

“It would seem, for instance, to follow that the pedestrian run down when crossing a busy thoroughfare would be entitled to say that his injuries were caused by the failure of the authority to set the machinery in motion for the provision of a pedestrian crossing. If such duties are to be imposed on road authorities, that should in my opinion be done by Parliament.”

Lord Rodger of Earlsferry in *Gorringe v Calderdale MBC* (2004)

“These crossings enforce a right that everybody has forgotten about. The law is this: that when you put a foot on the carriageway, you have the right of way. But people don’t do it, because there is no point being in the right, while at the same time being in hospital after getting run over. I would like to see thousands of Zebra crossings in Manchester.”

Chris Boardman in *The Guardian* (2019)

# PROJECT REPORT

RQ1 Legal Advice

Deegan, Huxford

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## Executive Summary

Transport for Greater Manchester (TfGM) commissioned the Transport Research Laboratory (TRL) to undertake research into the use of non-prescribed Zebra crossings positioned at the mouth of side roads at junctions with main roads. These crossings are intended to give pedestrians priority when they wish to cross the side road; this applies to vehicles on the side road approaching the junction, and to vehicles on the main road wishing to turn into the side road.

This report incorporates advice and information from TRL as well as Vincent Fraser QC, The Department for Transport, Phil Jones (an independent expert on UK highway legislation) and Robert Huxford (an independent expert on UK highway law). It has been edited and produced by Brian Deegan who works for a transport consultancy called Urban Movement. Urban Movement are under contract to Transport for Greater Manchester to provide technical advice and support. Every effort has been made to summarise fairly the views of all consulted experts. Comments made by them are presented in full, although they have been ordered into subject categories to provide a clear overview of the legal situation regarding the use of Zebra crossings without yellow globes or control zones within the proximity of a priority junction.

The research question this report aimed to answer was:

What legal risk do highway authorities face from using regulated markings in non-prescribed ways?

This question was divided into the following sub-questions:

RQ1-1: Which laws relate to the use of non-regulated crossing markings, or regulated crossing markings in non-prescribed ways?

Information from legal counsel and statements from the Department for Transport was assessed and in conclusion Zebra crossings are clearly defined in the Traffic Signs Regulations and General Directions (2016). They are specified as needing both a yellow globe and a control zone which this research is trying to show may not be necessary at side roads. However, the Zebra crossing used on a cycle track has no requirement for a yellow globe and control zone and so this legally prescribed approach could be taken on side roads.

RQ1-2: What legal risks arise to highway authorities from the use of non-regulated markings, or regulated markings in non-prescribed ways?

Information from legal counsel and statements from the Department for Transport was assessed and in conclusion there is no prescribed sanction for highway authorities using unauthorised signs, but there is a duty of care to consider when addressing risks, and a recommended process is set out in this document. It is important to note that pedestrians are not afforded the same rights on a non-prescribed Zebra as they are on a full legal Zebra. Fundamentally it is advised that these approaches are only used for trial purposes until the legislation changes have been authorised by the Secretary of State. However, the Secretary of State has shown a desire for this research to be concluded so that he may make an informed decision. Research undertaken as part of this project gives confidence that the on-street trial will be a success. The safety review based on collisions of non-prescribed Zebras

already installed on the public highway brought up no issues<sup>1</sup>. Likewise, research into the recognisability of Zebras and potential behaviour of users found that the Zebra markings were almost universally understood<sup>2</sup>.

RQ1-3: What legal opportunities exist to provide crossings within existing regulation/legislation?

Greater Manchester has little desire to explore options or routes that are not fully endorsed by the Department for Transport. Courtesy crossings have been shown to provide benefits to pedestrians, but this avenue is not being explored in this research.

RQ1-4: What are the processes for altering regulation/legislation?

Adjusting the Traffic Signs Regulations and General Directions (2016) document so that the optional omissions of the yellow globe and control zone apply to Zebra crossings within ten metres of a priority junction seems to be the clearest route to progress. This will be subject to legal review and light parliamentary process. It is a minor change that would fall under secondary legislation and so no debate or vote would be required. It should pass through both houses as negative procedure and come into effect once signed by the Minister.

In conclusion, there is little legal risk with proceeding with the trial, but each site should be assessed thoroughly for potential risks. The process is shown in this report. The use of the Zebra crossing without yellow globes or a controlled zone is unlawful on the public highway but is fully compliant on a cycle track and this may offer the clearest avenue for legal progression should the Secretary of State wish to do so. Planned changes to the Highway Code (2020)<sup>3</sup> should support the benefits of this approach and vice versa, and statements in the Gear Change document give succour to the desire of Greater Manchester to provide clearer priority to pedestrians on side roads to address safety issues. If the Gear Change (2020)<sup>4</sup>, Obesity Strategy (2020), Health and Social Care Act (2012)<sup>5</sup>, Traffic Management Act (2004)<sup>6</sup>, Road Traffic Act (1988)<sup>7</sup> and Equality Act (2010)<sup>8</sup> are to be meaningful then there is a moral and legal imperative to address the danger faced by pedestrians at side roads.

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<sup>1</sup> Transport Research Laboratory (2020) Side Road Zebra Crossings, Analysis of Collision Records

<sup>2</sup> Transport Research Laboratory (2020), Side road Zebra crossings, effectiveness of Zebra marking alternatives.

<sup>3</sup> <https://www.gov.uk/government/consultations/review-of-the-highway-code-to-improve-road-safety-for-cyclists-pedestrians-and-horse-riders>

<sup>4</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/904146/gear-change-a-bold-vision-for-cycling-and-walking.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/904146/gear-change-a-bold-vision-for-cycling-and-walking.pdf)

<sup>5</sup> <https://www.legislation.gov.uk/ukpga/2012/7/contents/enacted>

<sup>6</sup> <https://www.legislation.gov.uk/ukpga/2004/18/contents>

<sup>7</sup> <https://www.legislation.gov.uk/ukpga/1988/52/contents>

<sup>8</sup> <https://www.legislation.gov.uk/ukpga/2010/15/contents>

# 1 Introduction

## 1.1 Background

On the 27<sup>th</sup> June 2018, Greater Manchester's cycling and walking infrastructure proposal<sup>9</sup> was launched which highlighted a potential low-cost option for protecting pedestrians at side roads. It showed a Zebra crossing without beacons and zig zags in line with the approaching footway and across the mouth of a junction (see figure 1). The media launch took place on Chapel Street in Salford where two of these non-prescribed Zebra crossings were installed (see figure 2). Both installed Zebras were assessed by Salford City Council road safety auditors who were satisfied that they did not increase injury risk.



Figure 1. A side road Zebra as shown in Greater Manchester's cycling and walking infrastructure proposal



Figure 2. A non-prescribed Zebra installed in Salford in June 2018

<sup>9</sup>Transport for Greater Manchester (2018). Beelines: Greater Manchester's cycling and walking infrastructure proposal. Retrieved from <https://tfgm.com/made-to-move/publications>

On the 23rd July 2018, a draft technical note was prepared for highways officers working on the Bee Network at the ten districts of Greater Manchester. This draft was also sent to the Department for Transport for comment and advice. This draft included the non-prescribed Zebra marking as well as several variations for consideration which were referred to as “implied Zebras” (see figure 3).

Implied Zebras had been used across the UK by highway authorities wishing to avoid the use of Belisha beacons and zig zag markings. The most famous examples of these can be seen in Poynton, Bexleyheath, Ashford and Altrincham. These markings mimic the effect of Zebra stripes without matching the exact specification as presented in the Traffic Signs Regulations and General Directions document.

In August 2018, the Department for Transport issued a note on implied Zebras highlighting potential issues. These comments are referred to in this report as they represent definitive statements from DfT on the subject. It should also be noted that section 15.3.6 of the Traffic Signs Manual states “any pattern or coloured surfacing should not mimic the stripes of a Zebra crossing as this is likely to be misleading.” Note the use of the word “should” which gives this statement guidance status. Following the issuing of this note the non-prescribed Zebra crossings were removed in Salford.

