Cycling Scotland

Scottish road users' awareness of Highway Code rules relating to vulnerable road users.

Summary of evaluation findings

March 2024

About:

Cycling Scotland received funding through Transport Scotland's Road Safety Evaluation Fund in June 2023 to test public understanding of hazard awareness relating to vulnerable road users, especially people walking, wheeling and cycling.

The purpose was to understand existing knowledge of rules and regulations that are intended to support safe road users.

In preparing this work, Cycling Scotland is grateful to Stuart Hay and Robert Weetman of Living Streets for providing guidance and review in the development of the methodology and questionnaires.

This paper provides a summary of the work undertaken, key findings, and subsequent actions.

Background:

Perception of danger remains the most significant barrier to more people cycling and a major barrier to walking. To ensure safe road use, it is essential that road users comply with road rules to take responsibility for the safety of themselves and others.

Data emerging from polling highlights significant gaps in public awareness of safe behaviours to protect vulnerable road users. Through this evaluation the aim was to gain a more comprehensive understanding of existing knowledge and understanding of relevant guidance and regulation – including knowledge of highway code, interpretation of infrastructure design, road markings and signs.

Working with Living Streets, the aim was to understand how the hierarchy was understood to support all users, from people cycling taking responsibility for those walking and wheeling and ensuring that people using vehicles with greater regulation and licencing requirements understand their responsibilities to all vulnerable road users.

In 2023-24, Cycling Scotland supported 70,000 people across Scotland with direct access to National Standard training, and related training outcomes for other road users. These courses have been positively evaluated against their intended outcomes. In undertaking this review, it is possible to identify gaps in the course content or clarification of priority messages to ensure that more people receive relevant and appropriate education to support safe road use.

Methodology:

The evaluation was based on two distinct activities:

- A population sample survey targeted at people with regular driving experience, led by Progressive Partnership
- An analysis of road-user behaviour at four identified sites across Glasgow and Edinburgh through video collection conducted by Street Systems

Recognising the relevancy of information collected relating to the changes to the highway code, along with ongoing monitoring through RITS (Road Safety Information Tracking Study)

and the Give Cycle Space Campaign, this evaluation was designed to complement existing data sources to provide a broader understanding. In this way, existing data was referenced, rather than repeated, to ensure staff and contractors could take a more focused approach to identify any wider knowledge gaps.

By working with Streets Systems the evaluation aimed to gain additional insight into actual behaviours – both as qualitative focus study alongside survey data, and to act as a comparison with existing data collection by Living Streets on contemporary road design – including continuous footways.

Evidence collection:

Highway Code Awareness Research:

Progressive Partnership were commissioned to run a representative sample survey of adults in Scotland with driving experience. Progressive Partnership has collected the most recent RITS data for Transport Scotland, and this experience was used to help develop a question set and methodology.

A 10 minute online survey was distributed to people across Scotland who drove regularly (at least once a week).

A total of 519 responses were collected between 18th September and 4th October 2023. This provided a dataset with an approximate margin of error of between +/- 0.86% to +/- 4.30% calculated at the 95% confidence level (market research industry standard).

Road User Junction Interaction Analysis:

Street Systems were identified to provide video studies across four sites in Glasgow and Edinburgh. Living Streets worked with Street Systems on their recently published report into Inclusive Design at Continuous Footways, and similar capture technology was used. Sites were selected featuring a mixture of on-road cycle lanes, without additional pavement treatment, to provide a contrast to earlier research.

Street observation equipment was installed to automatically collect data between the 11th and 16th October 2023. Across the four sites, 1,205 interactions were captured. Cycling Scotland appointed staff resources to review and categorise the interactions as relevant to the review. Due to the complexities of the road layout at one of the Edinburgh sites, the decision was taken not to include interactions in the study. 354 relevant interactions were identified as relevant. These were categorized using methodology adapted from Living Streets earlier research.

Evaluation Findings:

Progressive Partnership's key summary findings cover 34 slides, featured within the appendices.

The key learning identified by Cycling Scotland includes:

- 3 in 4 drivers say they know the Highway Code well, but only half are aware of changes introduced in 2022
- 40% of drivers have not looked at the Highway Code since passing their test – the majority of those surveyed passed their test at least 20 years ago

- In questions relating to the Highway Code, drivers scored an average 63% (the pass rate for the theory test is 86%)
- Younger drivers (age 17 to 34) achieved a lower score than older drivers (age 35+)
- Knowledge of the Highway Code around people walking and cycling is particularly weak. For example just 21% of respondents correctly identified that it is legal to filter in slow moving traffic, and only half of drivers could correctly prioritise modal type in the hierarchy of road users
- 36% of drivers surveyed also cycle. More than 10% of drivers surveyed **do not** agree it is important to prioritise the safety of people cycling (equivalent to ~300,000 vehicle drivers across Scotland).

The survey included specific questions on interactions at junctions, including giving priority when turning left. This allowed for comparison between survey responses and actual behaviours at identified junctions.

