Gloucestershire County Council
Highways Safety Inspection Manual

August 2023

JOB NUMBER:			DOCUMENT REF:			
Revision	Purpose Description	Originate	Checked	Review	Authorised	Date
C	Issued	CB	JG	Various	KH	August 2023
B	Draft for training	SF	LK	Various	KH	April 2022
A	Draft for Cabinet	SF	LK	Various	ST/NR	June 2018

Contents

1.0 CONTROL OF DOCUMENT

1.1 The Risk Manager will hold the signed original copy of each revision of the Gloucestershire Highways Safety Inspection Manual.

2.0 INTRODUCTION TO THE POLICY

This policy has been reviewed and updated considering the publication of The Code of Practice 'Well Managed Highway Infrastructure 2016. (The Code)

The principle of the Code is that Highway Authorities will adopt a risk-based approach in accordance with local needs, priorities, and activities. Asset Management translates the organisation's objectives into asset related decisions, plans and activities, using a risk –based approach.

2.1 The value and visibility of the highway asset and its benefit and importance to the community and economic wellbeing of Gloucestershire's occupants cannot be underestimated. The highway infrastructure provides access to businesses as well as shaping the character of an area.

2.2 The establishment of an effective regime of inspection, assessment and recording is the most crucial component of highway infrastructure maintenance. The Safety Inspection regime provides the basic information for addressing the first core objective of highway maintenance, network safety.

2.3 In line with the principles of The Code safety inspections has been modified in the light of local circumstances, and the relative risks and consequences associated with these. The characteristics of the regime, including the frequency of inspection, items to be recorded, and the nature of response are defined by this Safety Inspection Manual, which is set in the context of Gloucestershire County Council's (GCC) overall policy and maintenance strategy as outlined in the TAMP.

3.0 PURPOSE OF SAFETY INSPECTIONS

3.1 Safety Inspections are designed to identify all defects likely to cause danger, or serious inconvenience to users of the network or the wider community. The risk of danger is assessed on site and the defect identified with an appropriate priority response. Such defects include those that require urgent attention as well as those where the locations are such that longer periods of response are appropriate.

3.2 The Safety Inspection regime forms a key aspect of GCC's strategy for managing liability and risk.

3.3 GCC uses its Safety Inspection process, monitoring information and a regime of proactive maintenance to reduce risk and provide the public with a safer highway network. Further, if compliance with the Safety Inspection process permits, Section 58 of the Highways Act 1980 may be used in defence of claims against the Highway Authority. By virtue of the Highways Act 1980 GCC can repudiate a claim relating to alleged injury, loss, or damage if it can prove that: the authority had taken such care as in all circumstances was reasonably required to secure that part of the highway to which the action relates was not dangerous for traffic.
For the purpose of a defence the court shall in particular have regard to the following matters: -
The character of the highway, and the traffic which was reasonably expected to use it

The standard of maintenance appropriate for a highway of that character and used by such traffic.
The state of repair in which a reasonable person would have expected to find the highway.
Where the highway authority knew or could reasonably have been expected to know, that the condition of the part of the highway to which the action relates was likely to cause danger to users of the highways.
Where the highway authority could not reasonably have been expected to repair that part of the highway before the cause of action arose, what warning notices of its condition had been displayed.

4.0 DEFINITIONS

4.1 Unless otherwise stated, terms used in this manual are as defined in Code of Practice 'Well-managed Highway Infrastructure: October 2016 (the Code)

4.2 The Code defines defects in two categories.

- Urgent
  Those that require prompt attention due to the location and risk to the user of the network or because they represent an immediate or imminent hazard or because there is a risk of short-term structural deterioration.
- Non-Urgent
  Defects that that have been identified and after risk assessment are deemed to be a lower risk to the road user can be programmed more effectively to increase productivity and more sustainable management of the resources available.

4.3 Detailed guidance about the level of response to defects is contained in Section 5.0 and Appendix A of this document. However, in general the following applies: -

- Urgent defects shall be corrected or made safe at the time of the inspection if this is reasonably practicable. If it is not possible to correct or make safe the defect at the time of inspection, repairs of a permanent or temporary nature should be carried out as soon as possible and in any case by the end of the next working day. If temporary repairs are carried out, then permanent repairs should be carried out within response times specified in Highways Safety Inspection Manual.

- Non-Urgent defects are those which, following a risk assessment, are deemed not to represent an immediate or imminent hazard or risk of short-term structural deterioration. Such defects may have safety implications but are more likely to have serviceability or sustainability implications. Repairs undertaken are likely to form a programme of planned works to increase productivity.

5.0 FREQUENCY AND METHODOLOGY OF INSPECTIONS

5.1 The Code does not dictate hierarchies or frequencies for Safety Inspections. The Southwest Highways Alliance has developed a network hierarchy which is similar to the hierarchy in the previous Code of Practice, but which has more differentiation between the lower categories of road type (Table 1). GCC helped to develop this hierarchy and has adopted it for highway maintenance activities including Safety Inspections. In determining the frequencies of inspections (Table 2), the following considerations have been considered: -

- The hierarchy of the network
- Traffic use
- Incident or insurance claims history
- Public Enquiries.
- Vulnerable users of the network
- Characteristics of adjoining network elements
- Wider policy and operational considerations

Where two categories of the network intersect, the category with the higher intervention levels shall be applied to both at that location.