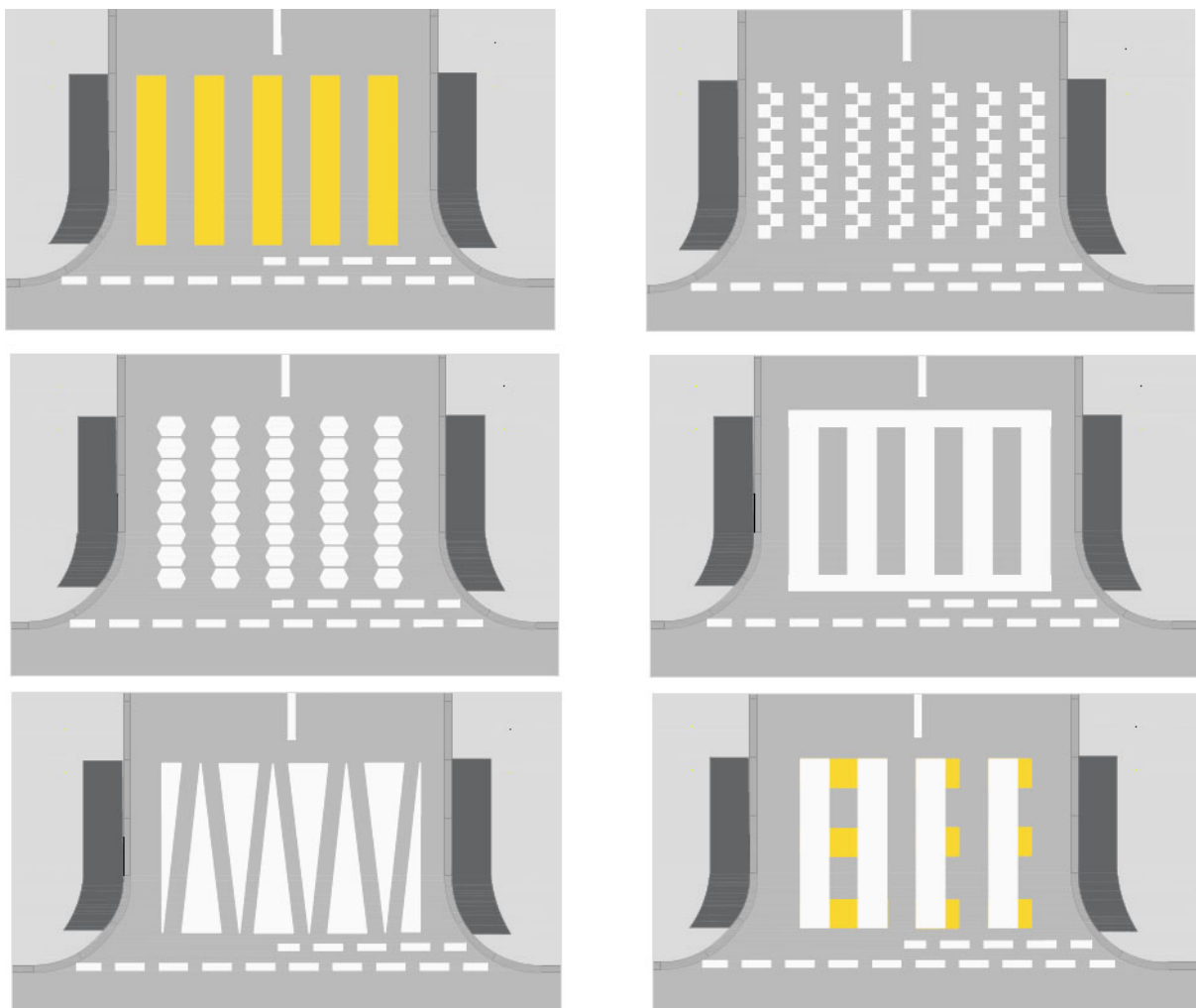


Figure 3. Alternative markings discounted by DfT civil servants and the District Highway Officers at Greater Manchester



On the 20<sup>th</sup> September 2018, a meeting was held with the Heads of Highways at all ten districts of Greater Manchester in which the implied Zebra approach was rejected and a clear instruction was given to proceed with the use of the non-prescribed Zebra. It was decided to pursue the use of Zebra markings at side roads without Belisha beacons and zig zags but with the same legal power as the prescribed Zebra.

Advice was sought from officers at DfT and the current Minister of State at the Department for Transport, the Rt Hon Jesse Norman. A meeting was held on 12<sup>th</sup> November 2018 at the DfT office with both officers and the Minister present. It was agreed that DfT would assist TFGM in the development of research to provide evidence that the approach was feasible. The Transport Research Laboratory were subsequently appointed to deliver this research.

Following the outbreak of COVID, this research had to be paused for ethical reasons, so a letter was sent on the 15<sup>th</sup> June 2020 by Andy Burnham, the Mayor of Greater Manchester, to the current Secretary of State for Transport, Rt Hon Grant Shapps, asking for early authorisation of the non-prescribed Zebra in order to help with the emergency response. The Minister responded on 16<sup>th</sup> June 2020 saying that that he would be happy to consider the outcomes and recommendations of the research once it was complete. The purpose of this report is therefore to give the highway authorities undertaking the trials the necessary legislative confidence to proceed to the final stage of the study.

To make it clear: Greater Manchester is seeking to use full legal Zebra crossings at side road priority junctions but would like the ability to omit zig zags and beacons as is the case on cycle tracks. They are not asking for a new marking or endorsement of an implied approach.

## **1.2 The case for side road Zebras**

In May 2018, The Greater Manchester Combined Authority assembled some initial evidence around side road Zebras to respond to the Department for Transport's Call for Evidence – Cycling and Walking Investment Strategy: Safety Review. A summary of this evidence is provided below:

Crossing side road junctions in the UK is stressful. There is an assumption that turning traffic will not give way and will rarely indicate so people must either grit their teeth and accept whatever fate brings them or move away from their desire line to a distance where they feel they could react quickly enough to avoid an approaching car. This issue is exacerbated for those with disabilities and those with small children. Figure 4 shows an example of a side road in Paris which gives implied priority to people crossing the road using a simple painted Zebra.





Figure 4. Zebra markings used in Paris to infer pedestrian priority

The standard approach is the UK has been to tighten and raise side road junctions to make them feel safer to cross but this is expensive, costing anywhere from £40k to £150k per junction. See figure 5 for an example. This treatment is therefore often reserved for high streets. Tightening junctions can also make it difficult for refuse trucks and delivery vehicles to access streets. If wide road geometry is retained to accommodate larger vehicles, smaller vehicles can turn in and out more easily. Figure 6 shows an untreated side road junction in Greater Manchester.

In October 2006 TRL produced a report<sup>10</sup> showing that all collisions reduced by 18% in London at borough sites where side road entry treatments were installed. As the side road Zebra is potentially a stronger safety measure a similar reduction could be expected at sites across Greater Manchester. If installed across the whole of Greater Manchester there could be a reduction of over 980 casualties a year, potentially saving 6 people's lives a year.

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<sup>10</sup> Transport Research Laboratory (2006) Effect of Side Road Entry Treatments on road safety in London.





Figure 5. A side road entry treatment



Figure 6. An untreated side road in Greater Manchester

Paint can cost as little as £200 to install and be applied anywhere easily. It implies clear priority and is easily maintained. The UK has invested hundreds of millions of pounds on side road entry treatments when the use of paint could have been more effective in most cases. For example, in 2008 in London around £1.5m was spent on 79 side road entry treatments as part of the London Cycle Network Plus project<sup>11</sup>. This approach is unaffordable to most highway authorities, so a new cost-effective solution is sought.

To illustrate the effect of side road Zebras, one of our consultants took a two-hour walk across Paris and Manchester and the results are shown in figure 7. All signal junctions and side roads in Paris had Zebra markings. There are many other variables to consider but the difference is stark.

City	Paris	Greater Manchester
Side roads treated	25	0
Motor vehicles failing to give way at side roads once established in the carriageway	0	9

Figure 7. A two-hour walk in Paris compared to a two-hour walk in Greater Manchester

Currently, the following regulations apply to Zebra crossings:

*“Every pedestrian who is on the carriageway within the limits of a Zebra crossing, which is not for the time being controlled by a constable in uniform or traffic warden, before any part of a vehicle has entered those limits has precedence within those limits over that vehicle and the driver must accord such precedence to any such pedestrian.”*

This is a clear legal statement that protects pedestrians by establishing precedence. Greater Manchester is requesting the ability to apply this clarity to side roads.

A simple change to the regulations that govern Zebra and parallel Zebra crossings is required – namely, to allow a simpler crossing to be installed on side roads flush with the junction. This crossing would not need Belisha beacons or zig zag markings as these add to cost, complexity and clutter. This simple marking is used worldwide to remind drivers of their duty to give way when turning into and out of junctions.

In 2014, Transport for London asked DfT for a simpler Zebra across cycle tracks, and permission was granted. There have been no issues with this approach, and we feel that the marking is sufficiently well-recognised to also work well on side roads. Adding the “elephant’s footprint” marking to this simple Zebra will create a side road crossing which also provides effective priority for cyclists in this critical situation. At present local authorities are using implied Zebras and non-compliant Zebras to address this issue. There are hundreds of examples of this across the UK but none offer the legal protection of a compliant Zebra.

<sup>11</sup> London Cycle Network Plus (2009) Annual Report

With these minor adaptations to an existing road marking we can make side roads safer for pedestrians and cyclists and require drivers to turn with more care. Zebra compliance is excellent in the UK so we can be confident of delivering safety benefits.

The section above is included for information purposes only. It is not robust research but offers an insight into why Greater Manchester believe the use of Zebras at side roads is an important step towards protecting pedestrians.

It should be noted that at the time of writing the Department for Transport is conducting a consultation on the Highway Code to strengthen the wording of Rule 170<sup>12</sup>. At present, Rule 170 states “Give way to pedestrians who have started to cross”. The consultation proposes that it may be changed to “on junctions to advise drivers and riders give way to pedestrians waiting to cross and to remain behind cyclists and motorcyclists at junctions even if they are waiting to turn and are positioned close to the kerb. “Rule for drivers, motorcyclists, horse riders and cyclists: At a junction you should give way to pedestrians crossing or waiting to cross a road into which or from which you are turning.”

This is a big difference as previously pedestrians would have to be established on the carriageway to be afforded priority. If the new rule goes through, then waiting pedestrians could be afforded priority. This should remove some legal ambiguity and improve driver behaviour, but it could be argued that the use of Zebra markings would encourage the adoption of this new rule.

### 1.3 The current study

The research question covered in this report is as follows:

What legal risk do highway authorities face from using regulated markings in non-prescribed ways?

This question has been divided into the following sub-questions:

RQ1-1: Which laws relate to the use of non-regulated crossing markings, or regulated crossing markings in non-prescribed ways?

This question will be covered in depth, but it is perhaps a moot point as the entire reason for doing this research is to make a case for a minor adjustment of existing regulation to allow for the use of full legal Zebra crossings at side road junctions. Nevertheless, a lot of the legal conversations have centred around this question so it will be explored in full.

RQ1-2: What legal risks arise to highway authorities from the use of non-regulated markings, or regulated markings in non-prescribed ways?

This question will explore the difference between regulatory standards and the risk to individuals. It can be as possible to be lawful and unsafe as it is to unlawful and safe. Highway regulations change over time to address new highlighted or developing risks. It is perhaps perverse to argue that an unlawful measure should be restricted if it has been proven to save

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<sup>12</sup> Department for Transport (2020) <https://www.gov.uk/government/consultations/review-of-the-highway-code-to-improve-road-safety-for-cyclists-pedestrians-and-horse-riders/summary-of-the-consultation-proposals-on-a-review-of-the-highway-code>

lives, promote Government policies on public health and contribute to the discharging of duties under the Equality Act 2010. Likewise, if a lawful measure has been proven to be unsafe it would be folly to continue to promote it as standard practice. Should best practice be to follow the law, or should the law be adjusted to reflect best practice?

In October 2011, the Department for Transport issued a Traffic Signs Policy Paper entitled *Signing the Way*<sup>13</sup>, which includes powerful statements on this issue from the Parliamentary Under Secretary of State for Transport: "...our travel behaviour is changing over time as we make more informed and sustainable transport choices. The traffic sign system needs to reflect these changes...". The document states that "the current level of prescription that the Traffic Signs Regulations and General Directions (TSRGD) require can be a barrier to local authorities working effectively", "it is essentially reactive and does not promote innovation and creative solutions" and "the complexity of TSRGD is a practical barrier to implementation of the appropriate design of traffic signs on the highway".

