NORTH EAST LINCOLNSHIRE COUNCIL
www.nelincs.gov.uk

Internal Ref:	NELC. HIMP2018
Review date	September 2019
Version No.	V01.00

Policy for Highway Inspection and Maintenance – Roads, footways and Cycle Routes

1. Council Priorities

North East Lincolnshire Council's priorities:

'Stronger economy and stronger communities'

To achieve this vision we need to work in new ways with partners in the public and private sectors, the voluntary and community sector, and with individuals, families and communities. We must support and enable the achievement of improved community outcomes with creativity and innovation.

We want North East Lincolnshire to be seen as an attractive place to live, work, visit and invest. We know that we have significant and exciting opportunities for investment and growth in North East Lincolnshire.

The Council's stronger economy / stronger communities priorities are underpinned by a key strategic framework comprising the following:

- health and wellbeing strategy
- economic strategy
- prevention and early intervention strategy
- financial strategy
- safeguarding

Our outcomes framework is the means by which our priorities will be translated into action and delivered, developed and achieved in conjunction with our partners across sectors. This is intended to drive a culture of evidence-based decision-making that will enable elected members to take informed key decisions, knowing the risks and the opportunities for citizens, communities and businesses. Our commissioning plan will ensure and foster clear links between the outcomes framework and the resources available to achieve them.

The framework, sets out the five high level outcomes that we and our partners aspire to achieve to ensure prosperity and wellbeing for the residents of North East Lincolnshire.

The five outcomes are that all people in North East Lincolnshire will:

- Enjoy and benefit from a strong economy
- Feel safe and are safe
- Enjoy good health and well being
- Benefit from sustainable communities
- Fulfil their potential through skills and learning

All policies that are developed or reviewed by North East Lincolnshire Council have due regard to the aims of the Equality Duty including ensuring that no-one is treated in any may less favourably on the grounds of age, disability, gender reassignment, pregnancy & maternity, race, religion or belief, sex, sexual orientation or marriage & civil partnership.

2. Introduction

North East Lincolnshire Council, as the highway authority, is under a statutory duty (defined in the Highways Act 1980 section 41) to maintain the highway which is maintainable at public expense, (defined by the Highways Act 1980 section 36).

References within this policy to "highway" means “highway maintainable at public expense”.

In order to maintain the highway in a suitable condition for traffic, both vehicular and pedestrian, that may reasonably be expected to use it, a system of maintenance priorities must be established. The extent of the highway includes the whole width between boundaries.

In the interest of route consistency for highway users, and to ensure optimisation of cross boundary service provision, the council will collaborate in determining levels of service, especially across boundaries, with neighbouring authorities responsible for strategic and local highway networks.

The purpose of this policy is primarily to establish the framework for delivery of the Council’s requirements for inspection and maintenance of those roads, footways and cycle routes which form part of the public highway network

infrastructure. Other elements of network infrastructure may be referred to within this policy and these will be covered in more detail elsewhere.

A network hierarchy based on asset function is the foundation of a risk based maintenance strategy. The network hierarchy is determined by traffic volume or by local social and economic importance (see Item 3). This has regard to the wider objectives for transport integration and network management, including strategies for public transport, walking and cycling. Collectively these issues are referred to as the "functionality" of the section of highway in question.

The Well Managed Highway Infrastructure Code of Practice, published by the UK Roads Liaison Group (October 2016), provides guidance on implementing a risk based approach to highway inspection and maintenance This guidance will be taken into consideration in the practical implementation of this policy.

Issues relating to the maintenance of Public Rights of Way are covered separately, under the Council's Public Rights of Way strategy, and are therefore not addressed within this policy.

3. Network Hierarchy

3.1 Road Hierarchy

Road hierarchy will be determined having regard to traffic flows, particularly those of heavy goods vehicles and buses, but also on the basis of risk assessment having regard to the local and social economic importance of the particular section of carriageway in the network. The aim is to develop a logical pattern of routes within the urban and rural areas that reflect the different types of journeys made and the functionality of the section of highway in question.

The "Factors to Consider – Roads" set out in **Table 2.1 of Annex 2** to this policy will be used as a reference point from which to develop the hierarchy for North East Lincolnshire's roads.

3.2 Footway Hierarchy

Footway hierarchy will be determined by functionality and scale of use. Six broad categories will be used as a reference point from which to develop the hierarchy for North East Lincolnshire's footways as set out in **Table 2.2 of Annex 2** to this policy.

