Why do cyclists run red lights?

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Lazy
Impatient
Dishonest unlicensed cheating scum

International research

- Average 7% of cyclists run red lights (Melbourne), not as widespread as drivers perceived
- Main predictive factor is direction of travel; cyclists turning left were the most likely to ‘run’ a red light
- In fatal, serious or slight cycle collisions, cyclists running a red light was not a top 10 factor

But what about NZ?
Observational surveys

- 2 T-intersections and 3 crossroads, AM peak, fine weather
- Busy central city locations with varying types and signal operations
- Over 600 cycle movements were analysed, 9,500 pedestrian movements and almost 12,000 vehicle movements

Cyclist behaviour at intersections

Red light ‘running’ by all road users (%)

<table>
<thead>
<tr>
<th></th>
<th>Queen/ Wellesley</th>
<th>Queen/ Wakefield</th>
<th>Queen/ Quay</th>
<th>Queen/ K Rd</th>
<th>Dom/ Valley</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycle red light runners</td>
<td>62</td>
<td>51</td>
<td>20</td>
<td>13</td>
<td>2</td>
</tr>
<tr>
<td>Cycle red light runners</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Pedestrian red light</td>
<td>2</td>
<td>11</td>
<td>3</td>
<td>2</td>
<td>28</td>
</tr>
<tr>
<td>Pedestrian red light</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Average red light running by all road users

- Cyclists 20%
- Cyclists (excluding use of Barnes Dance) 3.9%
- Pedestrians 3.9%
- Vehicles 1.2%

Least pedestrian provision

3 2 1 Go! Now you go
So why do they do it?

Online cyclist surveys

2. When I arrive at the traffic lights at a FOUR WAY INTERSECTION wanting to travel STRAIGHT ahead (the red arrow in the picture) and they are showing a red light:

- Always
- Usually
- Sometimes
- Never

Straight ahead cyclists

- 86% always obeyed red
- 3.2% always ran red

Top of a T

- 78% always obeyed red
- 18% always ran red

Cyclists turning left

- 67% always obeyed red
- 37% always ran red
Cyclists turning right

91% always obeyed red
5.3% always ran red

Cyclists’ motivation for ‘running’ red lights

#1 Reason: “I feel safer to proceed ahead of traffic”

- Impatience
- Overly long traffic signal cycle times

Reason #2: The traffic light sensors aren’t always triggered by my bike

Impatience

I will go slightly ahead of the green light. By understanding the sequence & watching the opposing lights & traffic. I do this to avoid moving off at the same time as the cars behind.

It is safer to start off ahead of traffic, especially buses.

Overly long traffic signal cycle times

Often safer to run the red if there is no opposing traffic in order to get through intersection safely without the risk of conflict with other traffic.

I always feel most vulnerable on my commute when starting from a standstill away from an intersection.

The main reason for me running a red light is to get ahead of traffic so I don’t get run over immediately as the light turns green.

I don’t trigger a lot of the lights so will end up going thru the red.

Traffic lights are tedious due to their lack of ‘smarts’ and struggle to recognise the presence of cyclists.

The only time I am tempted to go through on red is when it is early morning and I haven’t triggered the sensor for the lights.

If the lights are not triggered by my cycle, I will run a red when traffic permits.

Sometimes the sensor doesn’t work if I’m the only person there so I use the pedestrian crossing to get across.
I need to make a turn/change lanes and it’s easiest/safest to do this by ignoring the traffic lights.

**Reason #3:**

**Safety suggestions**
- More sensitive traffic signal sensors, to detect cyclists more easily
- Cycle ‘head start’ phases
- Greater enforcement of unsafe motorist behaviour towards cyclists
- Feeder cycle lanes to access advanced stop boxes

**Cyclists using Barnes Dance phases - should we?**

<table>
<thead>
<tr>
<th>Do you think cyclists should be legally allowed to cross during a dedicated pedestrian phase?</th>
<th>Yes, I do</th>
<th>35%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, but only if they stop first and wait for pedestrians to finish crossing</td>
<td>48%</td>
<td></td>
</tr>
<tr>
<td>No I don’t</td>
<td>9%</td>
<td></td>
</tr>
<tr>
<td>No, it would be unsafe to cycle through crowds of pedestrians</td>
<td>8%</td>
<td></td>
</tr>
</tbody>
</table>

**Relevance for ‘Safe System’**
- Road rules should not put cyclists in situations where they feel they must choose between acting legally and protecting their own safety
- Overwhelmingly, cyclists run red lights to clear the intersection ahead of following vehicles – for safety, not impatience
- We must find ways to allow cyclists to behave in a safe and legal manner at signalised intersections
- From this study, there are clearly several potential system improvements that could be made

**Recommendation #1:** Find ways to allow cyclists to clear an intersection ahead of other vehicles

- E.g. cyclist advance signals on busy cycle routes where a post-intersection merge is required
**Recommendation #2: Allow cyclists to turn left against a red light**

- Most common red light offence
- Safe?
- Done overseas (Idaho Stop Law)
- Treat as a Give Way
- Assess risk to peds

**Recommendation #3: Allow cyclists to use Barnes Dance phases**

- Allows cyclists to safely clear intersections ahead of vehicles or undertake tricky turns
- Treat Barnes Dance as a Give Way (to pedestrians)

**Recommendation #4: Find ways to improve cyclist detection by intersection sensors**

- Psst. It’s over here
- Cyclists not aware how to activate detectors
- Detectors not calibrated to detect cyclists

**Spot the cyclist**

**Or they are in the wrong place**
Conclusion

• Cyclists make choices about their behaviour on an intersection-by-intersection basis
• Overall, cyclists’ red light running is a relatively infrequent and safe behaviour
• Levels of red light running vary but (if use of Barnes Dance phases excluded) it’s the same as jaywalking (3.9%)
• Higher numbers of vehicles ran red lights than cyclists but the proportion was lower (1.2%)
• Cyclists want to clear the intersection ahead of other vehicles for safety reasons – not impatience
• Commonly cyclists run red lights to turn left

Learnings

There is stuff we can do

• Sensor loops in the right place
• More cycle lanes and boxes
• Use technology to give cyclists head start
• Legalise low risk red light running (Barnes Dance, left turn) – make cyclists give way
• Stop slagging off cyclists for running red lights. Pedestrians are just as bad and neither group kills people like the alarming number of cars running reds

Thank you.

Questions?