Table 1 – Carriageway Hierarchy

Hierarchy	Description
2 - Strategic Route	
Trunk and some Principal 'A' roads between Primary Destinations	Routes for traffic travelling long distances, often with little frontage access or pedestrian traffic. Speed limits are usually more than 40 mph and there are few junctions. Pedestrian crossings are either segregated or controlled and parked vehicles are often prohibited. Not always National Speed Limit
3 - Main Distributor	
Major Urban Network and Inter Primary Links. Short - medium distance traffic	Routes between Strategic Routes and linking urban centres to the strategic network often with limited frontage access. In urban areas speed limits are usually 40 mph or less, parking is often restricted at peak times and there are positive measures for pedestrian safety.
4 - Secondary Distributor	
Classified Road (B and C class) and unclassified urban bus routes carrying local traffic with frontage access and frequent junctions	In rural areas these roads link the larger villages, industrial sites, and commercial sites to the Strategic and Main Distributor Network. In urban areas these roads usually have 30 mph speed limits and very high levels of pedestrian activity with some crossing facilities including zebra crossings.
5 - Link Road	
Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions	Roads interconnecting the Secondary Distributor Network with Collector Roads and Local Access Roads with frontage access and frequent junctions. In rural areas these roads link the smaller villages to the distributor roads. In urban areas these form residential, industrial, and public transport interconnecting roads, usually with 30 mph speed limits and pedestrian movements.
6 - Local Link Road	
Roads connecting Link Roads and other Distributor Roads. Local Link Roads usually have frontage access and junctions onto Local Access Roads	These roads are residential interconnecting roads, usually with uncontrolled pedestrian movements. They provide well used vehicular links within the local access roads.

7 - Local Access Road	
Roads serving limited numbers of properties carrying only access traffic	In rural areas these roads serve small settlements and provide access to a number of properties or land. In urban areas they are often residential streets, cul-de-sacs, or small industrial estates.
8 - Minor Road	
Local roads serving an extremely limited number of properties or agricultural land.	In rural areas these form minor access roads to houses and farms. In urban areas these form minor side roads and vehicular alleyways
9 - Lanes	
Minor routes and low use tracks that provide access to isolated buildings.	In rural areas these often-narrow metalled roads serving isolated agricultural buildings In urban areas are often metalled no through lanes serving garages or the rear of properties.
10 – Green Lanes and Tracks	
Lanes and tracks that are unsuitable for vehicular traffic	Lanes and tracks that are unsuitable for vehicular traffic but may be used as a footpath, part of a Cycle Trail, or by horse riders, generally for leisure purposes.
11 - Disused Tracks	
Unmetalled tracks that are unrecognisable as a road	Roads that have become unrecognisable as such, having fallen into disuse through regression or agricultural use.

Table 2 – Footway Hierarchy

Hierarchy	Description
1a - Prestige	Very busy areas of towns and cities with high public space and streetscene contribution
1 - Primary	Busy urban shopping and business areas
2 - Secondary	Medium usage routes through local areas, feeding into primary routes, local shopping areas, schools etc. Routes that experience large variations in footfall due to tourism, sporting events etc
3 - Link	Busy rural footways and urban footways that link a number of local access footways
4 - Local Access	Low use footways, residential streets, cul-de-sac's etc
5 - Minor	Little use rural footways that may serve a very limited number of properties

Table 3 – Cycle route Hierarchy

Hierarchy	Description
A	Marked - On Carriageway
B	Off Carriageway, Shared footway and Remote - Can be segregated or unsegregated

Table 4 – Safety Inspection Frequencies

Feature	Hierarchy	Category	Inspection Frequency	Inspection Type
Carriageway	**2**	Strategic Route	Monthly	Driven
	3	Main Distributor	Monthly	Driven
	4	Secondary Distributor	Monthly	Driven
	5	Link Road	3 monthly	Driven
	6	Local Link Road	3 monthly	Driven
	7	Local Access Road	Annually	Driven
	8	Minor Road	Annually	Driven
	9	Lanes	Annually	Driven
	10	Green Lanes & Tracks	Annually	Driven
	11	Disused Tracks	Annually	Driven/Walked

Feature	Hierarchy	Category	Frequency	Inspection Type
Footway	**1a**	Prestige	Monthly	Walked
	1	Primary	Monthly	Walked
	2	Secondary	3 monthly	Walked
	3	Link	Annually	Driven C-way/Walked
	4	Local Access	Annually	Driven C-way/Walked
	5	Minor	Annually	Driven C-way/Walked

Feature	Hierarchy	Category	Frequency	Inspection Type
Cycleroutes	**A**	Marked - On Carrigeway	As adjacent C/way feature	Driven/Walked
	B	Off Carriageway, Shared footway and Remote - Can be segregated or unsegregated	As adjacent C/way or F/way feature or Annual	Walk/Cycle

5.2 Planned Safety Inspections shall be carried out at the frequencies shown in Table 1 and within the tolerances shown in Table 5.

