



# CYCLIST REPORTING OF INCIDENTS TOOL

## Toward safer cycling: A new cyclist incident reporting system

Cycling has numerous health, environmental, and economic benefits; however, the perceived and actual risks of cycling act as a strong barrier to prevent people from using bicycles as a form of transport. The statistics around cycling safety make for sobering reading. Globally, cycling fatalities make up around 6% of the total number of road deaths (WHO, 2015) and research has found that cyclists are 12 times more at risk of death than car drivers (Pucher & Dijkstra, 2003). In Australia specifically, cyclists make up 1 in 40 of all road crash deaths (Garrard et al., 2010).

Despite significant progress in enhancing cyclist safety, vehicle-cyclist collisions remain poorly understood (English & Salmon, 2017; Goode et al., 2015; Salmon et al., 2021). Existing crash analysis systems are limited, focusing only on a small set of causes, and there are few mechanisms available for road users to report sufficient details about collisions and near misses. In particular, cyclists have limited opportunity to report their crashes and near misses. As a result, interventions designed to prevent cyclist collisions have not had the desired impact, partly because they are not based on a full understanding of the contributory factors involved.

A recognised approach for helping to understand and prevent safety compromising incidents is the use of an incident reporting and learning system (Goode et al., 2018). This involves providing a mechanism to report incidents and their contributory factors and then using the resulting data to inform safety management activities. Whilst the use of formal incident reporting and learning systems is an accepted component of safety management in most safety critical domains, they are yet to be adopted in the area of cyclist safety.

### Cyclist Reporting of Incidents Tool (CRIT)

Up until now, a valid and easily accessible cyclist incident reporting and learning system has not existed in Australia. As part of a program of research funded by the Road Safety Innovation Fund, we have developed the Cyclist Reporting of Incidents Tool (CRIT). The CRIT App provides cyclists with a free to use, simple, and quick way of reporting the crashes and near miss incidents that they experience whilst cycling, including important information regarding the incidents themselves (e.g. time and location, incident description) and the contributory factors involved. CRIT users also provide information on their weekly cycling hours, which enables the calculation of crash and near miss incident rates. The incidents reported through the CRIT App form the National Incident Dataset (NID).

With anticipated users from all over Australia, the information submitted to CRIT will be used by the research team to identify trends in incidents and incident causation, enhancing our understanding of cyclist crash and near miss causation and informing the development of strategies designed to enhance cyclist safety.

### For more information

Visit the project's website: [www.usc.edu.au/CRIT](http://www.usc.edu.au/CRIT)



# CRIT data collection

The CRIT App collects data that will enable a detailed understanding of cycling crashes and near misses, including incident type, location, and severity.

Enter incident details

Enter incident location

Enter incident severity or potential severity (for near misses)

Enter the factors that contributed to the incident

## CRIT key features

The CRIT App provides a summary of the national data for crashes and near misses, as well as your own personal incident data. The CRIT App also calculates an incident rate which will show the occurrence of incident per 1000 hours cycled.

Provides a summary of incidents across all users, including:

- overall incident rate
- crash incident rate
- near miss incident rate
- top three most frequently reported contributory factors.

Users enter their weekly cycling hours to enable the calculation of overall, crash, and near miss incident rates.