Following this review, the TSRGD was revised, and this brought in many helpful regulation changes, particularly in respect to cycling, but it is now four years past the last issue and new issues have arisen. It could also be argued that many old issues remain. This question will be addressed in section two in depth.

RQ1-3: What legal opportunities exist to provide crossings within existing regulation/legislation?

This question will be addressed in relation to the DfT statements on the use of implied Zebras and the TRL research into alternative markings as part of this research project<sup>14</sup>.

RQ1-4: What are the processes for altering regulation/legislation?

This question will be addressed by showing the simplest path possible for regulatory change should the research present an overwhelming case for this option to be possible.

Section 2 of this report will examine each one of these questions using statements from the Department of Transport, Transport Research Laboratory and TFGM legal counsel (Vincent Fraser QC), as well as expert opinion from Phil Jones of Phil Jones Associates (expert in highway legislation) and Robert Huxford (expert in highway law).

## 2 Legislation

### 2.1 RQ 1-1: Which laws relate to the use of non-regulated crossing markings, or regulated crossing markings in non-prescribed ways?

Legal counsel:

Section 23 Road Traffic Regulation Act 1984 ("the 1984 Act") provides that local traffic authorities may establish crossings for pedestrians on roads which shall be in the manner prescribed by regulations under section 25 of the 1984 Act. The relevant regulations are The Traffic Signs Regulations and General Directions 2016 ("the 2016 Regs"). Regulation 3 of the

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<sup>13</sup> Department for Transport (2011), *Signing the way* [Traffic Signs Policy Paper: Signing the Way \(publishing.service.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/214441/Traffic_Signs_Policy_Paper_Signing_the_Way.pdf)

<sup>14</sup> Transport Research Laboratory (2020), *Side road Zebra crossings, effectiveness of Zebra marking alternatives*.



2016 Regs provides that a traffic sign is a prescribed sign if it complies with all of the applicable requirements provided for in the Regulations.

The 1984 Act also provides that for a traffic sign to be lawfully placed on the highway in Great Britain it can be authorised by the Secretary of State. Special sign authorisations for non-prescribed signs are provided on a case by case basis to local authorities on application.

The term “Zebra crossing” is not used in the 1984 Act but it is found in the 2016 Regs. A Zebra crossing is one of the types of crossing which may be established under section 23 of the 1984 Act. The term “section 25 crossing” is defined as “a Puffin crossing or a Zebra crossing” and there is a detailed definition of a “Zebra crossing” as a place on the carriageway where provision is made for pedestrians to cross the carriageway, the presence of which is indicated by the relevant yellow globe and black and white stripes as specified. Schedule 14 to the 2016 Regs provides detailed specifications for Zebra crossings.

The dimensions and appearance of the stripes which form the actual pedestrian crossing are specified by paragraph 18 of Part 1 of the Schedule and shown in item 52 of Part 2. The globe and road markings are prescribed in Part 2 of Schedule 14, which require, in addition to the black and white stripes of the crossing, zig zags on the approaches to the crossing and a yellow globe at each end of the crossing. Direction 41 of Part 6 of the Schedule requires the placing of zig-zag lines either side of a Zebra crossing to form a controlled area. The significance of the give way markings and zig zags at Zebra crossings is prescribed in paragraphs 19 and 20 of Part 1 of the Schedule.

Part 5 of Schedule 14 to the 2016 Regs addresses movement at section 25 crossings. Importantly, paragraph 7 of Part 5 provides for pedestrian priority at Zebra crossings. It is this part which also imposes other restrictions upon motorists, including no overtaking or stopping within the zig zags of the crossing.

Paragraph 1 of Part 4 of Schedule 14 to the 2016 Regs applies section 36 of the Road Traffic Act 1988 (“the RTA 1988”) to the relevant signs. This is important because section 36 of the RTA 1988 provides that it is an offence to fail to comply with a traffic sign. This is of considerable importance in enforcing the provisions with respect to Zebra crossings.

Section 64 of the 1984 Act makes further important provisions. Section 64(1) provides

*“in this Act “traffic sign” means any object or device (“whether fixed or portable) for conveying, to traffic on roads or any specified class of traffic, warnings, information, requirements, restrictions or prohibitions of any description –*

*(a) specified by regulations made by the relevant authority, or*

*(b) authorised by the relevant authority, and any line or mark on a road for so conveying such warnings, information, requirements, restrictions or prohibitions.”*

Section 64(4) provides (subject to some exceptions which do not apply) that “[e]xcept as provided by this Act, no traffic sign shall be placed on or near a road. Whilst section 64(5) provides that regulations made under this section may provide that section 36 RTA 1988 shall apply to signs specified by the regulations.

The DfT provided two statements concerning how laws relate to non-prescribed crossings:

“An ‘implied Zebra’ not a prescribed crossing in legislation. It is a type of courtesy crossing, which does not grant priority to pedestrians in law. Courtesy crossings, and the problems they

can cause for certain groups, particularly visually impaired people, have been raised as an issue regularly over the last few years. Our view has been that any informal, or courtesy crossing, must not mimic a Zebra crossing – i.e. it should not consist of striped designs, whether in paint or surfacing materials.”

And

“We are unable to authorise the use of black and white stripes on their own as a form of crossing. This is because the definition of a crossing, including the signs and markings that must be used, is set out in the ‘Regulations’ section of TSRGD. This cannot be changed except through the Parliamentary process of amending legislation.”

In summary, to qualify as a conventional Zebra crossing it is necessary to comply with the various requirements of the 2016 Regs. Section 23 of the 1984 Act provides power to create conventional Zebra crossings; it does not provide power to create informal Zebra crossings. However, in the 2016 Regs a Zebra crossing is defined as a place on the carriageway where provision is made for pedestrians to cross the carriageway, the presence of which is indicated by a yellow globe and a controlled zone, except that globes and controlled zones need not be present at a crossing that only crosses a cycle track. This is important as a Zebra crossing is not always defined by its use of yellow globes. The black and white stripes are mentioned with no exceptions.

Item 55 is specified as “where used”, so it is optional and may be omitted. This relates to the “stud” style pedestrian markings. Item 54 is mentioned without exceptions. This relates to the give way marking diagram 1001.5. The use of a controlled zone shown by item 52, the zig zag markings, is clarified in section 15.7.4 of the Traffic Signs Manual chapter 6 as essential across a carriageway but may be omitted across a cycle track. Therefore, in conclusion, the prescribed Zebra crossing for use on a cycle track may be used without zig zags or beacons and in section 3.4 we shall look at whether this specification can be used in the proximity of side road priority junctions.

Under the Highway Code, pedestrians already have priority over vehicles turning into a side road. Under the proposed revisions to the Highway Code, Rule H2 will give pedestrians priority over vehicles turning into or from a side road.

“Rule H2: Rule for drivers, motorcyclists, horse riders and cyclists

At a junction you should give way to pedestrians crossing or waiting to cross a road into which or from which you are turning.”

The effect of this rule is to give the same right of way to pedestrians crossing the mouth of the side road. Therefore, as a Zebra gives right of way to pedestrians then logically there is nothing misleading about using Zebra stripes in this area. There has been no research done into whether the routine positioning of crossings away from the desire line at the mouth of junctions has had any effect on collisions.



The Department for Transport is the relevant authority and may authorise the erection of signs of another character than prescribed by regulations. It routinely does so and publishes a list of such authorised variations<sup>15</sup>.

## 2.2 RQ 1-2: What legal risks arise to highway authorities from the use of non-regulated markings, or regulated markings in non-prescribed ways?

Legal counsel:

Whilst it is clear that the 1984 Act does not provide power to create an informal Zebra crossing, the remaining question is whether it prohibits the creation of such a crossing. The black and white stripes which form part of a conventional Zebra crossing would amount to a *“traffic sign”* as defined by section 64(1) of the 1984 Act. In this respect it is important to note that section 64(4) prohibits the placing of traffic signs on a road except as provided by the Act. The question arises as to whether an informal Zebra crossing would also be a traffic sign for the purposes of section 64(4) and hence expressly prohibited by the Act.

There is scope for argument as to how section 64(4) of the Act is to be interpreted. The purpose of section 64(4) appears to be to prevent the creation of traffic signs which do not comply with the relevant requirements of the Act (including the relevant regulations made under the Act). However, section 64(1) defines how the term *“traffic sign”* is to be interpreted which would include for the purposes of section 64(4), given that there is no exception or qualification made for this subsection. It is therefore necessary to consider whether an informal Zebra crossing could be said to be a *traffic sign* as defined by section 64(1).

The final words of section 64(1) include within the definition of *“traffic sign”* *“any line or mark on a road for so conveying such warnings, information, requirements, restrictions or prohibitions”*. An informal Zebra crossing would comprise lines or marks on a road for conveying warnings etc. and could be said to come within the scope of these words. However, it is important to note the reference to *“so conveying such”* warnings etc. The earlier part of the definition which refers to objects or devices for conveying warnings etc. limits *traffic signs* to those specified by the relevant regulations. Whilst that limitation is not repeated in the case of road markings it could be said that the reference to *“so conveying such”* warnings incorporates that limitation. An alternative argument would be that the earlier part of the definition refers to *“conveying, to traffic on road or any specified class of traffic”* warnings etc., and that the reference to *“so conveying such”* warnings is a reference to conveying warnings to such traffic.

In my opinion there is no obvious reason why objects and devices would have to comply with the relevant regulations to amount to a *traffic sign* whereas road markings would not have to comply. I would therefore conclude that the correct interpretation is that road markings which do not comply with the relevant regulations do not amount to a *traffic sign* for the purposes of the 1984 Act even though they may be conveying warnings etc. to road users. However, there is scope for argument on this issue.

