

# Highway Safety Inspection Policy

October 2018

# 1 Contents

1	Contents.....	page 2
2	Introduction.....	page 3
3	Overview.....	page 3
4	Types of Highway Inspections.....	page 5
5	Hierarchy.....	page 6
6	Inspection Frequency.....	page 7
7	Highway Safety Inspections.....	page 9
8	Defect Investigatory Levels.....	page 11
9	Repair Response Times.....	page 12
10	Defect Risk Assessment.....	page 12
11	Enquiries.....	page 14
12	Training.....	page 15

## 2 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.

All councils within the Greater Manchester Combined Authority (GMCA) region in complying with this duty to maintain, have collaborated to develop a Greater Manchester Highway Safety Inspection Framework document (GMHIF). Oldham Council will adopt and carry out highway safety inspections in accordance with the GMHIF, adapted for local circumstances, 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 (HAs) 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.

## 3 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.

This document is Oldham Council's Code of Practice for Highway Safety Inspections and details how Oldham will comply with the practices set out in the GMHIF, in terms of network hierarchy, investigatory levels, frequency of inspection and response times to repair.

The GMHIF has been developed through a collaborative GMCA working group of officers who are directly involved at varying levels of responsibility in the function of highway maintenance, inspections, and claims management. The new Code of Practice, Well-managed Highway Infrastructure (WmHI), published on 28 October 2016 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'*.

The GMHIF and this policy document gives due regard to all Council highway duties and has adopted the guidance that reflects the recommendations from WmHI. The framework document is itemised on the agenda for the GMCA Highway Claims Benchmarking Group for the purpose of continual review and improvement.

WmHI recommends changing from reliance on specific guidance and recommendations in the previous codes to a risk-based approach determined by each

highway. 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 family 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.

Figure 1 shows an example risk management process, based on ISO 31000

**Figure 1**

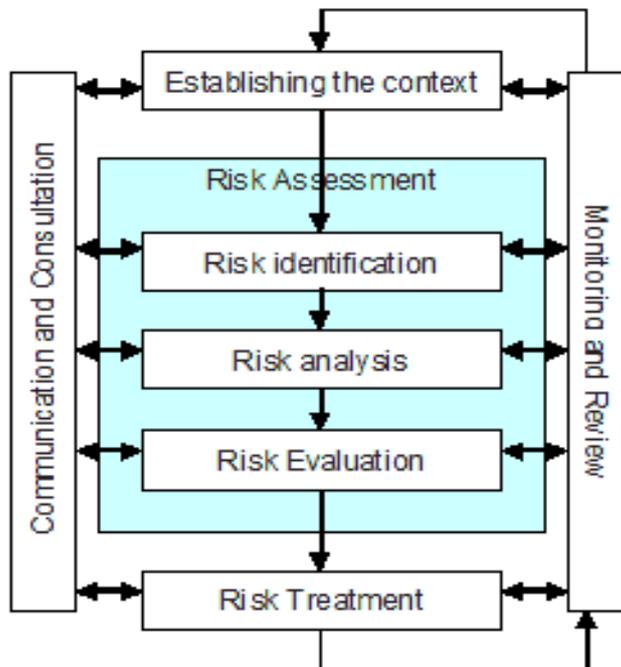
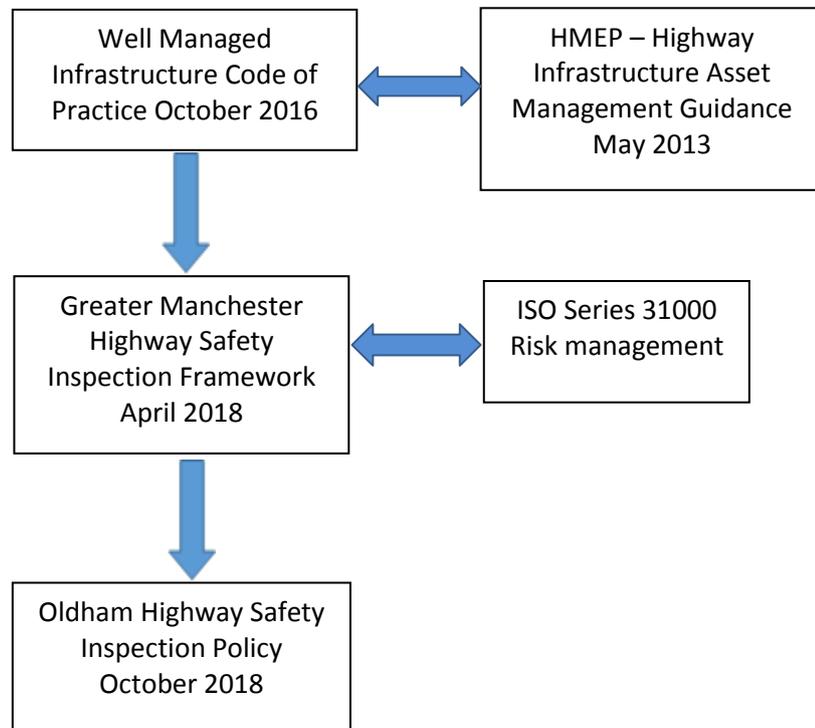


