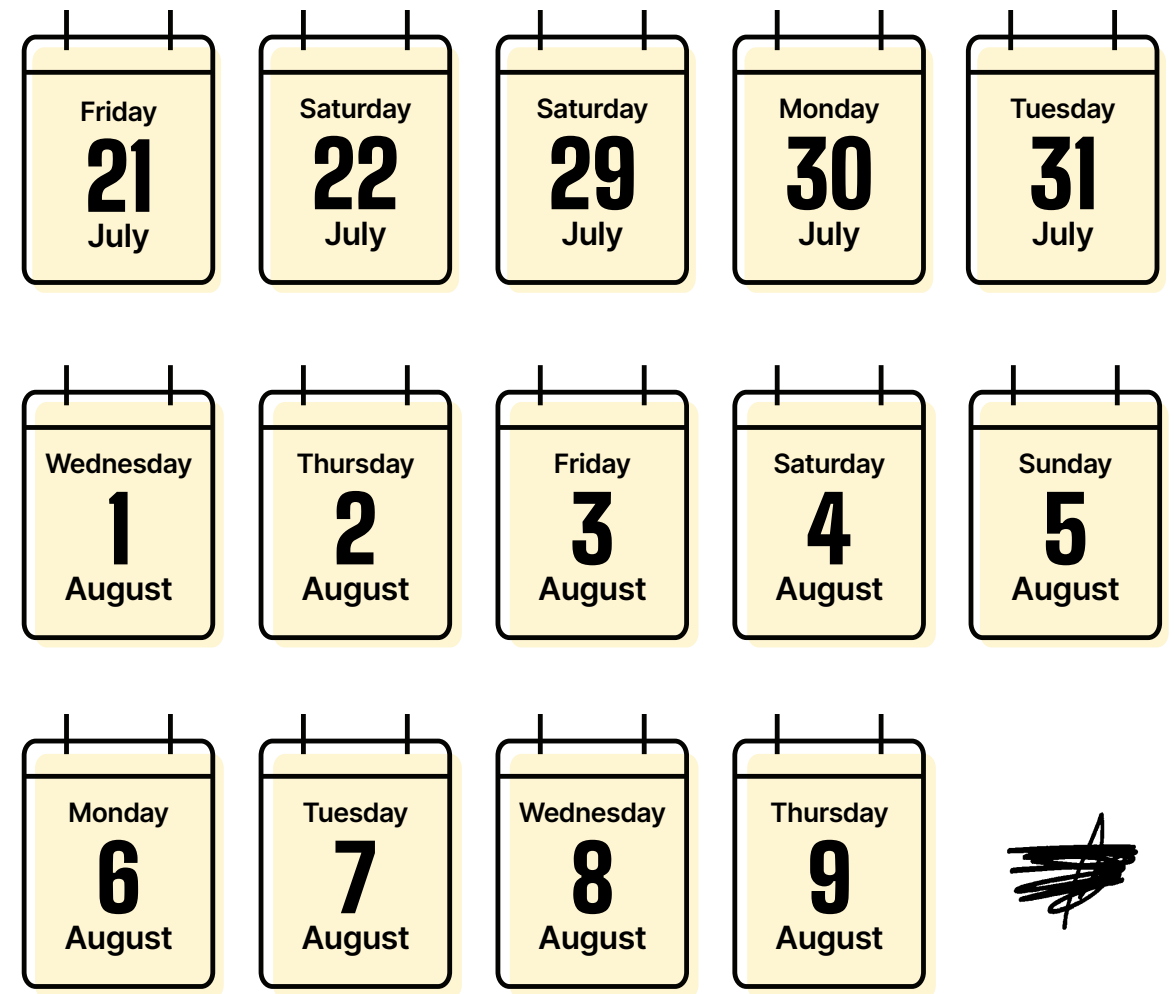
Methodology.