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<sup>15</sup> Department for Transport (2020) <https://www.dft.gov.uk/traffic-auths/>

The more difficult issue is the scope and effect of section 64(4). The sub-section prohibits the placing on roads of *traffic signs* which do not comply with the requirements of the 1984 Act. The difficulty is that to come within the definition of the term *traffic sign* the sign has to comply with the requirements of the Act in the first place. Accordingly, a sign which did not comply with the requirements of the Act would not be a *traffic sign* and would not be caught by the prohibition on placing non-conforming *traffic signs* on roads. There is a clear danger of circularity in the argument which risks rendering the sub-section meaningless or absurd. It might be argued that the sub-section simply makes plain that it is necessary to comply with the requirements of the Act in placing traffic signs, and that this is reinforced by the fact that there is no prescribed sanction as such for failing to comply with the provision, but this is not an entirely satisfactory explanation for the provision. If a sign cannot amount to a *traffic sign* unless it complies with the Act it is not clear what is being prohibited by the provision. Importantly it is not clear why there should be a prohibition on placing *traffic signs* not complying with the Act (if such sign is possible) but no restriction upon placing wholly unauthorised signs. In the circumstances I am of the opinion that there is a significant risk that a court would interpret the provision in a purposive fashion so as to prohibit the placing of road markings purporting to be road/traffic signs which do not comply with the statutory requirements. If such an approach were taken, then section 64(4) would prohibit informal Zebra crossings.

A further provision to be considered is section 132 Highways Act 1980 ("HA 1980") which makes it an offence for any person to mark the highway surface without the consent of the highway authority or other relevant authorisation. This provision plainly prohibits third parties from creating an informal Zebra crossing without the highway authority's consent but would not apply as such to the highway authority, which can consent to the placing of such marks. However, the fact that the highway authority would not be committing this offence by placing a mark on the road does not of itself establish that the authority would have power to place an informal Zebra crossing on the road.

There is no specific power within the HA 1980 expressly addressing informal Zebra crossings. Highway authorities are given a wide general power of improvement of highways under section 62 HA 1980 which is the power usually relied upon by highway authorities in the absence of a specific power. At the outset it should be noted that this power is not available if the works come within any of the powers specified in section 62(3) HA 1980. In my opinion an informal Zebra crossing could not be said to come within any of those powers. The only powers which might require consideration are those relating to traffic calming works specifically authorised by section 90G HA 1980 or under regulations prescribed by section 90H, but I do not consider an informal Zebra crossing comes within any of them; it should be remembered further that the point about traffic calming measures is that they normally involve some form of work which would otherwise be an obstruction to the highway, which is not the case with an informal Zebra crossing even if it may have a traffic calming effect.

Subject to the restrictions imposed by section 62(3), section 62(2) HA 1980 provides power to carry out "*any work...for the improvement of the highway*". The term "*improvement*" is defined in section 329(1) HA 1980 as meaning "*the doing of any act, under powers conferred by Part V of this Act and includes the erection, maintenance, alteration and removal of traffic signs...*". The term "*traffic sign*" is in turn defined in section 329(1) as having the same meaning as in section 64 of the 1984 Act.

Whilst the definition of improvement in section 329(1) HA 1980 is a partial definition in the sense that it merely identifies things which are included within the term and need not prevent other things from amounting to an improvement, it is plain that with respect to traffic signs the intention is that the HA 1980 and the 1984 Act are intended to be read together. In my opinion it would be a reasonable interpretation that in so far as the power of improvement provides power to provide signs, the intention is that it should be signs authorised by the 1984 Act and that it is not intended to be used for the placing of “informal” or unauthorised signs such as an informal Zebra crossing. In the absence of an authority on the point, there is scope for arguing that the placing of an informal Zebra crossing could come within the general power of improvement, but in my opinion it probably does not come within the power.

In short, (a) there is a significant risk that section 64(4) may be interpreted as prohibiting informal Zebra crossings, and (b) even if that is not the case, it is doubtful that there is any power to provide an informal Zebra crossing.

An informal Zebra crossing would have no legal status and importantly pedestrians would not have priority on any such crossing. The important priority for pedestrians on a Zebra crossing is derived from part 5 of Schedule 14 to the 2016 Regs and it applies only to a Zebra crossing. A Zebra crossing is defined in turn in Schedule 1 as a crossing with the relevant signs and markings laid down in Schedule 14. These provisions are in turn enforced by section 36 RTA 1988 which makes it an offence to fail to comply with a traffic sign which complies with the prescribed requirements which has been lawfully placed on the road. For these purposes a *traffic sign* has the meaning given by section 64(1) of the 1984 Act and prescribed means prescribed by regulations made by the Secretary of States.

I do not consider that any legal risk would attach to TfGM as a result of local Councils not implementing TfGM’s proposals for informal Zebra crossings for a number of reasons:

- i) If there is no power to provide informal Zebra crossings there can be no criticism of any failure to provide such crossings.
- ii) Even if there were power to provide informal Zebra crossings the power would lie with highway authorities. TfGM has no power to provide informal Zebra crossings; the most it could do is seek to persuade highway authorities to provide such crossings.
- iii) The general position in any event is that an action will not lie in negligence for failing to exercise a power (as opposed to a duty).

My instructions correctly identify what would be required if there were a desire to alter the 2016 Regs and/or to provide for informal Zebra crossings. *(End of counsel’s opinion.)*

The DfT provided four statements covering the legal risks of using prescribed markings in non-prescribed ways.

DfT Statement one:

*“The argument that black and white stripes are widely used on private land and therefore will work without problems on public highway is not strictly correct. It is true that black and white stripes are used in, for example, supermarket car parks or bus stations to show an informal pedestrian route, but in our view this is not analogous to the public highway. The situations are very different – a car park does not look like a road, and vehicle speeds and flows are much lower.”*

Research undertaken by University College London demonstrates that drivers recognised the black and white stripes and that they gave the strongest encouragement of courteous behaviour<sup>16</sup>. Car parks are different, but it could be argued that most residential streets function like car parks with equivalent or lower car volumes to typical supermarket car parks. This project has been set up to address concerns of the DfT and the safety risk of this issue was assessed in terms of the collision record of public highway non-prescribed Zebras compared to control junctions<sup>17</sup>.

DfT Statement two:

*“The character of the road is a key factor. Where the road appears to users to be public highway, regardless of its actual status, they reasonably expect to see the same highway features used. The Health and Safety Executive (HSE) prosecuted Luton Airport over the death of a pedestrian on an informal crossing on airport land. The ruling was that they should have provided a full Zebra complying with regulatory requirements, even though it was not public highway. It was a road to which the public have access, and as such should have been treated the same as highway when providing for pedestrians. Our advice to those designing crossings in car parks or similar is to provide a crossing in accordance with TSRGD, for the avoidance of doubt among users. HSE have supported this view.”*

It is perhaps worth examining the Health and Safety at Work Act and the Construction (Design and Management) (CDM) Regulations to understand the implications of this ruling. The types of liability include: Highway maintainable at the public expense; common law duty of care when exercising powers; liability for maintenance (non-feasance) limited by Section 58 of the Highways Act 1980; the common law duty on road users to take the road as they find it. Private roads are covered by occupier’s liability. Health and Safety in the workplace is covered by the Health and Safety at Work Act, CDM regulations, The Workplace (Health, Safety and Welfare) Regulations 1992.

In these Regulations, unless the context otherwise requires, “workplace” means any premises or part of premises which are not domestic premises and are made available to any person as a place of work, and includes any place within the premises to which such person has access while at work, and any room, lobby, corridor, staircase, road or other place used as a means of access to or egress from that place of work or where facilities are provided for use in connection with the place of work other than a public road<sup>18</sup>. It specifically rules out public roads and so is not a relevant act for highway authorities. However, the intent of the HSE endorsing the DfT view is of note and should be taken seriously on public roads. It is therefore worth examining the nature of the issue.

Regarding the Luton Airport case, the defendants were convicted for failing to discharge the duty under Section 3(1) of the Health and Safety at Work Act 1974, contrary to Section 33(1) (a), and contravening Regulation 11(3) of the Construction (Design and management) Regulations 2007. The Health and Safety at Work Act 1974 states:

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<sup>16</sup> University College London (2019) Analysing pedestrian and vehicle interaction at courtesy crossings

<sup>17</sup> Transport Research Laboratory (2020) Side Road Zebra Crossings, Analysis of Collision Records

<sup>18</sup> <https://www.legislation.gov.uk/uksi/1992/3004/regulation/2/made>

“It shall be the duty of every employer to conduct his undertaking in such a way as to ensure, so far as is reasonably practicable, that persons not in his employment who may be affected thereby are not thereby exposed to risks to their health or safety.”

Construction (Design and Management) Regulations 2007 highlights the duties of designers as such:

“Every designer shall in preparing or modifying a design which may be used in construction work in Great Britain avoid foreseeable risks to the health and safety of any person – (a) carrying out construction work; (b) liable to be affected by such construction work; (c) cleaning any window or any transparent or translucent wall, ceiling or roof in or on a structure; (d) maintaining the permanent fixtures and fittings of a structure; or (e) using a structure designed as a workplace.” The most relevant part for this research is the section on carrying out construction work. This risk is assessed in section 4 of this report.

In the Luton case<sup>19</sup> a 79-year-old pensioner crossed in front of an HGV that had been stationary at a crossing point for over 2 minutes. There were no stop lines and the pedestrian crossed under the blind spot below the lorry cab. The court heard that for a Zebra crossing, the give way should be at least 1.1 metres back from the crossing as required under the Traffic Signs Regulations and General Directions, but in this case the crossing in question had no give way line. It also heard that although pedestrians were directed to use the crossing by guardrails, the guardrails stopped short of the crossing, enabling pedestrians to cross the road before the crossing.

The crossing had been created in such a way that it was possible for pedestrians to cross beneath the blind spot of temporarily halted lorries, with the material risk that they could be crushed should the lorry driver pull forward. The provision of a give way line 1.1 metre or more back from the crossing might have averted this risk, as might the extension of the pedestrian guardrail. The ruling handed down by the judge at the court of appeal did not state that they should have provided a full Zebra complying with regulatory requirements. It stated that “the combination of the overly wide gap in the railings when compared to the crossing width (coupled with the pedestrian’s direction of approach) together with the absence of give-way marks led to a situation where pedestrians trailing suitcases and the like could enter the crossing on an unprotected area, and a lorry could be positioned where it could not see a pedestrian and both moved off at the same time. “

Therefore, the presence of zig zag lines and orange globes would have made no difference in this case. Furthermore, had a TSRGD-compliant Zebra crossing been introduced, the fact that it would have been on a private road would have meant that it would have no legal significance, and would itself have been an implied Zebra. Nevertheless, it is important to address the intent to which this case is raised as an issue on the public highway and that it is to highlight the need for compliance.

