

Number: WG19815



Llywodraeth Cymru  
Welsh Government

[www.cymru.gov.uk](http://www.cymru.gov.uk)

Welsh Government

## Consultation Document

# Proposed Guidance on the Risk Assessment of Walked Routes to School

Date of issue: 18 November 2013

Responses by: 7 February 2014



## Overview

The Learner Travel (Wales) Measure 2008 sets out the statutory requirements for home to school transport provision for learners in Wales. It includes the requirement that local authorities must have regard to "the nature of the routes which learners could reasonably be expected to take to the relevant places where they receive education or training."

In order to fulfil this duty to risk assess routes to school, including walked routes, local authorities refer to various guidance documents.

Concerns have been raised about the limited scope of the safety factors considered in the current guidance. The safety of children and young people of compulsory school age (i.e. 5-16) on the walked route to school should be of paramount importance and there is a case for extending the criteria by which routes are assessed before being deemed as safe.

The purpose of this consultation is to seek the views of key stakeholders on how the safety of walked routes to school could be improved.

The feedback / qualitative evidence from this consultation will inform the content of new statutory guidance on risk assessment in Wales.

## How to respond

You may respond to the consultation by using the questionnaire which forms part of this document.

## Further information and related documents

**Large print, Braille and alternate language versions of this document are available on request.**

## Contact Details

For further information:

### Public Transport Division

Department for Economy, Science and Transport, Welsh Government, Cathays Park, Cardiff CF10 3NQ

Email:

**LearnerTravelMailbox@wales.gsi.gov.uk**

Phone: **029 2080 1010**

## Data Protection

### How the views and information you give us will be used

Any response you send us will be seen in full by Welsh Government staff dealing with the issues which this consultation is about. It may also be seen by other Welsh Government staff to help them plan future consultations.

The Welsh Government intends to publish a summary of the responses to this document. We may also publish responses in full. Normally, the name and address (or part of the address) of the person or organisation who sent the response are published with the response. This helps to show that the consultation was carried out properly. If you do not want your name or address published, please tell us this in writing when you send your response. We will then blank them out.

Names or addresses we blank out might still get published later, though we do not think this would happen very often. The Freedom of Information Act 2000 and the Environmental Information Regulations 2004 allow the public to ask to see information held by many public bodies, including the Welsh Government. This includes information which has not been published. However, the law also allows us to withhold information in some circumstances. If anyone asks to see information we have withheld, we will have to decide whether to release it or not. If someone has asked for their name and address not to be published, that is an important fact we would take into account. However, there might sometimes be important reasons why we would have to reveal someone's name and address, even though they have asked for them not to be published. We would get in touch with the person and ask their views before we finally decided to reveal the information.

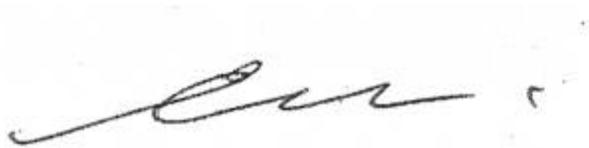
## **The Foreword**

I am clear that the safety of children and young people of compulsory school age on the walked route between home and school is of paramount importance.

I intend to develop and implement statutory guidance on the risk assessment of walked routes because I believe that the current guidance is too limited in scope. It does not consider a sufficiently broad range of safety factors and the criteria by which routes are assessed before being deemed safe should be extended.

I believe that providing children and young people with the opportunity to be involved with the assessment of routes is especially important, and particularly for them to be able to express their views on the safety of routes.

It is for these reasons that I encourage you to consider the consultation paper and the draft guidance. I look forward to working with you to improve the safety of walked routes to school.

A handwritten signature in black ink, appearing to read 'Edwina Hart', is centered on the page. The signature is fluid and cursive, with a prominent initial 'E'.

**Edwina Hart MBE, CStJ, AM**  
**Minister for Economy, Science and Transport**

## **What are the main issues?**

In responding to the consultation on the Active Travel White Paper, the Children's Commissioner for Wales highlighted concerns about the personal safety of children and young people when walking to school.

The Children's Commissioner drew attention to the fact that the current guidance on *Assessment of Walked Routes to School* focused on traffic issues and did not consider a wider range of factors that might affect safety such as whether a route was well-lit, contained isolated areas or areas known for anti-social behaviour by older children or adults.

The Children Commissioner's consultation response also highlighted the importance of children and young people being involved in the assessment process.