Table 5 - Safety Inspection Tolerances

Frequency of Inspection	1 month	3 month	1 year
Tolerance	+/- 5 days	+/– 7 days	+/– 27days
Max period between inspections	36 days	100 days	392 days

Note: all time periods are in calendar days

5.3 The minimum number of safety inspections to be completed each year will be:

- Monthly – 1 per month
- 3 monthly – 1 every 3 months
- 12 monthly – 1 per year

5.4 Safety Inspections are designed to identify all defects likely to create danger or serious inconvenience to the users of the network or the wider community. The risk of danger is assessed on site by the safety inspector the defect is categorised as either Urgent or Non urgent and the appropriate response time is then allocated based on the guidelines in Appendix A.

5.5 Safety Inspections are undertaken in a slow-moving vehicle with two personnel, one driving and the other inspecting. Consideration must be given to the safety of the inspection team and other road users during the driven inspections. Vehicles used must be fully compliant and suitable for the terrain likely to be encountered during inspections. The inspection covers all areas within the highway boundary along that road. In urban areas, particularly when inspecting footways, it may be difficult to ensure that the inspection is carried out correctly by vehicle and it may be necessary to carry out these inspections by foot. In Urban areas with Trees and paving slabs the inspector is to walk these areas due to the increased risk to the user. Walked inspections will be the normal method for town centre inspections Cycle routes/trails may also be inspected by bicycle.

5.6 Defects that are reported by the public will be inspected within 5 working days and the appropriate level of response will be determined using the guidelines set out within this document. Enquiries received out of hours will be dealt with by the callout teams after an assessment by the standby duty officer/central call centre.

5.7 Section 81 of the New Roads & Street Works Act 1991 places a duty on undertakers (utilities) to maintain their apparatus to the reasonable satisfaction of the Highway Authority. If the defect identified is dangerous then the highway authority is to make safe and recover reasonable costs from the utility company.

5.8 When an inspection identifies a particular piece of apparatus that is deemed to be unsafe and requiring attention, notification will be sent to the appropriate party requiring them to carry out remedial action under Section 81 of the Act. This notification should detail the apparatus and its location complete with maps, postcode and grid reference. **A copy is to be sent to the Street Works Team**

5.9 If remedial action is not carried out within a reasonable time, or before the next scheduled inspection, the Highway Authority may carry out repairs themselves and recharge their reasonable costs.

6.0 ADDITIONAL INSPECTIONS AND EXCEPTIONAL CIRCUMSTANCES

6.1 Additional inspections may be necessary in response to user or community concern, as a result of incidents, extreme weather conditions or monitoring information. These have been identified through the risk management process and have been summarised below. The occurrence of any such inspection and its outcome is recorded in the same format as a programmed Safety Inspection but is recorded as being an additional inspection.

6.2 **Critical Infrastructure**

Critical assets on our resilience network have been identified, such as Cole Avenue junction, or the Westgate Bridges. Inspections by suitably qualified and experienced personnel will be carried out following incidents likely to have affected them as requested.

Reactive Inspections

6.3 An appropriate person with the relevant experience and knowledge responds to user or community concerns and requests for service. Based upon the severity of the situation, a site visit may be required to make a more thorough assessment of the safety or service request. The defects will be assessed with the same criteria and intervention levels as those within the programmed Safety Inspection process.

Adverse/extreme weather conditions

6.4 Ice/snow - Inspections are linked to the GCC's Adverse Weather Plan and are prioritised by strategic routes and secondary routes. Inspections are carried out by an appropriate person with the relevant experience and knowledge for assessing condition.

6.5 Floods/flood damage/storm damage - Inspections are prioritised in order of strategic routes and secondary routes. Response gangs are allocated to routes on a prioritised basis for initial assessment and making safe where possible. Defects that cannot be made safe immediately are referred to an appropriate person for prioritisation and additional resources.

6.6 Extreme heat - Inspections are carried out in response to known or reported problems and are carried out by an appropriate person with the relevant experience and knowledge.

Monitoring of protection

6.7 Where defects with potentially serious consequences for network safety are made safe by means of temporary signing or other appropriate resource, arrangements may be made for a special inspection regime to ensure the continued integrity of the protection is maintained until a repair can be made.

Exceptional Circumstances

6.8 In exceptional circumstances, inspections may not be able to be carried out, e.g., during periods of extreme weather. In these circumstances, the Safety Inspection policy may be suspended and/or a temporary policy put in place. The authority for such action lies with GCC's E E & I Director

7.0 ITEMS FOR INSPECTION

7.1 Items included in safety inspections are outlined in Appendix A. The Safety Inspectors also record any other defects not included on this list that they consider are likely to create danger or serious inconvenience to the community.

7.2 Additional inspections relating to centre and edge line road markings or road studs may be carried out in the hours of darkness to assess reflectivity. The occurrence of any such inspection and its outcome is recorded in the same format as a programmed Safety Inspection but is recorded as being an additional inspection. Any work resulting is carried out as programmed work.

Safety Inspection of Highway Trees

7.3 All trees within falling distance of the highway are termed 'highway trees. A basic inspection of all highway trees that can be seen from the carriageway is included in the routine Safety Inspections. Any defect or feature likely to cause an obvious danger by encroachment, visibility obstruction, damage, ill health, or trip hazard is recorded, and the appropriate action taken. Under Section 154 of the Highways Act 1980, GCC deals, by notice, with hedges, trees and shrubs growing on adjacent land which overhang the highway. GCC carries out additional tree inspections with qualified arboriculturalists. Details of this can be found in GCC's Tree Inspection Policy.

