

# Highway Safety Inspection Policy



Version 1.1

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## **1. Introduction**

Section 41 of the Highways Act 1980 places a statutory duty on all Highway Authorities (HA) to maintain the highway network under their control. For there to be a breach of section 41 there must have been a failure to maintain or a failure to repair.

Bury Council in complying with this duty to maintain, carries out highway safety inspections in accordance with this policy document in order to provide a special defence by virtue of Section 58 of the Highways Act 1980 in an action against the Council for an alleged breach of Section 41.

Highway Authorities (HA's) need to prove that they have taken such care as in all the circumstances was reasonably required to secure that the part of the highway was not dangerous for traffic. This is usually proved by the Council having a reasonable system of routine scheduled highway safety inspections in place, having regard to various factors set out within section 58 of the Highways Act 1980

## **2. Overview**

This policy document has been developed with the primary aim of providing direction to those officers involved in undertaking highways safety inspections, that they may carry out their duties with consistency and to clear recognised and understood criteria.

The information contained within this policy document sets out the practices in terms of network hierarchy, investigatory levels, frequency of inspection and response times to repair for Bury Council as Highway Authority.

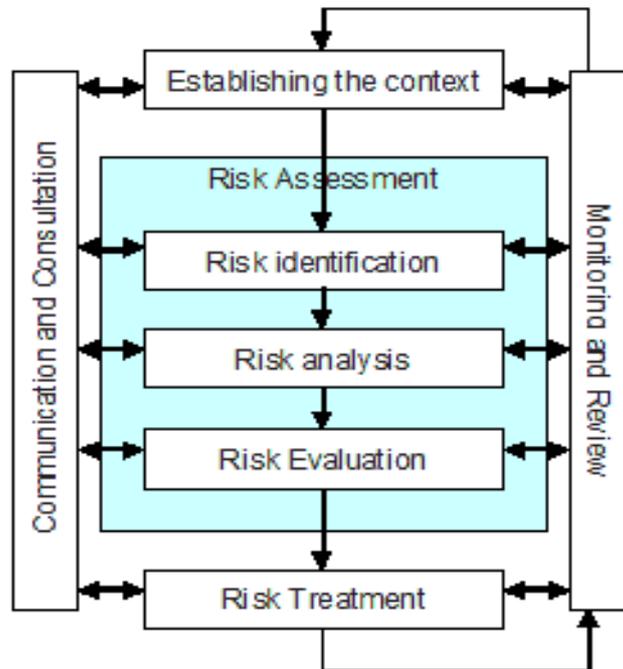
This policy document has been developed in compliance with the Greater Manchester Highway Safety Inspection Framework and has adopted the guidance that reflects the recommendations from the Code of Practice, Well managed Highway Infrastructure (WmHI), published on 28<sup>th</sup> October 2016.

Bury Council is an active participant in GM Highway Claims Benchmarking Group which is tasked with continually reviewing the GM Highway Safety Inspection Framework. Participation in this group will ensure that this policy document evolves in line with the GM Framework.

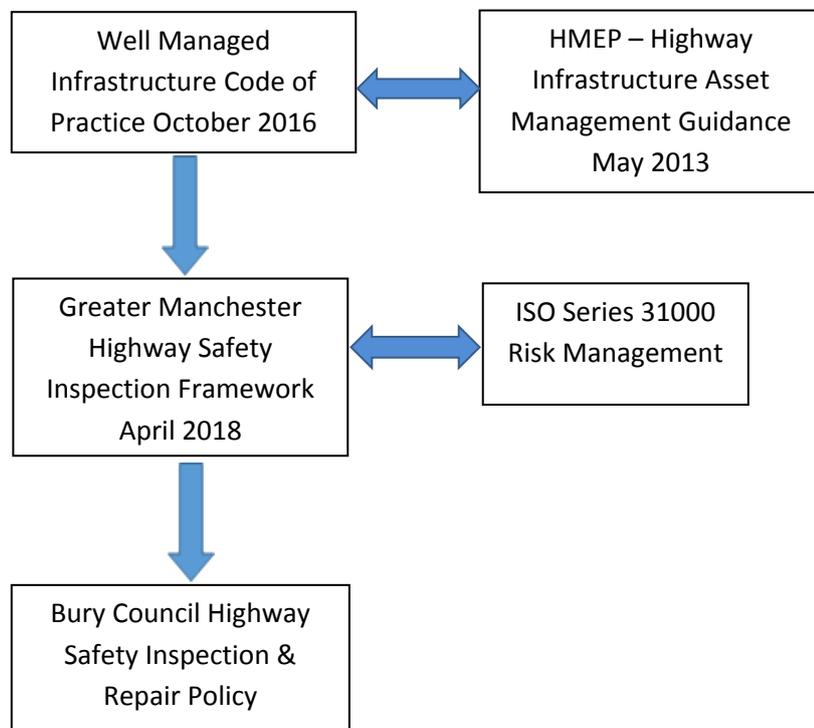
WmHI Code of Practice recommends changing from reliance on specific guidance and recommendations in the previous codes to a risk-based approach determined by each highway authority. The council's frequency of inspection and specific investigatory levels are based on the appropriate risk, functionality or usage of the highway. It further recommends adopting standards set out in ISO 31000.

