

Knowsley Metropolitan Borough Council



Highway Asset Management Policy for Highway Safety Inspections



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1. Introduction

This document forms part of a group of asset management strategies and policies that provide a framework for highway asset management in Knowsley. It outlines the Council's response to the recently published UK Roads Liaison Group (UKRLG) Code of Practice 'Well Managed Highway Infrastructure' in relation to highway inspections and demonstrates how Knowsley Borough Council will use the Highway inspection process, monitoring information and a regime of proactive maintenance to reduce risk and provide a safe highway network.

The new Code of Practice is designed to promote the adoption of an integrated asset management approach to highway infrastructure based on the establishment of local levels of service through risk-based assessment. The Council's previous approach to highway inspections was based on guidance which was prescriptive in nature. With the introduction of the new Code, authorities are expected to develop their own levels of service in accordance with local needs and priorities and the overarching change is one from reliance on specific guidance to a risk-based approach determined by each local highway authority.

The new Code of Practice recommends; 'In the interest of route consistency for highway users, all authorities, including strategic, local, combined and those in alliances, are encouraged to collaborate in determining levels of service, especially across boundaries with neighbours responsible for strategic and local highway networks'.

To develop a consistent approach across the Liverpool City Region Combined Authority, a collaborative working group of officers from a number of authorities listed in **Appendix A**, have developed an overarching Highway Safety Inspection Framework. Although not formally approved, the intention is for all neighbouring authorities to adopt the practices set out in the Liverpool City Region Highway Safety Inspection Framework in terms of network hierarchy, investigatory levels, frequency of inspection and response times to repair for defects identified on a Risk Based Approach.

This Highway Inspection Policy outlines how Knowsley Council will comply with the new Code of Practice using the practices set out in the Liverpool City Region Highway Safety Inspection Framework. It supersedes all previous approaches to highway inspection and repair within the Borough and sets out the policy on how damaged or faulty highway assets that may create a danger or serious inconvenience to highway users are managed through a system of inspection, risk assessment and repair.

Defects that meet the identified investigation criteria are to be assessed using a risk assessment matrix. The purpose of this assessment is to determine;

- The degree of risk they may pose to a highway user; and
- An appropriate and reasonable response to that risk.

This policy has due regard for the following documents:

- Highways Act 1980
- Well Managed Highway Infrastructure 2016 (WMHI)
- Well Managed Highway Liability Risk 2017
- Knowsley Council Asset Management Policy & Strategy 2018

2. Legislation

The Highways Act 1980 sets out the main duties of highway authorities in England. In particular Section 41 imposes a duty to maintain highways maintainable at public expense and the majority of highway related claims against authorities arise from the alleged breach of Section 41.

In order to discharge its duty of care, the highway authority is required under Section 58 of the Act to carry out at periodic intervals a safety inspection of the highway network.

Highway users can challenge the Council and argue that it has failed in its duty of care. This can occur, for example, where a pedestrian trips on the highway or where a vehicle is said to have been damaged by a pothole.

However, the Act allows a highway authority to raise a statutory defence against public liability claims. It says that the highway authority should not be liable for the consequences of a matter if it can prove that “such care as in all the circumstances was reasonably required to secure that part of the highway to which the action relates was not dangerous to the traffic.” By virtue of Section 58 of the Highways Act, the highway authority is able to repudiate a claim relating to alleged injury, loss or damage if it can prove that it has in place adequate policies and procedures to maintain the highway, and that the policies and procedures were being implemented effectively.

3. Types of Highway Inspections

The scope of this document is limited to Safety Inspections of the adopted highway maintainable at public expense.

Safety Inspections are designed to identify all defects likely to create 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 and assigned an appropriate priority and response period.

The methodology is to undertake safety inspections as one process to enable inspectors to focus specifically on defects which if not repaired, are or may become a potential danger to road users and pedestrians.

Highway safety Inspections are derived from two main sources:

- Planned cyclic safety inspections to identify potential dangers; and
- Ad-hoc Reactive safety inspections following reports in respect of the condition of the highway.

Records of cyclic safety inspections and safety inspections following enquiries are maintained on the authorities Highways Asset Management system.