If the provisions of the Health and Safety at Work Act were applied to highways maintainable at the public expense what would be the consequence? We would have a much higher level of service for pedestrians but we would have fundamentally to change the design of

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<sup>19</sup> <https://www.casemine.com/judgement/uk/5a8ff71d60d03e7f57ea7b0a>

practically every street in the UK as they have been designed for the expeditious movement of motor traffic and not the safe movement of people. It is worth looking at The Workplace (Health, Safety and Welfare) Regulations 1992<sup>20</sup> to make this clear. The section on the organisation of traffic routes states:

- 1) Every workplace shall be organised in such a way that pedestrians and vehicles can circulate in a safe manner.
- (2) Traffic routes in a workplace shall be suitable for the persons or vehicles using them, sufficient in number, in suitable positions and of sufficient size.
- (3) Without prejudice to the generality of paragraph (2), traffic routes shall not satisfy the requirements of that paragraph unless suitable measures are taken to ensure that—
  - (a) pedestrians or, as the case may be, vehicles may use a traffic route without causing danger to the health or safety of persons at work near it;
  - (b) there is sufficient separation of any traffic route for vehicles from doors or gates or from traffic routes for pedestrians which lead onto it; and
  - (c) where vehicles and pedestrians use the same traffic route, there is sufficient separation between them.
- (4) All traffic routes shall be suitably indicated where necessary for reasons of health or safety.
- (5) Paragraph (2) shall apply so far as is reasonably practicable, to a workplace which is not a new workplace, a modification, an extension or a conversion.

Would 1770 fatalities a year be acceptable if roads were treated like workplaces? Likewise, the workplace regulations say of crossing points that:

“Where pedestrian and vehicle routes cross, provide appropriate crossing points for people to use. Pedestrians, cyclists and drivers should be able to see clearly in all directions. Crossing points should be suitably marked and signposted, and should include dropped kerbs where the walkway is raised from the driving surface.”

And

“At busy crossing places, consider traffic lights, Zebra crossings (or other types of crossing), or suitable bridges or subways as a way of segregating pedestrians from moving vehicles.”

Compliance with this guidance would almost certainly lead to side road entrances on main streets being created as “appropriate crossing points”.

DfT Statement three:

*“There are safety concerns with allowing black and white stripes to be used in this way on the public highway. It does not address the visibility problem caused by vehicle blind spots. Nor does it consider poor visibility for drivers waiting to turn into or out of the side road, who will be likely to move forward to wait on the crossing if they cannot otherwise see. Drivers turning into the road may not see the crossing until it is too late to stop.”*

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<sup>20</sup> <https://www.hse.gov.uk/workplacetransport/separating.htm>

Side road Zebras do help to address the issue caused by vehicle blind spots, by creating a large traffic sign that emphasises the fact that drivers do not have right of way. A give way line can be introduced 1.1 metre or more away from the crossing. The standard detail shown in section 3 shows this. Drivers will have to move forward, over the implied crossing, but it is unclear why this is a concern. Under any configuration of an urban side street entrance they would have to do this. Drivers turning into the road under the Highway Code must be prepared to give way pedestrians irrespective of whether there is a crossing or not. Drivers turning into the side road are required to give way to pedestrians crossing the side road and must be in a position to stop. As part of the on-street trial we will look for queuing scenarios to see the effect on the severity of interactions of vehicles waiting on the non-prescribed Zebra. We will also try to determine if driver of a queuing car is more likely to give way if they see a pedestrian waiting to cross.

DfT Statement four:

*“There could be negative impacts on proper Zebra crossings as well. ‘Implied Zebras’ placed at every side road are likely to lead to drivers not respecting full Zebras. “There is evidence that when the number of Zebra crossings proliferated in the 1960s, compliance dropped substantially. Many crossings were then removed.”*

There is no evidence to support that this assertion based on the 1960s applies to the 2020s, 60 years having elapsed. There was a ministerial statement at the time: “if we allowed pedestrian crossings to proliferate to a large extent throughout the country, the standard of observance of the rules by drivers would undoubtedly fall dramatically.” The minister omitted to adduce any evidence in support of this assertion. It should in any case be remembered that in the 1960s when many vehicle braking systems were based on cables, rods and lacked servo assistance, where vehicle stopping distances were far in excess of those achieved by modern vehicles equipped with radial ply tyres and servo-assisted hydraulic brakes.

In the 1960s the primary objective of government street design policy and guidance was centred around vehicles. Roads in Urban Areas 1966 asserted that “Urban roads should be designed to be safe and to permit the free flow of traffic at reasonable speed.” Traffic at the time did not include pedestrians. Roads in Urban Areas was withdrawn by the DfT in 2007 when Manual for Streets was published. In 2020 the Department for Transport published Gear Change, a Cycling and Walking Plan for England which places consideration for pedestrians at the heart of decision making. “We are consulting on updates to The Highway Code to strengthen and improve safety for all road users. We aim to introduce a hierarchy of road users to ensure that those road users who can do the greatest harm have the greatest responsibility to reduce the danger or threat they may pose to others.” There are also the user hierarchies in the DfT Manual for Streets, and in the MHCLGs National Planning Policy Framework as well as the Public Sector Equality Duty.

We believe that side road Zebras not only constitute a rational case for an experiment in Greater Manchester, we contend that it would be irrational not to go ahead, given the weight of research and the policy changes introduced by this government.

In summary, there is no prescribed sanction for highway authorities using unauthorised signs but there is a duty of care to consider when addressing risks. This is covered in section 4 of this report. It is also important to note that pedestrians are not afforded the same rights on a non-prescribed Zebra as they are on a full legal Zebra. Fundamentally it is advised that these approaches are only used for trial purposes until the changes proposed in section 3 of this



report have been authorised by the Secretary of State. However, the Secretary of State has shown a desire for this research to be concluded so that he may make an informed decision with colleagues at the Department for Transport as to whether this approach should be authorised. The trial has been designed to address the potential safety risks highlighted by expert colleagues at the Department for Transport even though they cannot authorise a trial using prescribed markings in a non-prescribed way.

Of interest is the following statement from Highway Risk and Liability Claims: A practical guide..., July 2009: *“There have been very few cases relating to alleged defects in design. A request went out to members of the CSS in 2008 for cases that had gone against the authority on the basis of design. There was no significant history. There was a small number of live cases that were tending to focus on trip hazards resulting from design. There is of course nothing stopping an individual making a claim for a design defect, however the instances seem rare and the chances of success remote”*.

## **2.3 RQ 1-3: What legal opportunities exist to provide crossings within existing regulation/legislation?**

Courtesy crossings provide an alternative to non-prescribed Zebras although it should be noted that Professor Peter Jones found that “the presence of marked stripes, regardless of being a formal Zebra or informal crossing, is the strongest influence on courtesy behaviour<sup>21</sup>. Likewise, an earlier report as part of this project found that courtesy crossings that did not mimic Zebras performed much worse in terms of recognition and desired potential behaviour than Zebra type markings<sup>22</sup>. Traffic Signs Manual Chapter 6 states that “Any pattern or coloured surfacing should not mimic the stripes of a Zebra crossing as this is likely to be misleading”. Given that this is a “should” and not a “must” there is no legal precedent against it. Courtesy crossings are therefore outside of regulation and may be used at the discretion of the highway authority. Figure 8 shows an example in Altrincham.

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<sup>21</sup> University College London (2019) Analysing pedestrian and vehicle interaction at courtesy crossings

<sup>22</sup> Transport Research Laboratory (2020) Effectiveness of Zebra marking alternatives.



Figure 8. A courtesy crossing in Greater Manchester

Having said this, the Highway Authorities of Greater Manchester and Transport for Greater Manchester are determined to comply with the spirit of the regulations and so rather than use courtesy crossings on the planned Bee Network they are seeking approval for a full legal Zebra that functions in a similar way to the cycle track Zebra and is used in the proximity of a side road junction. This research stands as testament to the region's desire to work with the Department of Transport to make a case for change and the current consultation on changes to the highway code suggest all organisations are pushing towards greater pedestrian priority.

## 2.4 RQ 1-4: What are the processes for altering regulation/legislation?

In this section the relevant sections of TSRGD will be referenced and suggested changes highlighted. There are other instruments for authorising the use of Zebras without beacons or zig zags, but this method appears to be the easiest in legislative terms. The expert advice of Phil Jones from Phil Jones Associates was used to inform this section. Note that in this section **yellow highlight** is used to show the text proposed for change and **green highlight** shows the suggested replacement text.

Issue one: How does the driver know where to give way?

Paragraph 19 in Schedule 14 states:

"19. The give-way line marking provided for at item 54 of the Part 2 sign table (and shown in the diagram at item 52) conveys to vehicular traffic proceeding towards a Zebra crossing the position at or before which a vehicle must be stopped for the purpose of complying with paragraph 7 of Part 5."

It is therefore vital that a give way marking is used in association with the Zebra markings to comply with this regulation. This element is shown in figure 9 on the proposed standard detail.

Issue two: Can the yellow globe be removed?

The schedule 1 definition of a Zebra crossing states:

“(b) the presence of which is indicated by—

- (i) a yellow globe of the type provided for at item 27 of the sign table in Part 2 of Schedule 14 at each end of the crossing (except that globes need not be present at a crossing that only crosses a cycle track);”

The key phrase is in the brackets in that there is an exception to using the yellow globe so potentially this exemption could cover side roads.

Issue three: Can the controlled area be removed?

Schedule 14 paragraph 25 states:

“25.—(1) Sub-paragraph (2) applies where, but for this paragraph, these Regulations impose a requirement for there to be a controlled area.

(2) Where the crossing is placed across a cycle track, no controlled area in that part of the carriageway that is a cycle track is required.

(3) In relation to a Zebra or Parallel crossing which only crosses a cycle track, a yellow globe (provided for at item 27 of the Part 2 sign table) is not required.”

This schedule states an exemption for the controlled area, again in relation to cycle tracks.

Therefore, the following changes are recommended. In the schedule 1 definitions it could state:

“(b) the presence of which is indicated by—

- (i) a yellow globe of the type provided for at item 27 of the sign table in Part 2 of Schedule 14 at each end of the crossing (except that globes need not be present in the circumstances set out in paragraph 25 of Schedule 14 Part 1);”

And Schedule 14 paragraph 25 could state:

“General provision about crossings placed across cycle tracks

25.—(1) Sub-paragraph (2) and (3) apply where, but for this paragraph, these Regulations impose a requirement for there to be a controlled area.

