# Highways Asset Management Plan

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Lancashire County Council

## Contents

# PART A - INTRODUCTION

*In this section you will find information relating to why we have drafted this Highway Management Plan (HMP), what the HMP is and how it relates to our other highway asset management documents. This section also contains information relating to the size of and extent of Lancashire's highway assets.*

## 1 - Highway Management Plan

This Highway Management Plan (HMP) has been drawn up in response to the UK Roads Liaison Group document 'Well-managed Highway Infrastructure: Code of Practice' (WMHICoP) published in October 2016 which replaces, updates and combines the contents of three previously separate codes of practice relating to the maintenance of highways ('Well-Maintained Highways') Structures ('Management of Highway Structures') and street lighting ('Well-Lit Highways').

The Highway Management Plan replaces and expands on the previous county council document 'Highway Maintenance Plan' and follows the guidance contained in the WMHICoP. The HMP recognises that maintaining our highway assets involves more than filling potholes and repairing defects, as reducing budgets requires us to manage our aging assets and manage risk in order to provide a safe and as reliable highway asset network as resources will allow.

The WMHICoP acknowledges that as highway maintenance budgets are reducing highway authorities can no longer maintain all their assets to the same standard or carry out cyclic activities at the same frequency as in the past. As a result the WMHICoP advocates that each highway authority adopts its own a risk based approach to highway management. The HMP and supporting codes of practice detail our approach and have considered risk when setting appropriate inspection intervals, cleaning frequencies, intervention levels and response times.

As managing our highway assets involves many processes and procedures it is not possible to capture all these in one document. The HMP is just one of a number of documents that collectively outline our approach to highway management in Lancashire. Where appropriate, the HMP will make reference to, or contain links to supporting information such as codes of practice, life-cycle plans and other documents such as the Transport Asset Management Plan (TAMP) and the Highways Asset Management Framework etc. As these supporting documents are subject to amendments and updates, a number of these are currently being revised and will appear on the Highways Asset Management webpage in due course.

The HMP outlines the current situation for each of our major asset types and summarises the main functions and processes we use to manage and maintain our highway assets. The HMP has been arranged into six parts comprising Introduction, Policy Framework, Risk Management Activities, Highway Management Activities, Highway Infrastructure

Maintenance and Regulatory Activities. As all related matters are arranged together it should be possible to dip in and out of the HMP as required.

We anticipate that the HMP will be used by our internal customers, external customers and stakeholders for a variety of purposes.

**External Customers**
These are people from outside the organisation, who use, or are affected by the services that we provide. Our external customers and include:

- People who live, work and study in Lancashire,
- People who visit Lancashire,
- Our partners and suppliers,
- Organisations and businesses in Lancashire.

**Stakeholders**
These are organisations who have an interest in the services that we provide as our actions may have an impact on the services they deliver. Stakeholders include:

- District Councils
- Parish and Town Councils

**Internal customers**
These are people we do work for and work with internally. Our internal customers are people who –

- are employed by the council,
- represent Lancashire County Council including county councillors and volunteers

It is intended that all our customers will find the HMP to be a useful and interesting document. For our external customers and other stakeholders the HMP outlines how we intend to manage and maintain our highway assets and it sets out in a transparent way what we can and can't do and the expected response times for various tasks. For our internal customers the HMP will become a reference resource for all county council employees engaged in highway asset maintenance or management activities, enabling a consistent approach to be adopted countywide.

The HMP will help to inform county councillors, so when contacted by constituents and others, they will be able to explain our approach to highway asset management and further explain what the county council is doing to improve and maintain these assets.

As the HMP will be stored centrally on the Highway Asset Management webpage it will be easily accessible to all. As the HMP outlines our levels of service, typical response times

and intervention levels this information can be used to help manage customer expectations.

**Other Highway Authorities**
Whilst other Highway Authorities are not strictly customers or stakeholders we are, in line with the recommendations contained in the UK Roads Liaison Group document 'The Highway Infrastructure Asset Management Guidance, happy to share with others how we manage our highway asset network.

## 2 - Relationship with Other Plans

Lancashire's highway and transport infrastructure assets are the most valuable publicly owned resource managed by the county council, with a combined estimated value of over £10 billion. These assets are fundamental in helping the citizens of Lancashire access a range of county council services and take advantage of a wide range of economic, health, social and recreational opportunities that are available to them.

Given the importance that our transport infrastructure plays in our everyday lives it is vital there are plans in place to manage and maintain the highway network in such a condition that it can be fully exploited by a variety of users for a variety of purposes. In order that the county council can maintain its transport assets in a condition that is considered fit and safe for reasonable use, a number of complimentary plans have been developed which together seek to focus resources where they can achieve the best overall long term value. These plans are:

- **The Highways Asset Management Framework** is an overarching document that provides a framework for highway asset management in Lancashire. It clearly sets out what highway asset management means to us and outlines the procedures, processes and systems we have put in place, to help us ensure that our highway and transport assets are maintained in a condition that is considered fit and safe for reasonable use. The document can be accessed here.

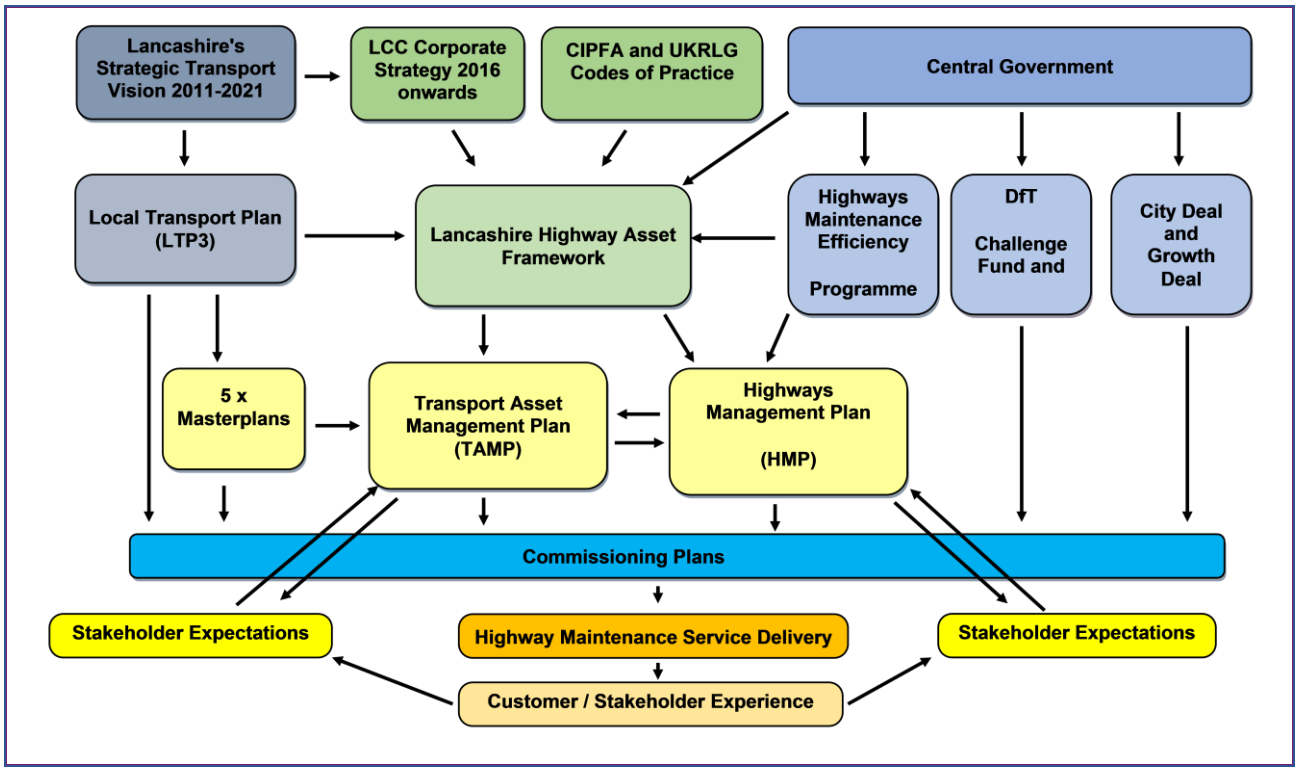
- **The Transport Asset Management Plan (TAMP)** was approved by the Cabinet Member for Highways and Transport in July 2014 and sets out how the county council intends to maintain and improve the transport asset network in Lancashire over the 15 year period 2015/16 to 2029/30.

  The TAMP is comprised of three phases, each of which runs for five years and introduces a more efficient method for the allocation of capital resources that is primarily based on need. The TAMP and the annual refresh documents can be viewed here.

- **Highway Management Plan (HMP)** – outlines those activities that are supported from revenue expenditure and contribute towards the delivery of a quality Highway Maintenance Service. Once approved this document will be published here.

These plans have been drawn up in response to the funding challenges that local authorities are now subjected to and provide a sound basis on which we can address the needs of our highway assets in the most efficient and effective manner. Collectively they provide an integrated asset management approach by establishing local standards of service.

The diagram below shows how the HMP links to county council corporate objectives, national objectives and national initiatives.




Our philosophy is based on 'prevention is better than cure'. By intervening at the right time with the right treatment we will reduce our 'whole-life' costs so we can do more with less. This is a significant departure from a traditional 'worst first' approach in that we will be intervening more frequently at an earlier stage in an assets life-cycle. This will enable us to use more cost effective treatments such as surface dressing, to seal surfaces against water ingress and reduce the occurrence of potholes, and allow our money to go further.

The HMP covers many aspects of how we manage and maintain our highway assets through a mixture of reactive, routine, programmed, regulatory, winter service, resilience and emergency activities. It also contains comprehensive details of highway maintenance standards, specifically aimed at those technical staff involved in front line service delivery and sets out for each element of the network, standards and targets considered necessary to meet key objectives of customer service; network safety; network serviceability; network condition and network availability.

# PART B - POLICY FRAMEWORK

*In this section you will find details of the advantages the county council will realise as a result of having a HMP. I addition this section sets out our communication strategy in particular how the public and stakeholders can report defects and the mechanisms we intend to use to receive feedback from our customers.*

## 1 - Purpose of the Highways Management Plan

The delivery of a safe and well managed highway network relies on good evidence, sound engineering judgement and the adoption of robust asset management practices.

The HMP outlines the policies, procedures, guidance documents and operational practices we have put in place to help us manage and maintain our highway assets in the best condition within the financial and resource constraints the county council operates. In order to overcome these constraints, we will were possible look to secure additional funding though 'invest to save' projects, grants, developer contributions and the submission of competitive funding bids.

The HMP explains what we are able to achieve with the resources available to us and sets out in a transparent manner how we intend to utilise these in the most effective manner. The HMP not only supports the TAMP but also seeks to adopt the Department for Transport's desire for all sectors within the highway maintenance sector to realise efficiencies through their operations. In line with the provisions contained in the Highways Maintenance Efficiency Programme we will seek out good practice and collaborate with local, regional and national groups whenever possible.

We will use the HMP as a framework to monitor and report our actual performance against the levels of service on an annual basis. Whilst we may not be able to maintain all our highway assets in an 'as new' condition, or attend to every reported defect, there is still much we can do to provide a highway network that is safe and fit for reasonable use.

The HMP will:

- Deliver the statutory obligations of the authority.
- Be responsive to the needs of users and the community.
- Provide effective management of the highway network asset.
- Support our highway network management strategy.
- Support and add value where possible to wider policy objectives.
- Manage, preserve and improve our highway assets to meet user needs, both now and in the future.
- Carry out repairs to the most appropriate standards, utilising treatments to ensure value for money.
- Repair ‘safety defects’ as a priority.

The HMP has been drafted using published guidance and amended as appropriate to cater for local considerations following consultation with those officers having widespread experience of highway maintenance in Lancashire, in order to establish robust highway maintenance practices.

## 2 - Stakeholders and Communication

In order that we effectively inform internal stakeholders, communities and members of the public of our activities we have devised a communication strategy. Part of this is a 'focus checklist' that will help managers and officers to communicate effectively with those who may be affected by highway asset works. Details of our Communication Strategy can be found here.

In order to drive efficiencies through all parts of our operations we are making full use of modern technology including mobile technology and the latest software programmes to provide a more responsive, transparent and accessible system which will allow customers and stakeholders to access services and report faults through the Customer Service Centre or internet as we move to make significantly greater use of 'self-service' facilities.

**Defect Reporting Mechanisms**

It is recognised that some defects may be present from time to time on the highway network and these may be detected by highway users before planned inspections by highway safety inspection teams. The county council acknowledges it is essential there are mechanisms in place to enable such defects to be reported as easily as possible. Our preferred reporting mechanism is electronic, using the 'Report It' link here.