4. Network Hierarchy

The adopted highway has been classified by type of carriageway, footway and cycleway within the hierarchy in accordance with Well Managed Highways.

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 Knowsley will be reviewed as and when officers become aware of changes to the factors that determine its category.

Table 1: Carriageway Hierarchy

Category	Category Name	Short Description	Long Description
1	Motorway	Limited access motorway regulations apply	Routes for fast moving long distance traffic. Fully grade separated and restrictions on use.
2	Strategic Route	Trunk and some Principal 'A' roads between Primary Destinations	Routes for fast moving long distance traffic with little frontage access or pedestrian traffic. 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.
3a	Main Distributor	Major Urban Network and Inter-Primary Links.	Routes between Strategic Routes and linking urban centres to the strategic network with limited frontage access. In urban areas speed limits are usually 40

		Short - medium distance traffic	mph or less, parking is restricted at peak times and there are positive measures for pedestrian safety.
3b	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 and HGV generators to the Strategic and Main Distributor Network. In built up areas these roads have 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
4a	Link Road	Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions	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. In urban areas they are residential or industrial interconnecting roads with 30 mph speed limits random pedestrian movements and uncontrolled parking
4b	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 individual properties and land. They are often only single lane width and unsuitable for HGVs. In urban areas they are often residential loop roads or cul-de-sacs.

Table 2: Footway Hierarchy

Category	Category Name	Short Description	Long Description
1(a)	Footway	Prestige Walking Zone	Very busy areas of towns and cities with high public space and street scene contribution
1	Footway	Primary Walking Route	Busy urban shopping and business areas and main pedestrian routes.
2	Footway	Secondary Walking Route	Medium usage routes through local areas feeding into primary routes, local shopping centres etc.
3	Footway	Link Footway	Linking local access footways through urban areas and busy rural footways
4	Footway	Local Access Footway	Footways associated with low usage, short estate roads to the main routes and cul-de-sacs.

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A	Cycleway		Cycle lane forming part of the carriageway, commonly 1.5 metre strip adjacent to the nearside kerb. Cycle gaps at road closure point (no entries allowing cycle access).
B	Cycleway		Cycle track, a highway route for cyclists not contiguous with the public footway or carriageway. Shared cycle/pedestrian paths, either segregated by a white line or other physical segregation, or un-segregated.
C	Cycleway		Cycle trails, leisure routes through open spaces. These are not necessarily the responsibility of the highway authority, but may be maintained by an authority under other powers or duties.

5. Inspection Frequency

Whilst the hierarchy is the initial determinant of the inspection frequency the final inspection frequency will adopt a risk based approach through the individual assessment of the Carriageway, Footway and Cycleway to determine the required inspection frequency. This approach means that whilst the hierarchy determines the initial inspection frequency the final frequency of inspection will depend on the final risk based assessment.

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

Where two categories of the network intersect, the category with the higher frequency level shall be applied.

The council's frequency of inspections is based on the appropriate, functionality or usage of the highway and the subsequent hierarchy assigned, see tables 3, 4 and 5 below.

Table 3: Carriageway Inspection Frequency

Hierarchy	Category	KMBC Frequency	Method
Motorway	1	Weekly	Driven
Strategic Route	2	1 Month	Driven
Main Distributor	3(a)	1 Month	Driven
Secondary Distributor	3(b)	1 Month	Driven
Link Road	4(a)	3 Months	Walked
Local Access	4(b)	1 Year	Walked

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Table 4: Footway Inspection Frequency

Hierarchy	Category	Frequency	Method
Prestige Area	1(a)	N/A	N/A
Primary Walking Route	1	1 month	Walked
Secondary Walking Route	2	3 months	Walked
Link Footway	3	6 months	Walked
Local Access Footway	4	1 year	Walked
Rights of Way	ROW	Annually	Walked

Table 5: Cycle Route Inspection Frequency

Feature	Category	Frequency	Method
Cycle Route	A	As for roads	Walked
Cycle Route	B	As for Footways	Walked
Cycle Route	C	1 year	Walked

6. Inspection Tolerance

The operational tolerances shown in the table below are applied to take account of variations in the available resources due to national holidays, standard holiday entitlements, absence due to sickness and days lost due to adverse weather. If the tolerance is exceeded, a record of the reasons and the mitigation measures taken will be kept.