(2) Where the crossing is placed across a cycle track

(3) Where the crossing is placed across the carriageway of a minor road in the vicinity of a junction and the nearest edge of the black and white stripes shown in the diagram at Item 52 of the sign table in Part 2 of Schedule 14 is no more than 10m from the give way sign

(4) In relation to a Zebra or Parallel crossing a yellow globe (provided for at item 27 of the Part 2 sign table) is not required where –

(a) the crossing only crosses a cycle track or

(b) the crossing is placed across the carriageway of a minor road in the vicinity of a junction and the nearest edge of the black and white stripes shown in the diagram at

Item 52 of the sign table in Part 2 of Schedule 14 is no more than 10m from the give way sign "

These minor changes would make the side road Zebra possible and mean that the standard detail shown in figure 9 would be possible.

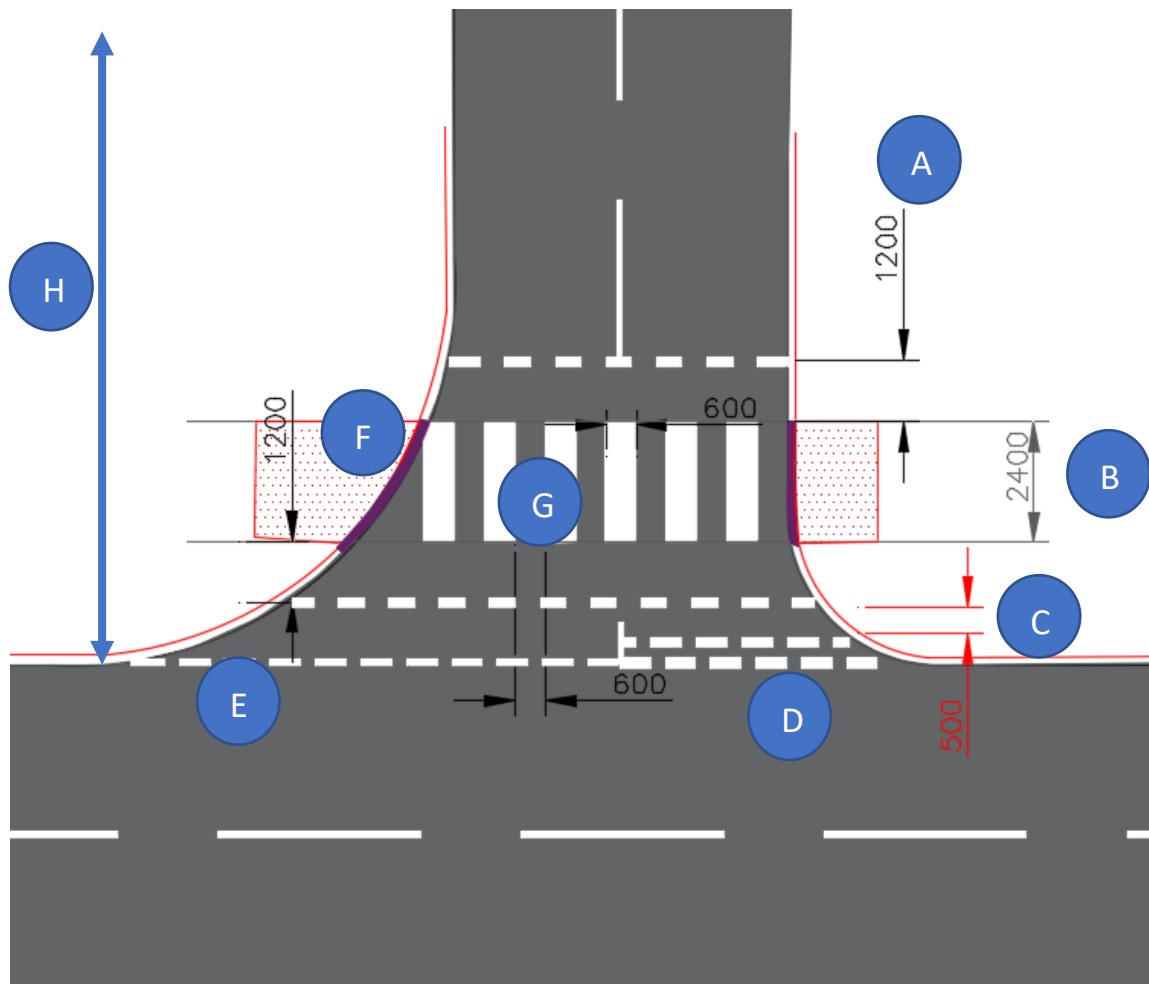


Figure 9. Proposed Standard Detail for a Zebra crossing within the proximity of a priority junction.

A is the distance from Zebra black and white stripes to give way marking (diag. 1001.5). This is set at 1.2m.

B is the minimum width of a Zebra crossing. This is set at 2.4m. The maximum width is 10m.

C is the distance between the priority junction markings (diag. 1003A) and the give way markings Item 54 (diag. 1001.5). This is site specific but a minimum of 0.5m is suggested. Note that priority junction markings may not be present. Efforts should be made to position the Zebra crossing on the pedestrian desire line.

D is the optional priority junction exit give way markings (diag. 1003A)

E is the optional priority junction entrance give way marking (diag. 1009A)

F is the red blister tactile paving associated with controlled crossings. L shaped tiles may be used.

G is the width of the black and white Zebra stripes. This is set between 400 and 600mm.

H is the maximum distance away from a priority junction give way that the Zebra classifies as being at a priority junction. This is suggested at 10m and up until the give way line (diag. 1001.5).

Processing these changes would be a light parliamentary procedure as the changes to TSRGD are minor. It is therefore secondary legislation and laid before parliament with no debates or votes required. It is very rare that anyone will object so it should pass through as a negative procedure. This is the type of parliamentary procedure that applies to statutory instruments. Its name describes the procedure. It will become law the day the Minister signs it and automatically remains a law unless a motion to reject it is agreed by either House within 40 sitting days.

## 2.5 Case law

The landmark case in this area is the case of *Gorringe v Calderdale Metropolitan Borough Council* (2004). This case provides an overview of many relevant cases and reads as a summary of legal risks. Lord Steyn, Lord Hoffman, Lord Scott of Foscote, Lord Rodger of Earlsferry and Lord Brown of Eaton-under-Heywood all make statements that are particularly interesting to this research and the potential liability. The judgement went against the plaintiff who claimed that the highway authority should have warned of danger by painting a slow sign on the roadway. It was stated that a highway authority had the duty to maintain the highway and keep it in repair but there was no common law duty to place a marking on the road or erect signs. In all other respects the public had to take the highway as they found it. This is stated in the Highway Act 1980 because of *Burnside v Emerson* (1968). The general rule stated by Lord Hoffman was that “There is no duty to give warning of obvious danger”.

However, Lord Hoffman talks about the liability arising from a positive act in stating “An individual who had suffered damage because of some positive act which the authority had done to make the highway more dangerous could sue for negligence or public nuisance in the same way as he could sue anyone else”. He also clarified that “highway authorities were liable in tort for misfeasance but not for non-feasance.” Which is to say that they cannot be prosecuted for doing nothing, but they can be prosecuted for doing something that makes the highway more dangerous. In the case of side road Zebras, it would need to be argued that the presence of the black and white stripes made the highway more dangerous.

In the case of *Stovin v Wise* (1996), Mrs Wise emerged from a side road and ran down Mr Stovin. Her defence claimed that the visibility was poor. It was a majority decision that the council owed “no private law duty to road users to do anything to improve the visibility at the intersection.” This is interesting as it was a majority decision and so, at least initially, sites should be chosen with good visibility. Lord Hoffman does state that there may be liability where it would be irrational in a public law sense not to do something.

In the case of *Larner v Solihull Metropolitan Borough Council* (2001), Mrs Larner was injured when she drove through two give way signs and was injured by another car on the major road. She sued the council claiming that under section 39 of 1988 Road Traffic Act additional

warning should have been present. The case was dismissed but on appeal Lord Wolf said that section 39 was a “target duty” which did no more than “require the council to exercise its powers in the manner that it considers appropriate”. However, common law liability can arise and “this would happen if an authority acted wholly unreasonably”. Lord Wolf defines wholly unreasonable as “the default of the authority falls outside the ambit of discretion given to the authority by the section.” Lord Scott of Foscote argues that this could never be the case and that “the door left ajar by Lord Wolf...be firmly shut”. It would be very difficult to argue that a painted Zebra would fall under this wholly unreasonable definition in any case.

*Skilton v Epsom and Ewell Urban District Council* (1937). In this case the council had put road studs in the centre of the highway, and one became dislodged causing a cyclist to fall off her bike. The plaintiff succeeded in suing the council with the decision resting on whether “the defendants caused a nuisance?”; this was defined as “they have done something on the highway not for the purpose of maintaining it as a highway but for some totally different purpose, and the act which they did had become at the time the injury was caused to the plaintiff a nuisance”. So, the council was liable because they did something that was not maintenance and it caused a nuisance. In the case of side road Zebras only paint is being suggested so it is unlikely that this will cause injury or be considered a nuisance by this definition.

Lord Scott of Foscote states that “a highway authority may be liable at common law for damage attributable to dangers that it has introduced” But “an overriding imperative is that those who drive on public highways do so in a manner and at a speed that is safe having regard to such matters as the nature of the road, the weather conditions and the traffic conditions. Drivers are first and foremost responsible for their own safety.” This last statement is a key one for side road Zebras in that it puts the onus on drivers to keep safe. The nature of a side road is that drivers should be looking out to stop or yield and so the responsibility lays with the driver to do so.

Lord Rodger of Earlsferry provides a statement that is particularly helpful for the aims of this research and the use of side road Zebras. He states “It would seem, for instance, to follow that the pedestrian run down when crossing a busy thoroughfare would be entitled to say that his injuries were caused by the failure of the authority to set the machinery in motion for the provision of a pedestrian crossing. If such duties are to be imposed on road authorities, that should in my opinion be done by Parliament”. Lord Rodger of Earlsferry references Lord Stott who said “it is not for the courts but for parliament to create such a far-reaching duty, after considering all the implications. Parliament has so far chosen not to do so, leaving it to drivers to take proper care for the safety of themselves, their passengers and other road users.” The simple legislation changes asked for in Section 1.4 of this report represent a chance for Parliament to right this historic wrong to pedestrians. The Lords are asking for Parliament to protect pedestrians at crossings. This research is seeking the ability to help people, who have an established legal right to cross the road safely.