The Welsh Government has carefully considered the issues raised and is clear that the safety of the child has to be paramount in considering these matters.

The Welsh Government already has powers to address the issues raised by the Children's Commissioner and did not need to make primary legislation through the Active Travel (Wales) Bill in order to take action.

Using powers under section 15 of The Learner Travel (Wales) Measure 2008, this consultation sets out new statutory guidance on the risk assessment of walked routes to school which local authorities will be required to consider in future.

The main issues are as follows:

- The discrepancy between the current guidance – The Learner Travel Operational Guidance and the Road Safety GB Guidance *Assessment of Walked Routes to School* – to which local authorities refer when undertaking risk assessments
- The potential for confusion that can arise from conflicting guidance and the impact this could have on child safety
- The fact that the current guidance on the *Assessment of Walked Routes to School* is limited in scope and that there is a need to extend the criteria by which walked routes to school are judged to be available
- There is currently no consistent mechanism by which children and young people can express their views on the safety of home to school routes

## **Where are we now?**

The Learner Travel (Wales) Measure 2008 requires local authorities to risk-assess routes between home and places of education or training.

In relation to carrying out risk assessments, local authorities in Wales currently refer to the Road Safety GB guidance entitled *Assessment of Walked Routes to School* which supersedes the previous version entitled *Local Authority Road Safety Officers' Guidelines on the Identification of Hazards and the Assessment of Risk of Walked Routes to School*.

However, there are clear discrepancies between the Road Safety GB Guidance and the Welsh Government's Learner Travel Operational Guidance, which local authorities also refer to. For example, under the Road Safety GB guidance the presence or absence of street lighting on a route is not considered to be a factor in judging whether a route is available (or safe). Furthermore, the Road Safety GB guidance does not require social dangers to be taken into account.

The Welsh Government's Operational Guidance sets out that a route is considered to be available if it is safe for a child without a disability or learning difficulty to walk the route alone or with an escort if the age of the child would call for such an escort. The Welsh Government's Operational Guidance also sets out that in assessing the comparative safety of a route, local authorities should assess the risks a child might encounter along the prescribed route, including, for example, the absence of street lighting. This guidance states that transport arrangements are not suitable if they are unsafe.

## **Why does the Guidance need to be reviewed?**

There are a number of reasons for creating new statutory guidance on risk assessment to replace the current sets of guidance:

- The discrepancies between the current guidance are a source of confusion for local authorities which have a legal duty to risk-assess walked routes
- The criteria by which routes are judged to be safe needs to be extended (as demonstrated by the fact that the Road Safety GB guidance does not take account of factors such as availability of street lighting and other risks)
- The need to secure the views of children and young people on the safety of home to school routes (in accordance with the Children and Young Persons (Wales) Measure 2011 which gives effect to the United Nations Convention on the Rights of the Child in Wales)
- The statutory School Organisation Code, which comes into force on 1 October 2013, sets out that likely walking routes should be assessed for safety and accessibility before proposers (for example local authorities) bring forward proposals to close / open schools and

- Local authorities currently have no guidance with regard to when or how often to carry out risk assessments of walked routes to school

## **Proposals**

The Welsh Government's proposals are as follows:

- To develop and implement new statutory guidance on the risk assessment of walked routes to school
- To consult/work with Local Safeguarding Children's Boards and other agencies to ensure safeguarding is included as a factor in the assessment of walked routes to school
- To work with the Children's Commissioner for Wales to determine the views of children and young people on the safety of walked routes
- To establish how to engage with the Children and Young People's Partnerships in each local authority area to ensure the views of children and young people are heard and taken into account
- To work with local authorities to establish what changes need to be made to the risk assessment process
- To consult/work with schools, the Education Achievement Service and local education authorities to ensure the safeguarding of learners with particular regard to school admission policies and organisation plans

## **Options**

Welsh Government officials identified the following options<sup>1</sup>:

- Bringing forward regulations to govern the risk assessment of walked routes to school
- Producing new statutory guidance on the risk assessment of walked routes to school

Whilst the National Assembly for Wales has the legislative competence to make regulations in relation to the safety risk assessment on learner transport, it has no power to regulate the risk assessment of walked routes to school.

However, the Welsh Government may produce new statutory guidance on the subject to which local authorities must have regard.

---

<sup>1</sup> Welsh Ministers also have powers to issue directions against local authorities and governing bodies in Wales under sections 496, 497 and 497A of the Education Act 1996. They also have similar powers under section 15 of the Learner Travel (Wales) Measure 2008. However, these powers would only be used in extreme circumstances.