Table 6: Inspection Tolerance

Safety Inspection Frequency	Repeat Inspection	Tolerance
Week	7 days from date of last inspection	+ or – 2 days in normal weather conditions
1 Month	30 days from date of last inspection	+ or – 7 calendar days in normal weather conditions
3 Month	90 days from date of last inspection	Within the same calendar month in normal weather conditions
6 Month	178 days from date of last inspection	Within the same calendar month in normal weather conditions
Annual inspections	1 year from date of last inspection	Within the same calendar month in normal weather conditions

7. Amendments to Inspection Frequencies

It is recognised that some locations due to their condition and other circumstances may require more frequent safety inspections than set in this policy. In these circumstances the inspection frequency can be increased following an assessment and will be documented. Once the additional risk has been reduced and reassessed an additional variation in the inspection frequency can be documented to change the inspection frequency back to its original or appropriate frequency.

Additional inspections may be necessary in response to user or customer enquiries, as a result of incidents, extreme weather conditions or monitoring information. The occurrence of any additional inspection and its outcome is recorded in the same format as a programmed Safety Inspection but is recorded as being an additional inspection.

An appropriate person with the relevant experience and knowledge responds to user or customer enquiries and requests for service. The defects are assessed with the same criteria and investigatory levels as those within the programmed Safety Inspection process.

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 temporary measures put in place. The decision and action taken is to be documented.

8. Resources

The authority in common with other highway authorities has limited resources with which to maintain the network and must balance the resource available with the risk to the safety of road users and therefore has adopted a risk based approach to the inspection and repair of its highway network.

9. Highway Safety Inspections

The purpose of these safety inspections is to identify defects that are likely to pose a risk or serious inconvenience to users of the network or the wider community and to arrange for their remedy.

Highway safety inspections are carried out to specified frequencies. During the inspection a Risk Based Approach is taken to identify defects and will be recorded and processed for repair within the Highways Asset Management System.

10. Inspection Methodology

When footways have a walked inspection at the assigned frequency determined taking in to account the hierarchy, the carriageway will also be inspected during these walked inspections.

Before commencing the walked safety inspection the inspector shall note the; following information:

- The street name
- Inspection frequency
- Current date and time
- Weather conditions (Ground conditions)

Walked Highway Safety Inspections

- i. When undertaking walked inspections the inspector will walk slowly down one footway, surveying that footway and half of the adjoining carriageway, then return down the opposite footway repeating the process.
- ii. When the inspector encounters parked motor vehicles etc. they shall take reasonable steps where appropriate so as to view the area obstructed by the vehicle without endangering themselves.
- iii. The inspector shall proceed along the footway identifying defects that meet the investigatory levels. All defects at investigatory level will be Risk Assessed and have the appropriate repair period applied to it. All defects meeting the investigatory level shall be recorded on their handheld device.

Driven Carriageway Safety Inspection

Before commencing the Driven Safety Inspection the inspector shall note the; following information:

- The street name
- Inspection frequency
- Current date and time
- Weather conditions (Ground conditions)

Driven inspections are carried out by an inspector and a driver in a vehicle equipped with amber hazard warning beacon. The driver follows the defined route, at a slow speed of 20 mph or less where appropriate. The driver shall be responsible for driving and the highway inspector will be responsible for carrying out the safety inspection, any defects be recorded on their handheld device.

The Inspector and vehicle driver shall have due regard to their personal safety and in particular from moving traffic either on the main highway or at junctions and crossings. On no account must he/she put himself/herself in any hazardous situation.

11. Recording Defects

Defects that meet the investigation criteria are recorded on a data capture device using an inspection route loaded on the device prior to beginning the inspection. In the event of a catastrophic IT failure inspections will be recorded manually at the time of inspection and the system updated when available.

When possible the use of a Global Positioning System device will be used and a trace produced for evidence that an inspection has taken place on the date and time recorded and to enable more accurate positioning of defects.

Photographs of defects will be stored with inspection records. The photographs will comply with the following:

- Photograph should not be focused on the defect only. They should be taken to show the context of the defect and the surrounding environment;
- The image quality must be clear, in focus and not blurred or obscured.