ISO 31000 is a series of standards relating to risk management codified by the International Organization for Standardization. The purpose of ISO 31000: 2009 is to provide principles and generic guidelines on risk management.

## Example Risk Management Process to ISO 31000



## Relationship between guidance documents, CoP, Framework and Policy.



### 3. Types of Highway Inspections

This policy document deals specifically with highway safety inspections and repairs.

Bury Council's methodology is to undertake safety inspections as one process to enable inspectors to focus specifically on defects which if not repaired, are likely to become a potential danger to road users and pedestrians.

Highway safety Inspections are derived from two main sources, these are;

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

### 4. Hierarchy and Frequency

All the adopted highways have been assigned a carriageway, footway and cycleway hierarchy in accordance with WmHI Code of Practice.

Table 1 below details examples of hierarchy determining factors to be considered when assigning network hierarchies. Other factors may also be pertinent.

**Table 1**

Road classification	Strategic network, A,B,C, unclassified network
Characteristics of street	Schools, shops, hospitals, areas of large employment located adjacent to the highway
Condition data	Highway Inspector local knowledge
Wider policy or operational considerations.	Enquiries, complaints data

The highway inspection team will records streets worthy of a hierarchy classification review within the highway asset management system, during the course of their routine highway safety inspections. This dynamic approach will enable network hierarchy classifications to react more responsively to changes in the road network.

The council's frequency of inspections is based on the appropriate risk, functionality or usage of the highway and the subsequent hierarchy assigned. The road category within the hierarchy, will be the main determinant of inspection frequency.

Table 2 below shows the inspection hierarchy and frequency of inspections although site specific factors may merit a decision to temporarily or permanently increase or reduce the frequency in a specific location (for example to mitigate the risk of unusually high defect levels).

**Table 2**

<b>Feature</b>	<b>Category</b>	<b>Reference</b>	<b>Frequency</b>
Carriageways	Strategic Route	2	1 month
	Main Distributor	3(a)	1 month
	Secondary Distributor	3(b)	1 month
	Link Road	4(a)	3 months
	Local Access Road Minor Roads	4(b) 4(b)	1 year 1 year
Footways	Prestige Walking Zones	1(a)	1 month
	Primary Walking Routes	1	1 month
	Secondary Walking Routes	2	3 months
	Link Footways	3	6 months
	Local Access Footways Minor Footways	4	1 year 1 year
Cycle ways	Part of Carriageway	A	As for Roads
	Cycle Track, Shared Cycle/Footway – a route for cyclists not contiguous with the public footway or carriageway or a shared cycle/pedestrian path	B	As for footway/Annually

## 5. Highway Safety Inspections

Highway safety inspections are carried out to specified frequencies. During the inspection, defects which are identified using the risk matrix criteria outlined within this policy document, are recorded and processed for repair.

### Inspection Methodology

All footways will have a walked inspection at the assigned frequency determined by the hierarchy, and the carriageway will also be inspected during these walked inspections.

When, in accordance with the hierarchy, it is only the carriageway to be inspected, then the inspection can be by means of a driven or walked inspection.

## **Walked Highway Safety Inspections**

Safety inspections will be recorded using handheld devices noting:

- The street name; and
- Current date

The inspector shall position themselves in a safe location on the footway, in such a position that it enables him/her to view the full width of the footway and carriageway to the centre line including the carriageway channel areas.

When the inspector encounters parked vehicles they shall take reasonable steps where appropriate so as to view the area obstructed by the vehicle.

The inspector shall proceed along the footway, identifying defects that meet the investigatory levels set out in table 3. The inspector identifies defects and then undertakes a risk based approach on assessing the danger of the defect

Any defect which falls at or outside these levels that the inspector identifies, would be assigned a score from table 4 and then a response time from table 5. These will be recorded on their handheld device, or by any other means during periods of IT system down time. On completing the inspection of one side of the street, the inspector shall apply the same process to the opposite side of the road.

## **Driven Carriageway Safety Inspection**

The vast majority of highway safety inspections will be walked, however should there be a specific identified need to carry out driven inspections the following process will apply.

The purpose of these carriageway 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.