A descriptive use study of the area was conducted using digital observation, paired with manual coding. Fourteen days of footage from the site was used for manual coding and theming, which required watching each day's footage and recording down volume and behaviour of the pedestrians, cyclists and scooter users at the times when fire appliances were entering or exiting or parking at the fire station. A panel of three researchers from FOLKL watched the footage in order to reach a conclusion on whether the users behaviour was safe or unsafe.

The presence of the digital camera and purpose of the project was clearly indicated and explained with adjacent signage.



Video observation was scheduled to capture data across a range of days. Filming took place for 14 hours a day, from 6:00 AM and 8:00 PM, on:



Scene description.

Outside of the Wellington Central Fire Station is a one way street and a bi-directional cycle lane, as well as a footpath. There are warning beacons on either side of the fire station which the fire station are expected to turn on when they are entering and/or exiting the building.

The behaviour of users in the area was analysed to determine whether it was safe or unsafe during an event when a fire appliance was entering and/exiting the fire station. Safety was determined by whether the user put themselves or others at risk through their behaviour during an event, a user that did so was determined to be unsafe. Some examples of unsafe behaviour could be a pedestrian running behind a reversing fire appliance or a motor vehicle parking on the yellow hatching and blocking the path of a fire appliance.



● Warning beacon

● Pedestrian warning beacon

● Warning beacon

● Pedestrian warning beacon

● Yellow hatching

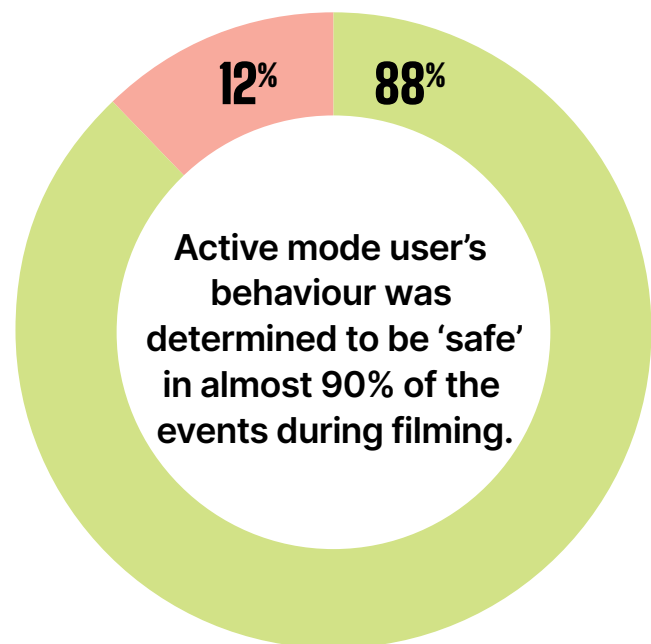
Safety behaviour of active mode users.

Over the 14 days of filming there were 160 events (fire appliance entering/exiting the fire station) with an average of 11 per day. The remaining 50 events (34%) either had just motor vehicles or no users/vehicles present.