Figure 2 shows the relationship between the guidance documents, Codes of Practice and Frameworks used to help Oldham Council in developing this highway safety inspection policy.

**Figure 2**



## 4 Types of Highway Inspections

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

The GMCA 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.

Records of cyclic safety inspections and reactive safety inspections following complaints are maintained on Confirm, a purpose designed computer database.

# 5 Hierarchy

All the adopted highways have been assigned where appropriate a carriageway, footway and cycleway hierarchy in accordance with WmHI and the Greater Manchester Framework.

Table 1 details the 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
Traffic use	Traffic flow data, footfall data
Characteristics of street	Schools, shops, hospitals, areas of large employment located adjacent to the highway
Characteristics of adjoining network elements	Hierarchy of adjoining streets

WmHI details the criteria for assigning categories within the hierarchy. Each adopted highway in Oldham has been assigned a category within the hierarchy, according to the descriptions given in WmHI, and its corresponding reference number for that category as listed in the GMHIF.

# 6 Inspection Frequency

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, in combination with traffic use, is the main determinant of inspection frequency. Hierarchy reviews will be undertaken on a 5 year cycle and by competent staff on a group basis.

Table 2 shows other factors that may affect inspection frequency.

**Table 2**

Condition data	Walked survey data, SCRIM, SCANNER, Structural Maintenance Visual Assessments (CVI or DVI), Defect numbers including minor repairs
Insurance claims data	Claim statistics recorded on street, numbers and trends derived from claims
Wider policy or operational considerations.	Enquiries, complaints data

GMHIF details the inspection frequency for each category within the hierarchy, however it states that an authority may decide to temporarily or permanently increase or reduce inspection frequency in a specific location (for example to mitigate the risk of unusually high defect levels or accident rates).

Table 3 shows the inspection frequency adopted by the GMCA for each category of highway and its corresponding reference number.

**Table 3**

<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

Oldham Council has risk assessed each street to determine whether any locations require an increase or decrease to the inspection frequency listed in Table 3, based on the factors in Table 2.

The condition of the street and insurance data are the principal factors in determining whether or not to amend inspection frequency. Other factors may also be taken into account, such the potential for a street to be used as a motorway diversion route. Special consideration may also be given to situations where the condition or insurance data is on the borderline of two different scores which would have an effect on inspection frequency.

It is anticipated that most changes to inspection frequency will be temporary, until such time that risk assessment justifies a further change in frequency. A review of inspection frequencies will be held each year to ensure that the risk assessments are up-to-date and a full review, including network hierarchy, will be carried out every five years. There will also be occasions where streets have their inspection frequency amended outside of the review where justified by exceptional circumstances (e.g. the street has been resurfaced or is temporarily being used as a diversion route).

Permanent changes to inspection frequency may also be considered based on local factors specific to a street, however these streets will still be subject to any risk assessments which could justify a further (temporary) change in frequency based on condition and insurance data.

Highways will be inspected in accordance with the frequencies listed in GMHIF, however where justified by risk assessment, highways may be inspected more or less frequently. Table 4 shows the inspection frequencies for each category within the hierarchy according to risk.

**Table 4**

Feature	Reference	Frequencies		
		Low Risk	GMHIF	High Risk
Carriageways	2	1 month	1 month	1 month
	3(a)	3 months	1 month	1 month
	3(b)	3 months	1 month	1 month
	4(a)	6 months	3 months	1 month
	4(b)	18 months	1 year	6 months
Footways	1(a)	1 month	1 month	1 month
	1	3 months	1 month	1 month
	2	6 months	3 months	3 months
	3	1 year	6 months	3 months
	4	18 months	1 year	6 months
Cycle ways	A		As for Roads	
	B	As for footway / Annually	As for footway / Annually	As for footway / 6 months

It is recognised that it will not be always possible to inspect a highway at exactly the same time of each month that it is due for inspection, so some flexibility will be required regarding inspection dates. An inspection will be scheduled to be completed as close as possible to its due inspection date, taking into account weekends / bank holidays and periods of adverse weather and inspector availability (e.g. periods of leave). In these instances the tolerances for each inspection will be determined by the inspection frequency as shown in Table 5.

