Waka Kotahi research summary

May 2023

The gig economy and road safety outcomes

‘Gig’ or contract driver work, such as passenger transport and food and courier delivery, has increased worldwide. And so has concern about the risks for gig drivers and other road users. What are the next steps for New Zealand to meet this challenge?

The ‘gig economy’ means work done outside of the traditional employer–employee relationship, on an ‘as and when needed’ basis. It’s usually in response to a real-time request for service through a digital platform/app such as Uber. Overseas evidence shows that gig drivers and passengers risk being killed or seriously injured on the road due to unsafe driving behaviours (such as mobile phone use), fatigue, unsafe vehicles, and not using safety equipment. A range of factors related to how gig work is arranged are likely to contribute to these risks.

This research aimed to address our knowledge gaps about gig work and road safety in New Zealand.

WAKA KOTAHI
NZ TRANSPORT AGENCY

Te Kāwanatanga o Aotearoa
New Zealand Government

The research

The researchers had four main objectives:

1. Summarise international and New Zealand research on road safety and the gig economy.
2. Identify the social and technical (socio-technical) factors that affect the gig economy and road safety in New Zealand.
3. Show where non-traditional road safety data could help us better understand context.
4. Make cross-sector recommendations to reduce the gig economy's risks.

The researchers:

- reviewed literature
- ran a workshop for key informants
- interviewed key informants
- reviewed Crash Analysis System data on the types and causes of gig driver crashes in New Zealand
- reviewed other data sources to better understand gig work and road safety risk
- surveyed New Zealand gig drivers
- rode along and observed four food delivery drivers
- interviewed six gig drivers.

They used the findings to create an Actor Map and an AcciMap to show how system factors influence gig drivers' road safety risks.

Mapping the results

The Actor Map describes the person and non-person actors across the gig work socio-technical system. The position of each actor in the map shows the potential influence and impact each has within the system. Actors higher up the map have influence and control over actors at the levels below (those closer to day-to-day gig work). Actors at the lower levels give feedback about safety to those at the higher levels for decisions and actions.

The AcciMap describes the factors that increase road safety risk and shows their interactions across the system.

It also describes the main influences that the researchers found across the system:

- A culture of convenience: Platforms meet consumers' need for fast and convenient service. They tend to prioritise customers' experience and satisfaction over drivers. Drivers can be dropped based on poor customer feedback, and they have little chance to respond. Drivers may feel pressure to ensure positive feedback – for example, speeding to deliver an order faster, or dropping off passengers in an unsafe yet convenient location.
- Regulating the gig economy: Platforms are usually located overseas and arrange work innovatively, so gig work is challenging for regulators. There's also limited data sharing between platforms, regulators, and other agencies, meaning we have a limited understanding of the gig economy and its effects for road safety in New Zealand.
- Employment status: Most, if not all, gig platforms see their workers as contractors – not employees. This means workers have limited job support from platforms and each other, and they can't collectively bargain or form unions for better conditions. This affects the overall conditions of gig work, and therefore road safety.
- Increasing cost of living: The increasing cost of living has meant more new gig drivers. Overall, this increases competition and reduces driver earnings. More financial pressure means more people doing gig work as well as other employment, and working across multiple platforms (multi-apping). This can lead to gig drivers working increasingly long hours to earn enough money and rushing between jobs, meaning long workdays, fatigue, mental overload and road safety risk.
- Road infrastructure: Road design (particularly in central city areas) doesn't allow for gig drivers and their need to park often, so drivers often park illegally. Platforms may also encourage unsafe behaviours – for example, by directing drivers to pick up or drop off passengers on bus lanes, or directing delivery drivers to make unsafe U-turns. Poor road conditions and other road users' risky behaviours also add to risk.
- Occupational health and safety (OHS): Both contract gig drivers and gig platforms are seen as a person conducting a business or undertaking. The OHS obligations of each aren't clear. Many drivers can't access the support they need to properly understand the requirements, and platforms refuse responsibility for drivers' OHS. These factors have implications for gig workers' road safety.

Recommendations

This study found limited evidence of serious road safety harm related to gig work. However, there is reported harm, and the gig work system has multiple risks. Gig work is becoming the main type of work for many people, and the proportion is likely to increase. This means government agencies should research how other countries have effectively regulated the gig economy and do the same to prevent outcomes similar to those overseas.

