



**HILLINGDON**  
LONDON

**London Borough of Hillingdon**

**HIGHWAY SAFETY INSPECTION POLICY &  
PROCEDURE**

**Highway Services**

**01/11/2018**

# Quality Management

## Report: Highway Inspection Policy & Procedure

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Date	01/11/2018	17.02.2020		
Prepared by	Poonam Pathak	Poonam Pathak		
Signature	PP	PP		
Checked by	Dalton Cenac	Dalton Cenac		
Signature	DC	DC		
Authorised by	Perry Scott	Perry Scott		
Signature	PS	PS		

The following have been consulted by Highways in the preparation of this policy

- LBH Legal Team
- LBH Insurance Team
- Gallagher Bassett (LBH claim handlers)
- METIS Consultants (critical review by independent consultant)
- Neighbouring authorities

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## 1. Introduction

This policy sets out the framework for the London Borough of Hillingdon (LBH) to carry out routine safety inspections for highways maintainable at public expense. The Highways Act 1980 Section 41 requires LBH to maintain all highways for which it is responsible. Section 58 of the act provides a statutory defence to a claim for breach of the Section 41 duty to maintain. This document provides a framework for LBH to use that defence. This policy has been prepared with the primary aim of providing assistance to those carrying out highway safety inspections with clear, consistent, guidance and instruction.

This policy has been developed to meet the requirements of the Highways Act and addresses the specific matters above by:

- i) Carrying out regular inspections with regard to the character of the highway
- ii) Applying investigatory criteria to the severity of a defect i.e. what constitutes 'dangerous'
- iii) Carrying out general repairs to the highway
- iv) Taking action to minimise the potential of a defect developing further
- v) Taking such action to make a dangerous defect safe by signing, guarding or immediate repair to remove the danger.

This policy supersedes all previous approaches to highway inspection and repair within LBH 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.

The Well Managed Highway Infrastructure - A Code of Practice 2016 (the Code) highlights the need for a risk based approach to all highways policies, and LBH Inspections have been modified in the light of particular local circumstances, and the relative risks and consequences associated with these. In accordance with the Code, LBH has reviewed the inspection regime including defect assessment and categorisation. The policy has been developed through a series of consultations within the council department's e.g. highways manager, safety inspectors, highway engineers, streetworks officers, legal representatives, risk and insurance professionals; and also benchmarking the inspection regime with the neighbouring boroughs. The guidance documents produced by LoTAG were also taken into consideration while preparing the policy.

## 2. Purpose of Inspection

The purpose of highway maintenance is to provide a highway network, which is safe and convenient for users of the highway. Safety inspections are designed to identify all defects likely to create danger or serious inconvenience to users of the highway or the wider community. This includes defects that require urgent attention as well as those where the location and reduced level of severity is such that a longer response time is acceptable.

Highway safety inspections:

- Identify defects which should be repaired as part of a maintenance programme to arrest further deterioration and avoid more serious problems developing.
- Demonstrate a structured inspection regime, which can provide evidence for the Highway Authority to defend claims.

### 3. Network Hierarchy

A network hierarchy is primarily a categorisation of carriageways, footways and cycleways by their respective use and function. It is acknowledged that the network hierarchy and inventory forms the basis for a coherent and consistent maintenance strategy. It provides the link between maintenance policy and implementation and assists with;

- Determining appropriate inspection frequencies
- The allocation of resources and maintenance priority

The key purpose of a network hierarchy is to ensure the orderly grouping of carriageways, footways and cycleways in a framework around which the Council can plan and maintain the highway network effectively and efficiently. It reflects the needs, priorities and actual use of each road in the network. Hence the network hierarchy will provide a balanced approach to determine an appropriate, safe and convenient use of all roads. Based on the guidance in Recommendation 12 (A.4.3.11 - A4.3.18) of the Code, the Council has considered the guidance in terms of local application, embracing detail knowledge and understanding of the local highway network to develop road, footway and cycleway categories. The network hierarchy has been reviewed taking into consideration the inspection regimes of neighbouring highway authorities as per the Recommendation 5 (A.2.3) of the Code.

#### 3.1 Carriageway hierarchy

The carriageway hierarchy below has been determined based on road classification with due regard to functionality, traffic use, character and trends.

Feature	Hierarchy	Functionality factor	General description	Category	Length (m)
Road	Main Distributor	Borough principal roads; very high traffic flow routes.	Routes linking strategic network.	A	51,662
	Secondary Distributor	Traffic sensitive roads; classified non-principal roads; high traffic flow routes.	Routes linking main distributor network	B	20,343
	Link Road	Medium traffic flow routes. Mainly unclassified.	Routes linking secondary distributor network; industrial interconnecting roads.	C	52,700
	Residential / Local Access	Low traffic flow routes. No traffic generator. Unclassified.	Residential roads; access to individual properties and land.	D	574,151

**Table 1**

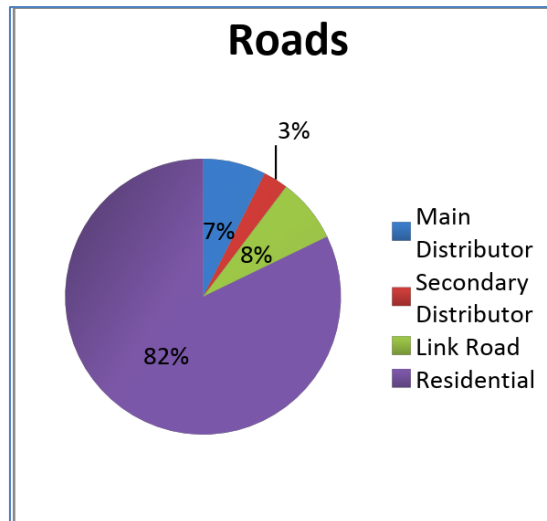


Chart 1

### 3.2 Footway hierarchy

The footway hierarchy is determined on functionality and actual use. Local factors such as the proximity of town centres, shopping parades, schools, hospitals, stations attracting higher than normal number of pedestrians to the area have been taken into account.

