INTRODUCTION
- Eco-Driving = energy efficient use of the vehicle.
- Smooth acceleration and deceleration, and anticipating traffic behaviours.
- Drivers need accurate speed information to eco-drive.
- Digital speedometers = precision; Analogue speedometers = rate of change information.
- Do digital vs analogue speedometers affect the way drivers eco-drive?

METHOD
- 2 x 2 design (N= 25)
  - IV1: Eco training vs No Eco Training (between subjects)
  - IV2: Analogue vs Digital (within subjects)
- ½ participants were given instructions on how to eco-drive. ½ participants were given no instructions.
- All participants then completed 2 x 30 mile simulated drives through an urban environment (1 with each speedometers).
- Speed zones varied from 30mph to 70 mph.

RESULTS
- Significant main effect of eco-driver training. Eco trained drivers had smaller.
  - SD of acceleration
  - SD of deceleration
  - Lane deviation
  - Drove in a higher gear
  - smallest F, F(1, 45) = 4.65, p = .04, ηp2 = .09.
- No significant main effect of speedometer display.
  - Although 74.07% of participants self-reported that they felt different speedometers changed the way they drove and/or attended to the environment.
- Significant interaction effect between IVs.
  - Participants that received eco-training had smaller SD of speed with analogue displays (compared to digital) and the converse was true for the non eco-trained condition.
  - F(1, 45) = 4.88, p = .03, ηp2 = .10.

DISCUSSION & LIMITATIONS
- There is a complex interaction between how drivers use speedometer information dependent on their driving motivations.
- Drivers have poor self perception of factors that affect their driving behaviour.
- Statistical power was limited by small sample size.
- Collected eye tracking data is yet to be analysed and is likely to reveal any attentional differences.

CONCLUSION
- Drivers can successfully be taught how to eco-drive with minimal instructions
- The results suggest that different speed displays may be utilised differently dependent on your driving goals and motivations.

ACKNOWLEDGEMENTS
This project was funded by the Bridging the Gap - Next Generation Feasibility Awards