From here customers and stakeholders can report faults and keep track of progress via the unique reference number that is issued for each reported defect. The county council has put in place a variety of mechanisms for customers and stakeholders to contact us – see the link here.

# PART C - RISK MANAGEMENT ACTIVITIES

*In this section you will find details of how, in accordance with the provisions contained in the WMHICoP, we intend to manage risk whilst fulfilling our statutory duty as Highway Authority. This section makes reference to how the authority manages risk at a corporate level, at a function level and on an asset by asset level as appropriate.*

## 1 – Statutory Duty

Lancashire County Council, as Highway Authority, has a statutory duty under Section 41 the Highways Act 1980 to maintain those roads, footways and cycle tracks that are 'highways maintainable at public expense' in a safe condition having due regard to the normal usage of the road and being mindful of the duty of users to take the road as they find it and to take reasonable care in the use of the assets. In fulfilling its duty as a Highway Authority the county council is required to manage a variety of risks at strategic and operational levels.

The management of risk on a day-to-day basis is an important aspect of how we maintain our highway assets. In order that we can implement a risk based strategy we have developed network hierarchies for carriageways, footways and cycle paths which reflect the relative differences in urban and rural usage and the relative risk that qualifying defects on our network pose to asset users.

These hierarchies enable us to carry out a consistent and efficient highway safety inspection regime in which safety inspections and frequency of inspection are arranged so areas that are deemed to pose a higher risk are inspected more frequently than those which are considered to be of a lower risk. This enables defects that meet intervention levels to be detected and repaired within appropriate timescales.

Having identified risk we are not always in a position to carry out an immediate repair and in such cases, the risk to asset users may be managed by taking assets out of commission through temporary road closures, closing or restricting bridge use or removing assets by for example cutting down street lighting columns. These assets may remain 'out of use' for some time until an acceptable and affordable solution can be found.

Many of our asset specific codes of practices and lifecycle plans have, in line with the WMHICoP, considered the main strategic risks associated with the asset type and contain measures to manage the identified risks. Where considered necessary or appropriate we will provide an enhanced level of service to mitigate risks. This may include more frequent gully cleaning at known flooding locations or enhanced levels of inspections of trash screens ahead of severe weather warnings etc. Where codes of practice or lifecycle plans currently don't exist or are in need of revision, then risk and mitigating actions will be considered as part of the review process.

Risk was considered as part of the TAMP strategy and is an important consideration that forms part of the life cycle planning process. The TAMP recognises that assets have an optimum intervention time and due to the extent of our highway assets, reducing budgets and increasing customer expectation this gives rise to a demand for intervention that far exceeds the resources available. As a result, prioritisation of available resources is essential to ensure effective asset maintenance programmes are delivered. Our prioritisation of maintenance needs will be:-

- Safety issues,
- Maintenance of highway assets on the resilient road network,
- Maintenance of highway assets on the strategic road network,
- Maintenance of highway assets the residential road network,
- Other priorities.

We regularly inspect the condition of our assets, monitor accident statistics and carry out safety audits to identify locations, sections of road or highway assets that may pose a heightened level of risk to road users and wherever possible put measures in place to reduce the incidence of accident or injury. Such measures may include improving skid resistance, improving signing, junction improvements and other traffic management or traffic calming measures as appropriate.

The county councils corporate position with regards to risk is set out in the Highway Asset Management Framework which can be viewed here.

## 2- Highway Safety Inspections

Section 58 of the Highways Act 1980 provides a statutory defence against third party claims where a Highway Authority can establish that reasonable care has been taken to 'secure that the part of the highway to which the action relates' to a level commensurate with the volume of ordinary traffic such that it 'was not dangerous to traffic'.

In order that we can defend against such claims, we have a Highway Safety Inspection Policy that outlines our inspection regime which is our primary defence in any case of litigation brought against the county council. This policy can be viewed here.

## 3 - Skid Resistance

The Skid Resistance Standard HD28/15 and the 'Well-Managed Highway Infrastructure Code of Practice' requires each local authority to evaluate and maintain adequate levels of skidding resistance on carriageways, footways and cycle routes as this contributes significantly to network safety, particularly for cyclists, motorcyclists and equestrians.

In response, the county council has produced a 'Skid Resistance Code of Practice' which sets out our approach to monitoring skid resistance, interpreting data, investigating

accident sites and developing an annual programme of remedial and/or resurfacing works across Lancashire's highways. Further information can be found here.

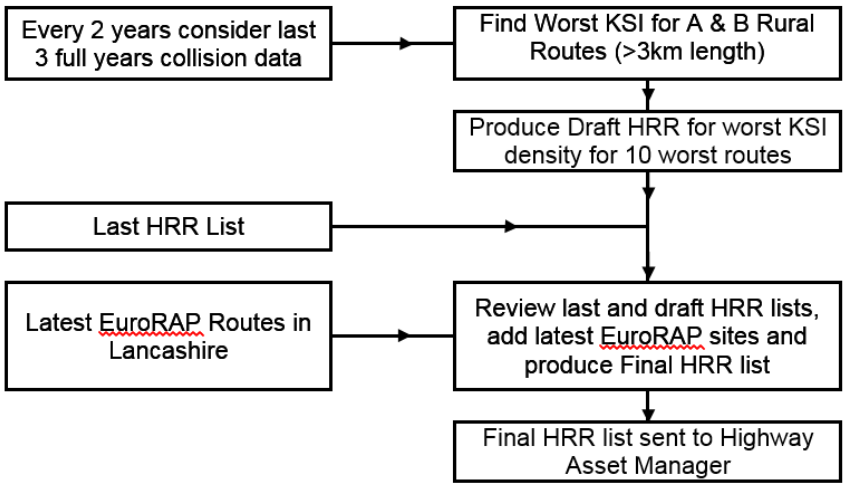
## 4- Higher Risk Routes

Lancashire County Council as Highway Authority introduced the concept of 'Higher Risk Routes' (HRR) to ensure co-ordination between safety engineering and highway maintenance. The rationale of creating a Higher Risk Route list is that rural roads, particularly those classified A and B, are far more susceptible to having fatal or serious injury collisions due to the relatively higher speeds at which some drivers choose to travel and the proximity of many roadside features along these lengths.

HRR are identified following a bi-annual analysis of collision data over the previous three full years for which data is available. The analysis looks at identifying those A & B rural roads (i.e. roads with a speed limit >50+ mph) with the highest collision statistics. From this, a list of the highest density routes of Killed & Serious Injured (KSI) per km, over a 3km length is produced. The top 10 routes form the basis of the initial HRR draft list.

The KSI densities of the previous HRR list are reviewed and merged with those of the latest draft HRR list. The top 10 routes from this combined list together with those routes in Lancashire identified by the European Road Assessment Program as being high risk, form the basis of the revised HRR list.

Each time a new HRR list is produced this is to be forwarded to the Highways Asset Manager for action so that a co-ordinated approach towards road safety can be taken on these routes, so that in addition to any accident investigations that might be considered, other highway works such as routine maintenance and repair of damaged infrastructure is reviewed to ensure appropriate safety improvements can be incorporated. This could take the form of improved signing or passive safety works. The methodology use to generate the HRR list is shown below.



## 5 – Local Flood Risk Management

Following the introduction of the Flood and Water Management Act, Lancashire County Council is designated as a Lead Local Flood Authority and in this role it is required to produce a Local Flood Risk Management Strategy to explain how we will manage local flood risk in our area.

The county council has worked in partnership with Blackpool Council to develop a joint Lancashire and Blackpool Local Flood Risk Management Strategy. Further information on the Local Flood Risk Management Strategy can be found here.

## 6 - Abnormal Load Management

We coordinate the movement of abnormal loads throughout Lancashire's highway network, ensuring that industry requirements are met, whilst minimising the risk to road safety, delays to other road users and safeguarding bridges from damage by over-weight or over-height vehicles. Further information regarding abnormal load movements through Lancashire can be found here.

## 7- Weather, Civil and other Emergencies

### Planning for Responding to Network Disruptions

The county council has a duty to work in collaboration with the emergency services, the National Health Service, NHS organisations, local authorities, the Environment Agency and others to plan for and respond to a range of emergencies. In the event of specific hazardous, incidents or large-scale civil or national incidents the County's Emergency Planning Section will take the lead. Further information about Emergency Planning and the Emergency Plans in place can be found at here.

Procedures exist to deal with a whole range of flooding related emergencies and flooding contact details can be found here.

### Arrangements for Out of Hours Highways Emergencies

Smaller scale local emergencies such as diesel spillages or road traffic accidents are dealt with under formal procedures using resources located at county council depots throughout Lancashire. Outside normal working hours, the county council operates an out of hours call out service to deal with emergencies that occur over the weekend, on bank holidays or after 5pm Monday to Friday.

Generally, out of hours emergencies should be reported to the police who will direct highway related emergencies to the county councils nominated 'first responder' for a particular area. The 'first responder' is a Highway Services member of staff who has been trained to asses and deal with emergency situations.

'First Responders' will wherever possible attend site within 2 hours of receipt of the phone call in a fully equipment van. On occasion, due to snow, ice, flooding and high winds etc.,

the first responder may be delayed. Upon reaching the incident the first responder will make an assessment of the incident and will endeavour to make the site safe through signing, coning, patching, clearing or carrying out remedial repairs as appropriate. If the first responder is unable to make the site safe, they will phone for additional support as considered appropriate. If the first responder is unable to make the site safe they will stay on site until Highway Services crews are in attendance.

During the winter gritting season first responders also act as duty officers and are called upon at various times of the day, including out of hours, to make an assessment as to whether precautionary gritting crews need to be deployed.

# PART D – HIGHWAY MANAGEMENT ACTIVITIES

*In this section you will find information relating to how we manage our highway network. This contains information relating to the various network hierarchies we have defined, how we collect condition data and how this is used to define service standards, check the level of service provided and how we are performing.*

## 1 - Lancashire Road Network Hierarchy

The network hierarchy is the foundation of a risk-based highway maintenance strategy and is crucial in establishing appropriate levels of service. We are currently reviewing our network hierarchy to ensure we provide a consistent approach with regards highway maintenance priorities so that highway safety inspections are carried out at appropriate intervals and defects that meet intervention levels are repaired in a sufficiently prompt manner so as to reduce the risk of injury, damage and third party claims. The current network hierarchy is set out below:

**Carriageway Hierarchy**

| Category | Ref. No | Type of Road General Description | Description |
|---|---|---|---|
| Motorway | 1 | Limited access - motorway regulations apply | Routes for fast moving long distance traffic. Fully grade separated and restrictions on use |
| Strategic Route | 2 | Trunk and some Principal 'A' class 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 | 3a | 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 | 3b | B and C class roads and some unclassified urban routes carrying bus, HGV and 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 | 4a | 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 | 4b | Unclassified roads providing access to residential and business areas. | In rural areas these roads serve small settlements and provide access to individual properties and land. They are often only single lane width and unsuitable for HGVs. In urban areas they are often residential loop, access and estate roads or cul-de-sacs. |

**Footway Hierarchy**

| Category | Ref. No | Description |
|---|---|---|
| Primary Walking Route | 1 | Busy urban town/city centre shopping areas and main pedestrian routes linking interchanges between different modes of transport e.g. railways, bus stations/interchanges. |
| Secondary Walking Route | 2 | Medium usage routes through local areas feeding into primary routes, local shopping centres, large schools and industrial and commercial centres etc. |
| Link Footway | 3 | Linking local access footways through urban areas and busy rural footways |
| Local Access Footway | 4 | Footways associated with low usage, short estate roads to the main routes and cul-de-sac etc. |

## 2 - Resilient Network

In line with the recommendations contained in the Department for Transport publication 'Transport Resilience Review: A Review of the Resilience of the Transport Network to Extreme Weather Events' the county council has identified and published details of its resilient network on the Highways Asset Management website which can be viewed here.

In defining our resilient network this is the minimum road network the county council will strive to be keep continuously open as far as is practicably possible in severe weather, as it ensures continuity of travel across neighbouring local authority boundaries; access to the strategic road network; allows essential services to operate reliably and safely; buses to operate a minimum service and helps to ‘Keep Lancashire Moving’.

## 3 - Moss Road Network

Within Lancashire there are a series of roads built on peat. Whilst many of these pose no problems, there are a small number known as 'moss roads' that cause significant engineering difficulty. In 2000/01 it was estimated that £25.1m would be required to carry out works to bring the 400km of highway that make up the moss road network up to a sufficiently acceptable standard to safeguard its future integrity.

As current day costs would far exceed available funding it is vital there are mechanisms in place for prioritising investment in these roads which are used extensively to support the local agricultural and horticultural economies of the Wyre, West Lancashire and Fylde districts as well as for commuting purposes and carrying public transport routes.