## **Draft Guidance**

The draft guidance is at appendices A and B.

Appendix A of the draft guidance encourages a child-centred approach to risk assessing walked routes to school. The central aim is to extend the criteria by which routes are assessed as available.

In terms of subject matter, the draft guidance covers such issues as the need to consider the age and specific needs of learners; route conditions; traffic; footpaths; crossing points; canals; rivers; ditches; embankments; lighting; bridges and any other dangers, including social dangers.

Appendix B provides a suggested format for carrying out risk assessments.

## **Consultation**

The purpose of the consultation is to:

- Gather qualitative evidence from key stakeholders
- Identify any other useful sources of information on improving risk assessment processes and practices

## **Next Steps**

The next steps are as follows:

- The production of new statutory guidance for the risk assessment of walked routes by February 2014
- This will be incorporated into the wider, updated Learner Travel Operational Guidance later in 2014 and used throughout Wales to ensure that there is a consistent approach to conducting risk assessments of walked routes in each local authority area
- The risk assessment guidance will cover:
  - Highways
  - Traffic and vehicle risks
  - Topographical features
  - Lines of sight and visibility
  - Social dangers (e.g. bullying, known areas where drug dealing takes place or where half way houses exist etc )
  - environment dangers (e.g. seasonal changes, flooding etc)
  - Children and young people's views

# **Risk Assessment of Walked Routes to School**

## **Consultation Response Form**

Your name:

Organisation (if applicable):

E-mail / Telephone number:

Your postal address:

**Question 1: What are the weaknesses/strengths of the current risk assessment regime?**

**Question 2: Do you think these proposals are a good idea? Why?**

**Question 3: Can you suggest additional risk factors along walked routes to school (in addition to those already listed in Appendix B)?**

**Question 4: When and how often should risk assessments of walked routes to school be carried out?**

**Question 5: Are there any other triggers that should result in risk assessment?**

**Question 6: At what stage, do you think, children should be able to walk unaccompanied to school? What factors should impact on/influence this decision?**

**Question 7: How should the various criteria used to assess a route's availability be weighted?**

**Question 8: What, in your view, would be the best standard format for conducting risk assessment (to help ensure a consistent approach across Wales) – for example, tick-box, proforma?**

**Question 9: We have asked a number of specific questions. If you have any related issues which we have not specifically addressed, please use this space to report them:**

Please enter here:

Responses to consultations may be made public – on the internet or in a report. If you would prefer your response to be kept confidential, please tick here:

---

## **WALKED ROUTE ASSESSMENT PROCEDURE**

### **Introduction**

The safety of children is of paramount importance. This is why the risk assessment of walked routes to school is an important process. The Welsh Government is keen to establish mechanisms by which the views of learners on the safety of walked routes to school can be taken into account. In this way, the view and perceptions of children can complement those of the local authority officers who have responsibility for risk assessing walked routes to school.

### **Summary of assessment process**

The purpose of the exercise is to establish the safety of the route. The approach to the assessment should take into account, amongst other factors, the views of learners.

The assessment process should include the views of the learners affected to check against risks that they perceive. It will also be appropriate to consider the other safeguarding issues in the area. This will provide a wider assessment than just the physical route.

The whole route from the child's home to school and the return journey should be assessed at the times that children would normally be travelling – that is, at the start and finish of the school day. This should take account of not only the time of day when travel normally takes place but also seasonal changes when daylight hours change.

Currently, local authorities must conduct risk assessments of walked routes to school in their respective areas. It is for each local authority to decide when and how often the risk assessments are conducted.

On the issue of how many routes local authorities need to risk assess, as a result of the new statutory guidance, the following factors may be determining factors:

- A known 'danger spot' on a route
- An issue raised by the Local Safeguarding Children's Board;
- A request from a concerned parent<sup>2</sup>

The physical assessment may be undertaken through computer or imagery analysis but, where possible, it is also important to walk routes in case the information provided electronically is not up to date or comprehensive. The assessment should provide:

---

<sup>2</sup> School Travel Plans, although not statutory in Wales, may also yield information about risks or dangers along walked routes to school.