Feature	Hierarchy	Functionality factor	General Description	Category	Length (m)
Footway	Primary Walking Route	Very high pedestrian volume. Major bus route.	Busy urban town centre; shopping and business centre; main train stations; main pedestrian routes.	1	14,197
	Secondary Walking Route	High pedestrian volume.	High usage routes through local areas feeding into primary routes; shopping parades; large schools.	2	5,437
	Link Footway	Medium pedestrian volume.	Linking local access footways; local shops.	3	46,824
	Local Access Footway	Low pedestrian volume.	Low usage footways; residential housing estates; cul-de-sacs.	4	1,148,302

Table 2

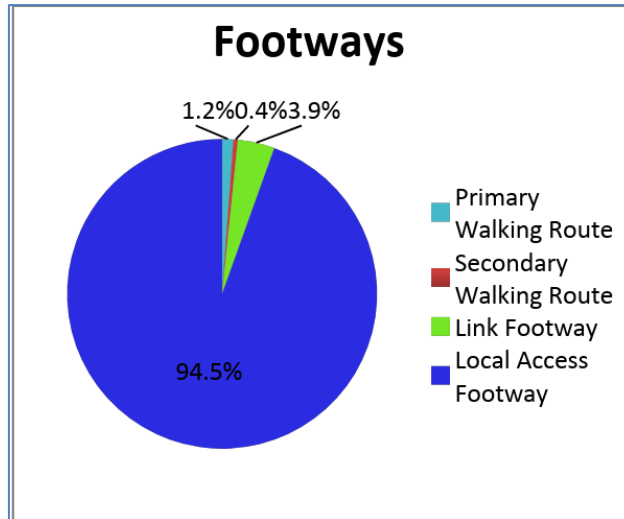


Chart 2

### 3.3 Cycleway hierarchy

The cycleway hierarchy is determined by where they are situated and inspections are undertaken as part of the footway and carriageway inspections.

Feature	Hierarchy Description	Category	Length (m)
Cycleway	Part of carriageway - Cycle Lane	A	8,890
	Part of footway - Cycle Track		
	Remote from carriageway - Cycle Path	B	38,520
	Cycle Trails	C	31,480

Table 3

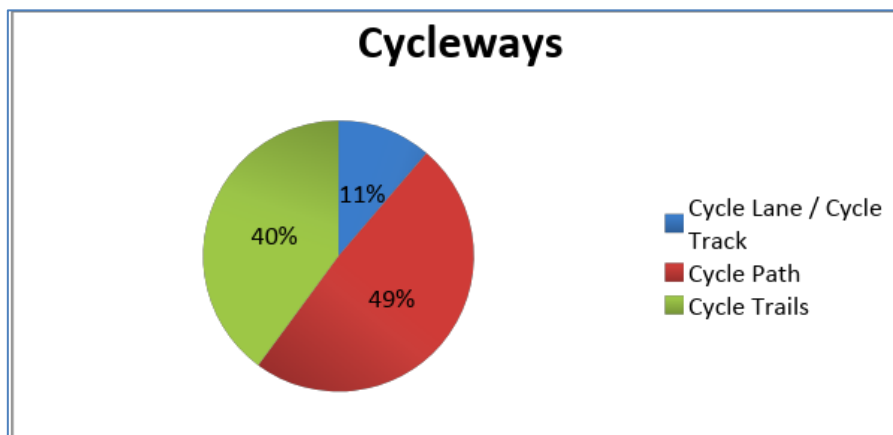


Chart 3

## 4. Inspection Frequency

The frequency of inspection adopted by LBH reflects the needs, priorities and actual use of each highway in the network. The frequencies take into account national guidelines for a risk based approach in accordance with local needs. A particular highway may in some



instances have varying frequencies of inspections in different locations along its length. The general frequencies of inspection are stated in Table 4.

The existing hierarchies and frequencies were reviewed to comply with the Code, together with a benchmarking exercise with neighbouring boroughs (consistency with other local authorities). The new hierarchies and classification are based on LBH risk assessment and available resources. Following the review inspection frequencies have been increased on main distributor roads, secondary distributor roads, link roads, and link footways.

Feature	Hierarchy Description	Category	Length (m)	Frequency
Road	Main Distributor	A	51,662	1 month
	Secondary Distributor	B	20,343	1 month
	Link Road	C	52,700	3 month
	Local Access	D	574,151	1 year
Footway	Primary Walking Route	1	14,197	1 month
	Secondary Walking Route	2	5,437	3 month
	Link Footway	3	46,824	3 month
	Local Access Footway	4	1,148,302	1 year
	Cycleway	Cycle Lane or Cycle Track	A	8,890
Cycle Path		B	38,520	6 month
Cycle Trail		C	31,480	1 year
PROW	Public Right of Way		128,711	1 Year

**Table 4**

#### **4.1 Inspection frequency compliance**

While every effort will be made to achieve the frequency of inspection shown in Table 4, on occasion the effect of weather, workload, inspector availability or for other operational reasons it is possible that the specified inspection frequencies cannot be met. In such circumstances the missed inspection will be undertaken within the first week of the following

month. If an inspection cannot be undertaken within this period this must be reported to the manager immediately.