3.3 Cycleway Hierarchy

The categories for cycleways are shown in **Table 2.3 of Annex 2** to this policy and are categorised not by functionality or use but by location. Where the level of use is significant and relevant to maintenance need, for example on cycle commuter routes, this will be taken into consideration when developing the hierarchy.

4. Inspection Regime

The establishment of an effective regime of inspection, survey and recording of findings, is the most crucial component of highway infrastructure maintenance. The characteristics of the regime, including types and frequency of inspection, items to be recorded and the type of response required, will be based on an assessment of the relative risks associated with potential circumstances of location, agreed level of service and asset condition. The regime will have regard to the Council's Highway Asset Management strategy.

The Inspection, assessment and recording regime will provide the basic information for addressing the core objectives of highway maintenance:

- Network Safety
- Network Serviceability
- Network Sustainability.

All elements of the inspection and assessment regime will be applied systematically and consistently in accordance with the principles of Quality Assurance. This is particularly important in the case of network safety, where information may be crucial in respect of legal proceedings. It is recognised however that all information recorded, even if not primarily intended for network condition assessment purposes, may have consequential implications for safety and may therefore be relevant to legal proceedings. It is also recognised that records may have to be made available for public inspection and reference.

4.1 Categories of Inspection

Inspections and surveys are considered in the following categories, which correspond to the core objectives of highway maintenance.

- **Safety Inspections** - These are designed to identify all defects likely to create a 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. These inspections may include systematic testing of some facilities.

- **Service Inspections** - These mainly comprise detailed inspections tailored to the requirements of particular highway assets and elements to ensure that they meet requirements for serviceability. The scale and scope of these inspections will be determined in line with the Council's highway asset management strategy. These inspections also include inspections for network integrity and for regulatory purposes, including NRSWA, intended to maintain network availability and reliability.

- **Condition Surveys** - Structural condition surveys are primarily intended to identify deficiencies which, if untreated, are likely to adversely affect long term performance, serviceability and safety. Processing survey data through a specialist software system can provide evidence of future life

expectancy and for when intervention may be appropriate. Certain condition surveys are undertaken to enable reporting to national government and to satisfy the requirements of valuation regimes.

It must be recognised that the Council is not obliged by statute to undertake comprehensive inspections of all highway elements under all of these categories. However safety inspections will be undertaken in order that repairs can be carried out to defects that present a danger and, where necessary, the Council is able to support a defence under Section 58 of the Highways Act 1980.

The Council will undertake condition surveys to assess the condition of the network and prioritise programmes of planned works, but also to a certain extent to enable reporting to national government on road condition and to satisfy the requirements of highway asset valuation regimes.

Service inspections however are in the main discretionary, and the extent to which these are undertaken will depend on the maintenance regime established by the Council in the light of its highway asset management strategy and available resources. However inspections for regulatory purposes which are intended to maintain network availability and reliability, including NRSWA, will be undertaken.

4.2 Recording and Monitoring of Information

All information obtained from inspections and surveys, together with the nature of the response, including nil returns, will be recorded consistently to facilitate analysis.

The recording system will provide for recording of service requests, complaints, reports or information from users and other third parties. These may require immediate action, special inspection, or influence future inspection or monitoring arrangements and the nature of response, including nil returns, will also be recorded.

4.3 Safety Inspections

Safety inspections are designed to identify all defects likely to create danger or serious inconvenience to users of the network or the wider community. Such defects include those that will require urgent attention (within 24 hours) as well as those where the locations and sizes of the defect are such that longer periods of response would be acceptable.

Road safety inspections will normally be undertaken by a Highway Inspector, driven in a slow moving vehicle, at frequencies that reflect the characteristics of the particular highway and its use. In busy urban areas, where it may be difficult to obtain the necessary level of accuracy from vehicle-based inspections, walking inspections will be used.

Footway safety inspections will normally be undertaken by a Highway Inspector on foot, at frequencies that reflect the characteristics of the particular highway and its use. Tarmac footways in rural areas and urban

estates may be inspected by a Highway Inspector being driven in a slow moving vehicle, where the footways are more lightly used and there is little or no roadside parking.

Cycle routes within the carriageway will be included within the road safety inspection regime, with identified defects assessed on a risk based approach consistent with cycle use. Cycle routes with shared pedestrian use or segregated from the footway by a white line will be included within the footway safety inspection regime. Cycle routes and trails remote from the highway will be inspected by cycle or by walking as appropriate.

Additional inspections may be undertaken in response to user or community concern, as a result of incidents or extreme weather conditions, or in the light of information obtained from condition monitoring of the asset.