We also need quality data to inform and justify the regulations. For existing data sources, the researchers recommend:

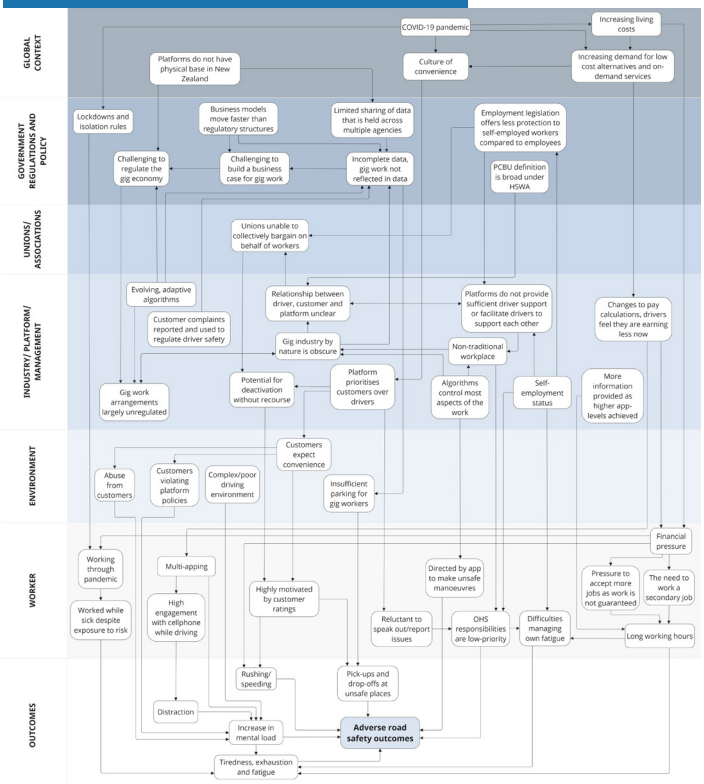
- reviewing the passenger endorsement and small passenger service licence dataset
- examining whether driving hours data can and should be shared across platforms and other driving industries
- regularly monitoring the Crash Analysis System for data on gig worker death and serious injury incidents, and encouraging accurate recording of causal crash factors
- reviewing platforms' complaints registers for customer reports on road safety incidents and encouraging platforms to report customer and driver incidents.

Regulation

Government agencies should develop clear guidelines and regulations for gig work. There's a range of international measures that may provide examples for New Zealand.

The design of app algorithms is also mostly unregulated, and it's difficult for regulators to keep pace with industry innovation. Government agencies should examine whether design elements of the work can be regulated, independent of workers' employment status.

AcciMap (from page 100 of report)



The place of gig workers should be more consciously considered within city strategies, and government agencies should further develop infrastructure to meet their needs accordingly. For example, designated pick-up and drop-off locations may promote safer and more predictable gig worker driving.

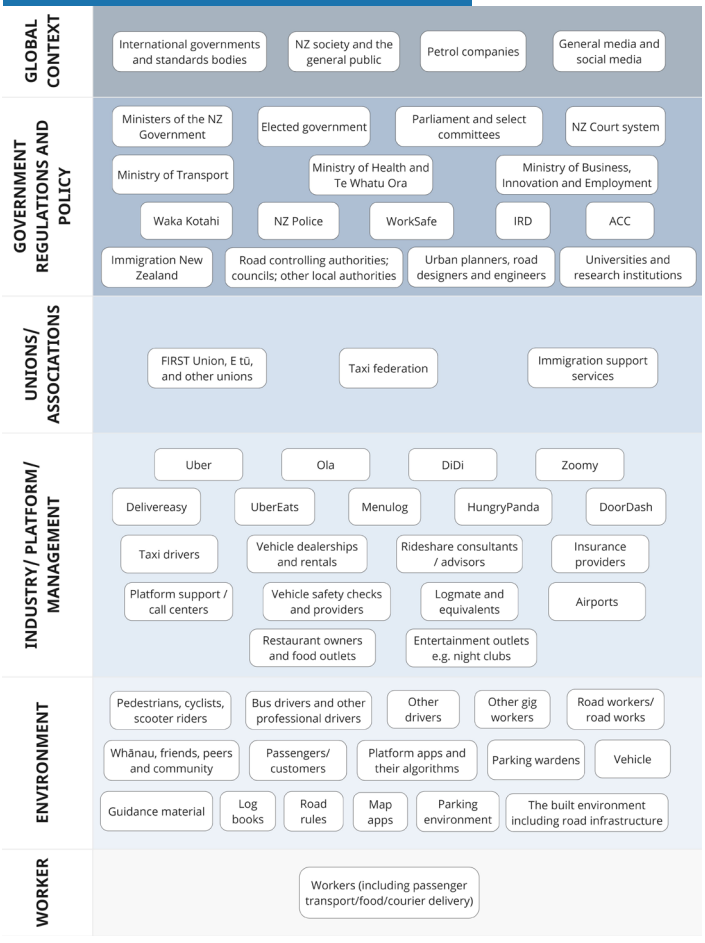
As cities intensify, gig workers may make more use of riskier travel modes such as bikes, motorbikes, and e-scooters. Cities should plan for this through parallel plans for safer cycling and micromobility.

Government agencies should either improve drivers' access to road safety and health and well-being information when beginning gig work or require gig companies to provide this support.

Further research

This research shows that exposure and responses to road safety risk and the likelihood of harm may differ by gig driver segments. A comprehensive driver segmentation study would help us to better understand this.

Actor map (from page 98 of report)



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