## 4.2 Inspection schedule

The inspection schedule is managed through the 'Insight - Symology' system. The work is scheduled by the system depending on the inspection frequency and actual due date. All inspections to undertaken during a given month are shown on the system as being *due* on the beginning of the month. At the beginning of each month the inspectors download the inspection routes to be undertaken during the month and the inspections are completed within that month.

## 5. Items for Inspection

The items and the typical defects/risks that are assessed as part of the inspection process are listed in the Table 5 below. The list is not exhaustive and persons carrying out the safety inspections are requested to record any defect that might create a hazard to users of the highway.

Item	Scope of defects/risks to be identified
Carriageway	Surface defects (potholes, depression, cracking, rutting, crowning, uneven surface) Edge defects (edge deterioration, depression) High friction surfacing defects (worn/slippery surface) Mud, debris, spillage or contamination on running surfaces Obstructions (debris) Flooding (depression, blocked gullies) Markings, Road Studs defects (worn/missing marking, damaged/missing /displaced studs) Covers and gratings defects (rattling, difference in level) Ironwork defects (damaged/broken covers) Kerb defects (missing/dislocated, damaged, missing fillets causing trip)
Footways and Cycleways	Surface defects (rocking/cracked slabs, abrupt level difference, Longitudinal or transverse cracking or gaps, depression) Kerbs and edge defects including missing and projecting kerbs Highway weeds causing slippery surfaces or trips Mud, debris, spillage or contamination on running surfaces Obstructions (A-board, Bins) Loss of Mortar/grout
Public Rights of Way	Surface defects (trip hazards, potholes, Overhanging vegetation Unlawful obstruction Integrity of stiles and gates etc.
Drainage	Blocked gullies causing a water hazard Slow running gullies causing a water hazard

	Accumulation of water on carriageways, footways and cycle routes
Landscaped Areas and Trees (incl. hedges)	<p>Root growth causing surface irregularity</p> <p>Trees or hedges overgrowing the footway or carriageway such that a hazard is presented</p> <p>Basal growth causing obstruction</p> <p>Unstable trees or branches</p> <p>Overgrown hedges, grass or vegetation causing inadequate visibility, particularly at junctions or pedestrian crossings</p> <p>Trees and vegetation obscuring signs or street lights constituting a hazard to users</p>
Road Markings and Studs	<p>Loose studs - Potential for damage and injury</p> <p>Severely worn pedestrian crossing markings</p> <p>Worn or missing markings constituting a hazard to highway users</p>
Traffic Signs and Bollards	<p>Missing, damaged bollards - hazard</p> <p>Missing, damaged, obscured or mis-directed signs constituting a hazard to highway users (for example, missing "no entry" signs)</p> <p>Unstable signs, signals or posts in danger of collapse</p> <p>Obscured signs</p>
Fences and Barriers	<p>Missing or damaged pedestrian guard rail</p> <p>Missing or damaged safety fence</p> <p>Integrity and location of safety fencing for both vehicles and pedestrians</p>
Traffic Signals, Pedestrian and Cycle Crossings	<p>Exposed wiring</p> <p>Unstable signal post</p> <p>Malfunctioning or inoperative traffic signals</p>
Street Furniture	<p>Damaged or missing bollards</p> <p>Damaged litter bins, cabinets etc. causing a hazard to pedestrians</p>
Condition of Street Lighting / Illuminated Signs and Bollards	<p>Damaged or defective lighting columns/illuminated signs and bollards</p> <p>Exposed wiring in lamp columns, bollards or cabinets</p> <p>Structurally damaged lamp columns in danger of collapse</p>
Temporary traffic management, highway licences	<p>Chapter 8 not followed</p> <p>Signing of obstructions, such as skips and scaffolding,</p>
Bridges	<p>Accident damage to:</p> <p>Structures and supports</p> <p>Parapets</p> <p>Drainage systems</p> <p>Insecure expansion joints etc.</p>
Debris	<p>Debris in the footway or carriageway constituting a hazard to vehicles or pedestrians</p> <p>Oil, loose grit or gravel or other debris in the carriageway causing a</p>

	skidding hazard
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**Table 5: Items for inspection**

While inspecting any street the officer will have to record the hazardous defects as stated above whilst considering the following;

**Defects not under the ownership of the Council**

During an inspection defects may be identified which are not the responsibility of the Council to repair. The Inspector shall therefore take steps to ensure that the party responsible for the repair are made aware of the defect and will if necessary take interim action to make a defect temporarily made safe. The decision will be based upon a local risk assessment by the Inspector and related to the level of risk presented at the time.

**Statutory undertakers defective apparatus (Section 81 NRSWA 1991)**

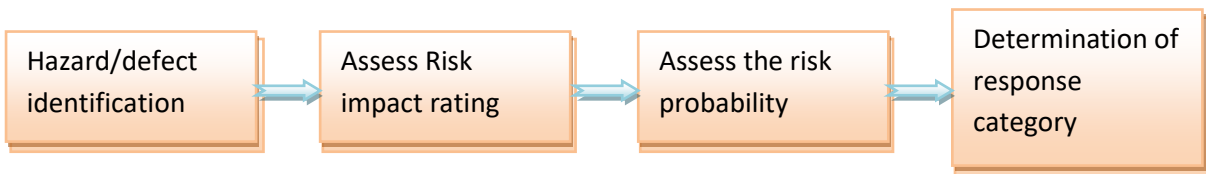
Where an inspector identifies defective utility apparatus, this must be recorded, also stating where possible the undertaker concerned. This information is passed onto the relevant utility with a recommended response time in order that an appropriate repair is carried out.