7.4 All Safety Inspectors receive some basic arboriculture guidance, but a qualified arboricultural advisor carries out an inspection when specialist knowledge is required. Their advice is also sought before any work is carried out on tree roots causing a problem to a footway surface. Qualified tree surgeons inspect any sites where they are conducting tree maintenance work for GCC.

8.0 DEGREE OF DEFICIENCY AND NATURE OF RESPONSE

8.1 Defects are risk assessed based upon hierarchy, intervention level, response time, likelihood of predictable deterioration and the requirement for permanent or temporary repair.

8.2 Defects that represent an immediate or imminent hazard shall be corrected or made safe at the time of the inspection. If it is not possible to correct or make safe the defect at the time of the inspection, repairs of a permanent or temporary nature shall be carried out by the end of the next working day.

8.3 Other significant defects which, following a risk assessment, are deemed not to represent an immediate or imminent hazard, or when there is not deemed to be a risk of rapid structural deterioration, shall be repaired within the timescales shown in Appendix A.

8.4 The intervention levels, the making safe, and the permanent repair times for each item listed for inspection have been determined for each category of the network by evaluating the likely impact (should the risk occur) and the probability of it actually occurring. The resulting risk factor determines the category and timescale to rectify the defect (see below). The subsequent intervention levels apply as a minimum unless the feature is by design and are set out in Appendix A.

8.5 On-site judgement will need to consider particular circumstances such as the defect's location, volume of traffic, use by vulnerable persons and where necessary the Safety Inspector may increase the Reaction Time for a defect. If a defect is not listed the inspector will carry out a risk assessment to determine the appropriate response, considering the location of the defect.

8.6 Where a permanent repair will necessitate obtaining details of equipment from statutory undertakers before work can be safely carried out, a timescale of 3 months will apply. This will generally only apply where excavations are required.

8.7 Gloucestershire has a wide variety of road and footway network. From high volume dual carriage in congested urban environments to single lane rural roads connecting small farms or villages. Road and footway users should expect to find a condition which is safe and consistent with the type of and location of that infrastructure. Simply put, a motorist would expect the condition of a principal class A road carrying high volumes of traffic at speed to be in a high standard of repair without actionable potholes or significant depressions in the running lane; whereas the motorist using an unclassified road in a very rural environment should not be surprised to find a road surface that may have minor potholes, depressions, or other deterioration. This concept of fit for purpose roads is captured in the Code of Practice by dividing road types up into classes and maintenance hierarchies. As such, Gloucestershire's approach to Local Access Roads will be to consider safety defects as those having a lower intervention level, or longer response time, than those on other parts of the network. The tables in Appendix A outline the detailed requirements for each defect type.

Table 6 - Safety Defect Repair Times

Key	Timescale for the repair of safety defects
	Repair or make safe within 2 hours
	Repair or make safe by end of next working day
	Repair within 28 days
	Repair within 3 months and erect warning notices to advise of inadequate highway condition
	Not Defined – pass to Local Area Team for action
	No action – review condition of defect at next inspection

9.0 RECORDING AND MONITORING OF INFORMATION

9.1 All information obtained from safety inspections, together with the nature of response, including nil returns, shall be recorded consistently. The data obtained shall be able to be reviewed independently and in conjunction with other survey information. It shall be stored electronically on a server which is backed-up daily. Service requests, complaints, reports, or information from users and other third parties shall also be recorded, along with the nature of response, including nil returns.

9.2 All inspections shall record time, weather conditions, any unusual circumstances of the inspection, and the person conducting the inspection. It should also include areas which were not inspected due to Road works or Closures and provision should be made to inspect when the obstruction has been removed.

9.3 Each Safety Inspector shall have a minimum of one inspection per year re-inspected by the Lead Inspector to ensure consistency and quality of the Safety Inspection regime is maintained.

Variations/review of Hierarchy and Inspection Frequency

9.4 The network and its hierarchy are fluid and as a minimum the network shall be reviewed for changes about hierarchy biennial. Changes in safety inspection frequency shall be approved by the Risk Team Working Group and may be altered in response to the factors listed below:

- Traffic growth or reduction
- Sections of the network which have a higher-than-normal level of accidents
- Pedestrian/cyclist growth or reduction
- Sections of the network being promoted as safer routes to school or for leisure use.
- Recurring defects of the same nature being identified at a location where non-routine maintenance work is required to resolve the issue.
- Non-routine maintenance work carried out to resolve recurring defects identified at a specific location.

Risk Team Working Group Members may include some or all the following:

- Network Manager
- Senior Asset Data Officer
- Risk Manager
- Inspections Team Leader
- Safety Inspector from Area being reviewed
- Insurance Team Representative

10.0 HEALTH, SAFETY AND TRAINING

10.1 Highway safety inspections require concentration on the identification and recording of defects, but not at the expense of the safety of the inspector or road user. Individuals have a responsibility for the safety of themselves and others and must ensure that they do not take unnecessary risks.

10.2 Health and safety risk assessments and safe systems of work must cover all inspection activities identifying potential hazards to inspectors and road users and appropriate control measures. These risk assessments and safe systems of work must be reviewed regularly to consider newly identified risks, new or amended legislation, new or revised inspection methods and new or revised defect repair methods. Reference should be made to the Contractor's Health and Safety Policy Statement, the Clients Corporate Health and Safety Policy Statement.

