Highway Safety Inspection Policy

April 2018
# Table of Contents

1. Introduction .....................................................................................................2
2. Legislative Requirements ..............................................................................2
3. Scope of the Document ..................................................................................3
5. The Purpose of Highway Safety Inspections ...............................................3
6. Defects Reported by the Public.....................................................................3
7. Working Days ..................................................................................................3
8. Highway Asset Management System ............................................................3
9. Changes to this policy ....................................................................................4
10. Network Hierarchy ..........................................................................................4
11. Carriageway Hierarchy ...................................................................................4
12. Footway Hierarchy ..........................................................................................6
13. Inspection Frequency .....................................................................................6
14. Inspection Frequency Tolerance ...................................................................6
15. Inspection Schedule .......................................................................................6
16. Suspension of Inspections ............................................................................7
17. Risk Assessment Process ............................................................................7
  17.1 Risk Evaluation ......................................................................................7
  17.2 Identification of Hazards and Defects ....................................................7
  17.3 Assessment of Risk Impact Rating .........................................................7
  17.4 Assessment of Risk Probability ...............................................................7
  17.5 Determination of Response Category – A Worked Example .................8
  17.6 Summary of Response Categories ..........................................................8
  17.7 Dynamic Risk Assessment and Inspector Discretion .............................9
18. Recording Inspections ...................................................................................9
19. Undertaking Inspections - General Procedures ...........................................9
20. Statutory Undertakers (Utility Companies) Defects ....................................9
21. Other Hazards or Breaches of Legislation ................................................10
22. Performance ................................................................................................10
1. Introduction

Lancashire County Council as the local highway authority has a statutory duty under the Highways Act, 1980 to maintain the publically maintainable highway network. To assist the authority to fulfil this statutory duty and to ensure a consistent countywide approach this Highway Safety Inspection (HSI) Policy has been established in respect of the vehicular network. The highway safety inspection policy also forms a key aspect of the authority's approach to managing liabilities and risks. The highway safety inspection regime will identify potential maintenance works for action or repair to mitigate risks.

The highway safety inspection regime is the primary defence in any case of litigation brought against the county council where lack of adequate maintenance has been alleged by a third party. This policy deals specifically with safety inspections of the highway network and how we assess and react to requests and complaints from the public in relation to highway defects. Its primary aim is to guide those officers in the maintenance of Lancashire’s highway network, using a policy that is achievable, practical and reasonable, enabling us to maintain the highway to a safe standard using the resources available.

2. Legislative Requirements

Section 41 of the Highways Act 1980 imposes a duty on local highway authority to maintain those highways that are “highways maintainable at public expense” and this will include the maintainable vehicular highways which have carriageways and sometimes footways and cycle tracks within their widths.

Section 58 of the Highways Act 1980 provides a special defence in action against a highway authority for damages for non-repair of highway.

In an action against a highway authority in respect of damage resulting from its failure to maintain a highway maintainable at the public expense it is a defence (without prejudice to any other defence or the application of the law relating to contributory negligence) to prove that the authority had taken such care as in all the circumstances was reasonably required to secure that the part of the highway to which the action relates was not dangerous for traffic.

For the purposes of a defence, the court shall in particular have regard to the following matters:—

(a) the character of the highway, and the traffic which was reasonably to be expected to use it;

(b) the standard of maintenance appropriate for a highway of that character and used by such traffic;

(c) the state of repair in which a reasonable person would have expected to find the highway;

(d) whether 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 highway;

(e) 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.
3. Scope of the Document

This policy sets out the process for the identification of and consequent action relating to maintainable vehicular highway defects within the bounds of section 41 of the Highways Act 1980. In developing this policy, consideration has been given to the policies established by other highway authorities. Matters in relation to winter service operations are not covered by this policy and are contained within the Winter Service Plan.

4. Well-Managed Highway Infrastructure: A Code of Practice

This policy is underpinned by the recommendations set within the Well-Managed Highway Infrastructure code of practice. However, the code is not a statutory document but this provides highway authorities with guidance on highways management. Adoption of the recommendations within the code is a matter for each highway authority, based on their own legal interpretation, risks, needs and priorities.