When a defect is identified as requiring investigation the risk assessment process will determine the appropriate action.

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 damaged, defective apparatus such as inspection chamber covers, stop taps, hydrant covers and the like will be recorded on the Highways Asset Management system as part of the highway safety inspection and reported to the appropriate statutory undertaker for action and repair.

Knowsley Borough 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. Where possible any associated costs will be charged to that undertaker.

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 Highways Asset Management system and reported to the appropriate statutory undertaker for action and repair.

12. Defect Investigatory levels

The purpose of a safety inspection is to identify defects within the highway that are likely to create a danger or serious inconvenience to highway users. In order to provide clear guidance, a minimum investigatory level has been set in the Liverpool City Region Safety Defect Inspection Framework using a risk and evidence-based approach, benchmarking with other Highway Authorities and WMHI.

The investigatory level is the level at which a risk assessment takes place to determine the action or non-action to be taken.

The action or non-action will be recorded and processed within the Highways Asset Management system.

The Investigatory levels for footways and carriageways adopted are detailed in the table below.

Table 7: Investigatory Levels

Feature	Investigation Depth
Footway	25mm
Carriageway	40mm
Carriageway investigatory level at designated pedestrian crossing points	25mm
Kerb defects	50mm horizontal displacement

13. Items for Inspection

The items to be assessed during highway safety inspections will include such assets or components as carriageway, footway, cycleway, verge, ironwork, fencing, road markings, signing, and other street furniture items.

Inspection of bridges and other structures is undertaken by the Council's structural engineers, in accordance with the national Code of Practice.

14. Repair Response Times

During safety inspections, all observed defects that meet the investigatory level are risk assessed and the level of response determined with all information being recorded at the time of the inspection.

This Policy defines defects by priority:

- Priority 1- those that require prompt attention because they represent an immediate or imminent hazard;
- Priority 2 to 5 - all other defects.

Priority 1

These defects should be corrected or made safe at the time of the inspection, if reasonably practicable. In this context, making safe may constitute displaying warning notices, coning-off or fencing-off to protect the public from the defect or other suitable action. If the inspection team cannot make safe the defect at the time of inspection, then they will instigate the relevant procedures to ensure appropriate resources are mobilised to make the defect safe within the necessary timescales defined within Table 9.

Priority 2 to 5

These defects are those which are deemed not to represent an immediate or imminent hazard, and which can be repaired within longer timescales. Priority 2 to 5 defects are categorised according to priority with response times defined within Table 9.

15. 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 Knowsley Council's process for assessing the risk posed by defects and hazards and establishes a practical process to facilitate its implementation.

The principles of a system of defect risk assessment for application to safety inspections are set out below. Any item that meets the investigatory level is to be assessed using the risk assessment matrix in table 8.

Risk Evaluation

The risk factor for a particular risk is:

Risk Factor = Likelihood score x Consequence score.

- **Likelihood of Event Occurring** is the inspector's assessment of likelihood of the defect **to pose a risk or serious inconvenience to users of the network or the wider community and to arrange for their remedy**. It follows an assessment of the road Hierarchy and the location of the defect within the road.
- **Consequence of Event Occurring** – The impact/severity is quantified by assessing the extent of damage likely to be caused should the risk be realised. The

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main consideration of impact/severity is the magnitude or dimension of the defect. However, other variables such as road speed may also affect the likely impact, its location to vulnerable users and other hazards within the immediate environment.

It is this Risk Factor that identifies the overall risk rating and consequently the appropriateness of the speed of response to remedy the defect.

Having identified a particular risk, assessed its likely impact and probability and calculated the risk factor, the priority and the timescale to rectify the defect is allocated to it.

The risk assessment matrix detailed below will be the prime document used by the Highway Inspectors during the course of their inspections. The matrix will be used to assess the risk associated with the defect and the appropriate response.

Table 8: Risk Matrix

		Consequence			
		Low (1)	Medium (2)	High (3)	V High (4)
Likelihood	Low (1)	1	2	3	4
	Medium (2)	2	4	6	8
	High (3)	3	6	9	12
	V High (4)	4	8	12	16

The response times reflect the risk assessment and are set out below. The response times begin from the time the defect has been identified and are closely monitored and recorded to assess the performance.