**Defective reinstatements (Section 72 NRSWA 1991)**

Where an inspector identifies defective reinstatement belonging to a statutory undertaker, this must be recorded stating where possible the undertaker concerned and passed onto the relevant utility for appropriate action.

**6. Risk Assessment**

Recommendation 14 and section A.5 of the Code recommends that the safety inspection regime and the defect repair regime should be risk based. 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;



**Chart 4**

**6.1 Impact**

The impact rating is quantified by assessing the extent of harm 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.

The impact of a risk occurring is measured on a scale of 1 – 3 (1 lowest, 3 highest). The following table gives guidance:

Impact rating	Score	Description	Possible Indicators
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<b>High</b>	3	The hazard presented by the defect, or due to the short term structural deterioration in the defect, could result in serious injury or a fatality.	<p>Impact will result in serious damage to persons or property.</p> <p>Highway users will instinctively react to avoid the defect and this will place them in peril.</p> <p>The defect could destabilise a vehicle and this will place highway users in peril.</p>
<b>Medium</b>	2	The hazard presented by the defect, or due to the short term structural deterioration in the defect, could result in injury or claim against the Authority.	<p>Impact will result in damage to persons or property, from which they are likely to recover.</p> <p>Highway users will instinctively react to avoid the defect.</p> <p>The defect could destabilise a vehicle.</p>
<b>Low</b>	1	The hazard presented by the defect, or due to the short term structural deterioration in the defect, is unlikely to result in injury or claim against the Authority. If untreated the defect will contribute to the deterioration in the overall condition of the highway asset. The defect is unlikely to deteriorate further before the next safety inspection.	<p>The defect will be recognised by Highway Inspectors as requiring attention, but is unlikely recognised as a defect by most Highway users.</p> <p>The defect is very unlikely to cause injury.</p>

**Table 6: Impact**

## 6.2 Probability

The probability of a risk occurring is quantified by assessing the likelihood of highway users encountering the defect or hazard. The probability of a risk occurring is measured on a scale of 1 – 3:

Probability rating	Score	Description	Possible Indicators
<b>High</b>	3	High chance of occurrence.	<p>Vehicular, cycle and / or pedestrian flows are high.</p> <p>A high percentage of vulnerable users may pass through the site.</p> <p>The location of the defect and the topography of the site will mean that it is</p>

			difficult to a highway user to recognise and hence avoid the defect.  Forward visibility may be compromised.
<b>Medium</b>	2	Medium chance of occurrence.	Vehicular, cycle or pedestrian flow may be high, but differing modes are less likely to share the Highway at this location.  Responsible Highway users may be able to recognise and take action to mitigate the impact of the defect.  Forward visibility is good.
<b>Low</b>	1	Low chance of occurrence.	Vehicular, cycle or pedestrian flows are moderate or low.  Different transport modes are unlikely to share the Highway at this location.  The majority of responsible Highway users will be able to recognise and take action to mitigate the impact of the defect.

**Table 7: Probability**

### 6.3 Risk factor

The risk factor is the product of the impact and the probability and determines the seriousness of the risk. The risk matrix determines the risk factor from the impact and probability assessments which is intended as a guide for highway inspectors to enable them to identify defects that present a foreseeable risk of injury or damage to users of the highway.

Risk assessment matrix:

<b>Probability</b>	<b>Low (1)</b>	<b>Medium (2)</b>	<b>High (3)</b>
<b>Impact</b>			
<b>Low(1)</b>	1	2	3
<b>Medium (2)</b>	2	4	6
<b>High (3)</b>	3	6	9

**Table 8: Risk Matrix**

Having identified a particular risk, assessed its likely impact and probability, and calculated the risk factor, the timescale to rectify the defect can be defined as a Category 1 response or

a locally determined Category 2 response. The response categories are shown in Table 9 below:

Risk Factor	Category	Symology priority	Response time	Colour
9	Cat 1(ECO)	1	4 hours	Red
6	Cat 2H	2	14 Days	Blue
4	Cat 2M	3	28 days	Yellow
3 to 1	Cat 2L	4	3 Months	Green

**Table 9: Risk Response Matrix**

The need and priority of any repair will vary depending upon the following factors and in accordance with the risk evaluation and management process above.

- The depth, surface area, or other extent of the defect
- The location of the defect relative to highway other features such as junctions, bends and pedestrian crossing points (including designated pedestrian crossing points)
- The location of the defect relative to the positioning of users, especially vulnerable users, such as in traffic lanes, wheel tracks or at crossing points
- The nature and extent of interaction with other defects
- Forecast weather conditions, especially potential for freezing of surface water
- Level of use.

## 7. Defect Repairs

A main driver of this policy is to have a highway safety inspection and repair regime that ensures the safety of highway users, is proportionate to risk, practicable and achievable. The defects identified will be categorised depending on the risk and impact associated with it. The defects that are likely to create danger or serious inconvenience to users of the network or the wider community will require emergency or urgent attention as well as those where the locations and sizes are such that longer periods of response will be acceptable. The level of response is determined with reference to the risk response matrix (Table 9) together with inspector experience and judgement. Inspectors have full discretion to escalate the response time if they consider it necessary given the character of the defect and its location.

