



TRANSPORT
SCOTLAND
CÒMHDHAIL ALBA

SRP8: Delivery Cyclists

Insights into an overlooked demographic



Executive summary

This research examined how the growing number of delivery cyclists (those who deliver food and other items to customers using a cycle) in Scotland use infrastructure. It also explored the travel patterns, concerns and needs of this group. The report also presents a number of recommendations from delivery cyclists to make their work safer, easier and more pleasant. We hope that the findings in this report will support transport planners and others to plan for good quality infrastructure that will enable sustainable last-mile delivery. This project was funded by Transport Scotland and carried out by Sustrans.

A total of 163 delivery cyclists in Edinburgh and Glasgow responded to our survey about infrastructure, safety and working needs. In addition, we conducted 20 semi-structured interviews to gain a more detailed understanding of delivery cyclist experiences. The delivery cyclists involved in our study were mostly men, mostly under 45 and more than half with English as their main language.

Delivery cyclists were clear about their views on the infrastructure that is their workplace, although on some topics views varied. Most delivery cyclists interviewed described bumpy, poorly maintained roads, with poor drainage systems, and obstacles such as potholes, cobblestones, manholes and fallen leaves which make cycling unsafe. Delivery cyclists stated that poor road conditions meant they had to be hyperaware to avoid accidents, increasing their mental workload. They also described costs associated with repairs to cycles due to poor road conditions, and a sense of conflict between cars and cyclists when they had to weave around or avoid hazards in the road surface. Alongside road quality, the provision of toilet facilities was also poorly rated by survey respondents as a factor affecting their cycling experience.

While cycle lanes are designed for use by cyclists, the needs of delivery cyclists may differ from the needs of other groups within the cycling population. In interviews, delivery cyclists said that there were protected or unprotected cycle lanes available for the majority of their delivery journeys, though these were frequently blocked by cars. Unprotected cycle lanes (designated by a painted line), when compared to protected cycle lanes (demarcated by vertical barriers such as wands), were perceived to offer benefits of clear separation from traffic, and the ability to move around obstacles and overtake other cyclists. However, unprotected cycle lanes also presented problems, as cars were reported to cut too close in front of cyclists when turning left.

Additionally, while some delivery cyclists we interviewed felt protected cycle lanes created a sense of physical safety, others thought they were dangerous to exit. Delivery cyclists recognised that, when using protected cycle lanes, they encountered fewer obstructions and experienced less pressure to cycle fast to keep up with cars. Delivery cyclists using cargo cycles described difficulties fitting their trailers into the space between the pavement kerb and the vertical barriers, and negotiating narrow or steep entries and exits when accessing separated cycle lanes. Most delivery cyclists thought shared paths with pedestrians were safe and enjoyable to use. Although some felt they were too narrow for both cyclists and pedestrians.

Delivery cyclist interviewees said dropped kerbs (where the pavement dips for a short distance to the level of the road or cycle lane) allowed them to skip traffic, access houses for delivery and escape uncomfortable interactions with drivers. Those using cargo cycles were particularly impacted by the lack of dropped kerbs. They said the absence of dropped kerbs presented challenges to them in doing their job.

In addition to examining the experience of using different forms of infrastructure, we also explored how safe delivery cyclists felt at work. A third (33%) of the delivery cyclists responding to our survey reported that they felt safe cycling with regards to traffic, while over a third (40%) did not feel safe cycling with regards to traffic, and just under a third (27%) were neutral on the topic. Delivery cyclists were asked in our survey about safety when cycling with regards to their personal safety and security, with over a third (38%) of respondents agreeing that they feel safe. Under a third (29%) did not feel safe with regards to personal safety and security, and under a third (29%) gave a neutral response. The factors most likely to make delivery cyclists feel 'much safer' were better-connected cycle routes, more separated cycle lanes, wider cycle lanes and reduced traffic volumes. Interviewees who said they felt safe acknowledged that they were either experienced cyclists or had been delivery cyclists for a long time. For those interviewees who said they felt unsafe, the main source of this feeling was driver behaviour. Moreover, female cyclists mentioned being harassed on the street while doing their deliveries or by shop workers. Delivery cyclists said these perceptions of safety shaped their journey choices, with one saying they avoided taking orders on routes that include fast and narrow roads, and two interviewees said they avoid going through unlit areas at night.

Suggestions for improvements to their working environment offered by survey respondents included better cycle infrastructure, segregation and markings, improved road maintenance, stricter enforcement of speed

limits and the highway code, and more 'cycle-aware' education for road users. When asked what would make it easier to deliver by cycle, dropped kerbs, removal of barriers, more cycle parking and clearer signage were found to be the top solutions. Most survey respondents agreed that better access to toilet facilities (85%), more shade or shelter (79%), and more water fountains (76%) would make delivering by cycle at least a little more pleasant.

Survey respondents considered locations with little or no traffic, that were flat, had cycle lanes, felt safer or were in scenic environments as the most enjoyable to cycle for work in. Most of the locations that respondents least enjoyed cycling in were described as having a lack of appropriate infrastructure, with features such as cobbles, poor lighting and a lack of separation between road/street users mentioned.

Recommendations

The delivery cyclists that took part in this study gave recommendations for improving infrastructure, safety, and experiences with motorised traffic. Capturing recommendations from the delivery cyclists is significant as it brings their voices into active travel discussions, where they have been a rarely heard cycling demographic. This is a valuable set of data for Sustrans, and anyone interested in designing cycling infrastructure, as this group uses cycling for work which provides a unique perspective.

The Sustrans design team have given examples of how some recommendations may be achieved, which is noted in the lists below. The recommendations do not necessarily reflect Sustrans advice or policy.