- A written record of the assessment (which should be retained)
- A plan showing the route (which should be attached to the assessment)

These guidelines cannot cover every situation and there are many subtle variations in the features of routes. Nevertheless, the assessment process should take account of some fundamental issues which can be broken down as follows:

- Learners
- Route conditions
- Social dangers
- Environmental dangers

## **LEARNERS**

### **Age and specific needs**

This guidance applies to learners of compulsory school age (i.e. 5-16 years).

The learner should be at the centre of the risk assessment because the welfare of the child is paramount. The age of the learner will be an important guide in informing the level of independence that can be assumed for the person who will access the route. However, this must be treated on a case by case basis and include the level of understanding and ability of the child along with any specific needs.

For example some children with specific needs such as hearing impairments or ADHD may have supervisory requirements above what is generally expected for their age group. Consequently, they may require supervision beyond that of their peer group. Supervision may be provided by a parent or carer. There is no statutory requirement on the local authority to provide an escort.

### **Companions**

Parents, as part of their responsibility, need to decide whether their child needs to be accompanied on a walked route to school on a regular basis. Where a child is accompanied on their walked route then the ability and specific requirements of the person accompanying them must also be considered. This will ensure that where the companion is also of school age or the carer has specific requirements that these will be taken into account.

If a risk is identified, is it possible to put control measures in place?

- Organise walking buses

- Provide chaperones – this is the responsibility of either parents or the local authority where a child is in receipt of a special educational needs statement which specifically outlines requirements for transport provision/ transport assistance
- Provide road safety courses – this is the responsibility of the local authority
- Improve behaviour – this is everyone’s responsibility (in accordance with individual school behaviour policies and the Travel Behaviour Code)

## **Views**

The views of the learner about an assessed route need to be taken into account and weighted against other risk factors. The Children’s Commissioner has been asked to work with children to establish what is important to them. Although this work has not been completed, the following factors have been identified as possibly needing consideration when a walked route is being assessed. This is not an exhaustive list.

- Places where the learner feels vulnerable (e.g. little-used routes, unlit underpasses)
- Concerns about using alternative transport
- Negative interaction with peer groups (e.g. bullying)
- Known points of conflict within the locality (e.g. interschool rivalry)

It would be helpful if the Children and Young Person Partnership arrangements in your local authority area were used to inform your risk assessments. You may also be able to identify whether there are hot spots or areas where learners are particularly unhappy and feel that a walked route poses a danger or risk. For instance, are there areas where unsupervised animals are often roaming and are a perceived threat to the learner?

If a risk is identified is it possible to put control measures in place?

- Implement school bullying policies through the school and the Travel Behaviour Code
- Use local authority animal control staff, the RSPCA or other appropriate bodies to deal with roaming animals, including dogs without collars
- Improve lighting conditions
- Promote walking in groups (walking buses)

## **School Liaison Officers and Partnerships and Communities Together (PACT)**

It is recommended that you build the following into the risk assessment process:

- Liaison with the Police School Liaison Officers (who are attached to 98% of schools in Wales) in order to discuss any problems/issues along walked routes to school – these Police Officers are aware of community concerns; often have experience of walking the routes to school and are aware of measures that can be taken to reduce risk along routes. They also regularly hold classes with pupils in order to discuss topical issues, such as road safety
- Attendance of Partners and Communities Together (PACT) meetings. Every ward has PACT meetings and these can prove to be useful mechanisms for partnership working and consultation with key stakeholders (for example, the Police, schools and children). In addition, these meetings can be useful for identifying issues along routes and developing possible solutions in partnership with the local community. PACT meetings can be used to consult children in the locality to identify their concerns

## **ROUTE CONDITIONS**

The assessment for walked routes for learners has been established for some time<sup>3</sup> and includes a number of identified hazards that should be checked to determine whether the route is available. For a route to be classed as available there needs to be:

- A continuous adequate footway on roads which carry medium to heavy traffic flow or
- “Step offs” on roads which have low traffic flow but adequate sight lines to provide sufficient advance warning to drivers and pedestrians or
- On roads with very low traffic flow, no “step offs”, but sufficiently good sight lines to provide adequate advance warning

If there is a need to cross roads there must be:

- Sufficient gaps in the traffic flow and sight lines to allow enough opportunities to cross safely or
- Crossing facilities (e.g. zebra, pelican crossings) or
- Pedestrian phase at traffic lights (including necessary refuges) or
- School Crossing Patrols or
- Pedestrian refuges

---

<sup>3</sup> Assessment of Walked Routes to School. Road Safety GB

## **Traffic**

Site surveys should usually take place during the period before schools starts in the morning as this is when traffic flow is generally heaviest, unless it can be shown that the afternoon flow is heavier.