10.3 All personnel involved in managing or carrying out highway safety inspections must be fully familiar and compliant with the safe systems of work set out. Should a highway inspector feel that a safe system of work does not provide sufficient protection at a specific location on the network, he/she must stop work immediately and inform their Line Manager. It may then be necessary to amend or develop a new risk assessment and safe system of work for that location or inspection before the inspection is continued.

10.4 The following guidelines relate to the various ways in which a safety inspection may be carried out. These guidelines are not exhaustive and any unique situation which may arise associated with an inspection needs to be carefully appraised to ensure that appropriate systems of work are identified and implemented.

10.5 In general highway safety inspections are carried out from a slow-moving vehicle, on foot or occasionally by bicycle. General control measures are listed below but should not be considered exhaustive.

10.6 Inspections from a vehicle

- The highway inspector shall not drive the vehicle while undertaking an inspection. A driver, or second inspector, must be used to ensure the safety of all occupants and other road users.
- The vehicle must be fitted with the appropriate beacons and reflective signing, and the equipment used where appropriate.
- Appropriate personal protective equipment and clothing as detailed by the employer will be always used.
- Should it be necessary for the vehicle to stop, the vehicle shall be parked off the live highway wherever possible. If this cannot be achieved, then there must be clear visibility in both directions and the roof mounted beacon must be switched on. Traffic must not be forced across any continuous white centre lining. If this cannot be achieved, advanced temporary traffic signing must be installed.
- When conducting an inspection on foot in the carriageway or on a verge closer than one metre to the carriageway then adequate temporary signing and traffic management arrangements shall be provided.
- Planned highway safety inspections shall not be carried out under conditions of poor visibility e.g., snow, fog, or heavy rain.
- Only special inspections of, for example, road markings and studs, shall be carried out during the hours of darkness/dusk.
- When possible, inspections shall not be carried out during morning and evening peak periods when pedestrian and vehicle movements are high.

10.7 Inspections on foot

- Lone working procedures must be followed.
- Appropriate personal protective equipment and clothing will be always used.
- Inspections will be conducted from footways or verges where possible.

- When conducting an inspection on foot in the carriageway or on a verge closer than one metre to the carriageway then adequate temporary signing and traffic management arrangements shall be provided.
- Planned highway safety inspections shall not be carried out under conditions of poor visibility e.g., snow, fog, or heavy rain.
- Only special inspections of, for example, road markings and studs, shall be carried out during the hours of darkness/dusk.
- When possible, inspections shall not be carried out during morning and evening peak periods when pedestrian and vehicle movements are high.

10.8 Inspections by bicycle

- Lone working procedures must be followed.
- Appropriate personal protective equipment and clothing will be always used.
- Inspections will be conducted from the cycle track.
- Planned highway safety inspections shall not be carried out under conditions of poor visibility e.g., snow, fog, or heavy rain.
- Only special inspections of, for example, road markings and studs, shall be carried out during the hours of darkness/dusk.
- When possible, inspections shall not be carried out during morning and evening peak periods when pedestrian and vehicle movements are high.

10.9 Appropriate training is needed to ensure that personnel responsible for managing and carrying out highway inspections understand the reasons and importance of highway inspections. These reasons include public safety and the insurance claim procedures.

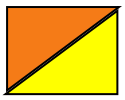
10.9.1 The aim will be for inspectors to be trained in accordance with City and Guilds Scheme 6033 were reasonably practicable. New inspectors joining the organisation without this level of training will be given in-house training provided by the safety inspection team (and assessed by the Inspections Team Leader to achieve consistency in the identification of safety defects and the prioritisation of defect repairs in accordance with the guidance set out in this policy.

11.0 REFERENCE DOCUMENTS

Well-Managed Highway Infrastructure: A Code of Practice October 2016. Published by UK Roads Liaison Group

Appendix A – Inspection Tables

Defect Category	Defect Type	Description	Response time
Cat 1a	Urgent	Defects that require prompt attention as they present an immediate or imminent risk	Repair or make safe within 2 hours
Cat 1b			Repair or make safe by end of next working day
Cat 2a	Non-Urgent	Defects that require attention, but safety implications are less significant than Cat 1 defects	Repair within 28 days
Cat 2b			Repair within 3 months and erect warning signs to advise of inadequate highway condition
	Non-Safety	Defect does not meet the criteria to be considered a safety defect	Not Defined – pass to Local Area Team for action
			No action - review condition of defect at next planned inspection



Where two intervention levels are shown, the inspector has the discretion to determine which level of response is appropriate.

CARRIAGEWAY DEFECTS

POTHOLES

A pothole is a sharp-edged depression anywhere in a carriageway where part or all the surface layers have been removed including carriageway collapses, surrounds to ironwork and missing cats' eyes. A pothole will be classed as a safety defect when its maximum horizontal dimension is greater than 300mm and is greater than 40mm deep. At controlled pedestrian crossing or other defined crossing points, e.g., at junctions or dropped crossings, intervention levels will be as for the adjacent footway. In prestige or high footfall areas in town centres, footway criteria will be used.