The main driver of this policy is to have a highway safety inspection and repair regime that ensures the safety of highway users wherever possible but is proportionate to risk and is achievable. It has been developed based on the principles of risk assessment and the long established case law surrounding highway defects. It is considered to provide a practical, proportionate and reasonable approach to the risks and potential consequences.

5. The Purpose of Highway Safety Inspections

Safety inspections are designed to identify defects likely to create danger or serious inconvenience to users of the network or the wider community. Such defects include those that are considered to require emergency or urgent attention as well as those where the locations and sizes are such that longer periods of response will be acceptable.

6. Defects Reported by the Public

To ensure a consistent approach to the processes set out in this policy and associated annexes especially the risk evaluation process, defect categorisation and response times will be applicable to defects reported by the public. Annex H provides more detail in this regard.

7. Working Days

Unless otherwise stated all timescales relating to 'days' used within this policy refer to working days i.e. Monday to Friday excluding weekends and bank holidays. The standard hours for a working day are 8am to 4pm.

8. Highway Asset Management System

Lancashire County Council uses its Highway Asset Management System (HAMS) for the recording of highway safety inspections; customer requests and works ordering; and other asset related information. The management and monitoring of defects including the allocation, repair and completion will be recorded and managed through the HAMS system.
Security shall be maintained through the county councils existing IT protocols and each member of staff who has access to the HAMS system will have their own unique logon credentials.

9. Changes to this policy

This policy will be reviewed as and when necessary but especially when changes to either legislation or national guidance are introduced. Any changes to the policy would be subject to approval through the council’s constitutional process.

The operational or procedural aspects of the policy, as set out in the annexed documents, will be reviewed as and when necessary and changes, revisions or updates will be approved by the Head of Service- Highways as set out in the annexes.

This enables, for example the addition of new defect types and impact ratings, changes to the type of repair methods used or changes to the codes used within the HAMS system for example. Any prospective removal or reduction of defect types and changes to the investigatory levels will be subject to cabinet approval.

10. Network Hierarchy

Lancashire County Council's network hierarchy is based on the recommendations set out in the Well Managed Highway Infrastructure Code of Practice. For the purposes of this policy Lancashire's highway network hierarchy is set out in section 11 and 12.

It is important to note that the hierarchy adopted reflects the whole maintainable vehicular highway network and the needs, priorities and actual use of each street. The carriageway hierarchy will be affected by traffic volume and by local social and economic importance for example a route leading to a major hospital or industrial area, or busy shopping street, will be higher in the hierarchy than a typical residential street. Hierarchy may also be influenced by factors such as pedestrian or cyclist usage. Collectively, these issues are referred to as the ‘functionality’ of the section of highway in question.

The carriageway hierarchy will primarily be determined by road classification but functionality and scale of use will also be considered in determining the classification of a particular street.

The footway hierarchy will be determined on functionality and scale of use only.

The network hierarchy will be reviewed when factors such as changes to national guidance or best practice occur. The network category allocated to each street in Lancashire will be reviewed as and when officers become aware of changes to the factors that determine its category.