**Table 5**

<b>Inspection Frequency</b>	<b>Tolerance</b>
1 month	± 1 week (7 days)
3 months	± 2 weeks (14 days)
6 months	± 3 weeks (21 days)
1 year	± 4 weeks (28 days)
18 months	± 4 weeks (28 days)

## 7 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 are recorded and processed for repair.

### **Inspection Methodology**

All footways will have a walked inspection at the assigned frequency determined by the hierarchy and risk assessment, 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**

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

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

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 6. 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 7 and then a response time from Table 8. On completing the inspection of one side of the street, the inspector shall apply the same process to the opposite side of the road. The results of the inspections will be recorded on the Confirm database.

### **Driven Carriageway Safety Inspection**

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;
- Inspection frequency;
- Current date; and
- Weather conditions (Ground conditions)

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.

This relevant method statement must be read in conjunction with the Highways agency documents listed below, which are;

- Temporary Traffic Management on High Speed Roads good working practice;
- Guidance for safer Temporary Management workforce issues; and
- Guidance for crossing High Speed Roads on foot during temporary traffic management works

All Inspectors carrying out driven carriageway safety inspections of high speed roads, will attend appropriate training.

### **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 it 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.

## 8 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 6 below lists the Defect Investigatory levels that would trigger the risk assessment using the matrix.

**Table 6**

Footway investigatory level	25mm 20mm in pedestrianised areas of Town Centre (see Table 6.1)
Carriageway Investigatory level	40mm
Carriageway investigatory level at pedestrian crossing points	25mm
Kerb defects	50mm or over horizontal displacement

**Table 6.1 – list of pedestrianised streets in Oldham Town Centre**

<b>Street Name</b>	<b>From to</b>
Henshaw Street	o/s 39 / end of Market Hall to Market Place
Market Place	Henshaw Street to High Street
High Street	Market Place to Lord Street
Albion Street	Henshaw Street to Lord Street
Curzon Street	Albion Street to High Street
Manchester Chambers	Cheapside to George Square
George Square	Manchester Chambers to George Street

## 9 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 call procedures to ensure appropriate resources are mobilised to make the defect safe. These procedures aim to ensure initial attendance to the defect within 24 hours of the defect being identified or within 2 hours where there is an immediate threat to life or limb.

### 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 8.

## 10 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 7.

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 used by the Highway Inspectors during the course of their inspections. The matrix will be used to determine the defect categorisation and response.

**Table 7 – 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

Key to Risks		
Low	Medium	High

**Priority Responses defined by colour**

**Table 8**

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

Priority	Response (Calendar days / hours)
1	2Hr
2	24Hr
3	14 Days
4	28 Days
5	Review At Next Inspection – or consider for planned maintenance

### 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 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 an internal enquiry for consideration for planned maintenance.

## 11 Enquiries

Additional ad-hoc Safety Inspections of specific defects are carried out in response to reports or enquiries from members of the public and other road users. In such instances these inspections will be carried out within 7 days from receipt of enquiry dependent upon volume of enquiries and availability of inspectors.

Each enquiry will be assessed on receipt and where from the information given it is deemed that a more urgent response is required, appropriate action will be taken.

## 12 Training

All staff that are employed to undertake highway safety inspections will be trained to Highway Safety Inspection Qualification City and Guilds 6033 – Units 301 and 311 or similar approved LANTRA accreditation wherever possible. This qualification lasts 5-years and refresher training must be undertaken.

Any new highway inspector that is permanently employed but does not already hold the above qualification or accreditation will be enrolled on an approved Highway Safety Inspection course at the earliest practicable opportunity.

If an inspector is to be employed on a temporary contract, their competence will be assessed at interview by a qualified line manager / supervisor and where additional training needs are identified, in-house training will be provided before the inspector is allowed to undertake inspections.

Any new highway inspector will shadow a qualified 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 also undertakes regular follow-up checks in the way of on-site staff appraisals with each inspector.

Each team member is provided with access to this policy document.

The highway inspectorate will hold regular team meetings to discuss issues in relation to the inspection process, therefore allowing it 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 or LANTRA approved training.
- On-site staff appraisals/work monitoring (line supervisor);
- Regular team meetings;
- Staff Development Reviews (Annually);
- Any other external courses of relevance to post; and
- Documents relating to relevant Codes of Practice