### 7.1 Categories of defect and response times

Defects are categorised as

Category 1: defects presenting the highest risk of harm to the public, thus requiring immediate attention to secure, guard, warn, or make safe.

Cat 1 emergency call out (ECO) up to 4 hours response required by the Rapid Response Team.

Category 2: these are defects that require some further action and are divided into high, medium and low by the risk assessment score.

Cat 2H: These require a permanent repair within 14 days.

Cat 2M: These require a permanent repair within 28 days.

Cat 2L: These require a permanent repair within 3 months.

The response times for Cat 2 repairs may in exceptional circumstances be affected by statutory holidays, plant shutdowns or sustained inclement weather.

Days used in this policy refer to working days i.e. Monday to Friday excluding weekends and bank holidays.

### Repair standards

Cat1 ECO repairs will be made safe by signing, guarding, covering or by temporary repair.

Cat 2 repairs will always be permanent repairs.

Temporary and permanent repairs will be carried out to the standards set out in the Specification for Reinstatement of Openings in Highways (SROH) and Specification for Highway Works (SHW.)

## **7.2 Out of hours response**

The Council provides a 24/7 out of hours standby service for emergencies. During out of hours, calls are answered by the Contact Centre and the details are provided to the highways emergency response team to attend. The Council is only able to deal with emergencies which are likely to have a significant impact on safety. Emergencies cover a range of situations including events such as road traffic accidents, collapse of footway/carriageway, severe flooding etc.

## **7.3 Accident claim automatic repair**

Whenever an accident is reported any defect will be assessed for repair whether it reaches the investigatory level or not.

## **8. Investigatory Levels**

It is recognised that on any highway network, a multitude of minor defects will exist which do not pose any risk to either the safety or the integrity of the highway and for which it may be impractical and inefficient to expend limited financial resources to undertake repairs.

Investigatory levels provide guidelines to highways inspectors, as to which defects should be considered for treatment or repair. The key to selecting the appropriate action for a defect is the risk assessment process. All defects (from the list of assets to be inspected) that meet investigatory level should be evaluated and the likelihood of injury or damage to a highway user assessed. This approach helps to ensure that defect repairs are appropriately planned, resourced and completed to the correct standard.

The investigatory levels are listed below in the Table 10.

(Note: Minimum Investigatory Levels are provided as a guide only. Should the Inspector, following risk assessment, deem it necessary to record any specific defect at a higher level, then they should do so).



Item	Defect	Investigatory Level
Carriageway	Pothole / depression ( <i>depth/width</i> )	>40mm & >200mm
Cycleways	Pothole / depression ( <i>depth only</i> )	25-40mm
Controlled crossing points ( <i>zebra, pelican, puffin, toucan etc</i> )	Pothole / depression ( <i>depth only</i> )	25-40mm
Carriageway	Standing water / water flowing onto public highway / blocked drain	> 1/3 width of carriageway and > 40mm deep
Signs/bollards/pedestrian guard rails	Damaged/misaligned item causing a hazard (including sign fixings)	Defect present
Footway	Trip / pothole / sunken cover	> 20mm
Footway	Rocking flagstones / block	> 20mm vertical movement
Footway	Loose kerbs ( <i>All</i> )	50mm horizontal 20mm vertical
Footway	Missing kerb section	> 20mm
Footway	Depression / ponding	>1m sq & >40mm deep
Footway	Horizontal gap ( <i>paving slabs</i> )	>20mm wide & >20mm deep
Footway	Fillets / open joints	>20mm wide & >20mm deep

