

# CYCLONE ALFRED ON THE ROAD

## DRIVING BEHAVIOURS IN EXTREME WEATHER

Produced by the MAIC Griffith University Road Safety Research Collaboration

Tropical Cyclone Alfred brought heavy rain, strong winds, and dangerous road conditions to South East Queensland and Northern New South Wales. This study aimed to explore who chose to drive during the cyclone, when and why they travelled, and the factors that influenced their decisions. Insights from this research aim to guide public safety messaging, support emergency planning, and help reduce road risks in future extreme weather events.

### TIMELINE



**21-23 FEB 2025**  
Tropical low formed in the Coral Sea



**27-28 FEB 2025**  
Intensified to Category 4 (severe)



**1-7 MAR 2025**  
Weakened while approaching coast



**8 MAR 2025**  
Landfall; severe weather and flooding in Qld/NSW

### WHO DROVE IN EXTREME WEATHER?

- Surveyed 367 drivers. Final sample: 319 drivers. *(Excluded 42 learner drivers and 6 people who drove less than a few times per week)*
- Sample demographics:
  - Mean age: 22.16 years
  - Mean driving experience: 5.68 years
  - 77.74% female, 21.63% male, 0.63% other/unspecified
  - 81.85% employed
  - 6.58% married, 36.68% in a relationship, 55.49% single, 0.31% divorced, 0.94% other/unspecified
  - 15.67% had dependents, 84.33% did not have dependents
  - 62.38% provisional licence, 37.62% open licence

None of the demographic variables were significant predictors of driving behaviour.

**HIGHER PERCEIVED DANGER WAS ASSOCIATED WITH LOWER ODDS OF DRIVING DURING THE CYCLONE**



### WHEN DID PEOPLE DRIVE?



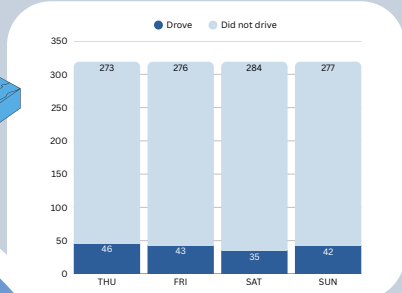
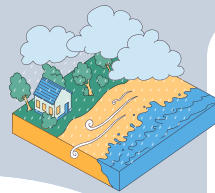
This study focused on driving behaviour during the four most extreme weather days:



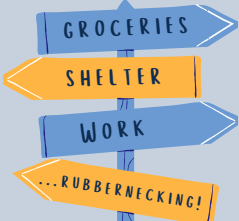
**29.47%** **drove at some point** on these 4 days

Of the 310 people who reported driving:

- 1.94% drove every day
- 7.42% drove 2 days
- 6.45% drove 3 days
- 11.60% drove 1 day



The number of people driving decreased from Thursday to Saturday, and then increased again on Sunday.



### REASONS FOR TRAVEL

Participants reported a range of reasons for travelling during the four days, from essential trips for food and safety, to non-essential outings like going to the gym or out for coffee.

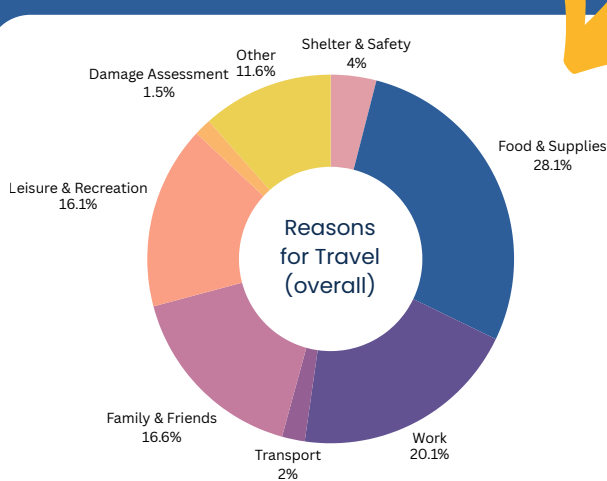
In the lead-up to the cyclone's projected landfall (Thursday and Friday), most trips were for food and supplies.

Friday saw an increase in visits to family and friends, likely due to power outages that afternoon and evening.

Work trips declined on Friday and Saturday, possibly reflecting business closures during this period.

### LESSONS WE LEARNT

- **Reduced travel improves safety:** Many drivers limited trips during peak extreme weather days.
- **Essential trips dominate:** Most driving was for food, supplies, and safety, highlighting the need to maintain access to essential services.
- **Power impacts travel:** More visits to family/friends during outages suggests people seek social support and safety, which should be factored into planning.
- **Work trips drop due to closures:** Remote and flexible work options help keep people safe during extreme weather.
- **Damage assessment:** Post-cyclone trips for checks and rescues highlight the need for clear road closure updates and driving safety messages.



**FEWER TRIPS MEAN SAFER ROADS.**

**PLAN AHEAD FOR ESSENTIALS.**

**STAY CONNECTED WITHOUT HITTING THE ROAD.**

