From Red to Green

The way forward for Cycling, Traffic Signals and ITS
From Red to Green

- The inconsistencies regarding traffic signals and cycleways has been investigated in the past by NZTA and SNUG
  - This has been understood for years but it is still hampering designers
- Can cycleways be legally safe and legally functional?
- Can we develop guidance for intelligent technology systems?
Legal or Functional Cycleway?

• A legal right turn from a cycleway is unsafe

3.2 Traffic signals in form of disc

(1) While a green signal in the form of a disc is displayed,—

(a) a driver facing the signal may proceed straight ahead or may turn left or right at an intersection unless a red signal in the form of an arrow or a special sign prohibits that movement;

(b) a driver facing the signal, including a driver turning left or right, must—

(i) proceed with due regard to the safety of other road users; and

(ii) give way to pedestrians, riders of mobility devices, and riders of wheeled recreational devices lawfully crossing or about to cross the roadway; and

(iii) give way to motor vehicles and cycles lawfully proceeding straight ahead;

(c) a driver facing the signal and turning right must give way to vehicles approaching from the opposite direction and lawfully turning or about to turn left.

(2) While a green signal in the form of a disc is the only signal displayed, pedestrians, riders of mobility devices, and riders of wheeled recreational devices facing the signal may enter the roadway unless a special signal for pedestrians indicates a flashing or steady red standing human figure symbol.

(3) If 2 drivers travelling in opposite directions each has a green signal to proceed and this clause does not specify who must give way, the driver required by clause 4.2 to give way must give way accordingly.

3.7 Traffic signals in form of cycle symbol

(1) While a green cycle symbol is illuminated, cyclists may proceed straight ahead, or turn left or right.
Legal or Functional Cycleway?

• A functional left turn from a cycleway is illegal

[6.4(2A) A steady vehicle display of a red arrow applies to all traffic intending to travel in the direction of the arrow and is not overridden by a white or yellow B signals for buses, a white or yellow T symbol for light-rail vehicles or a green or yellow cycle signal for cyclists.]

6.4(2) A steady vehicle display of a green, yellow or red disc signal applies to all traffic facing those signals, but may be overridden:

• (c) for a green disc display, by:
  • (i) a red or yellow arrow signal for traffic intending to travel in the direction indicated by the arrow;
  • (ii) a red B signal for buses, a red T signal for light-rail vehicles or a red cycle signal for cycles.
Creating Cycleway Consistency

- Peloton have been actively working with the CCC to develop standard designs and trials of new and improved cycleway technology
  - Shared Crossing Facility Trial
  - Mast Arm Policy
  - Standardise usage of tactile paving and aspects
Where is Future Consistency Needed?

- Peloton have been attempting to design a separated cycleway that is fit for purpose, incorporating:
  - Advanced detection
  - Intelligent camera detection
- When do you use these?
What more needs to be done?

- Use Signals NZ User Group and NZTA to drive cycleway traffic signal standards

- Lots of good research has taken place but we need a push so designers can legally and consistently build cycleways that people want to use!