In summary, there is no duty to exercise statutory powers. There is a common law duty of care to careful and negligent road users on highway authorities not to be negligent when they exercise their powers. Highway’s maintenance liability is limited by the special defence S58 Highways Act. Most importantly, public sector equality duty under the Equality Act 2010 requires positive action.

## 2.6 Legal imperative to act

There is evidence that drivers fail to comply with the current highway code in giving way to pedestrians at side roads, that pedestrians find crossing side roads stressful, that they have no informed choice as to whether to cross or not, and that pedestrians include children, who may not have the capacity to judge moving traffic, and people with protected characteristics under the Equality Act 2010. Also relevant is the Obesity Strategy<sup>23</sup>; the Prime Minister has noted the link between obesity and increased morbidity in COVID infections.

There are several legal targets and statutory duties that support pedestrian priority, including the 2050 Net Zero Carbon target<sup>24</sup> and the Public Health and Social Care Act 2012<sup>25</sup>. Each local authority must take such steps as it considers appropriate for improving the health of the people in its area.

The Equality Act 2010<sup>26</sup> shows the Public Sector Equality Duty and the duty to make adjustments. Councils, in the exercise of their functions (and private companies providing public services), must have due regard to the need to advance equality of opportunity of people with protected characteristics under the Equality Act 4, including elderly people, disabled people, and people of different gender. "Due regard" means a vigorous and open-minded inquiry before settling upon a course of action.

Blind, partially-sighted and elderly people and wheelchair users are at a disadvantage when crossing streets. They can have difficulty judging the speed and distance of oncoming traffic, and owing to their substantially reduced walking speed, will spend 2-3 times more time in the carriageway when crossing at the mouth of a priority junction. Women are more likely to be carers of children and may be disproportionately affected by difficulty in crossing side streets.

The public sector duty regarding socio-economic inequalities says "An authority to which this section applies must, when making decisions of a strategic nature about how to exercise its functions, have due regard to the desirability of exercising them in a way that is designed to reduce the inequalities of outcome which result from socio-economic disadvantage."

Public sector equality duty Equality Act (2010) Part 11, Chapter 1, Section 149 states that:

- (1) A public authority must, in the exercise of its functions, have due regard to the need to—
  - (a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited by or under this Act;
  - (b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
  - (c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

20 Duty to make adjustments.

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<sup>23</sup> <https://www.gov.uk/government/publications/tackling-obesity-government-strategy/tackling-obesity-empowering-adults-and-children-to-live-healthier-lives>

<sup>24</sup> <https://www.gov.uk/government/news/uk-becomes-first-major-economy-to-pass-net-zero-emissions-law>

<sup>25</sup> <https://www.gov.uk/government/publications/health-and-social-care-act-2012-fact-sheets>

<sup>26</sup> <https://www.gov.uk/guidance/equality-act-2010-guidance>



(4) The second requirement is a requirement, where a physical feature puts a disabled person at a substantial disadvantage in relation to a relevant matter in comparison with persons who are not disabled, to take such steps as it is reasonable to have to take to avoid the disadvantage.

9) In relation to the second requirement, a reference in this section or an applicable Schedule to avoiding a substantial disadvantage includes a reference to—

- (a) removing the physical feature in question,
- (b) altering it, or
- (c) providing a reasonable means of avoiding it.

There is a positive duty under the Traffic Management Act 2004 to secure the expeditious movement of traffic (including pedestrians).

Network Management Duty from the Traffic Management Act 2004<sup>27</sup> imposes a duty to secure the expeditious movement of traffic on the authority's road network; traffic includes pedestrians. Powers to undertake any action which the Authority considers will contribute to securing—(a) the more efficient use of their road network; or (b) the avoidance, elimination or reduction of road congestion or other disruption to the movement of traffic.

#### 16 The network management duty

(1) It is the duty of a local traffic authority [or a strategic highways company (“the network management authority”)] to manage their road network with a view to achieving, so far as may be reasonably practicable having regard to their other obligations, policies and objectives, the following objectives—

- (a) securing the expeditious movement of traffic on the authority's road network; and
- (b) facilitating the expeditious movement of traffic on road networks for which another authority is the traffic authority.

(2) The action which the authority may take in performing that duty includes, in particular, any action which they consider will contribute to securing—

- (a) the more efficient use of their road network; or
- (b) the avoidance, elimination or reduction of road congestion or other disruption to the movement of traffic on their road network or a road network for which another authority is the traffic authority;

and may involve the exercise of any power to regulate or co-ordinate the uses made of any road (or part of a road) in the road network (whether or not the power was conferred on them in their capacity as a traffic authority)

S31 Interpretation: “traffic” includes pedestrians.

Section 39 of the Road Traffic Act 1988<sup>28</sup> covers accident prevention. It says that authorities:

- (a) must carry out studies into accidents arising out of the use of vehicles

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<sup>27</sup> <https://www.legislation.gov.uk/ukpga/2004/18/contents>

<sup>28</sup> <https://www.legislation.gov.uk/ukpga/1988/52/contents>

(b) must, in the light of those studies, take such measures as appear to the authority to be appropriate to prevent such accidents, including the dissemination of information and advice relating to the use of roads, the giving of practical training to road users or any class or description of road users, the construction, improvement, maintenance or repair of roads for the maintenance of which they are responsible and other measures taken in the exercise of their powers for controlling, protecting or assisting the movement of traffic on roads.

Local authorities must undertake reviews of air quality and where air quality standards and objectives are not being achieved, must designate air quality management areas, and prepare an action plan which must have regard to the statutory guidance.

Local authorities also have a Common Law duty of care to careful and negligent road users as highlighted in section 2.5.

The Greater Manchester Strategy priority 2 is “Young people equipped for life”<sup>29</sup>, which aims to help with travel and transport. Priority 7 talks about “A green city-region and a high-quality culture and leisure offer for all”. It says “We’re working to reduce carbon emissions and pollution, use resources more sustainably, and make the most of our outstanding natural environment. We want to create community hubs and places which people can enjoy.” Priority 9 covers Healthy lives and says “We’re making radical improvements to mental and physical health services, promoting wellbeing, encouraging healthier lifestyles, and trying to prevent people getting ill in the first place.” And priority 10 talks about “An age-friendly Greater Manchester”, saying “We’re pioneering an approach to become the UK’s first age-friendly city-region. We want people to stay well and live at home for as long as possible.”

The objective of using side road Zebras are as follows.

To:

- assist in delivering central government policies, plans and the policy of the Greater Manchester Authorities in promoting walking, wellbeing, encouraging healthier lifestyles, improving equity, advancing equality of opportunity among all people, reducing air pollution and carbon emissions
- reduce the number of collisions between pedestrians and vehicles at side street entrances
- increase the proportion of drivers complying with the requirements in the Highway Code that they should give way to pedestrians at side-road entrances
- improve the useability of streets by disabled people and elderly people, providing better equality of opportunity
- provide increased safety for children, who may not have the capacity to judge traffic
- reduce the barriers to movement along streets
- increase the number of people walking and the distance they walk

Our proposal:

To trial a system of Zebra crossings, omitting zig-zag lines and yellow globes, in line with common international practice.

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<sup>29</sup> [https://www.greatermanchester-ca.gov.uk/media/1084/greater\\_manchester\\_summary\\_\\_\\_full\\_version.pdf](https://www.greatermanchester-ca.gov.uk/media/1084/greater_manchester_summary___full_version.pdf)

Research commissioned as part of this study has found that drivers recognise and stop at striped-lines-only Zebra crossings, indicating that the side road Zebras stand a strong chance of success.

Recommendation:

The proposal assists in discharging high-level policy objectives and statutory duties.

Side road Zebras are common international practice, though not currently in the UK.

### 3 Trial advice

#### 3.1 Risk management

In order to deliver an on-site trial of a non-prescribed Zebra, the highway authority must be satisfied that it has addressed every risk that is posed. Risk should start with the most dangerous user, which in this case is the driver. At a side road priority junction, drivers are expected to yield when entering and exiting the junction. Therefore, the presence of another set of give way lines should prove to reinforce this fact. Drivers are also expected to yield to pedestrians who have started to cross under Highway Code Rule 170. Therefore, the presence of Zebra black and white stripes should prove to reinforce this fact. Although prescribed markings are being used in non-prescribed ways, they are not in any way providing misleading or contradictory information to the prescribed signs and markings.

A similar precedent would be in the use of elephant's footprints at side roads, which is increasingly common in London. In this case, elephant's footprints Schedule 14, Part 2, Item 57 (diag.1055.3) are only prescribed for use at signal-controlled junction and at a parallel crossing. Yet they are the most conspicuous marking and convey the message clearly that this is a route for traffic consisting solely of pedal cyclists. When associated with a cycle track across a junction this message is not misleading or ambiguous. Nevertheless, all due care and attention should be used before taking a step that is unlawful, even when there seems very little risk of prosecution as there is no legally prescribed sanction. Figure 10 shows a list of generic potential risks. This should form the basis of a site-specific risk assessment. It is then suggested that this is presented alongside a design and site plan to internal legal teams to gain approval before proceeding to site.

Issue	Design response	Severity	Likelihood	Risk	Mitigation
Driver failing to give way leading to exit collisions with pedestrians	Markings greatly reduce risk compared to standard side road treatment due to conspicuity and implied pedestrian priority	2	1	2	Remove markings and potentially introduce more formal crossing
Driver failing to give way when entering leading to collisions with pedestrians	Markings greatly reduce risk compared to standard side road treatment due to conspicuity and implied pedestrian priority	3	1	3	Remove markings and potentially introduce more formal crossing

Rear end shunts	Risk slightly increased as approaching vehicles may be more inclined to moderate their speed	1	2	2	20mph speed limit introduced
Visibility at night leading to failure to give way	Visibility of side road increased by markings	2	1	2	Upgrade street lighting, install warning signs
Surface skid resistance in wet conditions leading to loss of control for turning motorcycles and bicycles	High friction surfaces to be used where this issue is anticipated	1	1	1	20mph speed limit introduced
Crossing blocked by parked cars	Parking restrictions in place at side roads	1	2	2	Enforcement
Driver confusion leading to failure to give way	Markings are universally recognised and have been experienced by all UK drivers in car parks or private land	2	1	2	Warning signs used on approaches
Risk of crossing being blocked consistently in congested conditions	Markings are universally recognised and associated with yielding priority to crossing pedestrians so space should emerge	1	1	1	Remove markings and potentially introduce more formal crossing
Risk of trip hazard if used without drop kerbs	Make efforts to install dropped kerbs as soon as possible dependant on available budgets	1	2	2	Install dropped kerbs
Risk of road markings being obscured by approaching cars entering the side road in congested conditions resulting in failure to give way	Visibility of side road increased by markings	2	1	2	Warning signs used on approaches
Risk of pedestrian stepping out without looking assuming drivers will give way leading to collision	Pedestrians will be made more aware of the crossing and may be more likely to observe approaching traffic	2	1	2	Warning signs used on approaches
	max	3	3	9	

<b>low</b>	<b>med</b>	<b>high</b>			
1,2,3	3,4,5	6,7,8			

Figure 10. Generic risk log for the use of the non-prescribed Zebra at a priority junction.