Frequencies for safety inspections of network sections will be based upon consideration of:

- Category within the network hierarchy
- Type of asset e.g. carriageway, footway etc
- Critical assets
- Consequence of failure
- Network resilience
- Use, characteristics and trends
- Incident and inspection history
- Characteristics of the adjoining highway network elements
- The approach of adjoining Highway Authorities
- Wider policy or operational considerations.

Although the category within the hierarchy, in combination with traffic use, will be the main determinant of inspection frequency, the other factors will be taken into account in deciding whether consideration should be given to increasing or reducing the frequency.

The frequencies based upon network categories set out in Table 3.1 of **Annex 3** to this policy will be used as a starting point, but in defining a safety inspection regime all of the parameters listed will above be taken into account as appropriate.

Where footways or cycleways remote from carriageways form part of an integrated route or network intended to encourage walking and cycle use, consideration will be given to adopting a consistent safety inspection frequency for the route or network as a whole.

4.4 Safety of Electrical Installations

The presence of electrical equipment on highways, primarily relating to street lighting, illuminated traffic signs and signals requires special attention to ensure the safety of users and the community. This issue is fully covered within the Council's "Street Lighting Policy", and in the "Contract for the Maintenance of Traffic Signals".

5. Investigatory Levels

The asset condition of each element of the network has the potential to contribute to the core objectives of:

- **Network Safety**
- **Network Serviceability**
- **Network Sustainability**

Each element of the network has the potential to contribute to some extent to the above objectives. For example the contribution of the condition of the carriageway fabric to the Network Safety core objective is as follows:

- Nature, extent and location of surface defects
- Nature, extent and location of edge defects
- Nature and extent of surface skidding resistance – this issue to be addressed separately within a Skid Resistance Strategy

The term '*investigatory level*' has been used deliberately to infer that there is no expectation that repair action will necessarily be taken following the investigation. This is not an 'intervention level'. Rather the action to be taken will be determined by the dynamic risk assessment undertaken during the site inspection. The dynamic risk assessment will take into consideration other defects of a similar nature within proximity to the identified / reported defect.

Having regard to relevant case law, the following basic investigatory levels for road and footway defects (including cycle routes) have been adopted by the council:

Roads: a sharp edged depression or pothole of 40mm depth or greater, and extending in any one direction greater then 300mm.

Footways and cycle routes: a sharp edged defect (including rocking flags / paving stones) with a deviation of 20mm or greater from the surrounding level of the highway, or a rapid change in surface profile greater than 25mm extending in plan dimension less than 600mm.

5.1 Defect Categories

During safety inspections, all observed defects that provide a risk to users of the highway should be recorded and the level of response determined on the basis of risk assessment. Highway Inspectors will be required to make an on-site judgement of the likely risk associated with any defect having regard to its particular circumstances. For example the proximity of schools, community centres or other venues where vulnerable users of the highway are likely to be present.

North East Lincolnshire Council has adopted response times which correspond with two categories of defect:

Category 1 –Defects which are considered to require urgent attention that 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. 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. If temporary repairs have been used, permanent repair should be carried out within a reasonable period.

Category 2 –Defects that do not represent an immediate or imminent hazard or risk of short term structural deterioration may have safety implications, although of far less significance than those which are considered to require urgent attention. They are more likely to have serviceability or sustainability implications. If repairs are to be undertaken these are likely to be within a planned programme of works with their priority determined by risk assessment. Access requirements, other works on the network, traffic levels, and the desirability of minimising traffic management, should also be considered as part of the response.

5.2 Determining Response Times

During safety inspections, observed defects that are considered to provide a risk to users of the highway should be recorded and the level of response determined on the basis of a risk assessment. Although some general guidance can be provided on the likely risk associated with particular defects, on site judgement will always need to take account of particular circumstances. For example, the degree of risk from a pothole depends upon not merely its depth but also its surface area and location.

The principles for a system of defect risk assessment for application to safety inspections, are set out below.

5.3 Risk Evaluation

Risk evaluation will be undertaken by the Highway Inspector, at the time of the inspection. All defects which correspond to, or are in excess of, the stated defect investigatory level should be risk evaluated. This means assessing the probability of an incident happening (**likelihood)** and the likely impact (**consequence)** should an incident occur.

5.3.1 Likelihood

The risk probability is quantified by assessing the likelihood of users passing by or over the defect. The risk probability is likely to increase where higher vehicular or pedestrian flows exist. The risk evaluation table (Annex 1) provides guidance on determining the likelihood.