CARRIAGEWAY POTHOLES										
Carriageway Category	Strategic Route	Main Distributor	Secondary Distributor	Link Road	Local Link Road	Local Access Road	Minor Road	Lanes	Green Lanes & Tracks	Disused Tracks
Hierarchy	2	3	4	5	6	7	8	9	10	11
< 40mm										
Depth > 40mm & < 75mm, Horizontal dimension > 300mm										
Depth > 75mm deep, Horizontal dimension > 300mm										

ABRUPT LEVEL DIFFERENCES

An abrupt level difference in the carriageway will be classed as a safety defect when it has a vertical displacement of greater than 40mm over a distance of 300mm.

ABRUPT LEVEL DIFFERENCES										
Carriageway Category	Strategic Route	Main Distributor	Secondary Distributor	Link Road	Local Link Road	Local Access Road	Minor Road	Lanes	Green Lanes & Tracks	Disused Tracks
Hierarchy	2	3	4	5	6	7	8	9	10	11
< 40mm										
Depth > 40mm & < 75mm, Horizontal dimension > 300mm										
Depth > 75mm deep, Horizontal dimension > 300mm										

CRACKS OR GAPS

Longitudinal and transverse cracking or gaps in the carriageway will be classed as safety defects when they are greater than 40mm deep (20mm in town centres), and greater than 300mm in continuous length (200mm in town centres) and 30mm wide.

CRACKS OR GAPS										
Carriageway Category	Strategic Route	Main Distributor	Secondary Distributor	Link Road	Local Link Road	Local Access Road	Minor Road	Lanes	Green Lanes & Tracks	Disused Tracks
Hierarchy	2	3	4	5	6	7	8	9	10	11
< 30mm										
> 30mm - < 40mm										
> 40mm										

CROWNING, RUTTING & DEPRESSIONS

Crowning, rutting and depressions will be classed as safety defects when they are greater than 40mm high over a distance of 1200mm

CROWNING, RUTTING & DEPRESSIONS										
Carriageway Category Height/Depth	Strategic Route	Main Distributor	Secondary Distributor	Link Road	Local Link Road	Local Access Road	Minor Road	Lanes	Green Lanes & Tracks	Disused Tracks
Hierarchy	2	3	4	5	6	7	8	9	10	11
< 40mm										
> 40mm - < 100mm										
> 100mm										

EDGE DETERIORATION

Edge deterioration of the carriageway will be classed as a safety defect when the edge of the surfaced carriageway breaking up is over 150mm (300mm for Link & Local access) into the carriageway; it is greater than 40mm deep and greater than 300mm in length.

EDGE DETERIORATION										
Carriageway Category	Strategic Route	Main Distributor	Secondary Distributor	Link Road	Local Link Road	Local Access Road	Minor Road	Lanes	Green Lanes & Tracks	Disused Tracks
Hierarchy	2	3	4	5	6	7	8	9	10	11
< 40mm										
> 40mm - < 75mm										
> 75mm										

OVER-RIDING

Over-riding of the verge in the highway will be classed as a safety defect when the length of the over-riding is greater than 3m and the vertical side adjacent to the surfaced carriageway is greater than 40mm deep.

OVER-RIDING										
Carriageway Category	Strategic Route	Main Distributor	Secondary Distributor	Link Road	Local Link Road	Local Access Road	Minor Road	Lanes	Green Lanes & Tracks	Disused Tracks
Hierarchy	2	3	4	5	6	7	8	9	10	11
< 50mm										
> 50mm - < 100mm										
> 100mm										

EDGE OF CARRIAGEWAY KERBING & CHANNELS

Damaged, loose or missing kerbs or channels will be classed as a safety defect.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING THE GENERAL DEFECT MATRIX

FOOTWAY DEFECTS

POTHOLES & EDGE DETERIORATION

A pothole is a sharp-edged depression anywhere in a footway where part or all the surface layers have been removed including footway collapses and surrounds to ironwork. A pothole will be classed as a safety defect when it is greater than 20mm deep and its maximum horizontal dimension is greater than 100mm

POTHOLES & EDGE DETERIORATION						
Footway Category	Prestige	Primary	Secondary	Link	Local Access	Minor
Hierarchy	1a	1	2	3	4	5
Depth < 20mm						
Depth > 20mm & < 40mm						
Depth > 40mm						

ABRUPT LEVEL DIFFERENCES

An abrupt level difference in the footway will be classed as a safety defect when it has a vertical displacement greater than 20mm deep over a distance of 100mm.

ABRUPT LEVEL DIFFERENCES						
Footway Category	Prestige	Primary	Secondary	Link	Local Access	Minor
Hierarchy	1a	1	2	3	4	5
Depth < 20mm						
Depth > 20mm & < 40mm						
Depth > 40mm						

CRACKS OR GAPS

Longitudinal or transverse cracking or gaps in the footway will be classed as safety defects when they are greater than 20mm deep, 1000mm in continuous length and 40mm wide.

CRACKS OR GAPS						
Footway Category	Prestige	Primary	Secondary	Link	Local Access	Minor
Hierarchy	1a	1	2	3	4	5
Width < 20mm						
Width > 20mm						

CROWNING, RUTTING & DEPRESSIONS

Crowning, rutting and depressions will be classed as safety defects when they are greater than 20mm in depth over a distance of 600mm. All measurements will exclude 500mm around the base of trees.

