

Urban Cycle Routes Encouraging Active Travel By Improving Route Safety



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INTRODUCTION

Compared to other methods of travel, urban cycling is a healthier and often quicker way of traversing around a bustling city centre or a sleepy suburb. Not only does a sleek bicycle allow you to skip the traffic, weaving past cars that are stuck bumper to bumper, but it also lets you take shortcuts, riding through parks, plazas, and public pathways to arrive at your destination. Suffice to say, this comes in very handy for built-up urban jungles.

Unfortunately, in many locations, urban cycling isn't practiced as often as it could be. With so many benefits to be enjoyed, why do people choose more traditional methods of travel? One reason is safety – cycling across busy and chaotic city streets can be daunting and dangerous, especially if the cycle route is unclear, or if the lane isn't fully segregated from bus lanes or general traffic. Fortunately, plenty can be done to address these problems, to make urban cycle routes more appealing, and promote a healthier and greener way to travel for your residents.

Let's Discuss...

- What Can Be Done To Improve Urban Cycle Routes?
- What Makes An Urban Cycle Route Successful?
- How Can The Use Of Cycle Routes Be Encouraged In Urban Centres?
- How Can Glasdon's Active Travel Products Help?

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PART 1: Achieving Urban Cycle Route Success

WHY DO PEOPLE CHOOSE NOT TO CYCLE?

City life can be hectic at times, especially when it comes to transport. Every day, tens of thousands of people use the city's transport network at any one time, putting considerable strain on the roads.

While cycling is widely recognised as a healthy and environmentally friendly method of travel, many city residents have other priorities that impact their travel choice. Commuters cite poor weather conditions, slow travel speed, lack of carrying capacity, lack of storage options, and being too far away from their workplace as reasons they prefer not to cycle. One other key concern also stands out – safety.

According to research conducted by <u>Ribble Cycles</u>, over **25%** of people were too worried about having an accident to cycle to work. On top of that, **1 in 4** said they weren't confident enough as a cyclist to make the trip. It's not difficult to see why, with urban cyclists not only having to contend with heavy traffic, but also public transport like buses or trams, pedestrians, and emergency service vehicles, which can make city streets difficult to navigate (and even dangerous) for cyclists.

To encourage those that are considering active travel to get started, urban authorities should consider the appeal of their cycle routes, and improve the ease and safety of bicycle travel around the city.



The Cost Of Reduced Active Travel

£30 billion lost every year to congestion

137 million working days lost to sickness or injury

65% of the population overweight,**28%** physically inactive

6.1 CO2 tonnes released into the atmosphere per person

27 areas failing to meet air quality objectives

According to Lancashire County Council

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THE IMPORTANT ELEMENTS OF URBAN CYCLE ROUTES

Local authorities need to improve the appeal of urban cycle routes for cyclists, and make sure they work for all other denizens of the road too, if hoping to encourage greater active travel participation. According to the Department for Transport, a number of different elements will need to be considered to create an appealing urban cycle route:money.

COHERENT

Urban cycle routes must be clearly marked and signposted, directing bicycle traffic through the intricate twists and turns of the city. This allows cyclists to follow the route with confidence, and not be caught off guard by conflict points like junctions or roundabouts.

DIRECT

Urban cycle routes should offer the most direct route to the destination, avoiding excessive detours that become time-consuming for cyclists and creates confusion or disruption on the roads.



SAFE

Urban cycle routes should be wide enough (approximately 2 metres) to provide a buffer space between cyclists and passing cars, whilst also providing enough room for cyclists to overtake one another. Perceived safety is almost as important as actual safety – barriers like bollards, kerbs and railings provide both a sense of security and some actual physical protection from road traffic collisions. Visibility is also essential – a route that stands out to motorists, especially during nighttime, helps avoid accidents and keeps each lane of traffic segregated.

COMFORTABLE

Urban cycle routes should be well-maintained and kept in good order. Broken ground, potholes, and overgrown vegetation can all slow down journeys, narrowing the width of their lane and forcing cyclists to evade the obstruction or stop. This could be particularly dangerous for conflict points and busy routes.

ATTRACTIVE

Urban cycle routes should be visually appealing in addition to being practical. Simple factors like keeping the cycle route clear of rubbish, adding foliage and greenery, and adding safety features to align with the path's aesthetics can make a meaningful difference.

Addressing these considerations will help your urban cycle route appeal to more residents, and naturally encourage an uplift in active travel participants.







WHAT ARE THE HAZARDS OF URBAN CYCLE ROUTES?

Hazards involved with urban cycling are a critical reason why so many opt for more conventional travel methods. Let's discuss each hazard in detail below.

Road Traffic Collisions

RTCs are an ever-present threat for both cyclists and motorists. All it takes is for a bicycle to stray a little off course, or a driver to miss a cyclist in the dark, for a potentially fatal collision to occur. Add into the mix a drunk driver, a crowded carriageway, poor weather conditions, or limited visibility, and the likelihood of an accident rises further still.