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

- The street name; and
- Current date

Driven carriageway inspections shall be carried out utilising a driver (albeit more often than not they will be a trained highway inspector) and a highway inspector. The driver shall be responsible for driving and the highway inspector will be responsible for carrying out the safety inspection.

The 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. On no account must he/she put himself/herself in any hazardous situation.

Driven inspections will not be carried out on high speed roads.

## Inspection Vehicle

The inspection vehicle used for the driven highway safety inspections will be an appropriate vehicle for the task. The vehicle will ideally be equipped with all the necessary livery, flashing beacons, advisory LED vehicle mounted display signage etc., so can be driven safely at low speeds to facilitate a driven visual inspection of the highway having due regard to minimising inconvenience to other road users.

## 6. Defect Investigatory Levels

This section of the policy document sets out the investigatory levels and operational processes that are considered to be appropriate and responsible, taking into account the safety of highway users.

Table 3 below lists the Defect Investigatory levels that would trigger the risk assessment using the matrix.

**Table 3**

Footway investigatory level	25mm
Carriageway Investigatory level	40mm
Carriageway investigatory level at pedestrian crossing points	25mm
Kerb defects	50mm or over displacement of a kerb

## 7. Repair Response Times

During safety inspections, all observed defects that provide a potential risk to users are recorded and the level of response determined on the basis of an onsite risk assessment.

This policy defines defects in two categories, which are;

- **Category 1** - those that require prompt attention because they represent an immediate hazard; and

- **Category 2** - all other defects.

### **Category 1**

These defects will 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 emergency response to ensure appropriate resources are mobilised to make the defect safe. These procedures aim to ensure initial attendance to the defect within 2 or 24 hours of the defect being identified.

### **Category 2**

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

## **8. Defect Risk Assessment**

The principles of a system of defect risk assessment for application to safety inspections are set out below. Any item with a defect level which corresponds to, or is in excess of, the minimum investigatory level, is to be assessed using the risk assessment matrix in table 4 below.

### **Risk Factor**

The risk factor for a particular risk is calculated by;

- Risk Factor = Likelihood score x Consequence score.

It is this factor that identifies the overall seriousness of the risk and consequently the appropriateness of the speed of response to remedy the defect.

Having identified a particular risk, assessed its Likelihood and Consequence thus calculating the risk factor, the category and the timescale to rectify the defect is either defined as a Category 1 response, or allocated to one of the Category 2 defect types (Low, Medium or High).

### **Likelihood of Event Occurring**

This is the inspector's assessment of the likelihood of the defect affecting the safe passage of vehicles along the highway, or affecting the structural integrity of the highway. It follows an assessment of the highway hierarchy and the location of the defect within the highway.

**Consequence of Event Occurring** This is the impact/severity and is quantified by assessing the extent of damage likely to be caused should the risk be realised. The 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

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 determine the defect categorisation and response.

**Table 4 – Risk Matrix (Taken from Institute of Highway Engineers)**

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

**Priority Responses defined by colour**

**Table 5**

Risk factor	Defect Category	Priority Response
25	1	1
15 to 25	1	2
9 to 12	2	3
5 to 8	2	4
2 to 4	2	5
1	2	6

Priority	Response (Calendar days)
1	2Hr
2	24Hr
3	14 Days
4	28 Days
5	Considered For Planned Maintenance
6	Review At Next Inspection

### Minimum 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 resources to undertake repairs. Any defects which do not meet the minimum investigatory levels can be recorded should the Inspector deem this appropriate using his/her discretion (for example, where a cluster of such defects may form a potential preventative maintenance scheme in the future). Where such defects are recorded, they will be recorded as Cat 2 defects but assigned a planned maintenance response time, defined in the risk matrix priority responses

## 9. Enquiries

Where necessary customer enquiries will prompt an ad-hoc highway inspection which will be recorded should action be required. Ordinarily customers will not receive feedback on the enquiry unless it is expressly requested, however our systems will be updated detailing action/findings.

## 10. Training

All staff that are employed to undertake highway safety inspections are trained to Highway Safety Inspection Qualification City and Guilds 6033 – Units 301 and 311.

Any new highway inspector will shadow a colleague within the inspection team for a period of time prior to being allowed to undertake inspections alone, and then is subject to close monitoring and supervision.

Induction training will be undertaken for any new employees.

The appropriate line manager / supervisor will undertake periodic follow-up checks in the way of on-site staff appraisals with each inspector which is then recorded and signed by both the supervisor and inspector as a true record.

Each team member is provided with this policy document together with Bury Council Safety Inspection Manual.

Regular highway inspection team meetings are held which enables issues in relation to the inspection and repair process to be continually reviewed.

**Make up of training to include;**

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