Further surveys should take place at the end of the school day and again at whichever period has the heaviest traffic flow, giving a minimum of three surveys. Data should be recorded in five-minute consecutive periods.

Where there is an obstacle such as a narrow bridge along the route, professional judgement will have to be used to assess the relative risk of passing it. The gap criteria given above may be useful and assist in this type of situation.

Traffic flow can vary from very low on some country roads to very heavy in urban areas. It will also vary on individual stretches of road depending on the time of day and, in some cases, time of year and day of the week.

Speed limits should also be taken into account with relation to traffic flow in determining what is safe.

### **Suggested flow levels:**

Low traffic flow – up to 400 vehicles per hour

Medium traffic flow – 400 to 840 vehicles per hour

Heavy traffic flow – over 840 vehicles per hour

It is difficult to define a figure between 'low' and 'very low' traffic flows as its suitability for these assessments depends on the road environment, speed limits, 'platooning' of traffic, the gaps between 'platoons'. The assessor should use their professional judgement.

It is recommended that traffic counts are recorded as "passenger car" equivalent values (PCUs), by using the following factors:

Passenger Car Units

3 pedal cycles = 1 PCU

2 motorcycles = 1 PCU

1 Car = 1 PCU

1 light goods vehicle (up to 3.5 tonnes gross weight) = 1 PCU

1 Bus/Coach (over 3.5 tonnes) = 2 PCUs

Goods Vehicles (over 3.5 tonnes) = 2 PCUs

Goods Vehicles (over 7.5 tonnes/multi axle lorries) = 3 PCUs

All vehicle counts are two-way except on one-way systems. Dual carriageways are counted as one-way on each side. Where the two-way (one-way of a dual carriageway) traffic flow is below 240 vehicles per hour the road is assessed as safe to cross. This is based on the original County Road Safety Officers Association criteria and is equivalent to 1 vehicle every 15 seconds, allowing a reasonable gap time to cross a 7m wide road at a walking speed of 0.92 m per second.

The road casualty record along the route should be noted with special attention to accident danger spots. If the route is also used for public transport note should be made of stopping places and the level of increased pedestrian use that could impact on foot path availability.

If a risk is identified suitable measures should be considered – for example:

- Speed humps
- Speed cameras<sup>4</sup>

## **Footpaths**

A footway, roadside strip of reasonable width and condition, a public footpath or bridleway will all normally be assumed to provide an available route for that part of the journey. The footway will need to be wide enough to allow passage and, in the case of very young children or those that should be accompanied, it should be wide enough to allow supervision to be carried out safely. The condition of the path should be examined to ensure it is clear of obstacles underfoot and from excessive foliage.

On a road with low traffic flow a verge that can be stepped on by a child and accompanying parent when traffic is passing can normally be assumed to provide an available route. This is known as a “step off”. Many available routes may lie along roads that have neither a footway nor verge. On these roads the width of the carriageway, traffic speed and type of traffic (e.g. frequent long or heavy goods vehicles) as well as visibility/sight lines that may be affected by sharp bends, high hedgerows or other obstructions must be considered.

Where a route is found to be lacking in ‘step offs’ there may also be issues with adequate visibility– the features that affect the availability of ‘step offs’ often impact on visibility – hedges, gradients etc. In such cases, these should be considered within the assessment criteria carried out by the local authority. However, there may be exceptions to this.

---

<sup>4</sup> Speed humps and speed cameras are normally only put in place in response to Road Traffic Collision statistics.

If a risk is identified is it possible to put control measures in place?

- Resurface or widen the available foot path
- Provide a new foot path
- Remove vegetation
- Provide lighting

### **Crossing points**

Where roads need to be crossed, the availability of crossing facilities such as central refuges, pedestrian crossings or traffic signals should be taken into consideration. Where there are no crossing facilities, the route's risk assessment should consider each crossing point, bearing in mind traffic speed and flows, sight lines etc.

If there is a need to cross roads there must also be:

- Sufficient gaps in the traffic flow, traffic speed and sight lines to allow enough opportunities to cross safely - the gap time analysis should be used where necessary or
- Crossing facilities (e.g., zebra, pelican, puffin crossing etc.) or
- Pedestrian phase at traffic lights or
- School Crossing Patrol or
- Pedestrian refuges

If a road needs to be crossed the visibility at the location should allow a vehicle to stop, given the 85 percentile speed (the speed at which 85% of the vehicles travel below) of the traffic flow. Vehicle stopping distances should be taken as those given in the Highway Code. In many rural areas, the exercise of continuous judgement is likely to be required. No criteria can provide all the guidance or answers to every situation that may be encountered.