11. Carriageway Hierarchy

<table>
<thead>
<tr>
<th>Category</th>
<th>Ref. No</th>
<th>Type of Road General Description</th>
<th>Description</th>
<th>Inspection Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motorway</td>
<td>1</td>
<td>Limited access - motorway regulations apply</td>
<td>Routes for fast moving long distance traffic. Fully grade separated and restrictions on use</td>
<td>Monthly</td>
</tr>
<tr>
<td>Strategic Route</td>
<td>2</td>
<td>Trunk and some Principal 'A' class roads between</td>
<td>Routes for fast moving long distance traffic with little frontage access or pedestrian traffic.</td>
<td>Monthly</td>
</tr>
<tr>
<td>Road Type</td>
<td>Description</td>
<td>Details</td>
<td>Frequency</td>
<td></td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------</td>
<td>-----------</td>
<td></td>
</tr>
<tr>
<td>Primary Destinations</td>
<td>Speed limits are usually in excess of 40 mph and there are few junctions. Pedestrian crossings are either segregated or controlled and parked vehicles are generally prohibited.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Distributor 3a</td>
<td>Major Urban Network and Inter-Primary Links. Short - medium distance traffic</td>
<td>Routes between Strategic Routes and linking urban centres to the strategic network with limited frontage access. In urban areas speed limits are usually 40 mph or less, parking is restricted at peak times and there are positive measures for pedestrian safety.</td>
<td>Monthly</td>
<td></td>
</tr>
<tr>
<td>Secondary Distributor 3b</td>
<td>B and C class roads and some unclassified urban routes carrying bus, HGV and local traffic with frontage access and frequent junctions</td>
<td>In residential and other built up areas these roads have 20 or 30 mph speed limits and very high levels of pedestrian activity with some crossing facilities including zebra crossings. On-street parking is generally unrestricted except for safety reasons. In rural areas these roads link the larger villages, bus routes and HGV generators to the Strategic and Main Distributor Network.</td>
<td>3 Monthly</td>
<td></td>
</tr>
<tr>
<td>Link Road 4a</td>
<td>Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions</td>
<td>In urban areas these are residential or industrial interconnecting roads with 20 or 30 mph speed limits, random pedestrian movements and uncontrolled parking. In rural areas these roads link the smaller villages to the distributor roads. They are of varying width and not always capable of carrying two-way traffic.</td>
<td>6 Monthly</td>
<td></td>
</tr>
<tr>
<td>Local Access Road 4b</td>
<td>Unclassified roads providing access to residential and business areas.</td>
<td>In rural areas these roads serve small settlements and provide access to individual properties and land. They are often only single lane width and unsuitable for HGVs. In urban areas they are often residential loop, access and estate roads or cul-de-sacs.</td>
<td>12 Monthly</td>
<td></td>
</tr>
</tbody>
</table>
12. Footway Hierarchy

<table>
<thead>
<tr>
<th>Category</th>
<th>Ref. No</th>
<th>Description</th>
<th>Inspection Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Walking Route</td>
<td>1</td>
<td>Busy urban town/city centre shopping areas and main pedestrian routes linking different modes of transport e.g. railways, bus stations/interchanges.</td>
<td>Monthly</td>
</tr>
<tr>
<td>Secondary Walking Route</td>
<td>2</td>
<td>Medium usage routes through local areas feeding into primary routes, local shopping centres, large schools and industrial and commercial centres etc.</td>
<td>3 Monthly</td>
</tr>
<tr>
<td>Link Footway</td>
<td>3</td>
<td>Linking local access footways through urban areas and busy rural footways</td>
<td>6 Monthly</td>
</tr>
<tr>
<td>Local Access Footway</td>
<td>4</td>
<td>Footways associated with low usage, short estate roads to the main routes and cul-de-sac etc.</td>
<td>12 Monthly</td>
</tr>
</tbody>
</table>

13. Inspection Frequency

The probability of a risk occurring is quantified by assessing the likelihood of highway users of the maintainable vehicular network encountering the defect or hazard. As this probability is likely to rise with an increase in either the functionality, usage or the strategic importance of a particular street, risk probability can be directly linked to Lancashire County Council’s network hierarchy. The carriageway hierarchy shown in section 11 will be used to set the inspection frequency for all streets. Where footways and cycle ways are adjacent to, near or part of the carriageway all parts of the street will be inspected at the carriageway frequency. The footway hierarchy shown in section 12 will be used to set the inspection frequency of footways and cycle ways that are not adjacent to, near or part of the carriageway.

14. Inspection Frequency Tolerance

Because of the effect of weather, workload, inspector availability and other operational reasons it is possible that the specified inspection frequencies cannot be met. For this reason a tolerance in the frequency of inspections is set out in the table below. If an inspection cannot be undertaken within the tolerance this must be reported to the senior highway inspector or team leader immediately:

<table>
<thead>
<tr>
<th>Specified frequency</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 times/year</td>
<td>Plus or minus 5 days</td>
</tr>
<tr>
<td>4 times/year</td>
<td>Plus or minus 10 days</td>
</tr>
<tr>
<td>Twice/year</td>
<td>Plus or minus 20 days</td>
</tr>
<tr>
<td>Once/year</td>
<td>Plus or minus 20 days</td>
</tr>
</tbody>
</table>

15. Inspection Schedule

The inspection schedule is managed through the HAMS system and each inspector will determine from a mobile computer which streets are due to be inspected. The
order or route in which those inspections are undertaken will be determined by each inspector. This process will be managed and monitored by more senior officers. If necessary they may give direct instruction in relation to which streets must be inspected each day or week.