Bicycle Traffic Collisions

Vehicles are not the only hazard to face cyclists on urban cycle routes – other bicycles may also prove problematic. Whether that's two bicycles that collide at a turning, or a cyclist that overtakes another without enough space, bicycle collisions may result in serious injury. Worse still, falling riders could stray into the path of oncoming traffic, with potentially fatal consequences

Pedestrian Collisions

Without clear signage, it's all too common for pedestrians to wander into a cycle lane and create an obstruction. This puts both themselves and any approaching cyclists at risk.

Pathfinding

Navigating complex junctions or roundabouts while cycling can be confusing. If the route is unclear, cyclists may hesitate, head the wrong way, or even give incorrect hand signals. Not only would this disrupt traffic and cause delays, but it creates the very real possibility of a collision with traffic, pedestrians, or city property.

Slip Or Trip

Just like travelling by foot, cyclists are not immune to slips, trips or falls. This is especially prevalent during poor weather conditions, or when there's an obstruction on the route. In short, anything that could interfere with a bicycle's traction will naturally present a hazard.

Breakage

While bicycles might not 'break down' in the same way as vehicles, they can and do break – worndown brakes, snapped chains, and punctured tires serving as just a few examples. If a bicycle isn't roadworthy or fit for use, it could cause serious injury to its rider or others. Additionally, a dismounted cyclist left stranded on the side of the road will be exposed to passing traffic until they are able to move elsewhere.



HOW CAN URBAN CYCLE ROUTES BE MADE SAFER?

As we've seen, the hazards of urban cycle routes are numerous, which can be off-putting for cyclists and those considering active travel. Fortunately, plenty of safety features, structures, and measures can be implemented to improve urban cycle route safety.

Road & Traffic Bollards

Road traffic bollards act as hazard markers, alerting drivers to nearby cycle lanes and preventing accidental collisions. Bollards are designed with maximum visibility in mind, drawing attention to any lane demarcations and keeping different types of traffic segregated from one another.

Road traffic bollards provide both cyclists and drivers with peace of mind, helping form a sense of a barrier between vulnerable cyclists and high-speed vehicles.



Delineator Posts

Functioning in a similar way to bollards, delineator posts provide a more temporary solution to segregating cycle lanes. Bright and reflective, delineator posts are easily spotted and help maintain the separation between road traffic and bicycle traffic.

Cycle Lane Defenders

Cycle lane defenders are an excellent semi-permanent alternative to concrete kerbing or barriers. Best used to segregate cycle lanes from road traffic lanes, cycle lane defenders provide added protection for both the cyclist and the motorist. Should either party drift too far, their wheels will impact the kerbing, prompting them to correct their steering, or at slower speeds, stopping any crossover altogether.



Lane defenders are a powerful, yet inexpensive way to introduce a barrier-type structure to cycle routes, making cyclists feel much more insulated from passing traffic.

Signage

Clear and visible signage can go a long way in preventing confusion and guiding different users of the road. Signage may indicate anything from an upcoming turnoff or junction to an approaching hazard, to demarcations for walkways or cycle lanes. Signage can often be mounted on bollards or posts for convenience, and made reflective for added visibility in the dark.

With a growing network of National Cycle Routes across the country, many of which weave in and out of urban centres, signage is particularly useful for marking these routes. Bollards or posts can be placed along the route, with signage indicating the number of the route to help keep cyclists on track.

By providing clear and precise direction, signage ensures cyclists are more confident on the roads, and can use National Cycle Routes as intended, safely.





PART 2: Improving Urban Cycle Route Safety With Glasdon

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Cyclemaster[™] Bollard

Designed specifically for cycle lanes and shared paths, the Cyclemaster Bollard is a highly visible marker that displays important signage for cyclists. Featuring retroreflective panels on all four sides and displaying up to 3 signs front and rear, it ensures travellers approaching from any direction stay informed and aware. Additionally, with a slimline profile, the Cyclemaster can be easily integrated into narrow spaces without creating an obstruction.

Cyclemaster Bollards are ideal for helping cyclists navigate safely through busy junctions, crossings, and contraflow lanes, making them the to go-to bollard for marking junctions or complex sections of route.

Design Features:

- Double-sided to offer a large sign area on the front and rear (up to 3 signs per side)
- Retroreflective panels provide high visibility in daylight and under headlights at night.
- Front and two side reflectors included as standard but additional side and rear reflectors available for increased visibility.
- Reflective areas recessed to prevent vandalism, provide weather protection and reduce damage when impacted.
- Available as either rebound Impactapol material or rigid Durapol material. Both materials offer long service life and are easy to maintain.
- Choice of fixing options available, including socket mounting option for damaged bollards to be removed and reinstated into the socket quickly using the simple key operated lock system.
- Compatible with Endurokerb Cycle Lane Defender.