Table 9: Priority Responses

Response Category	Description	Reporting timescale for Highway Inspector	Response Period
Emergency (P1) Score 16	Used for extremely hazardous defects that requires emergency attention because they pose an immediate danger to highway users.	Immediately via telephone call and recorded on Highways Asset Management system. Highway Inspector to protect the scene where reasonably practicable pending a make-safe or other suitable mitigation measure	Contractor to respond within 2 hours from the time of receiving the notification.

Urgent (P2) Score 8-12	Used for defects that require urgent attention because they pose an imminent risk to highway users.	Recorded on the Highways Asset Management system and telephone call made to repair team as soon as possible.	Contractor to repair within 24 hours of notification.
(P3) Score 6	Used for defects which are deemed not to represent an immediate or imminent hazard. They are categorised according to their likelihood and consequence	On the day recorded via the Highways Asset Management system	Contractor to repair defect within 14 calendar days of notification.
(P4) Score 2-4	Used for defects which are deemed not to represent an immediate or imminent hazard. They are categorised according to their likelihood and consequence	On the day recorded via the Highways Asset Management system	Contractor to repair within 28 calendar days of notification.
(P5) Score 1	As Programmed	1	

16. Inspector Discretion

On occasion a claim investigation will establish that the location contains a defect which does not meet the investigatory level. In such circumstances, the highways inspector can determine that a non-actionable defect should be actioned irrespective of the investigation level, subject to budget availability.

The inspector in his final assessment of the risk takes account of other on site local factors. Local factors may include the close proximity of a school, hospital or other establishment which attracts increased activity. The location of the defect relative to other features such as junctions and bends, proximity to other defects are to be taken in to account. The final on site risk assessment by the inspector allows the appropriate response to be applied.

17. Minor Defects

It is recognised that on any highway network, a multitude of minor defects will exist which do not pose any risk and do not meet the Investigatory Level and may result in no action being taken.

18. Enquiries

Inspections may also be initiated by an Enquiry from many sources, for example a member of the public, the police or a Local Councillor. Inspections generated in this way are recorded as Reactive Inspections within the Highways Asset Management system and a record kept even if a defect is not found or is not considered a safety defect.

Defects that are reported via an Enquiry will be inspected within a timescale relevant to the severity/location of the defect, but within 7 working days. The defects identified by reactive inspections shall be judged by the same criteria as those identified by planned inspections.

19. Training and Competencies

Training

It is recommended that all staff employed to undertake Safety Inspections are trained to Highway Safety Inspection Qualification City and Guilds 6033 – Units 301 and 311 or equivalent and undergo refreshing training every 5 years.

It is also recommended that any new highway inspector shadows a colleague within the inspection team for a period of time prior to being formally authorised and documented to undertake inspections.

Induction training will be undertaken for any new employees.

All highway inspectors will be subject to the authority's/contractors performance management & skills development process which should be a documented. Each team member is provided with this policy.

Regular Team Meetings and Tool Box Talks will be undertaken to discuss issues in relation to the inspection process therefore allowing it to be continually reviewed.

Competency

Competence is the ability to perform activities to a recognised standard on a regular basis. It combines practical and thinking skills, knowledge and experience and will be enhanced by the following elements:

- Manager Introduction & Briefing
- Work shadowing;
- Highway related training modules contained within the City & Guilds training scheme; Units 301 and 311 or equivalent.
- On-site staff appraisals/work monitoring (line supervisor);
- Regular team meetings;
- Staff Development Reviews (Annually)
- Any other external courses of relevance to post
- Documents relating to relevant Code of Practice

APPENDIX A: COLLABORATIVE WORKING GROUP

The Liverpool City Region Highway Safety Inspection Framework has been developed through a collaborative working group of officers from a number of authorities listed at below who are directly involved at varying levels of responsibility in the function of highway maintenance, inspections, and claims management.

Collaborative working group members;

- **Halton Borough Council**
- **Knowsley Borough Council**
- **Liverpool City Council**
- **St Helens Borough Council**
- **Wirral Borough Council**
- **Sefton Borough Council**
- **Warrington Borough Council**
- **Lancashire County Council**

Document Change Control Table

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