We are currently in the process of defining our Moss Road Strategy which, when finalised, will be reported to Cabinet for approval. Once approved the HMP will be updated. In the interim, advice should be sought from the Highways Asset Manager.

## 4 - Data Collection and Management

One of the most crucial aspects of highway infrastructure management is an effective inspection and survey regime that is backed up by robust data recording systems as the delivery of a safe and well managed highway network relies sound engineering judgement based on good evidence. Details of our Highway Asset Information Strategy can be found here.

## 5 - Levels of Service

Whilst we have a statutory duty to maintain our highways as outlined in the Highways Act 1980, there is no definition in the Act as to the standard of maintenance we are required to provide.

The WMHICoP is not prescriptive and unlike earlier publications doesn't set out minimum standards that highway authorities are required to adhere to. As a result, all the standards of service referred to in this document should be regarded as 'Lancashire Standards' which have been set according to local needs, priorities, risk and affordability. When setting our standards service we have been mindful that these ought to reflect the normal use of each part of the network rather than applying the standards required of a motorway to rural unclassified roads and visa-versa.

The county council's TAMP outlines a 15 year programme that comprises of three phases, each of which runs for five years. The TAMP identifies the 5 service standards of POOR, ACCEPTABLE, FAIR, GOOD and EXCELLENT against which the benefits to the users of the asset can be measured. The TAMP also identifies the desirable service standard for each asset type not only at the end of each phase which can be viewed here.

We have set Service Standards for all assets types included in the TAMP using objective condition data. We have recently undertaken highway video surveys of our highway and footway assets and consulted with neighboring authorities to ensure consistent interpretation of the data and development of service standards on cross boundary routes and assets.

## 6 - Performance Management

The county council is committed to transparency and accountability in relation to how we maintain our highway and transport assets. Currently the TAMP monitors and reports annually on the condition of assets by collecting information for a range of asset types. In addition we collect performance indicator information relating to response times to repair qualifying street lighting faults and qualifying pothole defects.

All highway asset performance data is reported to the Cabinet Committee on Performance Improvement and this information can be viewed here.

## 7 – Conservation Areas

Conservation areas are designated under the Town and Country Planning Act 1990 for their character and historic interest. Lancashire has 196 such areas and any development within a conservation area should aim to preserve or enhance the character of the area.

The responsibility for the planning of conservation areas primarily rests with the Local (District) Planning Authority. Consultation with the county council's relevant development control team should be undertaken prior to producing local plans, particularly on the funding of schemes and their long term maintenance liabilities. These consultations will

assess and agree the enhanced requirements of the scheme as a result of the environmental considerations in line with the Conservation Area Statement. In the absence of a Conservation Area Statement the design brief should concentrate on mirroring existing materials.

The county councils approach to the maintenance of conservation and heritage sites is to replace enhanced materials on a 'like for like' basis, wherever possible, practical and affordable. In general, the additional cost of enhanced materials will be met within the scheme and the extent of the additional costs would normally be a matter for discussion and negotiation during the consultation process.

Over and above the negotiated additional costs any further additional costs must be met by those bodies requiring the enhanced materials, subject to agreement that higher levels of enhancement will not impose an unreasonable burden of future maintenance on the county council. In some cases the extent of additional costs and any commuted sum payment required to cover additional through life maintenance costs may be more clearly defined in the relevant Code of Practice.

Practical guidance on the use of reclaimed materials, such as stone flags and setts, and the use of enhanced surfacing materials, usually either coloured or pigmented surfaces, is included in the developer guidance 'Palette of Materials' and the Geotechnical Materials Advice which is currently being reviewed and will appear on the Highway Asset Management Webpage in due course here. In the interim, advice should be sought from the Highways Asset Manager.

Numerous options are available commercially for street lighting equipment and these should be submitted for approval at planning stage. The choice of smaller items, such as street name plates, local finger post signs, seats etc. would normally be decided at local level.

## 8 – Capital Works Selection

The county council receives feedback on the condition of its highway assets from a variety of sources including highway safety inspections, specialist inspections, public enquiries, reports by telephone, reports via the Report It website and third party claims. All this information is considered when deciding where capital works are required. The procedure used to determine the capital programme is set out in Appendix 1

## 9 – Winter Service

The county council aims to provide a winter service which, as far as is reasonably practicable, will permit the safe movement of traffic and keep to a minimum, delays and accidents in which ice or snow is a contributory factor.

The purpose of this service is to manage our response to severe weather events meeting our statutory duty under the Highways Act 1980. Due to the size of Lancashire it is uneconomic, impractical and unjustifiable to simultaneously treat the whole highway network and keep this free of snow and ice. Approved contractors may be used to clear snow particularly in the more rural areas of the county and we will continue to work with district, parish and town councils on footway treatments, to supplement our in-house resource

Our Winter Service Plan which sets out how we intend to deal with the regular, frequent and reasonably predictable occurrences like low temperatures, ice and snow, as well as with exceptional events involving ice and snow and can be viewed here.

## 10 – Tourist and Leisure Destinations - Signing Policy

The county council as highway authority for Lancashire has a statutory duty to ensure that road users can travel on the highway safely and with minimal delays. Our policy on signing of tourist and leisure destinations contributes towards this and can be viewed here.

## 11 – Highway Status and Adoption

Section 36 of the Highways Act 1980 sets out which highways are to be maintainable at public expense and charges the local highway authority with preparing and maintaining a ‘corrected up-to-date list of streets within their area'. This list is held by the county council in textual, map and digital form. MARIO (Maps & Related Information Online) is the county councils interactive mapping website which can be used to find streets and via the use of 'layers' enables other information to be accessed. MARIO can be accessed at here.

An adopted highway can comprise or include carriageway, footway, verge (including landscaped and planted areas), footpaths and cycle ways and also normally includes equipment such as lighting, signals, signs, markings and highway drainage systems. In order to provide guidance to the public, developers and officers as to the types of highway in Lancashire, their status and the procedures that need to be followed, the county council is in the process of producing a Code of Practice on Highway Status and Adoption. When approved this will appear on the Highway Asset Management webpage here. In the interim, advice should be sought from the Highways Asset Manager.

## 12 – Material Choice & Highway Maintenance Practice

In order that we can deliver cost effective and durable highway works in respect to the choice of materials we have established Highways Asset Material and Design Innovation Group (HAMDIG) which is responsible for:

- Providing a consistent approach to the use of innovative materials and techniques
- Feedback on materials performance issues or failures
- Develop and accept specifications and for new materials usage

- To oversee the management of material trials within the highway
- Consider changes to existing materials use
- Ensure the above is done in accordance with county council rules and procedures
- Dissemination of good practice and notices relating to materials and their usage
- Initial approval of trials and on-going monitoring

Designs or specifications in accordance with Design Manual for Roads and Bridges, and Specification for Highways Work would not normally be considered by the Working Group unless problems or failures are experienced.

The HAMDIG have approved a range of materials for use on carriageways, footways and cycle ways and have also provided guidance with regards to the preferred choice of materials to be used in specific situations as follow:

- Hot Rolled Asphalt (HRA)
- Surface Dressing
- High Friction Surfacing (Anti-Skid Surfacing)
- Binder Course and Base
- Resurfacing over Setts
- Resurfacing of Roads with Composite Construction
- Patching
- High Risk Routes
- Footways
- Palette of Materials for New Developments
- Bridleway and Cycleway Surfaces

Information relating to the range of material choices approved by HAMDIG are being finalised and will appear on the Highway Asset Management webpage in due here. In the interim, advice should be sought from the Highways Asset Manager

## 13 - Sustainable Drainage Systems (SuDS)

SuDS are a natural approach to managing drainage on the vehicular highway, in and around properties and other developments by slowing or holding back water that runs off. SuDS can improve water quality and also improve local amenity, environmental quality and biodiversity and form part of green and blue infrastructure networks.

SuDS have featured in successive legislation since 2003 under the Water Framework Directive and more prominently Schedule 3 of the Flood and Water Management Act 2010 and in the National Planning Policy Framework 2012.

The county council believes that adopting a flexible approach to SuDS is the key to establishing an integrated drainage strategy and we are in the process of developing a sustainable drainage systems document setting out local specifications, standards and

policies. When available, this will be used by design engineers, developers and other professionals within the built environment involved with the planning, design, construction, operation, adoption and maintenance of highways, surface water drainage and associated SuDS.

Information relating to SuDs local specifications, standards and policies will appear on the Highway Asset Management webpage in due course here. In the interim, advice should be sought from the Highways Asset Manager.

## 14 - Climatic Change and Highway Maintenance

Climatic change scenarios for the U.K. estimate that average temperatures across the country could increase by 2 to 3.5 degrees Celsius over the coming century resulting in:-

a) An increase in temperature and rainfall and rainfall intensity that is likely to result in:

- An overall reduction in winter 'maintenance', however, there may be a need to make contingency arrangements for the possibility of less frequent but more extreme cold spells
- Pavement softening and traffic related rutting due to higher summer temperatures
- Bleeding of asphalt pavements leading to loss of skidding resistance
- Possible increases in ground water levels and soil moisture content
- Lengthening of the growing season and the related additional maintenance cost
- Gullies, drains, culverts having to deal with increased rainfall and more incidents of heavy and prolonged periods of rain.

b) In Lancashire increased wind speeds would be likely to result in;

- An increase in the frequency of damage to roadside trees and structures
- An increase in both the frequency and severity of storms in the Irish Sea with the consequent risk of erosion and damage to or loss of highway infrastructure at the coast

Reviews and future editions of the HMP, lifecycle plans and codes of practice will be increasingly influenced by climatic change issues and changes in national and local policies and practices associated with this climate change.

## 15 - Land Charge Searches

The county council, as highway authority, provides highway information in response to Local Land Charge Search enquiries made by district councils via Form CON29, private sector organisations via written enquiries and personal search companies using the Environmental Information Regulations and/or Freedom of Information Regulations. Information is also supplied by telephone to personal searchers.

In accordance with the Local Authorities (Charges for Land Searches) Regulations 1994, the county council makes a charge for the provision of such information. Details of our fees and charges can be viewed here.

## 16 – Estate Road Specification

In order to ensure that all new estate roads that are offered for adoption are built to the county council's standards we are in the process of writing an 'Estate Road Specification' which sets out for developers our construction requirements for all works in relation to roads, footways, highway drainage, street lighting systems and highway structures.

In addition, the specification sets out our requirements in relation to approved materials for a range of asset types/situations and our conditions in relation to inspection, checking and testing of the works in progress. Once complete, the works shall be maintained by the developer for a period of twelve months from the date of completion, as certified in writing, by the county council.

Information relating to the Estate Road Specification will appear on the Highway Asset Management webpage in due course here. In the interim, advice should be sought from the Highways Asset Manager.

# PART E – HIGHWAY INFRASTRUTURE MAINTENANCE

*In this section you will find information relating to how we maintain our highway network. This contains information relating to the highways service offer, general highway maintenance principles, lifecycle planning and information relating to how individual assets are maintained.*

## 1 - Highway Maintenance in Lancashire

Lancashire is the fourth largest authority in England in terms of population and as a consequence has a large, diverse and demanding transport network which is reflected in diverse highway infrastructure and maintenance needs and typical examples include:

- Problems with moss roads,
- Winter Service is a major need in the east of the county, particularly as elevation increases.
- Highway retaining walls are found predominantly in the east of the county where many roads have been constructed on sidelong ground.
- Many bridges were mainly built during the industrial revolution and are nearing the end of their useful life and require extensive maintenance.
- The 'new town' of Skelmersdale has large sections of infrastructure that will reach the end of its maintenance life cycle simultaneously, thereby creating maintenance peaks.

The impact of high traffic levels and unprecedented weather events of recent years have taken their toll, not just on our highway network but on highway assets across the country. In addition we are facing increased expectations from residents and businesses alike who are demanding a well maintained and efficient highway network in order that they can go about their everyday lives. This, combined with the climate of financial austerity, has presented us with severe challenges as to how we can maintain our highway assets with significantly less money.

## 2 - Road and Street Maintenance in Context

The approved Highway Service Offer as it relates to road and street maintenance is detailed below:

- Maintain approximately 7,000km of highway network in accordance with the Highway Management Plan, concentrating resources on managing and maintaining the network in a safe and serviceable condition safeguarding the county council from claims and other legal challenges.
- Undertake highway defect repairs that meet investigatory levels as set out in a Highway Safety Inspection Policy.
- Undertake highway maintenance revenue works in all 12 districts through in-house teams reducing reliance on contractors.

