

## APPENDIX B - LEARNER TRAVEL WALKED ROUTE RISK ASSESSMENT EXPLANATORY NOTES

The assessment of the availability of a route is based on a risk matrix considering the following factors in combination to determine how they affect learners using the route:

- Traffic levels
- Speed
- Collision history
- Visibility
- Availability of footways, footpaths and step off opportunities.
- Availability of crossing points
- The effects and timescales of future development (Planning Impacts)
- Other (If any)
- Social Hazards (as per Police advice)

The risk matrix assesses the **severity** of a hazard and the **likelihood** of being exposed to that hazard. Each is measured on a scale of 1 to 5. Multiplying the **severity** score and the likelihood score gives a **risk** score, which can range from 1 to 25. These are then judged as being a low (green), medium (orange) or high (red) risk in accordance with the following matrix:

<b>Severity</b>	5	5	10	15	20	25	
	4	4	8	12	16	20	
	3	3	6	9	12	15	
	2	2	4	6	8	10	
	1	1	2	3	4	5	
		1	2	3	4	5	
		<b>Likelihood</b>					

The assessment will be based on current available data, specifically collected data or, the judgement of the officer undertaking the assessment (where no data is available or able to be collected). The type of data on which the scoring is made will be indicated in the assessment. Whenever possible, assessments will be based on data from the usual time that learners will travel to and from school.

Initially, a risk score will be generated for the factors in combination and without taking into account any control measures that may, if required be used to mitigate the risk level. However, for any one factor, existing control measures may be in place and are likely to be related to one or more of the other factors under consideration. In each risk assessment the worst case scenario of each of the various combinations is used to demonstrate the suitability or otherwise of the route being assessed. A second risk score may be required following the introduction of any mitigation if the initial assessment indicates a need for additional control measures. In such circumstances it is the risk score with control measures that will be used in determining the availability of a route.

A description of the way in which the severity and likelihood of the hazards in combination as they would affect pedestrians using the route are scored for each factor is included below.

## Traffic Level / Crossing Points

Traffic levels will affect pedestrian movements at crossing points.

The severity score is based on the total vehicle numbers per hour whilst the likelihood of conflict with pedestrians is based on the nature of the recommended crossing point. The higher number of vehicles per hour is considered to represent a greater risk whilst the nature of the crossing represents the level of exposure to the learner.

### Severity (Vehicle Numbers)

1. < 240 vehicles per hour
2. 240-400 vehicles per hour
3. 400-840 vehicles per hour
4. 840-1000 vehicles per hour
5. > 1000 vehicles per hour

### Likelihood (Infrastructure / Environment)

1. Pelican / School Crossing Patrol
2. Zebra / Refuge Island
3. Sufficient visibility/stopping distance
4. Sufficient gaps in traffic
5. None

The overall level of risk that traffic levels has on pedestrians can if required be reduced by the introduction of control measures on all or part of a route, e.g. the provision of improved crossing facilities either controlled or uncontrolled.

## Traffic Levels / Footpaths

Traffic levels will affect pedestrian movements walking alongside the carriageway.

The severity score is based on the total vehicle numbers per hour whilst the likelihood of conflict with pedestrians is based on the nature of the recommended footway adjacent to the carriageway. The higher number of vehicles per hour is considered to represent a greater exposure to the hazard.

### Severity (Vehicle Numbers)

1. < 240 vehicles per hour
2. 240-400 vehicles per hour
3. 400-840 vehicles per hour
4. 840-1000 vehicles per hour
5. > 1000 vehicles per hour

### Likelihood (Infrastructure / Environment)

1. Continuous footway/footpath
2. Mix of footway/footpath/step off opportunities
3. Step off opportunities with required sight lines
4. Step off opportunities with required sight lines (seasonal)
5. No step off opportunities, but required sight lines

The overall level of risk of traffic levels affects on pedestrians can if required be reduced by the introduction of control measures on all or part of a route, e.g. the provision of footways or other means of segregating pedestrians from vehicles.

## Speed / Crossing Point

The likelihood score is based on the known speed limit and actual speeds based on the 85<sup>th</sup> percentile. Higher speed limits are considered to represent a greater hazard whilst the exposure to the hazard is dependant on the nature of the crossing.

### Severity (Speed)

1. 20mph
2. 30mph
3. 40mph
4. 50mph
5. 60mph

### Likelihood (Infrastructure / Environment)

1. Pelican / School Crossing Patrol
2. Zebra / Refuge Island
3. Sufficient visibility/stopping distance
4. Sufficient gaps in traffic
5. None

The overall level of risk that speed presents to pedestrians at crossing points can, if required, be reduced by the introduction of control measures on all or on part of a route, e.g. the provision of improved crossing facilities or a reduction in the speed limit within the area or at specific locations.

