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Acusensus 'Heads-Up' Solution

Addressing Dangerous Driver Behaviours

Parliamentary Inquiry into the increase in Victoria's road toll

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Distraction and Impairment – Inadequately Addressed



THE AGE THURSDAY, DECEMBER 26, 2013

8 NEWS

Melbourne man dies in LA bike lane smash

Nino Buccì

A Melbourne man has died after being hit by a car allegedly driven by a drunk driver while riding his bike in Los Angeles.

James Rapley, 29, was riding his bike on Sunday when he was hit from behind by a vehicle that had drifted into the bike lane.

Mr Rapley had been working in Chicago as a software developer, after studying in Melbourne and growing up in Seymour.

His father, John, said he had flown from Chicago to Los Angeles a day before his flight home for Christmas because he was nervous that bad weather would delay his plans. He hired a bike for a day when he was struck in the Pacific Palisades, a hilly area to the west of the city, about 9am (Los Angeles time).

"He was the sort of kid everyone hopes to have as a son," John Rapley said.

"I just really want to get the message out that drink driving can affect you anywhere and it's so stupid."

John received a call at 5.30am on Monday, Melbourne time, telling him his son had died.

Mr Rapley had worked in the US for six months for Groupon, after turning down a role with Google and working in Melbourne for IBM and Redflex Traffic Systems.

John said his son had been strong and



James Rapley

athletic and the Los Angeles Police Department had been surprised he was able to tackle the hill on a hired bike.

He had attended Melbourne University on a full scholarship after graduating from high school with an ENTER score of

99.45 and completed a double degree, before being employed by IBM a year before he graduated. While at university, he had played Big V division two basketball for the Melbourne University club, where he had also been assistant secretary.

A friend and former colleague said Mr Rapley was well-mannered and "just the sort of person you want to be".

"One of the best blokes I have known," the friend said.

John Rapley said the Los Angeles police had told him the 19-year-old driver, who was at the scene when police arrived, had been drinking. Mr Rapley was reportedly thrown four to five metres after the impact of the crash and died in hospital.



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COMMERCIAL-IN-CONFIDENCE

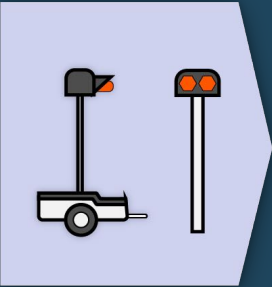
Journey to an Effective Solution

- Objective: Address distraction as a major cause of road trauma
- Method: Blank canvas exploration of possible solutions:
 - Apps
 - In-vehicle aids
 - Device block-outs
 - Automotive improvements
 - Enforcement
- Conclusion: Enforcement the only effective solution identified

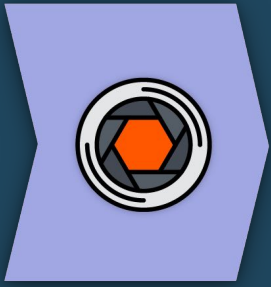


Overview: Acusensus 'Heads-Up' Solution

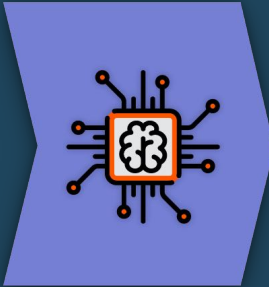
Automated Enforcement – Fixed and Transportable



Deploy



Capture



Analyse



Review



Acusensus 'Heads-Up' Solution Evidence

Anytime, anywhere, any speed



Captured Image

Patent Pending Technology, Accurate to 300km/hr

Vehicle Speed: 84 km/h



Security, Privacy, Quality and Review are Paramount

The privacy of road users and protection of their personal data is of great importance to Acusensus.