- Responsive maintenance requests for works will be limited, with little scope for improvements.
- Requests for service will be assessed and responded to where appropriate within 20 working days. All enquirers will be expected to use on-line and electronic media, where those channels are available, to track progress of any investigation and repair activity.
- An out of hours call out service to respond to emergencies will be provided.
- Due to a reduction in management capacity within the highway service, there will be a reduced ability to engage specifically with elected members on specific issues. This may mean that many more queries will have to be reported using the Customer Service Centre with updates to queries being accessed through those same channels. The highway service will be unable to support regular 1 to 1 meetings with Members. There will be less forward looking liaison with district and parish councils and the contact will become much more transactional.

**What will be different and why in respect of Roads & Streets Maintenance?**

- Not all highway reports received from elected members and the public will result in works being undertaken; many will result in no further action as the nature of the report doesn't warrant action against the intervention levels identified in the Highway Safety Inspection Policy.
- The new Highway Safety Inspection Policy will result in less defects being identified in the footway as the intervention level has changed from 20mm to 25mm for the majority of the footway network.

In line with the WMHICoP we will endeavour to ensure that all the assets covered by this Highway Management Plan contribute to;

**Network Safety** – by regular inspections at appropriate intervals, defects that meet our intervention levels are attended to within the prescribed timescales. In this context defects relate a whole range of matters including, but not restricted to potholes, kerbing, carriageway edges, skid resistance, sight line visibility and water accumulation.

**Network Serviceability** – by maintaining and renewing assets as and when they approach the end of their service life, in accordance with the TAMP. For some assets this will entail resurfacing and for others this will involve refurbishing or replacement. We will as far as is reasonable practical maintain the carriageway and footway surfaces to provide the correct level of friction and provide a ride/walk quality that is appropriate to a particular road or footways place in the network hierarchy and surrounding geography. We will also endeavour to maintain the carriageway and footway availability width by removing encroaching vegetation and water as far as is practical. We will provide signing and lighting as considered appropriate to help, guide and assist road users with their journey.

**Network Sustainability** – by ensuring as far as is practical to minimise the effect our works and assets have on the climate, surrounding environment, habitat and biodiversity. We will endeavour to ensure that our works do not cause pollution. We will use recycled materials were it is practical and affordable to do so and will dispose of any waste that cannot be recycled in a responsible manner. We will remove weeds and trim weeds/other vegetation as appropriate to stop them causing damage to footways, drains and property by using approved methods and applications. Healthy highway trees will only be removed on safety grounds.

## 3 - Lifecycle Planning

Lifecycle planning is an important aspect of asset management and involves drawing up long-term plans for managing an asset with the aim of providing the required levels of service at the lowest whole life cost.

Lifecycle plans capture all information relating to the inventory, its condition and performance. They identify both the short-term routine maintenance needs and long-term capital costs so that annual spend profiles can be produced. They also enable long-term predictions about the deterioration of various assets and their maintenance needs to be produced.

Lifecycle plans provide secondary benefits in enabling the 'institutional knowledge' i.e. the knowledge and judgement of key personnel, to be captured and documented, thereby enabling it to be shared and further developed.

We have currently developed life cycle plans for street lighting, carriageways and structures and are in the process of developing life-cycle plans for a number of other asset groupings. All our approved lifecycle plans have been published on our Highway Asset Management webpage here.

## 4 - Carriageway, Footway and Cycle Route Structural Maintenance

**Definition of Activity**

Maintenance of the highway network is defined operationally by the following maintenance categories, in accordance with CIPFA guidance:

- **Highways Road Routine** - Patching - includes haunching and the repair of potholes.
- **Highways Road Routine** - Footways – Includes kerbing and edging, repairing potholes etc.
- **Highways Road Structural** - Reconstruction – The removal of all or some of the structural layers of road pavement and their replacement with new or re-cycled materials, including resurfacing and any consequent works in connection with

footways, cycle tracks, drainage, road markings and kerbs. Small areas of reconstruction carried out prior to resurfacing works.

- **Highways Road Structural** - Overlay - Overlay of existing surface course to increase or restore the strength of the carriageway. Overlays of thicknesses up to and including 50mm should be classified as resurfacing.
- **Highways Road Structural** - Resurfacing – the replacement of the existing surface course to restore the running surface.
- **Highways Road Structural** - Surface Treatments as below:

    - **Surface Dressing -** The treatment to restore the surface texture and seal the carriageway, including any prior or consequential works to fill potholes, undertake minor repairs or patching in order to prepare the road surface. Line markings are applied after the sweeping period has expired.
    - **Carriageway Preservation -** To seal and Preserve the existing surfaces to arrest the oxidation and weathering process and to 'lock down' any chipping loss that is starting to occur.
    - **Antiskid -** The application of a high friction surface which contains aggregate with a high PSV, to increase the skid resistance

**Policies**

The county council will

- allocate resources to programmed Highway Safety Inspections and safety repairs in order to secure the safety of the highway and minimise risk to users of the highway
- optimise the level of resources able to be allocated for the maintenance of the highway asset network
- allocate resources for programmes of work needed to implement the LCC Code of Practice on Skidding Resistance
- seek to promote walking and cycling by the maintenance of a safe and convenient network of footways, footpaths and cycle routes

**Objectives for the Structural Maintenance of Carriageways, Footway & Cycle Routes**

To provide for the safe operation of the highway network by:

- Implementing targeted and prioritised structural maintenance programmes that will prevent as far as is reasonably practical deterioration to the condition of the highway network
- Restoring skid resistance at sites defined following investigation and assessment in accordance with the county council's Code of Practice on Skidding Resistance
- Facilitating cycling, walking and wheelchair use by improving ride quality, surface regularity and surface drainage

- Incorporating network improvements into structural maintenance schemes where opportunities arise to improve facilities for public transport, cyclists, pedestrians and people with impaired mobility
- The use of recycled materials and recycling techniques where possible
- Improving comfort for bus passengers
- The application of whole life costing principles in the preparation of programmes and the timing and selection of treatments

**Limitations on Road Structural Maintenance activity**

The legitimate use of highway maintenance funding is defined as expenditure on works on any highway maintainable at public expense where the works do not:

- Widen the carriageway of any road by more than 0.25 metres;
- Significantly change the alignment of the carriageway of any road;
- Substantially improve the character of the highway, e.g. metalled and unmetalled highways;
- Involve the provision of new traffic signals (other than replacement of existing);
- Any scheme involving land becoming part of the highway, whether by acquisition or dedication.

Where a particular situation is unclear it must be referred to the Highway Asset Manager for a decision.

In general, national maintenance guidance does not define maintenance standards for structural maintenance. Service levels and targets for structural maintenance have been defined in the TAMP. As the scope for works of this nature across the highway, footway and cycleway networks in Lancashire far exceeds the amount of available funds the county council is able to allocate, structural maintenance programmes will be compiled using a number of factors including, but not restricted to:

- Priorities set out in the TAMP,
- Analysis of defects/repairs generated by the highway safety inspections,
- Works needed to implement the LCC Code of Practice on Skidding Resistance,
- Results of highway condition surveys,
- Works required arising from higher risk route list,
- Road/Route status – e.g. part of the resilient road network.

The Carriageway Lifecycle Plan sets out further details of how we maintain this asset grouping and gives further information on material choices, various lifecycle planning activities and the factors, such as risk, that we take into account when making our scheme selections. This can be viewed here.

**Policy for Flagged Footways, including Stone Flags and Concrete Flags**
Whilst flagged footways may be considered attractive they represent a serious long-term maintenance liability due to vehicles over-running of and parking on footways, causing flags to crack, leading to uneven surfaces and potential trip hazards.

Flagged footways even when they have not been over-run or disturbed by the public utilities will, in time, settle differentially creating trip hazards. A document dealing with the Renewal of Flagged Surfaces is currently being written as a guide to those responsible for the planning and implementation of works relating to the replacement of defective flagged footway surfaces. This will appear on the Highway Asset Management webpage in due course here. In the interim, advice should be sought from the Highways Asset Manager

## 5 – Pothole Repairs

Information relating to the repair of defects on the highway, including potholes is set out in the Highway Safety Inspection Policy which can be viewed here.

## 6 - Highway Structures

**Scope of Asset Grouping**
This asset group includes a number of diverse items, which are listed below

- road bridges
- footbridges which either carry footways adjacent to road bridges or span over roads
- culverts with a span 1.5m or more within the roads network
- subways within the roads network
- larger rural footbridges which span natural obstacles (9000 series but not kit footbridges)
- retaining walls
- structural aspects of sign and signal gantries as defined in HA Standard BD63

**Maintenance Policy**
Subject to the availability of resources the county council will carry out the minimum amount of maintenance consistent with meeting the objectives for maintenance of Highway Structures. Our maintenance policy in relation to the different asset types within this grouping are outlined below.

- **Underbridges**

The carriageway and footway levels for underbridges shall remain as existing to prevent an increase in dead load and a reduction in parapet height.

- **Overbridges**

The carriageway level for overbridges shall remain as existing to prevent a reduction in headroom.

- **Retaining Walls**

  Where a retaining structure supports the highway carriageway/footway, levels may be lifted slightly providing the wall is in good condition and the parapet height will not be reduced to less than 1.1 metres after resurfacing. Otherwise carriageway and footway levels shall remain as existing. Where an existing wall supports property adjacent to the highway, carriageway and footway, levels may be lifted as necessary.

We are currently revising our information outlining how we maintain our retaining walls. Once complete this will appear on the Highway Asset Management webpage here. In the interim, advice should be sought from the Highways Asset Manager.

**Objectives for Maintenance of Highway Structures**

The county council's long term objective is to ensure our structures are maintained in a good condition and present a low risk to public safety. We will achieve this by:

- Undertaking inspections on a regular basis to provide accurate information on the condition of the bridge stock
- Prioritising maintenance works from the detailed information in the inspection process
- Undertaking structural assessments and structured reviews and continue to work in partnership with Network Rail to ensure the safety of their structures
- Implementing interim measures at substandard structures to reduce the risk to public safety
- Carrying out routine maintenance works on a regular cyclic basis to help maintain the condition and functionality of the bridges stock.

**Definition of Activity**

The maintenance of bridges and retaining walls shall be limited to structures which meet the following definitions:

- A bridge is defined as having a span of 1.5 metres or greater
- A retaining wall is any wall where the retained height is greater than the wall thickness

**Limitations on Activity**

- For privately owned structures on the adopted highway network the county council shall, wherever possible, co-operate with private owners with the aim of achieving a similar maintenance strategy as that for county council owned structures.
- Smaller Structures, with a span of less than 1.5 metres, are deemed to be highway drainage structures and maintenance shall be undertaken in accordance with the details contained in the Highway Drainage and Flood Risk section

| MAINTENANCE STANDARDS FOR STRUCTURES | | |
|---|---|---|
| **Category** | **Feature** | **LCC Standards** |
| Bridges Condition<br>Bridges Condition<br>Bridges Condition | General Inspections | • A General Inspection of all highway authority owned bridges, subways, 9000 series footbridges and miscellaneous structures is undertaken every 2 years.<br>• A General Inspection of all highway authority owned bridges at high risk due to flooding is undertaken annually. |
| | Confined Space General Inspection (Special Inspection) | • A confined space inspection (General Inspection), of all highway authority owned confined space structures is undertaken every 3 to 6 years dependant on bridge condition. |
| | Confined Space General Inspection (Special Inspection) | • An underwater inspection (Special Inspection) on all highway authority owned bridges where a general inspection cannot be completed due to water levels is undertaken every 2 to 6 years. On structures at high risk due to flooding it is done every 2 to 3 years. |
| | | • Special Inspection of affected structures following every flood or high river flow event, to check for scour or other damage.<br>• Special Inspection in autumn of all structures at high risk due to flooding, in advance of winter high rainfall to enable removal of scour causing debris before floods. |
| Bridges Condition | Principal Inspections | • A Principal Inspection of all highway authority owned bridges, subways, 9000 series footbridges and miscellaneous structures with a Bridge Stock Condition Indicator (BCI) - (Critical) of less than or equal to 40 or with a BCI - (Average) of less than or equal to 65, is undertaken every 6 years<br>• A Principal Inspection of all highway authority owned bridges at high risk due to flooding is undertaken every 6 years |
| | | **Note**<br>This regime introduces Principal Inspections for structures with the worst condition and highest risk due to flooding. It does not provide all highway authority structures with a Principal Inspection. It relies on the information from the General Inspections to inform the programme. |
| Retaining Walls | | • We will continue to identify and record details of retaining walls on A, B and C category roads |
| Low Bridges | | • We will provide warning signs on all highway bridges showing the restricted headroom when the headroom is less than 16 feet 6 inches (5.03M). |
| | | • From time to time bridges which fit the definition of a structure are discovered and these will be assessed<br>• We will undertake structural reviews when significant events occur that could increase the imposed loads above those previously assessed for and/or reduce the load bearing capacity due to deterioration or accidental damage<br>• There will be a further assessment when a structural review has identified the need for assessment |

| MAINTENANCE STANDARDS FOR STRUCTURES | | |
|---|---|---|
| **Category** | **Feature** | **LCC Standards** |
| Management of sub-standard structures | | • If a highway authority owned structure does not meet the requirements of standards used in its assessment, we will identify and carry out the appropriate remedial action to maintain its safety.<br>• If there is deemed to be an immediate risk to public safety, we will implement formal interim measures, e.g. weight restrictions, narrowing of carriageways, closure and diversion of traffic etc.<br>• Highway authority owned structures which require strengthening works, will be prioritised alongside all other structural works required to maintain the bridges stock. |
| Parapets | | • We will continue the risk assessment and priority ranking of parapets on highway authority owned structures.<br>• We will prioritise upgrade/safeguarding works to parapets alongside all other structural works required to maintain the bridges stock. |
| Network Rail Partnership | | • We will continue the partnership with Network Rail regarding agreements for the assessment and strengthening of network rail owned public road bridges to ensure that Network Rail owned structures are adequate to support the highway. |
| Routine Maintenance to structures | | • Routine Maintenance to structures, (removing vegetation, cleaning drainage systems etc.) will be carried out when specific growth/defects have been identified as requiring attention following General/Principal Inspection.<br>• Structures with known significant vegetation growth are prioritised and treated on a 12 monthly basis. Routine maintenance operations will also be undertaken at a structure at the same time as other instructed maintenance works |

Further information about structures maintenance can be found in the Structures Lifecycle Plan here.