16. Suspension of Inspections

In exceptional circumstances, for example heavy rain or snow or due to a street being re-surfaced or utility works being undertaken, it may not be possible to undertake inspections. In these circumstances safety inspections may be suspended. This will be the decision of the senior manager responsible for the service and the reason for suspension will be recorded and documented. Once inspections resume streets that are awaiting inspection will be inspected at their next due date.

17. Risk Assessment Process

The Well-Managed Highway Infrastructure code of practice recommends that the safety inspection regime and the defect repair regime are risk based. Set out in this section is Lancashire County Council's process for assessing the risk posed by defects and hazards and establishes a practical process to facilitate its implementation.

17.1 Risk Evaluation

The risk associated with all defects and hazards needs to be evaluated in terms of its overall significance. This means assessing the likely impact should the risk occur and the probability of it actually happening. There are four basic steps to this process:

17.2 Identification of Hazards and Defects

Annex D and E provides guidance on the inspection, identification, recording and notification of defects and hazards. The investigatory levels for different types of defect are set out in Annex A. These investigatory levels will be the prompt for the inspector to consider the defect or hazard.

17.3 Assessment of Risk Impact Rating

The impact rating is quantified by assessing the extent of damage likely to be caused should the risk become an incident, and as such there is a clear link to the physical characteristics of the defect or hazard. The table below sets out the impact definitions. Annex A provides investigatory levels and impact ratings for the most common defects/hazards.

<table>
<thead>
<tr>
<th>Hazard/Defect Identified</th>
<th>Assess Risk Impact Rating</th>
<th>Assess Risk Probability</th>
<th>Determination of Response Category</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>High</th>
<th>The defect/hazard is likely to cause injury or damage to a person or vehicle.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium</td>
<td>The defect/hazard may cause injury or damage to a person or vehicle.</td>
</tr>
<tr>
<td>Low</td>
<td>The defect/hazard is unlikely to cause injury or damage to a person or vehicle.</td>
</tr>
</tbody>
</table>

17.4 Assessment of Risk Probability

The probability of a risk occurring is quantified by assessing the likelihood of highway users encountering the defect or hazard. As this probability is likely to rise with an
increase in either the functionality, usage or the strategic importance of a particular street, risk probability will be directly linked to Lancashire County Council’s network hierarchy (see section 11 & 12).

17.5 Determination of Response Category – A Worked Example

Having identified a particular defect or hazard, assessed its likely impact and quantified the risk probability, a specific risk matrix can then be used to provide a response category which prescribes the timescale within which the defect/hazard should be made safe or repaired. The table below provides an example of a prescribed risk matrix for a carriageway pothole:

<table>
<thead>
<tr>
<th>IMPACT RATING</th>
<th>Carriageway Network Hierarchy</th>
<th>1</th>
<th>2</th>
<th>3a</th>
<th>3b</th>
<th>4a</th>
<th>4b</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td></td>
<td>2 days</td>
<td>2 days</td>
<td>2 days</td>
<td>2 days</td>
<td>2 days</td>
<td>2 days</td>
</tr>
<tr>
<td>Medium</td>
<td></td>
<td>5 days</td>
<td>5 days</td>
<td>5 days</td>
<td>10 days</td>
<td>10 days</td>
<td>20 days</td>
</tr>
<tr>
<td>Low</td>
<td></td>
<td>Action will be taken at the discretion of the inspector; see 17.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Annex A of this document provides investigatory levels for the most common defects/hazards along with an appropriate risk impact rating, risk probability and response category. Below is a brief description of the Response Categories.

17.6 Summary of Response Categories

There are six potential response categories for defects & hazards with associated response times. These are listed in the table for quick reference and described in detail in Annex B.