Below-Ground, Extended Base

Adjustable-depth, concrete-in anchors

Fixed-depth concrete-in anchors



Mini-Ensign[™] Bollard

Ensign[™] & Mini-Ensign[™] Bollards

As a set of sign-carrying bollards, the Ensign & Mini-Ensign act as informational posts for placement along any urban or suburban cycle routes. Able to be customised from a range of different signage, these bollards display critical information and orders to cyclists.

The Ensign bollard features a larger 300mm sign face for increased visibility, while the Mini-Ensign features a slim profile for use in constrained spaces. Both bollards are an ideal solution for urban active travel initiatives.

Design Features:

- Manufactured from rigid Durapol® material. Mini-Ensign also available as a Rebound Impactapol® model, which is compliant to Passive Safety Standard: BS EN 12767:2019
- Broad selection of sign face options available, including 'cycle route', 'no entry', and 'cycles/pedestrians only' signs. Ensign bollard also offers a range of directional and maximum speed limit signs.
- Recessed areas for retroreflective or decorative banding a range of personalisation options available.
- Choice of fixing options available standard socket, below ground extended base, bolt-down fixing, or bolt-down fixing with adjustable anchors.
- Optional blanking cap available for use with socket system when bollards are removed.
- Compatible with Endurokerb Cycle Lane Defender.



Adjustable-depth.

concrete-in anchors







Standard

Socket





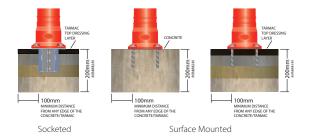
Neopolitan[™] Delineator Post

The high reflectivity of the Neopolitan Delineator Post provides a greater degree of visibility for road users and cyclists alike, by helping demarcate the boundary between cycle lane and general traffic. Crash tested to 100km/h, the Neopolitan is TSRGD compliant and offers exceptional rebound performance, ensuring minimal repairs or maintenance needed after an impact.

The Neopolitan Post is available for installation via bolt-down ground fixings or a LockFast mini socket, ensuring strong and sturdy support.

Design Features:

- Compliant to BS EN 12767 : 2019 Passed at 100km/h, achieving 100-NE-A-NR.
- Manufactured from Reflexapol Material for excellent rebound performance and passively safe in the event of vehicle or cyclist impact.
- Microprismatic retroreflectors (RA2) provide excellent night and daytime visibility.
- Compact square base means installation is easy and requires minimal floor space. Strong and robust fixing points ensure secure installation.
- Quick-release locking mechanism for quick and easy insertion and removal of post.
- Choice of retroflective banding options to suit different applications. Banding recesses helps protect weathering and prevent picking.
- Square stem with chamfered lead-in prevents post from twisting once installed with the socket, whilst enabling easy location during installation.
- Socket installation ledge provides greater ground purchase to prevent dislodgement & allows the post to be installed with resin/tarmac.
- Compatible with Endurokerb Cycle Lane Defender







Endurokerb[™] Cycle Lane Defender

The Endurokerb Cycle Lane Defender is a semi-permanent, modular system suited perfectly to promoting active travel. Highly visible and durable, Endurokerb safeguards cyclists by clearly defining the boundary between cycle lane and road traffic. Compared to traditional concrete kerbing and permanent cycle lanes, Endurokerb is much more flexible and cost-effective.

Offering a quick and easy installation process, Endurokerb allows for configurations uniquely tailored to your urban environment, seamlessly integrating cycle lanes with pedestrian crossings, junctions, and other roadside elements.

Design Features:

- Available in two model sizes—Endurokerb 100 & Endurokerb 60 with respective kerb heights of 100mm and 60mm.
- Compliant with DfT requirements.
- Modular system: can be configured to suit individual site requirements & compatible with existing Glasdon bollards for additional signage and demarcation.
- Safe manual handling weight for two people. Bolt-down fixings allow quick, easy installation for temporary and semi-permanent schemes.
- Angled side reflectors offer high visibility to pedestrians, cyclists and motorists. Moulded-in cats' eyes improve visibility at night.
- Made from 100% recycled & recyclable material.
- Kerb cover caps protect the fixing and prevent debris from clogging up the fixing points. Water drainage gap allows surface water to drain away.

Glasdon Products In Action















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CONCLUSION

To keep urban residents engaged in active travel, the cycle routes available to them must be appealing. Glasdon's road safety products are the perfect solution – their addition to urban cycle routes ensures greater safety, direction, and peace of mind for active travellers.

CHOOSE OPTIMAL ROAD SAFETY, CHOOSE GLASDON

Glasdon have been designing and manufacturing road safety products ever since our inception in 1959. Today, our products are utilised by highways and byways all across the United Kingdom.

In addition to the above featured products, we offer a range of sign-carrying & directional bollards, hazard & verge markers, and chevron signs & boards to improve road safety and ensure a sustainable and secure future.

The road to safer cycle routes and aesthetically pleasing public spaces starts with Glasdon.

If you have any questions about our products or what we can provide, our team of dedicated experts are more than happy to assist.





Glenwood[™] 150 Post





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EST. 1959



Glasdon Manchester[™] Bollard



Apex[™] Chevron Sign