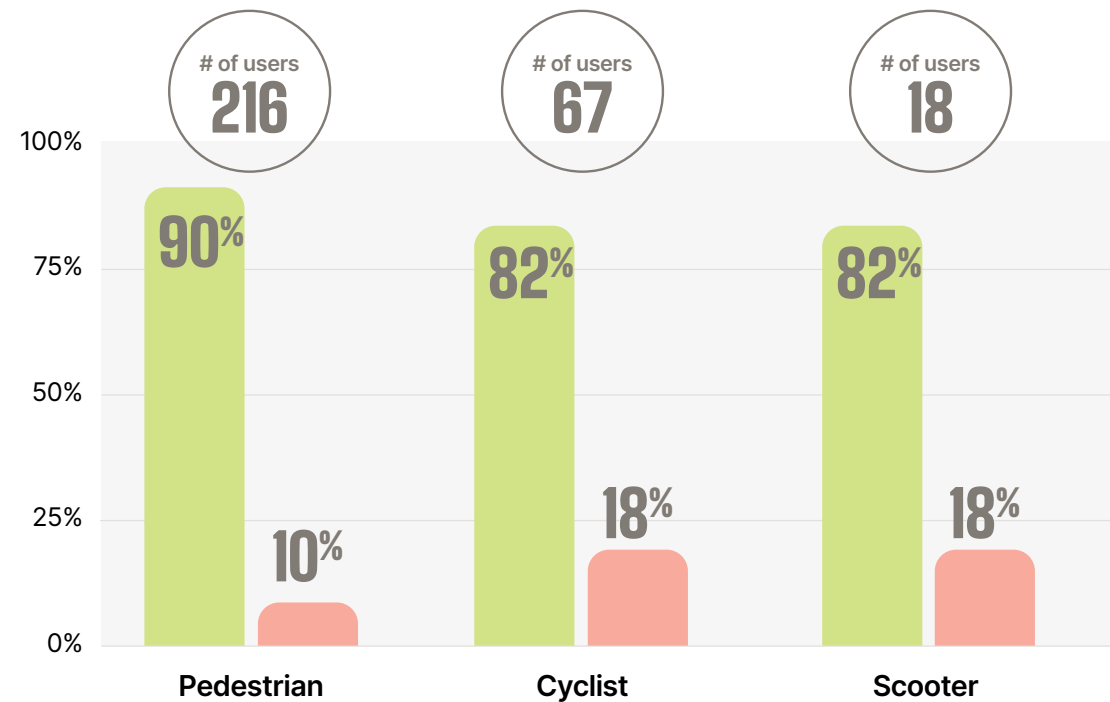
All active mode users showed high levels of safe behaviour during events when fire appliances entered and/or exited the station. Pedestrians showed the highest levels of safe behaviour (90%), despite the only infrastructure to indicate potential danger being a

warning beacon above head height near the entrance/exit location. In comparison, cyclists and scooter users were safe 82% of the time. There were a small number of instances where cyclists purposefully avoided the rumble strips leading into the area, by riding into the vehicle lane.

Safety behaviour in all active modes.

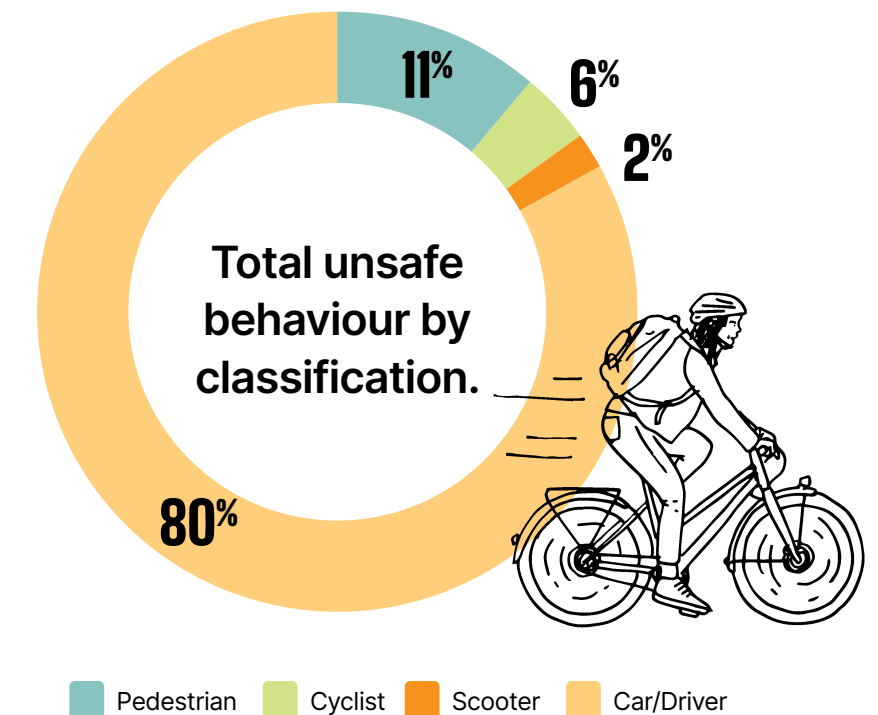


Safety behaviour by classification.