The report provides further detail and additional suggestions from delivery cyclists which relate specifically to Edinburgh or Glasgow.

Recommendations for infrastructure

Cycle lanes

Recommendations for improving the cycle lane network

- Extend the network of cycle lanes across cities so that there are more cycle lanes giving better geographic coverage. Position lanes so that they link key destinations
- Improve the connectedness of cycle lanes by linking lanes together in a coherent network and addressing areas where lanes end suddenly
- Assess which is the most appropriate type of dedicated cycle lane for different parts of the road network – for example, narrow streets may be better suited to shared road rather than separated cycle lanes

Recommendations for improving all types of cycle lanes (protected/unprotected/ shared/separated)

- Make lanes wide enough to accommodate cargo cycles
- Ensure safe and obstruction-free exit and entry points (including measures to deter parking)

- Install signage indicating the distance after which a cycle lane is going to end and when cyclists will be able to join a cycle lane (protected or unprotected) again
- Position signs targeted at motorists just before the end of a cycle lane indicating that they are about to share the road with cycles exiting the cycle lane.
 - **Sustrans design team note:** This could be achieved using signage 150m ahead (depending on speed)
- Keep lanes well maintained and free of debris, broken glass and obstacles – maintenance of road carriageway (such as use of road sweeping vehicles) should not be to the detriment of cycle lanes
- Position lanes, where possible, away from parking spaces in order to avoid risks from the opening of car doors.
 - **Sustrans design team note:** the Cycling by Design guidance recommends using a buffer zone between the parking spaces and the cycle lane

Recommendations for improving specific types of cycle lanes

Where **unprotected cycle lanes** are the best option, the key recommendations for ensuring they are fit for purpose for delivery cyclists are:

- Demarcating the lane from the road carriageway with a solid rather than a broken white line to make it clear that motor vehicles should not drive or park in the lane
- Moderating speed limits for stretches of roads with unprotected cycle lanes to reduce the dangers of cycling directly alongside fast traffic.

Where **protected (with wands/bollards/orcas) cycle lanes** are the best option, the key recommendations for ensuring they are fit for purpose for delivery cyclists are:

- Making physical protections visible in the dark (in particular, adding a reflective strip or light at the base of wands/bollards etc)
- Spacing physical protections sufficiently far apart from one another to allow cyclists to safely enter/exit the lane

- Implementing measures to prevent parked vehicles blocking the ends of the lanes.

! **Sustrans design team note:** e.g. double yellow lines

For **separated (away from the carriageway) cycle lanes**, the key recommendations for ensuring they are fit for purpose for delivery cyclists are:

- Improving connections between the cycle lane and the carriageway for smooth entrance and exit
- Ensuring access points are wide enough to accommodate cargo cycles
- Installing clear signage to indicate the lanes are for cyclists only and not pedestrians.

For **shared paths with pedestrians** the key recommendations for ensuring they are fit for purpose for delivery cyclists are:

- Making paths sufficiently wide to allow pedestrians and cyclists to comfortably share the space, and, in particular, to allow cargo cycles to manoeuvre around pedestrians
- Installing signage – for example, indicating allocated sides for pedestrians and cyclists – to manage shared use by minimising route-user conflict.

Road conditions and surface

- Prioritise fixing potholes
- Installing a strip of smooth surfacing along the side of cobbled roads
- Improve the road surface within cycle paths where it is uneven or disrupted (by, for example, manholes at different levels), or prone to collecting debris and water (due to being poorly drained).

Lighting

- Improve lighting in parks, along canals and on traffic-free routes, as well as in areas outside the city centre (side streets and residential areas)

- Consider installing lighting to indicate divisions between unprotected cycle lanes and the carriageway.
 - | **Sustrans design team note:** eg, surface-mounted solar studs

Dropped kerbs

- Install more dropped kerbs
- Prioritise dropped kerbs in retail parks and in front of food establishments to enable access
- Prioritise dropped kerbs on narrow streets to provide exit points in cases of cyclist–vehicle tension
- Clearly mark dropped kerbs with road paint in order to prevent obstruction by parked vehicles.

Other built environment features

- More cycle parking
- Better access to toilet facilities
- More water fountain locations
- Places providing shade/shelter for waiting in and/or designated waiting areas
- Places to sit and rest.

Recommendations for safety

- More cycle lanes that are separated from the road, for example with a barrier
- Wider cycle lanes
- Reduced traffic volume and speed
- More dropped kerbs
- More traffic lights tailored to cyclists.

Recommendations for users of motorised transport

Delivery cyclists called on users of motor transport to:

- Get to know the highway code and respect it
- Respect unprotected cycle lanes by avoiding driving in them or parking or loading in them
- Not park at the end of protected cycle lanes as this makes it dangerous for cyclists to exit
- Respect the 'advanced stop lines' (known as 'cycle boxes') in front of traffic lights and allow cyclists to filter into them
- Be aware of opening doors into the path of a cyclist
- Not overtake cyclists at speed, especially on uphill sections
- Be aware of cyclists who are filtering through stationary or slow-moving traffic
- Avoid turning left across the path of a cyclist
- Give cyclists space at all times, in particular when approaching roundabouts and junctions.

About Sustrans

We work for and with communities, helping them come to life by walking, wheeling and cycling to create healthier places and happier lives for everyone.

Across the UK we involve communities in shaping our towns and cities. Together we campaign for and create spaces where everyone can move around safely and give people the tools and confidence to get out of their cars.

We inspire people to change the way we all travel every day, forging closer connections with our neighbours and reducing traffic to create a better environment and more sustainable society for everyone.

Join us on our journey. www.sustrans.org.uk

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Cover photo: Kim Smith/Sustrans


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