CROWNING, RUTTING & DEPRESSIONS						
Footway Category Height/Depth	Prestige	Primary	Secondary	Link	Local Access	Minor
Hierarchy	1a	1	2	3	4	5
Depth/Height < 20mm						
Depth/Height - 20mm - 75mm						
Depth/Height > 75mm						

OVER-RIDING

Over-riding of the verge in the footway will be classed as a safety defect when the length of the over-riding is greater than 300mm long and over 100mm deep.

OVER-RIDING						
Footway Category	Prestige	Primary	Secondary	Link	Local Access	Minor
Hierarchy	1a	1	2	3	4	5
Depth < 100mm						
Depth > 100mm						

ROCKING OR UNSTABLE SLABS

A rocking or unstable slab will be classed as a safety defect when the vertical displacement is 20mm or greater in height or depth.

Inspection records should record the material type to assist with the repair operation.

Where slabs are in areas of amenity slabbing with no footfall, the general defect matrix should be used.

ROCKING OR UNSTABLE SLABS						
Footway Category	Prestige	Primary	Secondary	Link	Local Access	Minor
Hierarchy	1a	1	2	3	4	5
Depth/Height < 20mm						
Depth/Height - 20mm - 40mm						
Depth/Height > 40mm						

KERBING DEFECTS

Cracked, chipped or missing kerbs will be classed as safety defects where they represent a tripping hazard, are greater than 40mm deep and 100mm in length.

KERBING DEFECTS						
Footway Category	Prestige	Primary	Secondary	Link	Local Access	Minor
Hierarchy	1a	1	2	3	4	5
Depth < 40mm						
Depth > 40mm						
Missing						

CYCLE ROUTE DEFECTS

POTHOLES & EDGE DETERIORATION

A pothole is a sharp-edged depression anywhere in a footway where part or all the surface layers have been removed including footway collapses and surrounds to ironwork. A pothole will be classed as a safety defect when it is greater than 20mm deep and its maximum horizontal dimension is greater than 100mm

POTHOLES & EDGE DETERIORATION		
Hierarchy	A	B
Depth < 20mm		
Depth > 20mm		

ABRUPT LEVEL DIFFERENCES

An abrupt level difference in the footway will be classed as a safety defect when it has a vertical displacement greater than 20mm deep over a distance of 100mm.

ABRUPT LEVEL DIFFERENCES		
Hierarchy	A	B
Depth < 20mm		
Depth > 20mm		

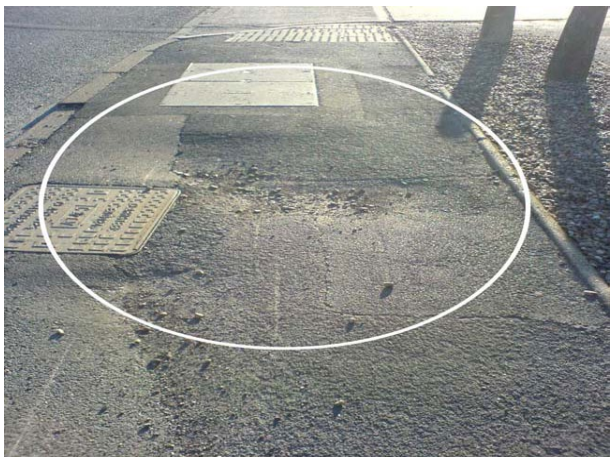
CRACKS OR GAPS

Longitudinal or transverse cracking or gaps in the footway will be classed as safety defects when they are greater than 20mm deep, 1000mm in continuous length and 40mm wide.

CRACKS AND GAPS		
Hierarchy	A	B
Depth < 20mm		
Depth > 20mm		

CROWNING, RUTTING & DEPRESSIONS

Crowning, rutting and depressions will be classed as safety defects when they are greater than 20mm in depth over a distance of 600mm. All measurements will exclude 500mm around the base of trees.



CROWNING, RUTTING & DEPRESSIONS		
Hierarchy	A	B
Depth/Height < 20mm		
Depth/Height - 20mm - 75mm		
Depth/Height > 75mm		

OTHER INSPECTION ITEMS

General Defect Matrix

Consequence / Likelihood	Insignificant 1	Minor 2	Moderate 3	Major 4	Critical 5
Rare 1	1	2	3	4	5
Unlikely 2	2	4	6	8	10
Possible 3	3	6	9	12	15
Likely 4	4	8	12	16	20
Almost Certain 5	5	10	15	20	25

HIGHWAY COVERS, GRATINGS & FRAMES

A cover, grating or frame in the carriageway, footway, cycle route or verge that is damaged, dislodged, missing, or not seated correctly will be identified as a safety defect. A cover, grating or frame which is higher or lower (40mm carriageways and 20mm footways) than the adjacent carriageway or footway will be classed as a safety defect.
All defective apparatus will be made safe and statutory undertakers will be notified under a section 81 notice.
Privately owned rainwater channels that are significantly damaged, dislodged, missing, or not seated correctly will be made safe and the property owner notified by the Area Team.
INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX

At controlled pedestrian crossing or other defined crossing points, investigatory levels will be as for the adjacent footway.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS FOR CARRIAGEWAYS WILL BE IDENTIFIED USING THE POTHOLE DEFECT MATRIX, AND FOR FOOTWAYS OR CYCLE ROUTES WILL BE IDENTIFIED USING THE ROCKING AND UNSTABLE SLABS DEFECT MATRIX

EMBANKMENTS AND CUTTINGS

Where a safety inspection identifies an embankment or cutting that is apparently unstable and represents an immediate or imminent hazard or there is a risk of short-term failure, the area will be made safe within an appropriate timescale. These will then be referred to area staff for further investigation and reactive inspections.