## 7 - Highway Drainage and Flood Risk

### Scope of Asset Grouping

This asset grouping includes a range of assets including highway ditches, grips, trash screens, culverted watercourses, gullies, manholes and slotted channels and associated highway drainage systems.

### Maintenance Policy

Subject to the availability of resources the county council will carry out the minimum amount of drainage cleansing consistent with meeting the objectives for maintenance and improvement of highway drainage systems.

In line with the service offer we will fulfil the county council's statutory obligations as a Highway Authority and a Lead Local Flood Authority, through the powers and duties in the Flood and Water Management Act 2010 and related legislation. Specifically;

- Continue development and application of the Flood Risk Management Strategy.
- Contribute to the designation of structures as appropriate and the maintenance of a record and register for assets and features that effect flood risk held by the Highway Asset Management team.
- Investigate flooding where necessary and appropriate (where this affects 5 or more properties).
- Undertake the Sustainable Drainage System Approval Board function.
- Act as Lead Local Flood Authority to promote partnership working with other Risk Management Authorities, including the development of bids for external funding for flood alleviation schemes.
- Base the frequency of cyclic maintenance of gullies on need. This frequency will be fully defined once more on site information is gathered and local conditions are understood.
- Undertake drainage defect repair works primarily informed through the cyclic maintenance programme, focussing attention on the areas of greatest need enabling work programmes to be efficiently managed to ensure greatest productivity.
- Prioritise drainage system repair works where highway drainage system defects are causing a significant risk to the travelling public or affecting property.

**Objectives for Maintenance for Highway Drainage and Flood Risk**

To provide for the safe operation of the highway network by;

- Ensuring that surface water is removed from carriageways, footways and cycleways as quickly as possible to prevent ponding and flooding that could cause a danger to the public.
- Preventing, by the use of an appropriate enforcement action the uncontrolled discharge of water from private land or un-adopted highways onto the highway such as might cause a danger to the public by the formation of ice, erosion of surfaces or accumulations of debris. Enforcement will be limited to powers available under the Highways Act 1980 and pursued where enforcement is expedient.

To provide and maintain drainage systems in a manner consistent with the principles of sustainability and effective asset management including, where relevant:

- Preventing water from soaking into road foundations as this might cause structural damage

- Preventing the unauthorised discharges of highway surface water run-off into residential or commercial property and private land adjacent to the highway as this might cause nuisance, damage or flooding
- The appropriate use of sustainable drainage systems (SuDS) within highway improvement schemes. SuDS will be encouraged on development sites in line with National Planning Policy Framework, National Guidance, Local Plans, guidance, standards and best practice. Adoption of SuDS features within the highway may form part of a Section 38 agreement.
- Taking reasonable precautions to prevent pollution of watercourses and to have due regard to the habitat, ecology and bio-diversity status of adjoining land
- Prevent highway ditches (where the highway authority is responsible) from becoming obstructed to ensure free passage of water.
- Avoid culverting of watercourses including highway ditches
- Develop and maintain an asset database (HAMS) and maintain a register of flood risk assets (requirement of Flood and Water Management Act 2010)
- Designate flood risk assets (which have a significant effect on flood risk)

**Definition of Activity**

Drainage cleaning activities shall include:

- The cleaning of carriageway and footway gullies, manholes and slotted channels e.g. drainage kerbs that are the responsibility of the highway authority, the sole purpose of which is to remove water from the highway;
- The testing, rodding and jetting of the highway drainage system, including drains, gullies and their connections, inspection chambers, interception pits, piped ditches, grips, kerbed offsets, carriageway drainage of structures and the drainage of subways; when there is evidence that this will be effective;
- The maintenance of ditches, grips, trash screens, culverted watercourses, inlets and outfalls, for which the highway authority is responsible through the removal of silt, vegetation and debris to allow the free passage of water; when there is evidence that this will be effective;
- The clearance or replacement of filter media to maintain the operation of filter drains and soakaways when there is evidence that this will be effective;

The county council will carry out drainage improvement and repairs consistent with meeting the objectives for maintenance and improvement of highway drainage systems, having regard to the availability of resources. Drainage repairs shall include;

- The installation and replacement of drains, gullies, inspection chambers, interception pits, piped ditches, grips, kerbed offsets, ditches, soakaways and ancillary works;
- Excavation and repair of highway drainage systems to remove obstructions to flow that cannot be removed by cleaning;

- The adjustment of ironwork for which the highway authority is responsible together with the replacement of damaged or unsatisfactory ironwork;
- Exploratory excavation and testing to investigate third party claims of damage and nuisance arising from defective alleged highway drainage systems.
- Installation of new highway drainage systems

The procedures to be followed for the repair or improvement of highway drainage systems are as follows:

- Information Gathering and Consultation;
- Areas Requiring Investigation and Submission for Funding;
- Input From Routine Maintenance Activities;

**Limitation of Activity**
In accordance with the service offer:

- We will not carryout proactive engagement in flood investigations that does not meet policy criteria.
- We will not proactively identify flood assets for the record/register.
- Resources will be focused on delivering the statutory processes such as consenting and Sustainable Drainage System (SuDS) Approval, and as a consequence our capacity to devote time to developing potential flood alleviation schemes and bids may reduce.
- Frequency of cyclic maintenance for gullies will be reviewed annually using the best quality data available to the service at the time of each review. Cleansing frequencies will be adjusted based on the level of risk associated to each asset group.

- Reactive cleansing will be carried out only when the risk is deemed too high to wait until the next scheduled visit. The following risk matrix sets out when a report will indicate the highest risk and always prompt a response reactively:

| | **The following gullies will be reactively cleansed** |
|---|---|
| **HAZARD** | |
| Internal flooding of residential/commercial property arising from a defective drainage system | All roads |
| Flooding or ponding on the carriageway rendering the highway impassable | All roads |
| Flooding or ponding likely to result in aquaplaning | Primary Gritting network sections 40mph and above |
| Water on the carriageway arising from a defective drainage system likely to result in the formation of ice in the wheel tracks | Primary Gritting Network All |

- Reactive gully cleansing is intended to be carried out within 24 hours of a report being received from members of the public where the above criteria is met, and gully cleansing will be part of a solution.
- In addition to the reports considered on the matrix above, all reports relating to highway drainage systems will be carefully considered, in particular:
    - Information and evidence provided.
    - History of the area.
    - Date of the next scheduled cleanse.
    - Potential impact of issues reported.
- This enables the area team to determine if immediate action is necessary as set out in the emergency matrix or if it can be addressed as part of the existing schedule.
- Reports received from members of the public whereby immediate action is not deemed necessary will not be actioned. These will be serviced on their next scheduled visit.
- During extreme events of flash flooding and intense rainfall it is unfortunately not always possible to respond within the 24 hour emergency response times for reactive gully cleansing and other measures such as redirection of water to another discharge point, removal of water from the carriageway, warning signage or traffic diversions may be carried out.
- Not all reports of standing water on the highway will result in works taking place

As the amount of work that needs to be on the highway far exceeds the availability of resources we are not able to attend to all drainage related defects or incidents. The table below sets out our priority / risk scoring system for prioritising drainage works.

| **Priority / Risk Rating System for Drainage Works (Low Score = High Priority)** | | | | | | |
|---|---|---|---|---|---|---|
| **Reason for Proposed Works** | **Road Category** | | | | | |
| | **1** | **2** | **3a** | **3b** | **4a** | **4b** |
| Flooding of residential/commercial property arising from defective drainage system | 1 | 1 | 1 | 1 | 1 | 1 |
| Flooding/ponding on the carriageway rendering highway impassable | 1 | 1 | 1 | 1 | 1 | 1 |

| Priority / Risk Rating System for Drainage Works (Low Score = High Priority) | | | | | | |
|---|---|---|---|---|---|---|
| Flooding / ponding on the carriageway presenting a hazard to road users | 1 | 1 | 1 | 1 | 2 | 6 |
| Seepage of water onto the carriageway liable to result in the formation of ice in the wheel tracks | 1 | 1 | 1 | 8 | 11 | 12 |
| Water crossing the carriageway on bends and gradients liable to cause aquaplaning | 1 | 1 | 1 | 8 | 10 | 16 |
| To eliminate damage to the highway requiring immediate works i.e. severe scouring | 1 | 1 | 1 | 3 | 4 | 6 |
| Flooding / ponding on the carriageway presenting a nuisance to road users | 2 | 6 | 8 | 13 | 17 | 20 |
| To eliminate damage to the highway requiring medium term works | 5 | 7 | 10 | 12 | 13 | 16 |
| Works in conjunction with major structural maintenance or surface dressing or funded via scheme & evaluated accordingly | 5 | 7 | 10 | 12 | 13 | 16 |
| To eliminate damage to the highway requiring long term works | 9 | 12 | 14 | 16 | 18 | 20 |
| Discharge of water to private land adjacent to the highway not causing flooding to residential or commercial property | Separate justification to be made for schemes in this category | | | | | |
| How long the issue has been on a waiting list | Add 1 point per year | | | | | |

The table below sets out our standards for cleaning highway drainage assets within the adopted highway.

| MAINTENANCE STANDARD FOR CLEANING DRAINAGE ASSETS | |
|---|---|
| **Asset Type** | **Standard** |
| Gully | Gullies are categorised as:<br>• **Priority 1** - emptied once a year on a scheduled basis,<br>• **Priority 2** - emptied once every 2 years on a scheduled basis, |
| | **Note**<br>• Reactive cleansing will be carried out only when the risk is deemed too high to wait until the next scheduled visit.<br>• No more than 50mm of material shall remain in the gully before it is recharged with clean water.<br>• Gullies shall be overfilled with water following emptying to ensure they are clear.<br>• Gullies without sumps shall be fully flushed through to confirm they are functioning correctly.<br>• Non-functioning gullies shall be reported for follow-up action. |
| Soakaways | • Chambers cleaned and filter media replaced as required.<br>• Associated catchpit (if any) cleaned once per year on a scheduled basis. |
| Petrol Interceptors | • Cleaned on a scheduled basis according to site requirements |
| Highway ditches | • Cleared as required following inspection and assessment of need |
| | **Note**<br>• No spoil to be deposited on Special Interest verges or other sensitive sites |
| Kerbed offsets | • Jetted once per year on a scheduled basis<br>• Ad-hoc jetting as required.<br>• Action prioritised with regard to risk |
| Grips and kerbed breakwaters | • Cleaned as required |

| MAINTENANCE STANDARD FOR CLEANING DRAINAGE ASSETS | |
|---|---|
| **Asset Type** | **Standard** |
| | • Action prioritised with regard to risk |
| Filter Drains | • Works as required following inspection and assessment of need.<br>• Consider new SuDS in parallel with old drainage pipework. |
| | **Note**<br>• Consider alternative methods |
| Gully connections and piped drainage systems,<br>Catch Pits<br>Culverts,<br>Swales,<br>Channels and Rills,<br>Infiltration Trench,<br>Filter Strip,<br>Infiltration Basin,<br>Detention Basin,<br>Geocellular Storage Systems | • Cleaned as required<br>• Action prioritised with regard to risk |
| Trash Screens | • In accordance with Trash Screen code of practice – see below<br>http://council.lancashire.gov.uk/ieDecisionDetails.aspx?ID=12108 |

The table below sets out our standards with regards the installation of drainage asset ironwork in the adopted highway.

| MAINTENANCE STANDARDS FOR DRAINAGE IMPROVEMENT AND REPAIR | |
|---|---|
| **Feature** | **LCC Standard** |
| Iron Work | • Manhole and inspection chamber covers in carriageways shall be installed to a tolerance of +/-6mm to the surrounding level.<br>• Gully frames and gratings shall be installed to a level flush or not exceeding 10mm lower than the adjacent paved surface.<br>• Investigatory levels for adjustment of ironwork are identified in the LCC Code of Practice for Highway Safety Inspections.<br>• Gully gratings with parallel bars shall be replaced where frame and grating is being adjusted for another purpose or where such a grating is found present in a designated cycle-lane<br>• New covers, frames and gratings shall be supplied and installed in accordance with the current edition of the Lancashire County Council Specification for Construction of Estate Roads as the minimum standard |
| | **Note**<br>• Gully grates should be set with the slot transverse to the direction of travel. Replacement of cattle grids should include square section bars to aid the passage of both cyclists and pedestrians<br>• New covers, frames and gratings shall be supplied and installed in accordance with the current edition of the Lancashire County Council Specification for Construction of Estate Roads as the minimum standard. |

Further information about our Flood Risk activities can be found here. Further information relating to Codes of Practice for Highway Drainage and Flood Risk can be found here.