5.3.2 Consequence

Having identified the likelihood of a risk occurring, Highway Inspectors will be required to consider the risk impact (consequence) of the defect, should an incident occur. The consequence is qualified by assessing the reasonably foreseeable extent of the injury or damage that might result. In assessing the consequence, considerations should include factors such as the proximity to schools, residential homes and group dwellings for older persons, or roads with high traffic speeds where the potential consequence of an incident can be considered more serious.

The Highway Inspector will be required to record the reasons for the assigned repair priority.

Annex 1 :

Risk Evaluation Tables

Likelihood of Event Occurring	Consequence of Event Occurring				
	Negligible	Low	Medium	High	Severe
High	5	10	15	20	25
Medium	4	8	12	16	20
Low	3	6	9	12	15
Very Low	2	4	6	8	10
Negligible	1	2	3	4	5
Key to Risks					
Low (Review)	Low	Medium	High / Med	High	

Defect Category	Risk Prioritisation (score)	Response Times		
Category 1	High (15-25)	**R1**	within 24 hours	
Category 2	High / Medium (10-12)	**R2**	3 weeks	(14 Working days)
	Medium (8-9)	**R3**	6 weeks	(28 Working days)
	Low (5-6)	**R4**	3 months	(63 working days)
	Low (Review) (3-4)	**R5**	Review at subsequent inspection(s)	

Annex 2 :

Table 2.1 – Factors to Consider - Roads:

Hierarchy Description	Type of Road General Description	Detailed Description
Motorway *	Limited access motorway regulations apply	Routes for fast moving long distance traffic. Fully grade separated and restrictions on use
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
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 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
Secondary Distributor	Classified Road (B and C class) and unclassified urban bus routes carrying local traffic with frontage access and frequent junctions	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.
Link Road	Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions	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.
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 HGV's. In urban areas they are often residential loop roads or *culs de sac*
Minor road	Little used roads serving very limited numbers of properties.	Locally defined roads.

* Motorways and Trunk roads are the maintenance responsibility of Highways England.

Table 2.2 –Factors to Consider- Footways:

Category Name	Brief Description
Prestige Walking Zone	Very busy areas of towns and cities with high public space and streetscene contribution.
Primary Walking Route	Busy urban shopping and business areas and main pedestrian routes.
Secondary Walking Route	Medium usage routes through local areas feeding into primary routes, local shopping centres etc.
Link Footway	Linking local access footways through urban areas and busy rural footways
Local Access Footway	Footways associated with low usage, short estate roads to the main routes and *culs de sac*
Minor Footways	Little used urban or rural footways serving very limited numbers of properties

Table 2.3 – Factors to Consider – Cycle Routes:

Category	Description
A	Cycle lane forming part of the carriageway, commonly a strip adjacent to the nearside kerb. Cycle gaps at road closure point (no entry to traffic, but allowing cycle access).
B	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	Cycle provision on carriageway, other than a marked cycle lane or marked cycle provision, where cycle flows are significant.
D	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.

ANNEX 3:

Safety Inspection: Potentially Dangerous Deficiency

The purpose of Safety Inspections is defined as inspections designed to identify all 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 urgent attention as well as those where the locations and sizes are such that longer periods of response would be acceptable. It will still be necessary however for those undertaking inspections, or responding to reported incidents, to judge whether any individual observed or reported defect should be recorded as Category 1 and the consequent urgent action put in hand. Each and every such decision could be critical to the safety of users and may also be vital in legal proceedings arising out of an incident occurring at or near to the site. Complete and accurate records will be essential.

The priority for treating any particular deficiency will depend upon:

- The depth, surface area, or other extent of the defect
- The location of the defect relative to highway features such as junctions and bends
- The location of the defect relative to the positioning of users', especially vulnerable users, such as in traffic lanes or wheel tracks or the main walking on pedestrian routes
- The nature and extent of interaction with other defects
- Forecast weather conditions, especially potential for freezing of surface water

The weight given to each of these parameters in determining the priority of response for treating any individual defect will be a matter of on site judgement based upon a risk based approach having regard to the adopted investigatory levels.

Table 3.1 : Safety Inspection Frequency

Feature:	Category:	Frequency
Roads	Strategic Route	1 month
	Main Distributor	1 month
	Secondary Distributor	1 month
	Link Road	3 months
	Local Access	1 year
	Minor Roads	1 year
Footways	Prestige Walking Zone	1 month
	Primary Walking Route	1 month
	Secondary Walking Route	3 months
	Link Footway	6 months
	Local Access Footway	1 year
	Minor Footways	1 year
Cycleways	Part of Carriageway	As for the road category
	Remote from Carriageway	As for Footway category
	Cycle provision on carriageway where cycle flows are significant	As for the road category
	Cycle trails	1 year