Safe Unsafe

Of the 160 total events recorded, 89% experienced unsafe behaviour. 80% of all unsafe behaviour was from cars/drivers.



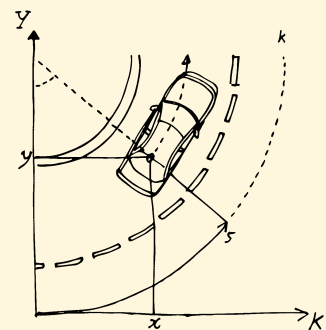
Pedestrian Cyclist Scooter Car/Driver

Behavioural notes.

Motor vehicle behaviour.

Although not a objective of this study, motor vehicles had an influence on the safety of all users in this area. **A total of 115 drivers were determined to be displaying unsafe behaviour during events when a fire appliance was entering and/or exiting the fire station.** For example there were several events in which motor vehicles blocked the yellow hatching when a fire appliance was exiting the fire station or sped up to pass the fire station as a fire appliance was entering and/or exiting. This caused some near misses between motor vehicles and fire appliances.

It was also noticed that motor vehicles frequently stopped on the yellow hatching zone outside the fire station, while waiting for a traffic light change. On number of occasions this occurred while an appliance was attempting to exit the station.



Yellow hatching zone.



Researcher field notes.

These remarks are examples of some of the behaviours displayed during the period of filming.

“When the signal beacons come on, running pedestrian crosses road at beacons and continues to run.”

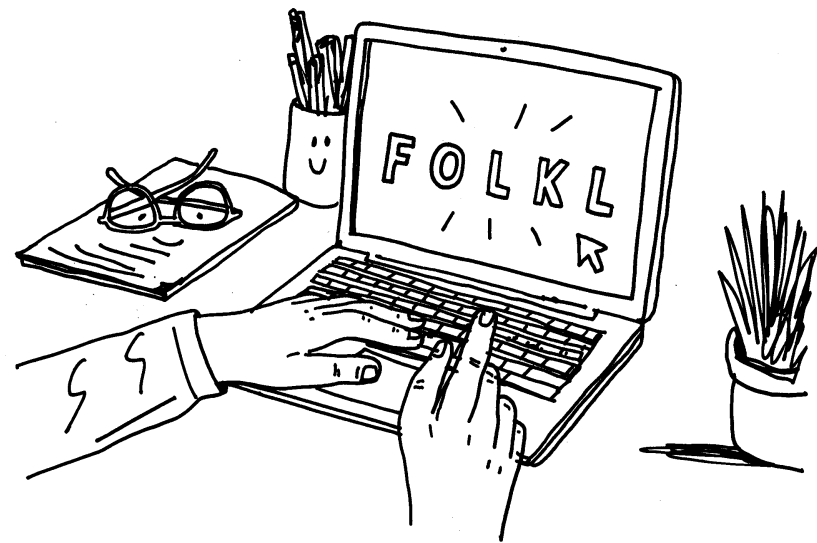
“Pedestrian stops at the signal beacons as they turn on. This prompts another pedestrian to stop and wait there, they wait until the beacons go off to move.”

“Pedestrian is running, as the truck reverses into the fire station pedestrian runs behind the truck. The signal beacons are on.”