## 8 – Road Markings and Studs

**Scope of Asset Grouping**
This asset group covers all lines, markings and road studs that are placed anywhere within the carriageway or at the kerb edge.

**Maintenance Policy**
Subject to the availability of resources and an assessment of priorities the county council will undertake any necessary maintenance works consistent with meeting its objectives for the maintenance of road markings and studs.

Where texture flex treatments were laid at junctions then they should only be reinstated where absolutely necessary and the perpendicular bar markings should be replaced unless there was no road safety benefit in which case they could be omitted. We will not provide any new markings or remove an existing marking without first consulting the appropriate traffic engineer or safety engineer and obtaining their approval to do so.

The refurbishment of existing road markings and studs funded via highway maintenance allocations may only be undertaken with the approval of the relevant Highways Manager with the exception of the following;

- "Give Way" markings will be maintained at all junctions where no other marking is provided on Strategic Routes, Main Distributors and Secondary Distributor roads.
- "Give Way" triangle markings will be maintained in conjunction with "Give Way" warning signs on the approach to Strategic Routes and Main Distributor Roads.
- At appropriate sites, where the word "SLOW" is placed in conjunction with the relevant warning sign indicating the particular hazard, these will be maintained.
- School entrance markings will be maintained outside school entrances used by pupils unless it is clearly inappropriate to do so.
- "Bus Stop" markings, servicing an active route, will be maintained where indiscriminate use of the carriageway for loading or waiting causes problems to bus operation.
- "H-Bar" markings will be maintained to protect access for disabled residents by preventing parking across dropped kerbs intended to facilitate mobility for vulnerable footway users and/or safe vehicular access.

**Objectives for Maintenance**

The purpose of maintaining road markings and studs is to support the objectives of safe and efficient movement for all road users on the network by:

- Keeping all markings and studs visible as far as possible at all times in relation to the road maintenance category
- Maintaining road studs in a secure condition
- Maintaining existing traffic regulation orders
- Maintaining the impact and effectiveness of traffic calming and traffic management schemes
- To support sustainable transport modes by maintaining traffic control and protection for vulnerable road user groups
- Maintain edge delineation to reduce edge damage

**Definition of Activity**
The maintenance and replacement of existing road markings, studs and existing areas of coloured surface treatments, excluding anti-skid surfacing, which provide improved safety to road users.

On Higher Risk Routes, where existing road markings are to be replaced the new markings should be high visibility. Consideration should be given to the use of red texture flex surfacing or 'nightsight' or 'rainline' type lining, but only where they will increase safety.

**Limitation of Activity**
Road markings and traffic signs will not be replaced or refreshed as frequently as previously. Only traffic signs and road markings at 'safety critical' locations or where enforcement is required will be replaced or refreshed. Safety critical works would include for example the renewal of solid centre line marks (no overtaking), junction give way and stop lines, solid edge of carriageway markings, formal pedestrian crossing points and school zig zag markings.

Traffic signs will be maintained to meet statutory requirements and design standards. Warning signs will be maintained where there is evidence of a significant casualty record.

In line with the Service Offer:

- Less traffic signs and road markings will be maintained than currently as there will be greater prioritisation associated with ensuring that parking monitoring restrictions are enforceable.
- Requests for traffic regulation orders such as residential parking/waiting restrictions, residents parking and speed limit orders will be prioritised after casualty reduction, strategic traffic management, economic growth and environmental improvement. As a result many requests will not be progressed.
- There will be less maintenance work carried out in response to requests which do not meet defect intervention levels

<table>
<tr><th colspan="6">MAINTENANCE STANDARDS FOR ROAD MARKINGS AND STUDS</th></tr>
<tr><th>Category</th><th>Feature</th><th colspan="4">Standard</th></tr>
<tr><td rowspan="5">Road Marking Renewal</td><td>Motorway & Primary Routes</td><td colspan="4" rowspan="5">• Only traffic signs and road markings at safety critical locations or where enforcement is required will be replaced.</td></tr>
<tr><td>County Distributors</td></tr>
<tr><td>Secondary Distributors</td></tr>
<tr><td>Residential Roads</td></tr>
<tr><td>Rural Unclassified and Local Access</td></tr>
<tr><td rowspan="5">Road Marking Replacement after Surfacing<br><br>(Maximum target period from surfacing work to completion of road markings)</td><td>Marking Type / Road Class</td><td>Mandatory markings (white)</td><td>School markings (yellow)</td><td>Non mandatory (white)</td><td>Other markings (yellow)</td></tr>
<tr><td>Principal Roads</td><td>1 week</td><td>1 week</td><td>2 weeks</td><td>2 weeks</td></tr>
<tr><td>Other Classified Roads</td><td>1 week</td><td>1 week</td><td>3 weeks</td><td>3 weeks</td></tr>
<tr><td>Unclassified Roads</td><td>1 week</td><td>1 week</td><td>4 weeks</td><td>4 weeks</td></tr>
<tr><td>All Road Classes</td><td colspan="4">Note<br>• During resurfacing 'No Road Marking' sign boards should be displayed until all markings have been replaced.</td></tr>
<tr><td>Road Studs</td><td>Replacement</td><td colspan="4">• Missing / defective studs to be replaced individually or by bulk change as required, to achieve 90% reflectivity before winter period.</td></tr>
<tr><td>Higher Risk Routes</td><td>Replacement of road markings</td><td colspan="4">• Where existing road markings are to be replaced the new markings should be high visibility.</td></tr>
</table>

## 9 – Highway Embankments, Cuttings and Slopes

**Scope of Asset Grouping**

A slope is defined as a length of either cutting or embankment which forms part of the highway asset. These can be categorised as natural slopes formed by geological processes or engineered earthworks slopes, which have been designed and constructed as part of highway works.

Slope movement is defined as a physical change in the equilibrium of the slope that results in a reduction in the factor of safety of the slope and can instigate failure. These movements can have catastrophic consequences to life, property or infrastructure located on, above or below the slope.

Movement of slopes is predominantly dependant on the type of soil and angle of slope. However, a number of factors can lead to movement:

- Steepening of the slope due to engineering works
- Undermining of the toe of the slope
- Surcharging of the slope due to development
- Failure of drainage systems or water mains, leading to water ingress

- Increased rainfall leading to water ingress and rises in ground water levels (Climate Change)

**Maintenance Policy**
Whilst we do not carry out annual slope inspections of the entire network, pre-existing slips or slopes which have the potential to cause loss of life are inspected and an inventory has been collated over a number of years. At the majority of these locations instrumentation has been installed to monitor the amount and more importantly the rate of movement. This monitoring is linked to a risk model, which provides a trigger level for remedial action

Having regard to the availability of resources and the priority rating, any necessary minor remedial earthworks will be undertaken consistent with meeting the operational standards for maintenance and improvement of highway embankments, cuttings and slopes. More major works will be assessed for inclusion in a special maintenance or improvement programme.

**Operational Standards for Highway Embankments, Cuttings and Slopes**
There are no stated operational standards for remedial earthworks. In general, problem areas are continually monitored and remedial action is instigated as soon as practically possible and prioritised primarily on safety grounds in line with available resources and Priority rating.

**Definition of Activity**
The repair of earth slips and the provision of any necessary associated drainage and new retaining systems (including, anchor walls, reinforced earth, soil stabilisation, site investigation, movement and similar works) in order that we can manage and minimise disruption, injury and loss of property as much as possible.

**Limitations on Activity**
The extent of the work we are able to carry out is dependent upon both the level of resources and incidence of slips and slope movements that are experienced.

**Maintenance Standards**
Earthworks do not normally deteriorate in a predictable manner, therefore it is difficult to assess a need in advance. Need is normally reactive, established by reports of earthworks that are becoming unstable or of sudden collapses.

For slopes exhibiting signs of slow movement, by minor cracking or deformation, a site investigation will be undertaken to assess the stability of the slope. Slopes at greatest risk which are prone to excessive movement due to higher than normal levels of rainfall shall be inspected after such periods of precipitation.

The risk from a landslip cannot be underestimated. It is probably one of the most serious problems that could affect the highway network and more importantly the community and local industry. In terms of business, financial, corporate image, the environment and the overall network at large the impact from a major landslip is enormous and will have consequences which will last for years after the event. Consequences of a slope failure include:-

| Risk Type | Description Example |
|---|---|
| Physical | Landslip |
| Business | Loss of business potential legal proceeding failure of duty of care |
| Financial | Cost of emergency and remedial works<br>Cost of insurance claims by 3rd parties |
| Corporate Image | Poor reflection on image |
| Environmental | Rupture of sewers or pipelines leading to contamination<br>Blockage of watercourse-resulting in flooding |
| Network | Disruption of Network-potentially for a long period |

Once potential risk and schemes are identified that are categorised and prioritised primarily on safety for remedial action or repair as appropriate. Where practicable, recycled materials will be used in repair works for remedial earthworks.

| PRIORITY FACTORS FOR HIGHWAY EMBANKMENTS AND CUTTINGS | |
|---|---|
| **Criteria** | **Feature** |
| Type of Earthworks | Highway Cutting |
| | Highway Embankment |
| | Land outside highway |
| Failure Risk | Collapse |
| | Imminent danger of collapse |
| | Moderate risk of collapse |
| | Gradual movement expected |
| Effect of Failure | Danger to highway users |
| | Endangered property |
| | Damage to fabric of paved areas or highway drainage |
| | Damage to Statutory Undertakers apparatus |
| | Interruption to the use of the highway |
| | Damage to 'unoccupied' private land |
| | Disruption to public transport services |
| Financial | Costs of damage |
| | Scheme costs |
| | Risk of Litigation |
| | Impact on alternative routes if highway use interrupted |
| Repair Options | Repair |
| | Temporary Diversion |
| | Monitor |

## 10 - Traffic Signs & Bollards

**Policy**
Subject to the availability of resources and an assessment of priorities the county council will undertake any necessary works consistent with meeting the objectives for maintenance of traffic signs and bollards.

Signs erected will meet the requirements set out in regulation under the Traffic Signs Regulations and General Directions 2016.

Unauthorised signs, boundary signs, temporary signs, signs to new developments and private directional signs will be regulated in accordance with the LCC Code of Practice on the Control of Placing Items within the Highway.

Bollards made from recycled plastic will be used unless there is an engineering reason for an alternative specification. In town centres, shopping areas and for new installations in conservation areas alternative designs/materials may be specified at no additional cost to the authority. District and parish councils will be expected to meet the extra-over installation and replacement costs of the enhanced specification.

Traffic mirrors will not be permitted in urban areas or on roads subject to a speed limit of 30 mph or less. Requests for traffic mirrors on other roads shall be referred to the Community Services (Highways) for consideration. A safety audit of any proposed site will be undertaken as part of the consideration process.

**Objectives for maintenance**

- To ensure traffic signs are legal, legible and visible as far as possible at all times in relation to the road use and traffic speeds;
- Give effect to new and existing traffic regulation orders;
- Prevention of pavement parking or footway overriding where the use of enforcement or regulatory powers is impractical, ineffective or undesirable.