OVERGROWN VEGETATION

Hedges and trees that encroach within the envelope described below will be identified as a safety defect. Clearance envelope: 5.5m over carriageways and 2.5m over footways, cycle routes and verges. Vegetation on highway verges that obscures forward visibility, visibility to signs, lighting units and visibility splays will be identified as a safety defect. Follow tree and hedge letter procedure.
INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX

FENCES AND BARRIERS

Safety fencing, pedestrian guardrails or boundary fencing which is damaged or protruding into the footway or carriageway will be classed as a safety defect.

Urgent defects will generally be made safe by the end of the next working day and permanent repairs carried out as programmed work. INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX

OTHER INSPECTION ITEMS

ROAD MARKINGS

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS FOR WORN ROAD MARKINGS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX

White line markings on strategic and main distributor roads of high safety risk or with a relevant accident record should be renewed when they are no longer adequate for their intended purpose.

TRAFFIC SIGNALS, ILLUMINATED BOLLARDS, PELICAN CROSSING LAMPS & STREET LIGHTING

Damaged, missing or dirt obscuring any of the above that represents a hazard will be classed as a safety defect.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX

Generally, all defects will be made safe and reported as soon as possible to the Traffic Signals or Street Lighting department.

GULLIES, DRAINS OR GRIPS

Damaged gullies, drains or grips that represent a hazard will be classed as a safety defect.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX

OTHER INSPECTION ITEMS

ILLEGAL SIGNS, FLY POSTERS AND ADVERTISING BOARDS

Illegal signs, fly posters or advertising boards that represent a hazard will be classed as a safety defect.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX

Generally, signs will be removed at the time of inspection, if possible, otherwise will be passed to area staff for action.

UNSAFE STRUCTURES

Highway's inspections will only be required to identify safety defects that can be identified visually during the normal course of inspections e.g., damage to the superstructure or supports of over-bridges, parapets, and expansion joints. All safety defects identified will be reported to the Client Structural Engineer Team immediately who will arrange for the appropriate remedial action to be taken.
INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX

OTHER INSPECTION ITEMS

DEBRIS, SPILLAGE OR CONTAMINATION.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX
Ensure that you follow Employers/Contractors safe system of works.

GRAFFITI
Graffiti that represents a hazard or is deemed as offensive will be classed as a safety defect, e.g., obscured traffic lights.

GRAFFITI - TRAFFIC SIGNS AND BOLLARDS										
Carriageway Category	Strategic Route	Main Distributor	Secondary Distributor	Link Road	Local Link Road	Local Access Road	Minor Road	Lanes	Green Lanes & Tracks	Disused Tracks
Directional	2	3	4	5	6	7	8	9	10	11
Directional and other signs										
Warning signs										
Stop, Give Way and Chevron signs										
A major hazard that could result in a serious danger/hazard or deemed offensive										

OTHER INSPECTION ITEMS

TRAFFIC SIGNS AND BOLLARDS (Inc posts and plates)
Significant or major defects caused by damage to traffic signs will be classed as a safety defect. Stop, Give Way and Chevron Signs that are significantly damaged, missing or are not legible such that a sign is not effective, presenting a hazard to highway users will be temporarily replaced by the end of the next working day and permanently repaired within 28 days. Other repairs will be carried out as programmed work.

TRAFFIC SIGNS AND BOLLARDS										
Carriageway Category	Strategic Route	Main Distributor	Secondary Distributor	Link Road	Local Link Road	Local Access Road	Minor Road	Lanes	Green Lanes & Tracks	Disused Tracks
Directional	2	3	4	5	6	7	8	9	10	11
Directional and other signs										
Warning signs										
Stop, Give Way and Chevron signs										
A major hazard that could result in a serious danger/hazard or deemed offensive										

TRAFFIC SIGNS AND BOLLARDS – ELECTRICAL

A traffic sign that has damaged or exposed electrical components will be classed as a safety defect.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX

Generally damaged or exposed electrical components will be made safe as an emergency and reported to the Street Lighting team to arrange for permanent repair.

OTHER INSPECTION ITEMS

TRAFFIC SIGNS AND BOLLARDS – BOLLARDS

A bollard that is damaged or missing such that it presents a hazard to highway users will be classed as a safety defect.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX

STREET FURNITURE

Damage to street furniture that represents a hazard will be classed as a safety defect.

INTERVENTION LEVELS AND DEFECT REPAIR PERIODS WILL BE IDENTIFIED USING GENERAL DEFECT MATRIX

Damage to street furniture will be reported to the relevant owner. Litter bins are the responsibility of the Litter Authority (typically the district authority). Bus stops are generally privately owned. Damage should be reported to the Integrated Transport Team for action.