## Speed / Footpaths

The likelihood score is based on the known speed limit. Higher speed limits are considered to represent a greater hazard whilst the exposure is dependant on the nature of the footway.

### Severity (Speed)

1. 20mph
2. 30mph
3. 40mph
4. 50mph
5. 60mph

### Likelihood (Infrastructure / Environment)

1. Continuous footway/footpath
2. Mix of footway/footpath/step off opportunities
3. Step off opportunities with required sight lines
4. Step off opportunities with required sight lines (seasonal)
5. No step off opportunities, but required sight lines

The overall level of risk that speed has on pedestrians can if required be reduced by the introduction of control measures on all or part of a route. This could be achieved by either the provision of or improvements to footways or other means of segregating pedestrians from vehicles or if appropriate a reduction in the speed limit within an area or at specific locations.

## Lighting / Crossing Point

The severity is based on the level of lighting at the crossing point whilst the likelihood is based on the nature of the crossing at that location the worst case combination is highlighted within the report.

### Severity (Lighting)

1. Well lit
2. Partly lit at Junctions / Crossing
3. Not lit <240 v/hr at Crossing
4. Not lit 240 – 400 v/hr at Crossing
5. Not lit 400 – 800 v/hr at crossing
6. Not lit >840 v/hr at Crossing

### Likelihood (Infrastructure / Environment)

1. Pelican / School Crossing Patrol
2. Zebra / Refuge Island
3. Sufficient visibility/stopping distance
4. Sufficient gaps in traffic
5. None

## Lighting / Footpath

The severity is based on the level of lighting at the crossing point whilst the likelihood of exposure is based on the nature of the footway at that location again the worst case combination is highlighted within the report.

### Severity (Lighting)

1. Well lit
2. Partly lit at Junctions / Crossing
3. Not lit <240 v/hr at Crossing
4. Not lit 240 – 400 v/hr at Crossing
5. Not lit 400 – 800 v/hr at crossing
6. Not lit >840 v/hr at Crossing

### Likelihood (Infrastructure / Environment)

1. Continuous footway/footpath
2. Mix of footway/footpath/step off opportunities
3. Step off opportunities with required sight lines
4. Step off opportunities with required sight lines (seasonal)
5. No step off opportunities, but required sight lines

## Collision History

The road collision and casualty record of roads is a key factor in determining the availability of a walked route. A minimum 3 year (preferably 5 years) collision history is taken into account as part of the assessment.

The severity score is based on the actual outcome of recorded accidents.

The likelihood score is based on the number and types of accidents along the route. A greater the number of accidents involving pedestrians is considered to be an indication of a higher exposure to a hazard. That said it is important to explore the circumstances surrounding the nature of any collision incident before a final decision is made as to whether a route is available or not. It is likely that a level of judgement would have to be applied if for instances a collision involving a drunken driver late at night could be deemed to be indicative of the safety of that road at the time of day when learners would be using it. For that reason it is recommended that in assessing a score greater than 15 for Collision History there should be scope for the assessor to accept the route if the circumstances relating to the collision/s is judged to be exceptional and unlikely to be repeated at the time when the route is being used by learners.

### Severity (Actual Outcome)

1. None
2. None Recorded
3. Slight
4. Serious
5. Fatal

### Likelihood (Actual Number and Type)

1. No collisions
2. No pedestrian collisions
3. 1 pedestrian collision
4. Multiple pedestrian collisions
5. Multiple child pedestrian collision

## Visibility

The issues relating to visibility / sight lines have been included within the risk assessments relating to traffic levels, speed and lighting.

## Planning Impacts

The severity score is based on the effect that a significant future development is likely to have on the walked route. A greater impact on the availability is considered to represent a greater hazard.

The likelihood score is based on the stage of approval of any proposals. A more advanced stage of approval is considered to represent a greater exposure to the hazard.

### Severity (Effect of Development)

1. None
2. Higher traffic speed
3. Higher traffic volume
4. Route affected
5. Route unavailable

1. None.
2. Pre planning proposals made
3. Planning application submitted
4. Planning approval
5. Development imminent

### Likelihood (Planning Approval Stage)

## Other (If any)

Whilst unlikely to be required, this factor is included to take into account any issues that may arise that are outside those identified in the above. This will be subject to a bespoke assessment of the severity and likelihood score for each case.

## Social Dangers

The interpretation of social dangers can be subjective and requires specific expertise which is not available within the authority. In addition, the data in relation to social danger is not readily available to the authority and can be subject to data protection requirements. Therefore, the Police will be

requested to undertake an assessment of social hazards and to inform the authority on whether they consider that a risk is present on the route.