**Table 10: Investigatory Levels**

## 9. Highway Inspection Process

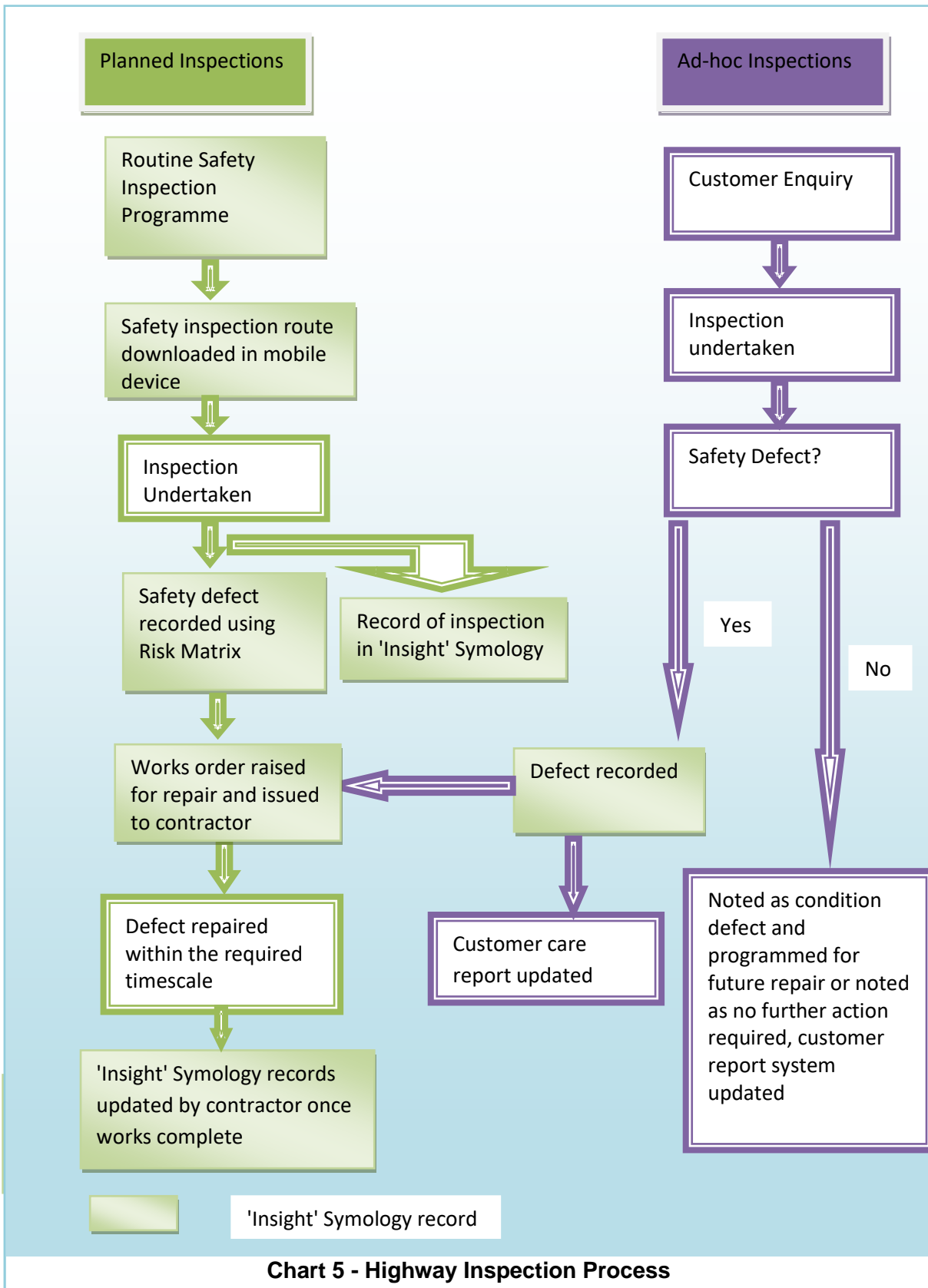
The safety inspection regime is applied and recorded systematically and consistently. The Code states that Authorities should determine the most appropriate way to undertake inspections in order to clearly observe any defects for each asset type. This may include inspections from a slow moving vehicle or in busy urban areas, and particularly when inspecting footways, by walking. The inspections are carried out in accordance with the following requirements;

- All highway safety inspections will be carried out to the frequencies detailed in Table 4. Inspection reports are part of the evidence used to show that the highway authority has acted reasonably
- The purpose of highway safety inspections is to identify all defects in the adopted highway that are likely to create danger or serious inconvenience to users of the network or the wider community and to arrange for their remedy. Particular attention will be given to factors affecting the more vulnerable users of the highway such as the elderly, people with disabilities, cyclists and motorcyclists.
- Highway safety inspections will not be carried out during the hours of darkness/dusk or under conditions of poor visibility e.g. snow, fog, heavy rain. Periods of peak traffic flows should be avoided where possible.
- All routine scheduled safety Inspections will be undertaken by area, by inspectors within the Highways Department. Every inspection undertaken shall be recorded on a mobile device at the time of inspection. The mobile device records the time of inspection, defect information if any. The results of routine safety inspections shall be downloaded to the Insight Symology database following completion of the inspection.

If no defects are recorded as a result of inspection, the inspector shall update the system stating 'no defects were identified during the inspection'.

- During the inspection if a CAT1 defect is identified, the Rapid Response Team will be called out to attend the site within 4 hours. Out of hour emergency calls are attended by a senior highways officer and operative. A works order is issued using the appropriate priority codes associated to the defects. Photographs will be taken of each defect raised to help to show location and severity of the defect. These will be stored and accessible through a database.
- It is recognised that parked vehicles can present a visual obstruction to the inspection process. However it is also recognised that removal of all parked vehicles from large sections of the highway would cause major disruption to residents, be difficult to enforce and impractical to provide any alternative parking. The Inspector must do all that is reasonable practicable to ensure that any defects are identified and recorded.
- Defects associated with a Statutory Undertaker will be recorded on the data capture device and the defects, section 81 (utility apparatus e.g. rattling/missing/damaged covers) and section 71 (reinstatement of excavation) and notices will be processed. Where possible any associated costs will be charged to the undertaker.
- Where a safety defect is made safe by means of temporary signing or repair, arrangements will be made to ensure the continued integrity of the signing or repair until a permanent repair can be completed. The nature of these arrangements will be defined through risk assessment.

A flow chart for the safety inspection process is as follows:



## **9.1 Method of Inspection**

Safety inspections are undertaken by a highways inspector either driven in a slow moving conspicuously marked vehicle or on foot. All footways will have walked inspections at the recommended frequency detailed in Table 4. The carriageways will also be inspected during walked inspections. Only carriageways will be inspected by a driven inspection.

### **9.1.1 Walked inspections**

The highway inspector shall have due regard to their personal safety and in particular from moving traffic either on the main highway or at junctions and crossings. All footway inspections will be carried out on foot. A walked inspection involves an officer wearing a high visible jacket who will walk down one side of the footway observing defects on the footway and to the centre line of the adjacent carriageway. The officer then performs the same procedure on the other side of the road recording defects using a handheld data capture device. All notes are recorded on the handheld device.