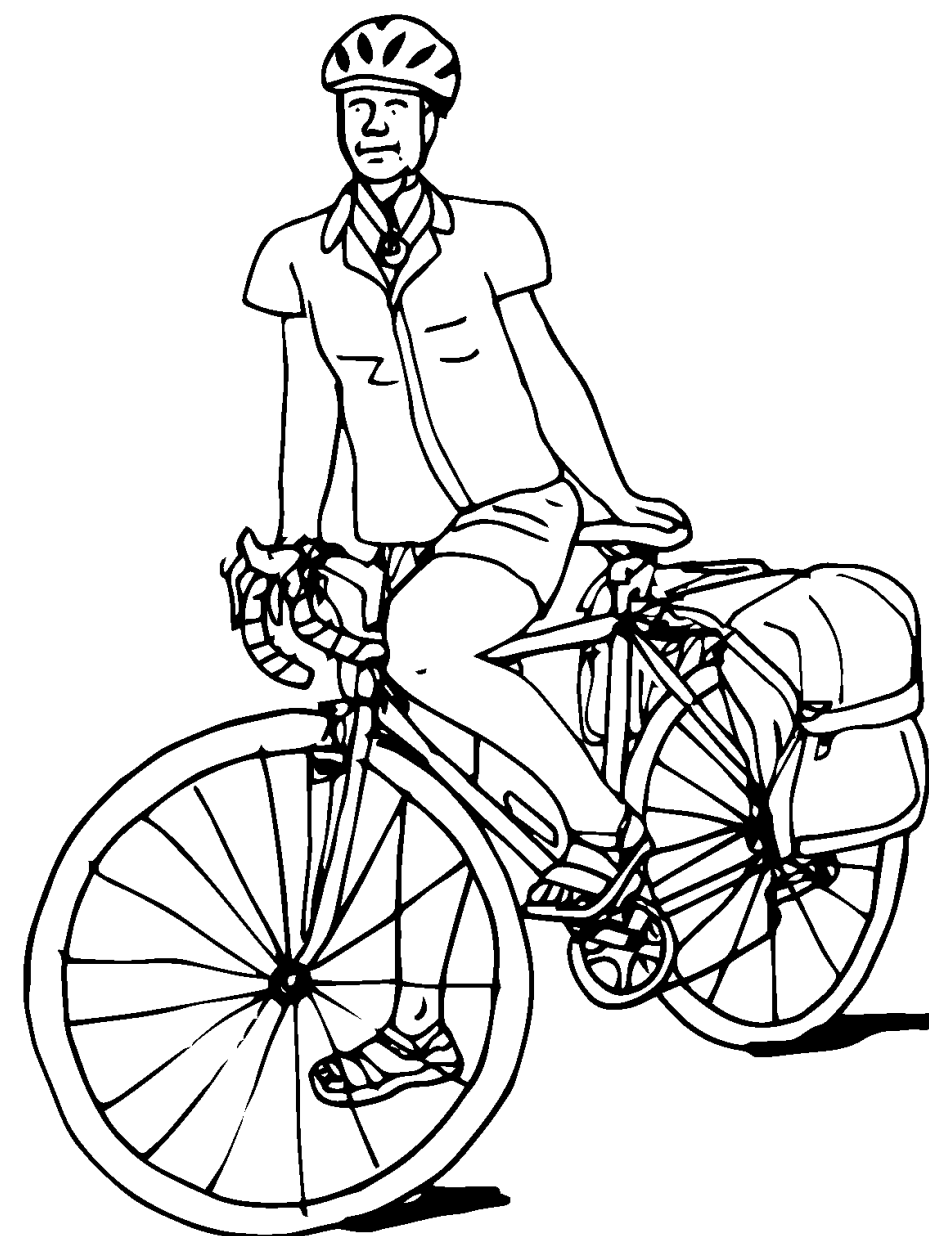
“Cyclist can see truck exiting in distance and slows down despite no signal beacons on.”

“Fire appliance pulls out of fire station without any beacons on, couple walking past is closely missed as it exits. Another pedestrian runs past to avoid the vehicle.”

“Motor vehicle is parked in the yellow hatching zone blocking the exiting fire truck. There is no attempt by the motor vehicle to move out of the way.”



Ngā mihi
Thank you.





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