<table>
<thead>
<tr>
<th>Response Category</th>
<th>Description</th>
<th>Reporting timescale for Highway Inspector</th>
<th>Response Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency (1E)</td>
<td>Used for extremely hazardous defects that require emergency attention because they pose an immediate danger to highway users.</td>
<td>Immediately via telephone call and recorded on HAMS.</td>
<td>4 hours. Make safe or repair within 4 hours.</td>
</tr>
<tr>
<td>Urgent (1U)</td>
<td>Used for defects that require urgent attention because they pose an imminent risk to highway users or because there is a risk of rapid deterioration that would cause the defect to become a Category 1E defect</td>
<td>Recorded on the HAMS system and telephoned call made to repair team as soon as possible.</td>
<td>2 days. Make safe or repair within 2 working days.</td>
</tr>
<tr>
<td>2C</td>
<td>Used for defects on streets inspected monthly which are deemed not to represent an immediate or imminent hazard. They are categorised according to their likely impact and risk probability.</td>
<td>On the day recorded via the HAMS system</td>
<td>5 days. Repair or make safe within 5 working days.</td>
</tr>
<tr>
<td>2D</td>
<td>Used for defects on streets inspected quarterly which are</td>
<td>On the day recorded via the HAMS system</td>
<td>10 days. Repair within 10 working days.</td>
</tr>
</tbody>
</table>
17.7 Dynamic Risk Assessment and Inspector Discretion

The most common types of defect that may be encountered on the highway are detailed in Annex A. Each defect has a set of investigatory levels along with a prescribed risk matrix showing impact, probability and a response category. Defects with a High or Medium impact will be actioned as set out in Annex A. Defects with a low priority will only be actioned at the discretion of the highway inspector. In addition highway inspectors have discretion to vary the response categories for high and medium defects due to reasons present at the time of inspection. This will be based on an on-site risk assessment taking account of factors such as but not limited to:-

- Position of the defect in the street
- Size and nature of the defect
- Frequency of inspection
- Volume and nature of traffic and pedestrians using that section of the street
- Vulnerable road users

A full explanation must be provided by the inspector as to the reasons for taking action and/or varying the response category. This must be noted in the "Description" field within the HAMS system.

18. Recording Inspections

Full details of how highway safety inspections are recorded are set out in Annex D.

19. Undertaking Inspections - General Procedures

Full details of the general procedures regarding undertaking highway safety inspections are set out in Annex E.

20. Statutory Undertakers (Utility Companies) Defects

Section 81 of the New Roads and Street Works Act 1991 places a duty on statutory undertakers to maintain their apparatus. Therefore defects relating to missing, broken, rattling or worn inspection chamber covers, stop taps, hydrant covers and the like will be recorded on the HAMS system as part of the highway safety inspection and
reported to the appropriate statutory undertaker for action and repair. This will be managed through the HAMS system.

Section 71 of the New Roads and Street Works Act 1991 places a duty on statutory undertakers to reinstate excavations in the highway in line with prescribed specifications and standards of workmanship. Therefore defects identified as part of the highway safety inspection that relate to statutory undertakers reinstatements will be recorded on the HAMS software and reported to the appropriate statutory undertaker for action and repair. This will be managed through the HAMS system.

Lancashire County Council under the duty imposed on it by virtue of section 41 of the Highways Act 1980 has an overall responsibility to maintain the highway. Therefore if it is not clear that the defect or apparatus is the responsibility of a statutory undertaker then it will be processed in the usual manner to mitigate the risk to highway users.

21. Other Hazards or Breaches of Legislation

As part of the highway safety inspection other hazards or issues may be found. Overhanging trees and bushes from private land or property can sometimes be a hazard to pedestrians or impede visibility for vehicle drivers, for example. Where this is observed the issue should be recorded on the HAMS system and actioned by highway officers.

Illegal vehicle crossings will not be recorded as defects. They will be noted on the HAMS system and reported to the relevant highway team.

22. Performance

Key Performance Indicators have been established to measure and monitor the time it takes to repair defects associated with the various response categories and times. These are detailed in Annex F.