In this case if any risk is highlighted as falling in the amber or red category and it cannot be resolved then it is recommended that the trial does not go ahead and an alternative site is found.

### 3.2 Site preparation and monitoring

All highway authority CDM and Health and Safety procedures should be followed but additional information is needed for the purpose of a fully monitored trial. Local authorities are advised to use the standard detail but consider the use of additional warning signs such as Schedule 12, Part 20 Item 7 “Warning of a Zebra crossing” sign. Paint should be applied with a high friction surface as it will be placed within the turning radii of motorcycles and bicycles. Efforts should be made to provide dropped kerbs and appropriate tactile information. Figure 11 shows a risk log for the specific use of camera equipment as part of the trial for consideration.

Issue	Control	Severity	Likelihood	Risk	Mitigation
Working on live carriageway	Comply with NRSWA and Chapter 8	3	1	3	Dynamic risk assessment
Weather conditions	Appropriate PPE	1	1	1	Dynamic risk assessment
Remote or hostile surroundings	Mobile phones	1	1	1	Dynamic risk assessment
Suitable street furniture	Visibility of side road increased by markings	2	1	2	Dynamic risk assessment
Tool operation	Fully trained operatives	2	1	2	Dynamic risk assessment
Manual handling	Experienced operatives	1	1	1	Dynamic risk assessment
Slips trips and falls	Keep site in good condition	1	1	1	Dynamic risk assessment
Working at height	Training and PPE	3	1	3	Dynamic risk assessment
Travel to site	Safe driving policy	2	1	2	Dynamic risk assessment
	max	3	3	9	

Figure 11. Camera equipment risk log

## 4 Summary and conclusions

### 4.1 Summary of Findings

The research question this report aimed to answer was:

What legal risk do highway authorities face from using regulated markings in non-prescribed ways?

This question was divided into the following sub-questions:

RQ1-1: Which laws relate to the use of non-regulated crossing markings, or regulated crossing markings in non-prescribed ways?

Information from legal counsel and statements from the Department for Transport was assessed and, in conclusion, Zebra crossings are clearly defined in the Traffic Signs Regulations and General Directions (2016). They are specified as needing both a yellow globe and a control zone which this research is trying to show may not be necessary at side roads. However, the Zebra crossing used on a cycle track has no requirement for a yellow globe and control zone, so perhaps this approach could be taken on side roads.

RQ1-2: What legal risks arise to highway authorities from the use of non-regulated markings, or regulated markings in non-prescribed ways?

Information from legal counsel and statements from the Department for Transport was assessed and in conclusion there is no prescribed sanction for highway authorities using unauthorised signs, but there is a duty of care to consider when addressing risks. It is important to note that pedestrians are not afforded the same rights on a non-prescribed Zebra as they are on a full legal Zebra. Fundamentally it is advised that these approaches are only used for trial purposes until the legislation changes have been authorised by the Secretary of State. However, the Secretary of State has shown a desire for this research to be concluded so that he may make an informed decision.

RQ1-3: What legal opportunities exist to provide crossings within existing regulation/legislation?

Greater Manchester has little desire to explore options or routes that are not fully endorsed by the Department for Transport. Courtesy crossings have been shown to provide benefits to pedestrians, but this avenue is not being explored in this research.

RQ1-4: What are the processes for altering regulation/legislation?

Adjusting the Traffic Signs Regulations and General Directions (2016) document so that the optional omissions of the yellow globe and control zone apply to Zebra crossings within ten metres of a priority junction seems to be the clearest route to progress. This will be subject to legal review and light parliamentary process. It is a minor change that would fall under secondary legislation and so no debate or vote would be required. It should pass through both houses as negative procedure and come into effect once signed by the Minister.

## 4.2 Conclusions

In conclusion there is little legal risk with proceeding with the trial, but each site should be assessed thoroughly for potential safety risks. The process is shown in this report. The use of the Zebra crossing without yellow globes, or a controlled zone is lawful on the public highway but only on a cycle track. Making this applicable to priority junctions may offer the clearest avenue for legal progression should the Secretary of State wish to do so. Planned changes to the Highway Code should support the benefits of this approach and vice versa, and statements in the Gear Change document give succour to the desire of Greater Manchester to provide clearer priority to pedestrians on side roads to address safety issues. If the Gear Change (2020), Obesity Strategy (2020), Health and Social Care Act (2012), Traffic Management Act (2004), Road Traffic Act (1988) and Equality Act (2010) are to be meaningful then there is a moral and legal imperative to address the danger faced by pedestrians at side roads.



## Biographies

Robert Huxford



Robert is director of the Urban Design Group, an international membership charity for people concerned about improving the design of cities, towns and villages. He is co-founder of PRIAN, the Public Realm Information and Advice Network, and a member of the Institution of Civil Engineers Municipal Expert Panel.

### Publications

Placemaking Guide – Perth and Kinross Council – author

UK Guide on Highway Risk and Liability Claims – co-author and editor

Vision for Transport 2020 – Engineering Council – ICE – author

Watercourses in the Community – Scottish Environment Protection Agency – author

Designing Streets for People – UDAL – ICE – author

Returning Roads to Residents – UDAL – ICE author

Rural Routes and Networks – Countryside Agency – ICE – co-author

Better Places for Business – UDAL – ICE – co-author

Brian Deegan



Brian is a Technical Director at Urban Movement, a transport consultancy which specialises in active travel. He is advisor to the Mayor of Leicester and the Greater Manchester Cycling and Walking Commissioner. He is one of the country's leading experts in cycling infrastructure and healthy streets. He was co-author of the EU Cycling Strategy and the London Cycling Design Standards.

## Published papers, research, guidance and technical standards

(note that authored papers and reports are shown in a darker font to those reports where the role was focussed on contributing as part of a team or reviewing content)

Document Title	Client/Publisher	Status	Date Published	Role
Cycling by Design	Transport for Scotland	Technical guidance and standards	In progress	Reviewer
Highway Code (revisions)	Department for Transport	Road user rules	In progress	Reviewer
Light Segregation research	Transport for London	Research	Unpublished	Contributor
Bus Stop Bypass research	Transport for London	Research	Unpublished	Reviewer
Bus Stop Boarder research	Transport for London	Research	Unpublished	Reviewer
Local Transport Note 1/20 – Cycle Infrastructure Design	Department for Transport	Technical Guidance	Jul-20	Reviewer
How to talk to people about the future of their streets	London Cycling Campaign	Policy guidance	Jul-20	Co-Author
Leicester Street Design Guide	Leicester City Council	Technical Guidance and Standards	Jun-20	Co-Author
Active Travel Implementation Plan	Sheffield City region	Infrastructure plan	Jun-20	Contributor
Climate Safe Streets	London Cycling Campaign	Policy guidance	Mar-20	Co-Author
Change a Region, Change a Nation	Transport for Greater Manchester	Infrastructure plan	Jan-20	Co-Author
Side Road Zebra Crossings: Effectiveness of Zebra Markings alternatives	Transport Research Laboratory	Technical research	Jan-20	Reviewer
Side Road Zebra Crossings: Analysis of Collision Records	Transport Research Laboratory	Technical research	Oct-19	Reviewer

Document Title	Client/Publisher	Status	Date Published	Role
Bee a Champion 2	Urban Movement	Guidance and training manual	Sep-19	Author
Glasgow Public Realm Design Guide	Glasgow City Council	Technical Guidance	Jul-19	Co-Author
Air Quality in Liveable Neighbourhoods	London Borough of Hackney	Technical Guidance	Mar-19	Co-Author
Bee a Champion	Urban Movement	Guidance and training manual	Sep-18	Author
Designing for Cycle Traffic	Institute of Civil Engineering	Technical guidance	Sep-18	Reviewer
Light protection of cycle lanes: Best practices	International Transport Forum /OECD	Technical guidance	Aug-18	Author
Beelines	Greater Manchester Combined Authority	Guidance and technical principles	Jun-18	Co-Author
Draft EU Cycling Strategy	European Cycling Federation	Technical policy guidance	Jun-17	Co-Author
Global Street Design Guide	NACTO	Technical Guidance	May-17	Contributor
Interim Advice Note 195/16 – Designing for Cycle Traffic	Highways England	Standard	Dec-16	Reviewer
Cycling Infrastructure in London	Institute of Civil Engineering	Research	Dec-15	Author
Cycling Cultures	University of Chester Press	Research	May-15	Co-Author
International Cycling Infrastructure Best Practice Review	Transport for London	Research	Dec-14	Reviewer
London Cycling Design Standards	Transport for London	Technical Guidance	Dec-14	Co-Author

Document Title	Client/Publisher	Status	Date Published	Role
Raising the bar – A review of cycling policies in the European Union	European Transport Safety Council	Planning policy	Sep-14	Co-Author
Active Travel Design Guidance	Welsh Government: UK	Technical Guidance and Standards	Sep-14	Contributor
Planning for Cycling	Chartered Institution of Highways and Transportation: UK	Technical Guidance	Sep-14	Reviewer
Enabling Cycling Cities – The ingredients for success	CIVITAS	Planning policy	Feb-13	Co-Author
EU PRAISE Project Thematic Report into Commuter Travel Patterns	European Transport Safety Council	Planning policy	Sep-10	Co-Author
Developing cycling networks – relevant human factors	Institute of Civil Engineering	Research	Apr-10	Co-Author