Between the attitudinal responses and observed behaviours there was a reasonable correlation, particularly for interactions between people driving and people cycling. However, in less than half of interactions were people driving observed to give priority to people walking across side roads (including those already crossing, and those waiting to cross).

“When turning into / out of a side street I always check for and give way to other road users such as people walking and cycling”. 79% agree and drivers gave way in 71.1% of relevant interactions at junctions.

“Drivers should not cut across vulnerable road users going straight ahead when they are turning into or out of a junction”. 95% agree and drivers gave way to people cycling in 85% of relevant interactions at junctions.

“At a junction, drivers should give way to pedestrians, whether they are crossing or waiting to cross a road”. 78% agree and drivers gave way to people walking in 43.2% of relevant interactions at junctions.

A summary of all interactions observed is included at the end of this report:

Implications:

The evaluation was intended to supplement existing data sets, and it is important to consider the wider context of each finding.

Familiarity with the Highway Code:

Although 75% of respondents said they knew the Highway Code well, or fairly well, just 52% of those surveyed were aware of changes introduced to the Highway Code in 2022. Although low, this does represent an increase from the YouGov polling by Cycling UK published in January 2023, which found as many as 64% of people in Scotland heard not much or nothing about the Highway Code Changes.

However, our RSF funded evaluation was not limited to changes made to the Highway Code, but also to longstanding guidance (such as the original wording of Rule 170 on giving way to pedestrians if they have started to cross the road), to support the safety of people walking, cycling and wheeling.

40% of drivers surveyed admitted they had not consulted the Highway Code since passing their driving test, with over 60% of respondents having passed their test more than 20 years ago.

This suggests the importance of wider communications to provide reminders and periodic updates. The most recent data from RITS (2021) found that 28% of drivers were aware of communications relating to driving and road safety.

While LGV / PCV drivers are required to complete 35 hours of periodic training every five years, no such requirement exists for drivers of vehicles under 3.5t.

Awareness of regulations and guidance to protect vulnerable road users

Of those drivers surveyed, 54% were able to correctly identify the hierarchy of road users, although almost 1 in 5 drivers incorrectly identified some motor vehicles as more vulnerable.

Data from Cycling Scotland's Give Cycle Space 2023 evaluation found that only 70% of drivers agreed that they 'believe that people cycling have equal rights on the roads as drivers', further highlighting ambiguity around the rights and responsibilities of road users.

Rule H1 was introduced as part of changes to the Highway Code in 2022. However, evaluation shows that drivers were also less clear on other guidance that pre-dates the revision.

On average, drivers got 12 of 19 questions about the Highway Code correct – an average score of 63%. The current pass rate for the driving theory test is 86%. In making this comparison, it is important to note that the Progressive survey had a significant focus on guidance for protecting vulnerable road users, rather than a broader overview as would appear in a theory test.

Of significant concern is interaction with pedestrians at side roads. While 78% of respondents answered correctly that "at a junction, drivers should give way to pedestrians whether they are crossing or waiting to cross the road", a sizeable minority got this response wrong, and evidence from the Street Systems junctions analysis demonstrates that priority is given to pedestrians in less than half of interactions at side roads.

In the RAC's 2023 Report on Motoring, data indicates that 71% of drivers say "they now give way to pedestrians who are waiting to cross at a junction. However, only 24% say that, when they are pedestrians, they find other drivers willing to let them cross in such situations. This difference between stated and perceived behaviours, is consistent with the findings of this study.

There was also limited understanding of guidance to support people cycling, with only 21% recognising the legal right to filter in slow moving traffic (Highway Code rule 88 and rule 160), and just 58% identifying the right to ride in the primary position (centre of the lane) as promoted in the UK National Standard for Cycle Training. This is consistent with data captured as part of the Give Cycle Space evaluation, which found that 51% of drivers could correctly identify the road position of people cycling from the edge of the road.

As part of the RITS survey, 85% of drivers agreed that they "believe people on pedal electric bikes fail to obey the rules of the road". Data from the Highway Code Awareness survey suggests that lack of knowledge may contribute to this belief.

Research into contributory factors show that "73% of the top 5 CFs are assigned to the driver of the vehicle in collision with the person cycling" and "the person driving failed to look properly more than twice as many times as the person riding the bike". There is insufficient

information to determine whether lack of awareness of guidance relating to road positioning or filtering has an influence on this. However, this data supports the need to highlight the responsibilities placed on drivers to watch out for VRUs and reduce the risks they pose to them.

Disparities in knowledge of drivers based on age

The In-Depth Road Traffic Fatalities Report findings show that "a large number of young drivers (390 drivers aged between 16 and 35) were found to be at fault for the fatal collisions" and that "when younger drivers are involved in fatal collisions, they are more likely to have been at fault."

The responses to the Highway Code survey identified that older drivers generally achieved a higher score that younger drivers (13.39 vs 11.13 respectively), despite many older drivers not having consulted the Highway Code in over 20 years.

It could be suggested that older drivers may score higher as they can draw on their driving experience. The scores achieved across all ages reinforces the need for ongoing Highway Code-related education and appropriate enforcement.