If there is an adequate footway throughout the whole length of the journey, and there is no need to cross the road, then the route is "available". (Informed, professional judgement may be necessary depending on traffic flows and the nature of the route.)

If roads have to be crossed to use a footway or to improve sight lines it may be necessary to advise on safe crossing places. On some country roads the footway may not be continuous. Informed judgement will have to be made about the availability of "step off" points.

The difficulty of crossing at a site can be assessed by considering the number of gaps in the traffic flow and the applicable speed limits which are acceptable to a specific group of learners. Free flowing traffic may provide gaps randomly and fairly frequently but speeds tend to be higher and gaps would need to be longer in order to cross the road safely. An acceptable gap to cross from kerb to kerb varies with each person and is dependant on age and ability.

The survey should record the number of gaps in each 5 minute period that are longer than the road crossing time, using 0.92m per second as the walking speed. Four gaps in each 5 minute period indicates a road that can be crossed without too much delay. Longer gaps could be classified as multiple gaps rather than as just one gap.

In the case of rail crossing particular attention needs to be paid to the type of crossing and incidents that have been recorded to assess the safety of the crossing.

If a risk is identified is it possible to put control measures in place?

- Provide pedestrian or other crossing facilities
- Install pedestrian refuge
- Provide school crossing patrols
- Improve signage

### **Canals, rivers, ditches, embankments**

Walking the route will enable the assessor to consider a number of features, in particular those that include water hazards such as rivers and canals. It is important to ensure that adequate barriers and safety features are included and that these are of the appropriate height to take into account the age groups of learners that may use the route.

It will also be important to establish:

- if the route has been subject to flooding
- if this is a regular occurrence and
- is there a suitable detour available

If a risk is identified is it possible to put control measures in place?

- Improved barriers
- Better signage
- More lighting
- Alternative available routes within the statutory walking distances

### **Lighting**

The level of natural lighting will differ over the year, so it may be appropriate to review the assessment of the route if reported conditions present difficulties for the learner and / or companion.

Street lighting should also be taken into account.

## **Planned Changes in the Area**

The assessment should consider any proposals that might impact on safety. Much of this information is likely to be held by the local authority and therefore the following checks will inform the risk assessment:

- Highways departments for proposed road works that would have a short-term impact on traffic conditions (e.g. road widening schemes)
- Planning departments for developments that may have a long-term impact on traffic (e.g. housing or retail developments)
- Education departments to check any proposed reorganisation of school places provision

## **OTHER DANGERS**

Walked routes may also have other unseen dangers and it will be important to liaise with the Local Safeguarding Children's Board (LSCB) to establish potential dangers in the local authority. The LSCB is made up of representatives from a number of appropriate bodies including police, probation, youth offending teams, local education authorities and local health boards. These Boards will be able to advise on the location of places that - at times - may be intimidating for some vulnerable people, or even dangerous.

It would be prudent to have in place a mechanism that would map specific risks, and generate alerts if new specific risks are identified that might impact on the safety of learner travel. There may be ways to organise routes to avoid specific places even though this may impact on the route distance.

Unforeseen dangers, such as natural disasters (flooding, heavy snow etc.) should also be taken into account.

**RISK ASSESSMENT****Route – A to B**

	<b>Risk Severity*</b>	<b>Risk Level**</b>	<b>Control Measures</b>	<b>Mitigated Risk***</b>
Learner details				
Companion details				
Learner concerns <ul style="list-style-type: none"> <li>• Personal issues</li> <li>• Local issues</li> <li>• Hot spots</li> <li>• Other transport</li> <li>• Issues</li> </ul>				
Traffic levels				
Footpath details				
Crossing points				
<ul style="list-style-type: none"> <li>• Rivers</li> <li>• Canals</li> <li>• Ditches</li> <li>• Embankments</li> <li>• Vegetation</li> </ul>				
Lighting				
Planning impacts				
Social hazards				

\*Scale of 1 very low → 5 very high

\*\* Likelihood (scale of 1 → 5) multiplied by severity

\*\*\* Likelihood (scale of 1 → 5) after putting in place control measure multiplied by severity