To provide and maintain traffic signs and bollards in a manner consistent with the principles of sustainability, in particular:

- By the removal of obsolete signs and posts;
- By positioning new signs in a manner which will not result in an increase in "street clutter".

**Definition of Activity**

- The repair, replacement and cleaning of non-illuminated signs and bollards
- The removal of obsolete equipment, including reinstatement of surfaces etc.
- The provision of new signs and bollards

**Priority / Risk Rating for Traffic Signs and Bollards**

- Warning and regulatory signs shall be given priority over all other signs
- The demands of reactive maintenance to existing installations will normally take precedence over programmed maintenance and minor improvements
- The cost effectiveness of the installation of bollards to prevent overriding of footways and verges in relation to the actual damage being cause to highway surfaces

In determining the priority for new signs and bollards the following will apply:

- Sites where traffic regulation orders have been approved in accordance with county council policy for the categorisation of traffic regulation orders
- Sites where there is an existing road traffic accident problem that can be improved by improved signing
- Sites where there are demonstrable road safety benefits like:-
    - Proposals for new signing to improve misleading signs or to remove confusion to road users
    - Proposals to new signing that will improve the operation of the network
    - Proposals for new signing that would provide a positive benefit to commerce, industry or tourism subject to the installation having due regard to network safety and current policies and standards

| MAINTENANCE STANDARDS FOR TRAFFIC SIGNS AND BOLLARDS | |
|---|---|
| **Feature** | **LCC Standard** |
| General Condition | • Safety Inspections only for defects.<br>**Note:**<br>• Damage to all signs, lights and trees on higher risk sites should be assessed before routine replacement or removal |
| Cleaning | • Clean only where necessary (core standard). Option to clean as required or annually dependent on local decision. |
| Brackets and fixings | • Reactive maintenance only following condition assessment by Highway Superintendent or defect from Highway Safety Inspection. |
| Damaged equipment | • Damaged signs should be made safe within 24 hours. The speed of replacement and permanent repair will depend on degree of risk |
| Roundabout blockwork, chevrons | • Weed kill and clean as required to maintain effectiveness. |
| High Risk Routes | • Where existing road signs are to be replaced due to impact damage their position should be reassessed and if appropriate the sign should be relocated.<br>• Where existing chevrons are to be replaced increasing the size of the signs |

| MAINTENANCE STANDARDS FOR TRAFFIC SIGNS AND BOLLARDS | |
|---|---|
| **Feature** | **LCC Standard** |
| | should be considered.<br>• Passive posts should be used when replacement is required. |

## 11 - Highway Verges, Landscaped Areas and Trees

**Policy – Green Estate**
Subject to the availability of resources the county council will carry out the minimum amount of maintenance consistent with meeting the objectives for maintenance of the green estate (highway trees, verges and landscape areas).

The county council will take a balanced approach to the management of its green estate such that:

- risks to people and property are managed appropriately
- environmental benefits are maximised and the overall condition of the tree stock and verge is enhanced wherever possible

The county's highway green estate makes a very significant contribution to Lancashire's landscape character, providing both visual amenity and helping to mitigate the environmental impacts of the highway. The green estate provide very important wildlife corridors, offering ecology and biodiversity benefits. The county council also has a duty to have regard for biodiversity under the Natural Environment and Rural Communities Act, and comply with the Habitat Regulations, the Wildlife and Countryside Act and the provisions of National Planning Policy.

Wherever possible, the county council will manage its green estate so that there is no net loss of habitat or ecological value, and subject to the availability of resources, seek opportunities to enhance biodiversity.

The Objectives and Standards sections below set out in more detail what we aim to achieve and the standards we will apply to our maintenance activity.

**Objectives for Maintenance of the Green Estate**
The objectives of this service are:

- to maintain safety for users or the highway, by reducing the risk of :
    - obstruction to visibility sight lines at junctions and bends
    - obstruction to legibility of traffic signs
    - root growth causing surface disruption
    - trees or branches falling onto the highway

  - vegetation or weed growth encroaching onto a carriageway, footway or cycle route such as would cause a danger or nuisance to users of the highway, in particular pedestrians, cyclists and buses that can be adversely affected by overhanging vegetation

- to maintain safety to pedestrians where no footway exists
- to prevent trees which are the responsibility of the highway authority from causing damage or unlawful interference to private property and utility apparatus
- to control weeds to prevent damage to the highway and to prevent the establishment of weeds as required by the Weeds Act of 1959 and the Wildlife and Countryside Act of 1981
- to maintain the green estate in an environmentally sensitive and sustainable manner, particularly with respect to minimising damage to habitats, minimising impacts on protected species, minimising impacts on watercourses and enhancing biodiversity
- to manage all 'special verges' (i.e. those that are designated as Biological Heritage Sites or that are recognised as having special local ecological interest or value) in accordance with site specific management plans prepared by a suitably qualified ecologist
- to support parish and district councils who wish to implement initiatives that will enhance the visual, amenity or biodiversity of their local green estate
- to create a high quality green estate that makes space for trees and maximises the opportunity to enhance biodiversity by incorporating the planting of appropriate varieties of trees

**Maintenance Categories for Highway Verges, Landscaped Areas and Trees**

The green estate comprises of a number of different elements, each having their own characteristics and requirements, which are set out below:

**Tree, Hedge and Verge Maintenance**

The county council has recently approved its Tree Safety Management Guidance which sets out the procedures we will put in place to inspect those trees which are either growing within highway limits or are within falling distance of the highway. In addition, the guidance defines what highway (county council owned), adjoining (i.e. growing on private land) and consent (i.e. planted within the highway with our consent) trees are and outlines procedures for dealing with overhanging trees, hedges and shrubs, dead or diseased trees. In addition it advises what we will and will not do in relation to complaints and reports about other perceived tree nuisances.

The Tree Safety Management Guidance should be read in conjunction with this section and when approved it will be published on the Highways Asset webpage and can be found here.

Traditionally there has been a presumption in law that trees within the highway that existed before dedication of the highway and self-sown trees that have become established since dedication of the highway are vested in the owner of the subsoil. However, it appears that the judgement of the Court of Appeal in the case of Hurst -v- Hampshire County Council (1997) indicates that the responsibility for all trees in a highway maintainable at public expense rests with the highway authority. However, there may be occasions when, given the known history of a tree and the road adoption, it may be advisable to seek specific legal advice.

**Definition of Activity**

- The management of foliage within or immediately adjoining the highway including the removal of epicormic growth, pruning, pollarding and the removal of dangerous overgrowth, branches, roots or trees presenting a hazard to road users or adjoining property and to utility companies apparatus.
- Routine operations that may be required to keep the highway verge, central reservations, cutting and embankment slopes in a safe and tidy condition.
- Routine operations required to preserve the effective width of the carriageway or footway.

The county council will undertake appropriate maintenance to retain a healthy tree stock across Lancashire and remove hazards. This will include planned and reactive inspection on receipt of a notice of a defect, and works will normally comprise pruning. The procedures we intend to adopt in relation to achieving our safety and environmental objectives, particularly with respect to reducing the risk of injury from dying, decaying, dead stock and dealing with a range of perceived tree nuisances are set out in the Tree Safety Management Guidance.

Trees will only be felled as a last resort when a tree is dead, when the risk to people or property posed by a tree is considered to be excessively high (this includes trees where there is potentially a high financial risk), or as an unavoidable consequence of highway maintenance works. Trees will not be removed to accommodate vehicular crossings.

**Replacement of Trees we have felled**

The county council will consider replacement planting for trees that have been removed because of their heath or structural condition. However, it may not be possible due to spatial constraints or underground services to replant in the same position as the removed tree. Species will be selected to match the spatial constraints of the planting site; therefore, it is likely that replacement trees will be of a different species, size and scale of the removed tree. The county council will also allow a third party such as a district or parish council, or a resident or community /amenity group to fund a replacement tree planting. In such instanced the species, stock size, planting position, support method and support until independence in the landscape has been achieved will be discussed and agreed with the Regional Tree Officer from the county council. Such trees would then be

adopted by the county council and subject to the cyclical safety inspection regime as the rest of the county councils tree stock.
**Note 2:** Cabinet Member for Highways and Transport on 20th April'23 approved the change.

**Planting of trees as part of highway schemes**
Where we plant trees as part of a highway scheme it is important that appropriate species and planting specifications, including the use of root pits are taken into consideration as inappropriate highway trees represent a long-term maintenance liability. Where new trees are being planted as part of a highway scheme the contactor should be required to provide a minimum 5 year establishment period, following which we take over and maintain such trees via reactive maintenance activities.

**Planting of Trees in the highway by others**
Section 96 of the Highways Act 1980 empowers a district or parish council to plant and maintain new trees in a highway maintainable at public expense, with the permission of the highway authority. Before a district or parish council can do this they need to sign a consent form which will indemnify the county council against third party claims arising from the tree being planted in the highway. Where we allow this, such trees are referred to as 'consent' trees.

Prior to district councils and parish councils planting consent trees within the highway they need to agree in advance with the relevant Highway Manager in conjunction with the council council's arboricultural officer the location of the tree, the variety of tree to be planted and the planting specification (e.g. the use of root barrier pits etc) to prevent damage to structures or uplift of footways as appropriate.

In relation to the planting of such trees

- there should be no compromise on achieving desirable visibility standards
- there should be no compromise regarding the positioning of trees to minimise the risk of vehicle impact
- there should be no compromise on achieving acceptable systems of street lighting
- trees should not be positioned such that tree canopies and/or root systems will obstruct users of the highway or future maintenance operations including maintenance of highway drainage systems and statutory undertaker plant
- horizontal clearance shall be sufficient to avoid direct damage to drains underground services, flexible services and adjacent private structures
- there will be no new / replacement tree planting on High Risk Routes

Where such trees are planted within the highway we:

- will not maintain such trees
- will not be liable for any claim arising from consent/licence tree defect

- will record details of the licence/consent form on the Highway Asset management System

Where a consent tree is planted within the highway and it subsequently causes an obstruction, hazard or damage to any part of the highway or highway structure the consent holder will be liable for rectifying any defect or hazard arising from this tree. The Tree Safety Management Guidance provides further advice about the serving of notices against consent holders and the withdrawal of permission, and removal of the tree, if the consent conditions are not being adhered to.

**Planting of Trees by Adjacent Property Owner/Occupiers**

Whilst section 142 of the Highways Act permits adjacent property owner/occupier to plant trees in the highway subject to compliance with the terms and conditions specified in a licence granted by a Highway Authority the county council does not generally allow such planting.

**Overhanging Vegetation and Hedges**

Section 154 of the Highways Act gives competent authorities the power to serve notice on the owners of overhanging hedges or shrubs or the occupier of the land on which they are growing. Where an overhanging hedge or shrub is identified to obstruct the passage of vehicles or pedestrians or obstructs or interferes with the view of vehicles, the county council is also empowered to take action to alleviate the problem.