### **9.1.2 Driven inspections**

The highway inspectors shall have due regard to their personal safety and in particular the potential hazards from moving traffic and the presence of pedestrians either on the main highway or at junctions and crossings. On no account must they present or put themselves in any hazardous situation. Safety inspections must be carried out in such a manner so as to avoid any disruption to traffic, therefore inspections will be carried out off-peak on the busier routes.

Where a vehicle is used the speed would be sufficiently slow to identify defects but mindful of the effect on other traffic. The driven inspection is undertaken by two people with the passenger carrying out the inspection and recording the data. Each carriageway will be driven in both directions with no undue delay in completing each carriageway. If any defect is observed but its position is not located adequately, a further inspection must be carried out to confirm the location on another pass.

## **9.2 Recording of Defects and Inspection Data**

In order for the Authority to defend potential claims, all data arising from highway safety inspections are recorded in a format that enables retrieval using a variety of search criteria. The inspections are carried out using a handheld data capturing device in LBH Asset Management System 'Insight - Symology'. If no work is ordered as a result of the inspection the computer system will automatically record that no orders were created, indicating that no defects were identified during the inspection.

### **9.2.1 Locating and recording defects**

To ensure the repair team can quickly identify the precise defect, it is essential that the information provided (including a photograph wherever possible) is simple and easily understood.

In order to locate a defect effectively, the repair team requires the following information:

- The location of the defect along the length of the highway.
- The position of the defect across the width of the highway
- The size and type of defect

Defects shall be marked with temporary road marking paint only where necessary, to enable the repair team to locate them quickly.

### **9.2.2 Location along the length**

This information should be clear, precise and easily understood. This will reduce any lost productivity time of the repair team used to locate a specific defect. Ideally a combination of the following information should be recorded:

- Street name / road number
- House number / building name
- Distance and direction from nearest road junction
- Street lighting column number

### **9.2.3 Location across the width**

This information is essential for assisting the repair team to precisely locate the defect identified by the inspector.

Examples

- Channel of carriageway
- On verge
- At start of radius.
- Adjacent to
- On pedestrian crossing
- In central reservation
- In slow / fast lane

### **9.2.4 Size and type of defect**

When describing a defect the inspector must clearly state the description of the defect and its approximate size, where applicable. This will enable the repair team to collect the correct materials to carry out the repair.

Descriptions such as 'Pothole', 'Broken Flags' and 'Damaged Kerbs' do not convey enough information for the repair team to carry out a repair efficiently. It is essential that all the information required to carry out the repair is recorded, by the inspector and passed onto the repair team.

## **9.3 Ad-hoc Inspections**

A highways enquiry received from a member of public, councillors, Member of Parliament or other stakeholders are assigned to the relevant highways inspector to investigate. The highways inspector will investigate the enquiry within a timescale appropriate for the perceived urgency. The inspection detail will be recorded in the LBH asset management system as stated in the process Chart 5. The repair of any defects is actioned in accordance with the criteria contained in this policy document.

If resources are available extra ad-hoc inspections may be carried out on areas of increased deterioration, regularly obstructed areas and other roads.

## **9.4 Public Rights of Way Inspections**

A public path or public right of way is a route over which the public have a right to pass and re-pass. Public rights of way are part of the wider public highway network. These inspections are undertaken by the Rights of Way Officer within Highways. The public rights of way are recorded on the definitive map and statement. The inspection frequency and defect identification criteria are detailed in Table 4.

## **9.5 New Road and Streetworks (NRSWA) inspection:**

LBH delivers its duties under NRSWA legislation through the London Permit Scheme. Inspections under the permit scheme will follow the sample inspection methodology for assessing carrying out all categories A, B and C. The three types of inspections used within the permit scheme;

- Sample Inspections,
- Defect Inspection
- Investigatory inspection

Inspections under the Permit Scheme will include processes for dealing with any defective signing and guarding and for reinstatements; improvement plans; together with any costs that may be recoverable, e.g. sample inspections fees from the Promoter.

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 Insight Symology system as part of the highway safety inspection and reported to the appropriate statutory undertaker for action and repair.

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 'The Insight - Symology' software and reported to the appropriate statutory undertaker for action and repair. This will be managed through the database.

Section 74 inspections are related to works that should have been completed by a due date or have been notified as having done so. LBH run an overrun charging scheme alongside the Permit Scheme under Section 74 of NRSWA.

Adhoc inspections are carried out to check for compliance with any permit conditions required under any particular permit, which are not included in any other inspections procedures.

## **10. Inspector Competency & Training**

Highways Inspectors are suitably experienced and competent to carry out highway inspections as described in this policy following a risk based approach. It is expected that they will have a good working knowledge of relevant inspection procedures; safety requirements; highway materials and construction, together with knowledge for the use of appropriate inspection equipment and software.