Through the Bikeability Scotland cycle training programme, Cycling Scotland supports over 60,000 pupils a year to develop skills to make everyday trips by bike. This is the first significant practical learning opportunity to establish and embed the hierarchy of road users, with clear guidance on pupil's responsibilities to people walking and wheeling. Analysis of road user interactions at side roads highlights low application of Highway Code rule 170 / H2, and suggests the need to embed the new hierarchy of road users from a young age.

Vulnerable Road User training for drivers is another opportunity to consolidate this. Evaluation of the Practical Cycle Awareness Training as part of formal driver CPC found a 25% increase in the number of LGV/PCV drivers who recognised the benefit of vulnerable road user awareness training, highlighting the benefits of education on awareness.

Over 3,000 secondary school pupils participated in Cycle Awareness Training for Learner Drivers during 2023. Evaluation previously found that this training had a statistically significant and sustained impact on hazard awareness. A limited number of advanced driving instructors participated in this survey, with a shift in attitudes consistent with that of young drivers. The Bikeability Trust, operating in England with funding from the DfT, has been involved in the development of a 'Cycle Savvy' driver learning module, aimed at supporting driving instructors. Closer collaboration with industry may help reinforce learning for younger and less experienced drivers.

A minority of drivers do not agree with the importance of prioritising the safety of vulnerable road users. 92% of respondents agreed that "when driving, it's important to always prioritise the safety of people walking", and 91% agreed for people cycling. Although a minority, as a representative sample, data suggests that as many as 300,000 drivers across Scotland (9% of the driving population) are either unsure or disagree with the importance of prioritising the safety of vulnerable road users.
This reflects findings from the RITS survey tracking, showing that 10-15% of drivers disagree that "people cycling have the same rights as people driving", and information collected as part of Give Cycle Space evaluation, with 93% of drivers agreeing "we should protect the most vulnerable road users, such as pedestrians and people cycling".

These statements generally refer to beliefs and attitudes, rather than awareness of the Highway Code. This highlights the importance of not only communicating the guidance and regulations, but also the rationale behind reinforcing the Hierarchy of Road Users, as reflected in road safety casualty statistics.

The UK Parliament Public Accounts Committee report on Active Travel in England stated that "*communications to the public have not been enough to help tackle perceptions that active travel is unsafe or to encourage more people to take part. People's perception of the safety of active travel is as important as actual physical safety. There is significant public concern around safety and this remains a substantial barrier to getting more people cycling and walking. We are not convinced that DfT's messaging around the positive changes that have been made to improve safety, such as revisions to the Highway Code, or the benefits of active travel have been communicated effectively to the general public*."

Scottish Road Safety Data (Stats 19) from MAST, covering the five-year period 2018-2022, identifies the following casualties:

- People cycling: 2,850 casualties, 1,972 (69%) occurred at or near a junction, 1,644 (83%) of these were uncontrolled junctions.
- People walking: 4,970 casualties, 2,402 (48%) at or near a junction, 1,827 (76%) of these were uncontrolled junctions.
- Combined: 7,820 pedal cycle and pedestrian casualties, 4,374 (56%) occurred at or near a junction, 3,471 (79%) of these were uncontrolled junctions

Note: slight and seriously injured cycling casualties are understood to be substantially underestimated, by at least a half.

A sizeable number of casualties occur at or near junctions, with the majority of these being uncontrolled. The Highway Code changes are designed to influence safer behaviours at locations of higher risk like junctions.

Next Steps:

Cycling Scotland has shared preliminary findings with Transport Scotland following grant award from the Road Safety Evaluation Fund. Summary findings will be shared with other road safety partners to support wider progress towards the Road Safety Framework vision and aims.

Cycling Scotland has reviewed existing training resources and literature, aimed at both people developing skills to cycle, and promoting vulnerable road user awareness to other road users.

As an immediate action from this survey, Cycling Scotland is updating:

- Content on filtering, within Cycle Awareness Training
- Content within the Bikeability Scotland Rider's Guide, emphasising priority at junctions, to match materials already within the instructor guides and notes that "Priority: Pedestrians waiting to cross the side road have priority. When turning left out of a side road, prepare to stop and always give way to vehicles on your right on the main road."

Further information is available from training@cycling.scot

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Appendix A:

Junction Interaction Analysis – summary including all four sites.

EDI1

All interactions
+246, -67, 78% compliance
With cyclists
+191, -9, 95.5% compliance
With pedestrians
+55, -58, 48.7% compliance

GLA2

All interactions
+85, -72, 54.1% compliance
With cyclists
+67, -35, 65.7% compliance
With pedestrians
+18, -37, 32.7% compliance

GLA3

All interactions
+23, -5, 82.1% compliance
With cyclists
+23, -4, 85.2% compliance
With pedestrians
+0, -1, 0.0% compliance

EDI 4

All interactions
+115, -84, 75.2% compliance
With cyclists
+72, -4, 94.7% compliance
With pedestrians
+43, -80, 35% compliance

All Sites

All interactions
+469, -228, 67.3% compliance
With cyclists
+353, -52, 87.2% compliance
With pedestrians
+116, -176, 39.7% compliance