- Images captured that do not show an offence are immediately and automatically deleted
 - Typically **95% of captured images are never seen** by a human
- Secure data storage, secure communication, extensive audit and monitoring systems
 - Evidence packages are encrypted and signed on-site, only the authority holds the decryption key
- Privacy protections built in
 - Human reviewed images anonymised
 - Automated image pixilation systems

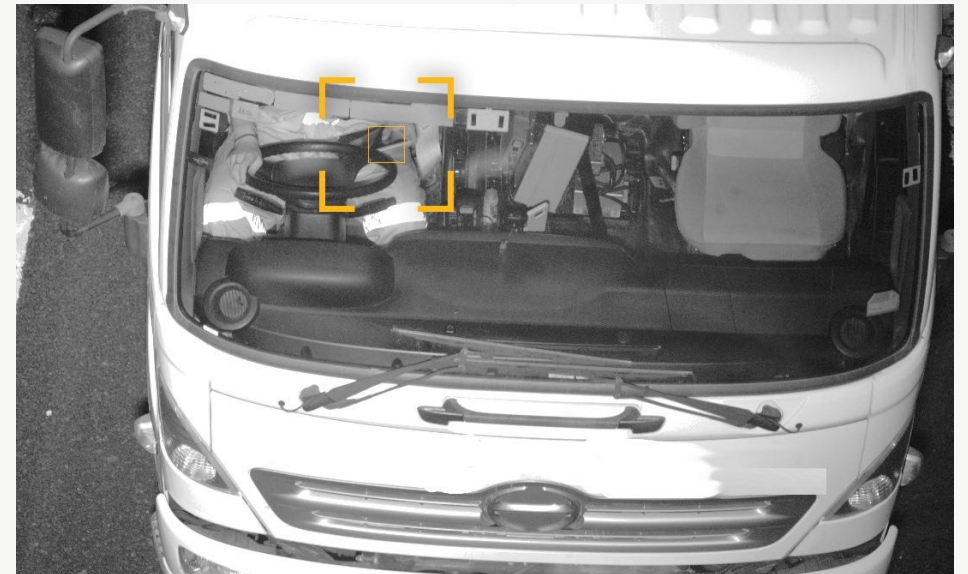


NSW Enforcement Program

- World's first mobile phone enforcement program
 - Emphasis on Rural and Regional Roads via Transportable (trailer) Solution
- Since the first NSW pilot conducted in January 2019, the rate of offences **has fallen steadily from 1.22% to 0.27%**¹ - NSW deputy secretary Tara McCarthy
- The program will progressively expand by 2023 to:
 - introduce approximately **45 cameras**²
 - perform **135 million vehicle checks annually**²
- Independent modelling commissioned by NSW shows that these cameras could **prevent around 100 fatal and serious injury crashes over five years**²

1. <https://www.dailytelegraph.com.au/news/nsw/mobile-phone-traffic-cameras-detect-tens-of-thousands-during-covid19/news-story/9eddbde067234bb20dc236faa87a04b8>

2. <https://roadsafety.transport.nsw.gov.au/staying-safe/mobile-phones/technology.html>



Victorian Pilot

- 2 Transportable Trailer Cameras deployed from July 2020 to October 2020 at metropolitan and regional locations¹
- In the first month:
 - 200,000 vehicles checked
 - **4,000 drivers** illegally using a mobile phone
 - **2% of drivers** illegally using a mobile phone
- Seatbelt compliance enforcement detection tested
- Speed enforcement capability tested
- This trial allows Acusensus to provide the state with real-world examples of offences captured by our solution without enforcement

1. <https://www.heraldsun.com.au/truecrimeaustralia/police-courts/new-cameras-nab-thousands-of-distracted-drivers-on-phones/news-story/a935170554292356a8aaf76652687bad>



An Universal Enforcement Solution



Important Learnings for Road Safety Programs

- Enforcement camera programs drive behavioural change – fourfold reduction in phone use in NSW
- Trailer deployment methodology has advantages over traditional mobile speed enforcement (e.g. worker safety, deployment durations, deployment hours)
- The same platform can be used to address multiple road safety challenges simultaneously
- A real-time solution can provide image data live via the cloud to Police to assist road side policing
- New technology offers pathways to significantly reduce the road toll by addressing existing and growing problems





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