They are also conversant with relevant current guidance and highway working practices and should hold an appropriate nationally recognised qualification. There is a clear need for

consistency during the inspection process and training of staff is important. All personnel involved with safety inspections will be trained with the following objectives:-

- To understand the reason and importance for undertaking highway safety inspections
- To gain an appreciation of the whole process of highway inspections, policy and procedure.
- To understand the risk based approach to inspections, levels of service and maintenance.
- To ensure that there is a common understanding and interpretation of what constitutes a hazard on the highway in the context of safety inspection
- To analyse the risk matrix i.e. consequence of hazard/defect and probability of someone getting seriously injured.
- To be aware of the health and safety issues involved and the working methods that should be employed in carrying out safety inspections.
- To collect safety inspection data in a form that allows the recording of information to a common standard
- To have a good understanding of suitable repair techniques
- To use data capture devices, computer systems and databases as appropriate
- To fully understand each inspection type, inspection requirements, downloading procedures and input of repair details.
- To be conversant with insurance claim procedures

Any training required will be delivered in-house or through specialist external trainers as appropriate. This will take the form of:-

- Specific training (e.g. external courses, national qualifications)
- On the job (e.g. internal monitoring or on-site training)
- Managers introduction, briefing and team meetings
- Staff's development appraisal

## **11. Changes to this Policy**

This policy will be reviewed annually and when changes to either legislation or national guidance are introduced. Any significant changes to the policy would be subject to approval through the Council's democratic decision making process. The operational or procedural aspects of the policy will be routinely reviewed and any changes, revisions or updates will be approved by the Assistant Director. This would enable for example the addition of new defect types or changes to the codes used within the 'Insight - Symology' system.

## **12. Key Performance Indicators**

- 1) Inspections carried out on schedule - The number of inspections carried out within the frequency set out in this policy (Target 95%).
- 2) Contractor repair times - The number of repairs carried out by the repair contractor within the time specified in the works order (Target 95%).

## **13. APPENDICES**

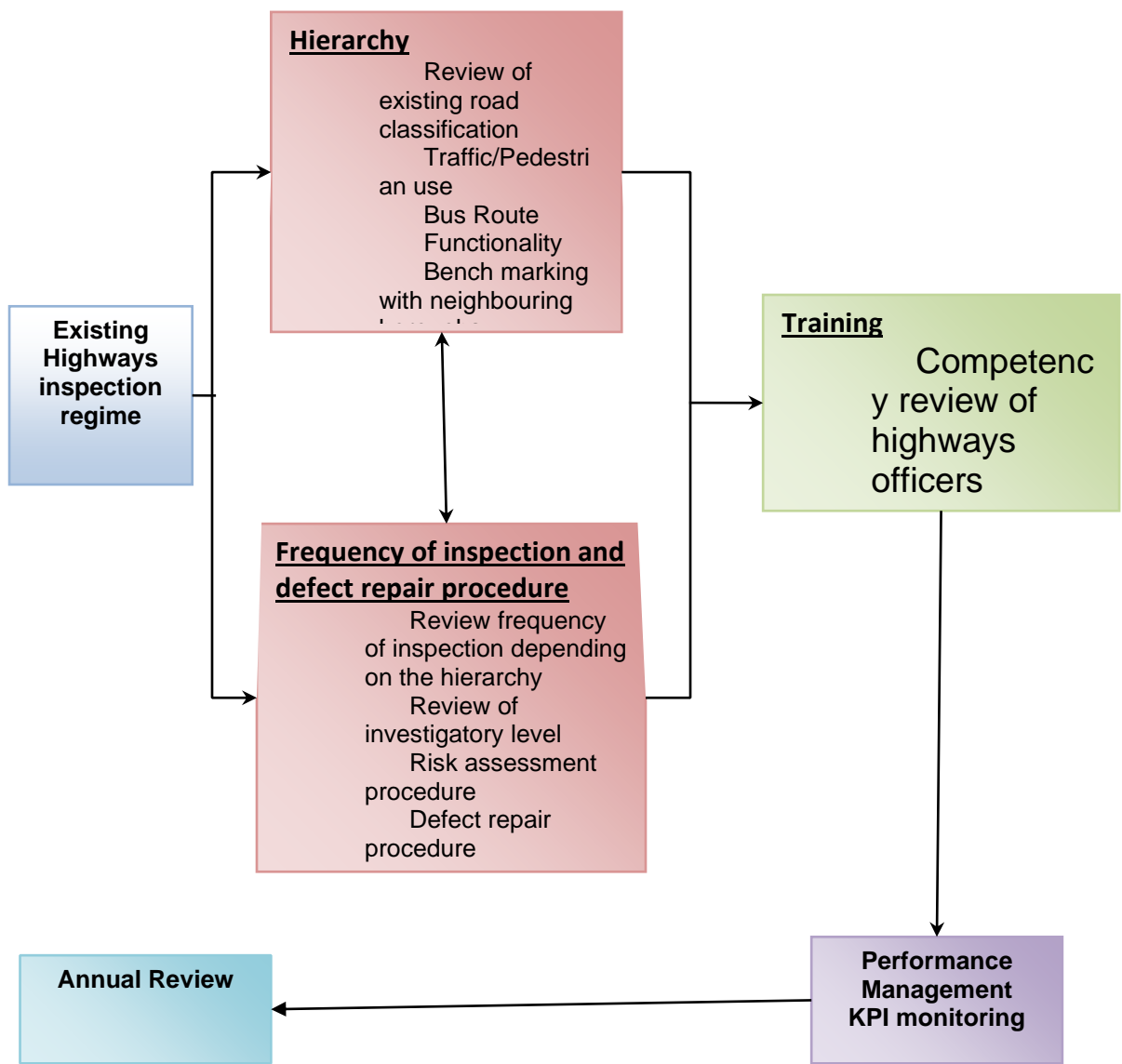
Appendix A – List of LBH carriageways by category

Appendix B – List of LBH footways by category

Appendix C - Decision Making Process

## Appendix C - Decision Making Process





LBH Decision Making Process