Our procedures for dealing with overhanging, dead or diseased trees and tree nuisance issues are set out in the Tree Safety Management Guidance.

| MAINTENANCE STANDARDS FOR VERGE MAINTENANCE | | |
|---|---|---|
| **Feature** | **LCC Standards** | **Notes** |
| Trees vested in highway authority | Trees will be maintained by pruning, pollarding and sometimes felling to minimise risks to highway users, people and property, utilities and to maintain a healthy tree stock. Work will either be undertaken as planned maintenance or by reactive maintenance, in respect of inspection reports or complaints.<br><br>**Maintenance on trees will be carried out to:**<br>• ensure a minimum 5.5m clearance over the carriageway and 2.5m over a footway or 3.0m where there are cycling rights<br>• ensure that there are clear site lines at junctions and access points, and for traffic signals and street signs<br>• minimise trip hazards<br>• ensure that street lighting is not | • Pollarding should only be undertaken where previously done as it is no longer considered good practice. However trees previously pollarded have to keep being done to prevent problems with weighty limbs and poor limb attachment.<br>• Maintenance will not be undertaken because trees are considered to large or too small for their setting.<br>• Where it is alleged that trees are interfering with telephone wires, property owners should initially be directed to their utility provider.<br>• Work will not be undertaken to improve the quantity and quality of light falling upon a property or television reception – see Tree Safety Management Guidance for advice about dealing with perceived tree nuisance.<br>• Works impacting on tree roots should only be taken after seeking arboricultural advice.<br>• Where significant pruning, pollarding or felling maybe required arboricultural advice should |

| MAINTENANCE STANDARDS FOR VERGE MAINTENANCE | | |
|---|---|---|
| **Feature** | **LCC Standards** | **Notes** |
| | unduly blocked<br>• remove the nuisance of a tree touching a property<br>• reduce interference with telephone wires (pruning only) when requested by the utility<br><br>**Maintenance on trees will not be carried out to:**<br>• remove overhanging branches that aren't touching property<br>• prevent roots entering a drain that is already damaged<br>• improve natural light in a property<br>• improve natural light to a solar panel<br>• improve the view from a property<br>• remove or reduce leaf fall, honeydew or other sticky sap, blossom, fruit, berries, nuts or bird droppings<br>• remove or reduce the incidence or bees, wasps and wild animals<br>• prevent interference with TV / satellite reception | always be sought, and with the exception of emergencies, adjacent property owners, parish councillors and elected members should be informed.<br>• With the exception of emergencies, works to trees that have a TPO or are located in a Conservation Area shall be approved in advance by the local district council.<br>• All maintenance works shall be undertaken in accordance with the requirements of the EC Nesting Birds Directive, the Wildlife and Countryside Act 1981, the Hedgerow Regulations 1997 and the Natural Environment and Rural Communities Act.<br>• Where it is reported that unsupervised young children are likely to be exposed to poisonous berries or foliage, each case should be investigated and appropriate action considered.<br>• We will not fell a tree to allow for the construction of a drop crossing to a private development<br>• Where roots are causing a trip hazard or other damage to the footway, highway or highway structures, alternative engineering solutions should always be considered along with possible works to the tree. Where such trees are removed, thought will be given, if replaced by a district/parish council, to replant them with a root barrier system, otherwise consideration will be given to planting a replacement tree of a more appropriate species.<br>• Replacement trees shall be selected, planted and maintained in accordance with the Design Guide. |
| Hedges vested in highway authority | • Seasonal growth on county council owned hedges will be trimmed once a year to ensure that there are clear site lines at junctions and access points and for traffic signals and traffic signs. | • Hedge clippings shall be removed from paved surfaces, in particular those used by cyclists. |
| Trees and hedges in other ownership | • Regulatory action shall be undertaken as required to maintain visibility, prevent obstruction of the highway and to obviate any danger from falling trees or branches.<br>• Consideration will be given to undertaking works at Highway Authority expense where cost effective by comparison with enforcement action. | • see Tree Safety Management Guidance for further information about taking action, serving notices and recovering expenses.<br>• Hedges may not be removed without satisfying the requirements of the Hedgerow Regulations 1997. |
| Landscaping areas vested in highway authority. | • Minimum works necessary to maintain visibility or prevent obstruction to the highway. | • New landscaping maintained under contract until established |
| Accident damage to | | • Trees on higher risk routes should be assessed to determine whether felling is an option. |

| MAINTENANCE STANDARDS FOR VERGE MAINTENANCE | | |
|---|---|---|
| **Feature** | **LCC Standards** | **Notes** |
| trees | | • No new trees are to be planted on higher risk routes. |
| Siding (Side dressing) | • Siding on carriageways will not be undertaken except when needed as preparatory work for surface dressing, renewal of road markings etc.<br>• Sidings on footways will be undertaken as necessary to preserve the footway width, following the receipt of inspection reports. | |
| Verge Repairs | • Undertaken as required following the receipt of inspection reports or complaints | |
| Weed Control | • Minimum works necessary to meet the County Council's statutory duty<br>• Chemical treatment for weed control | • Where weed growth is physically damaging the fabric of the highway, presents a hazard or is having a detrimental effect on the safety of the highway, treatment should be carried out on these weeds only.<br>• Weed spraying shall be carried out in accordance with the Control of Pesticides Regulations 1986. Only approved pesticides listed on the Pesticides Register of UK Authorised Products produced by the Health and Safety Executive may be used.<br>• For highway hard surface weed killing a translocated non-residual contact herbicide should be used such as Glyphosate, which are only effective on actively growing plants which restricts the applications to spring and autumn.<br>• On permeable surfaces we may want to try newer residual products. |
| Control of Rabbits | • The relevant county council Highway Manager shall undertake rabbit control operations where necessary to comply with the Council's statutory duty under the Pests Act 1954. | • Consultation with DEFRA shall be undertaken to determine the appropriate control measures in each case and taking into account the health and safety of highway users and others that may be affected by the operation |

## a) Grass Cutting

### Definition of Activity

- Cyclical cutting of grass on highway verges as necessary to secure safe conditions for users of the highway. Some district councils may supplement highway authority standards to varying degrees as part of their amenity and public health powers.
- Following the termination of the Lancashire Highways Partnership in 2006, Residual Highway Agreements were established with district councils to enable them to undertake a specified number of functions on the highway, including grass cutting.

These agreements will continue and are currently being re-negotiated. Where LCC carry out all grass cutting but the district council request a higher standard, they must agree the additional standards with the county council and provide appropriate funding to cover the cost of the extra work.

**Policy - Grass cutting**

Grass cutting on highway verges will be cut in accordance with operational standards consistent with the objectives for Maintenance and Improvement of Highway Verges, Landscaped Areas and Trees, to ensure that growth does not present a road safety hazard to any class of road user.

The Operational Standard for Grass Cutting is detailed in the table below.

| MAINTENANCE STANDARDS FOR GRASS CUTTING | | |
|---|---|---|
| **Category** | **Feature** | **LCC Standards** |
| Urban | | • The county council will carry out 8 cuts per year to maintain growth not exceeding 150mm height.<br>• If grass is allowed to grow longer than this it becomes necessary to remove cuttings.<br>• Furthermore, long grass can conceal debris which can become a safety problem if left unattended. |
| | | **Note**<br>• Bio-diversity management regime (as applicable) overrides standards.<br>• Omit bulb planted areas until foliage dies back |
| Rural verge >3m width | **Zone A**<br>1m swathe adjacent to carriageway | The county council will carry out three*[note 1] cuts per year. |
| | | **Note**<br>• Sight lines at junctions and on inside of bends should be cut as described for 1m safety swathe.<br>• All cuttings left in-situ.<br>• Bio-diversity management regimes (as applicable) override standards.<br>• Omit bulb planted areas until foliage dies |
| | **Zone C**<br>1m zone at rear of verge | Uncut except for any necessary winter thinning and coppicing. Cut as required to control noxious weeds |
| Rural verge <3m width | **Zone A**<br>1m swathe adjacent to carriageway | Cut as Zone A above |
| | **Zone C**<br>Remainder of verge | Cut as Zone C above |
| Rural verge between footway & carriageway | **Zone A**<br>1m swathe and 600mm margin either side of footway. | Cut as Zone A above |
| | **Zone C** | Cut as Zone C above |

| MAINTENANCE STANDARDS FOR GRASS CUTTING | | |
|---|---|---|
| **Category** | **Feature** | **LCC Standards** |
| >2m width | Remainder of verge | |
| Rural verge between footway & carriageway <2m width | Zone A: - full width intervening verge and 600mm margin at rear of footway | Cut as Zone A above |

**Note 1:** Cabinet 3rd Nov'22 approved reduction from 4 to 3 cuts per year as part of the savings proposals.

**Operational Standards for Weed Control**

Within the framework of the statutory provisions the council will take action to safeguard the condition of the highway where weed growth is seen to be physically damaging the fabric of the highway or presents a hazard or where weed growth is having a detrimental effect on the safety of the highway.

We will comply with the:

- statutory provisions of the Weeds Act to control the spread of Curled Dock, Broad Leafed Dock, Creeping Thistle and Ragwort and the specific requirements of the Wildlife and Countryside Act in relation to the control of Giant Hogweed and Japanese Knotweed.
- UK Government advice in relation to 'Prevent harmful weeds and invasive non-native plants spreading'.

**Definition of Activity**

- Physical and chemical weed control methods will be used on highways where they are practical and cost effective. Where practical, weed control will be integrated into a co-ordinated programme with the district council's highway sweeping to remove living and treated weeds from carriageways, footways and cycle routes.
- All weed spraying shall be carried out in accordance with the Control of Pesticides Regulations. Only approved pesticides listed 'on the Pesticides Register of UK Authorised Products produced by the Health and Safety Executive.
- For highway hard impermeable surface weed killing operations a translocated non-residual contact herbicide should be used. New weed growth occurs in spring and autumn, so for effective weed control, we will apply two applications to adopted areas which will be supported by responsive treatments as considered necessary. On permeable areas of the highway verge, including planted beds, we may consider use of new residual herbicides.

## 12 – Street Lighting and Illuminated Signs

**Scope of asset grouping**
This asset group includes a number of diverse items, which are listed below

- Columns, brackets, lanterns, lamps, control gear, switching devices and central management equipment,
- Illuminated centre island refuge beacons, posts, lamps and control gear,
- Illuminated signs, posts, lanterns, lamps, control gear and switching devices,
- Illuminated bollards, lamps and control gear,
- Zebra crossing beacons, posts, lamps and control gear,
- School Crossings, posts, lanterns, lamps, control gear, switching devices and central management equipment
- Underground cable networks, ducts, inspection chambers, feeder pillars, switching and fuse equipment,
- Subway Lighting, lanterns, lamps and control gear,
- Matrix Signals,
- Feeder Pillars,
- LCC owned cables, joints, fuses and other electrical components and connections

**Maintenance Policy**
The county council:

- Maintains approximately 150,000 street lights and 16,000 illuminated traffic signs to ensure compliance with our statutory duty to maintain.
- Attends to reports of defects within 5 working days.
- Undertakes cyclic maintenance at 10 yearly intervals.
- Provides an out of hours call out service to respond to emergencies.
- Manages the street lighting stock to minimise consumption of energy. All street lights will be dimmed to varying levels over a 10 year maintenance cycle.
- Currently dims light output to 50% which will be reduced down further as and when technology permits.
- Where possible, and subject to capital investment, will replace all non-LED lighting with LEDs.

**Objectives for Maintenance of Street Lighting**
The county council's long term objective for the street lighting asset group is to ensure that street lighting assets are maintained in a good condition, are electrically safe and are as environmental friendly as possible. This is achieved by:

- Ensuring that all equipment is electrically and structurally safe,
- Equipment is installed and maintained safely,
- Appropriate lighting in provided in conservation and other areas,
- The impact of lighting on the environment is minimised as much as possible,
- Minimising and reducing as low as possible the energy associated with this asset group,

- Delivering the street lighting objectives sustainably, economically and effectively,
- To maintain an accurate inventory.

The current service offer is that wherever possible lighting will be replaced with LED units and where possible street lights are operated at 50% light level. Currently units, dependant on road category and equipment fitted generally dime either between the hours of 1900hrs and 0700hours or as soon as they come on, until the time they switch off.

**Definition of Activity**

Under the Highway Act 1980 the Council has the power but not the duty to light. Therefore, whilst a Highway Authority has to illuminate certain traffic signs it has no statutory duty to provide lighting. If lighting is provided the county council has a duty of care to maintain any lighting provided in a safe condition.

**Limitations on Activity**

The county council will only maintain and repair those items that are on an adopted highway. Items that are located away from the public highway such as on private roads and public car parks are outside of our remit and will not be repaired.

| MAINTENANCE STANDARDS FOR STREET LIGHTING | | |
|---|---|---|
| **Category** | **Feature** | **LCC Standards** |
| Street lighting, signs and bollards etc. | Electrical Testing | • All electrical items are subject to an electrical test every ten years. |
| | Repairs | • We aim to visit all faults within 5 working days of receipt of fault report. On most occasions we will be able to successfully repair the street light at the first visit.<br>• Occasionally we many need to make a second visit to complete a repair. Faults involving electricity cables may take significantly longer than 5 working days to repair. |
| | | **Note**<br>• On 'traffic sensitive' and/or high speed roads, expensive traffic management may be required to enable operatives to work safely. As a result repairs on these roads are likely to take longer than 5 working days. |
| | Bulk Change and Clean | • We no longer carry out a bulk change of non-LED lamps. All lamps/lanterns will be allowed to fail before they are replaced.<br>• Lanterns will be cleaned at the time of the 10 yearly routine maintenance visit.<br>• Some signs and bollards may receive enhanced cleaning if they become obscured by traffic spray. |
| | Emergency Response | • We will attend to all 'emergency' situations such as columns that are knocked down, door off, lanterns hanging etc within 2 hours |
| | | **Note**<br>• Units will always be made safe – but dependent upon the situation, permanent repairs are not always possible at this initial visit. |

| MAINTENANCE STANDARDS FOR STREET LIGHTING | | |
|---|---|---|
| Street lighting | Column Testing | • There is no regular system in place to structurally test street lighting columns. Some testing is carried out, but on an ad-hoc basis. |

Further information about street lighting maintenance can be found in the Street Lighting Lifecycle Plan here.

## 13 – Traffic Signals

This service supports the network management duty by maintaining and optimising the performance of traffic signal installations at key and sensitive locations on the network. The service undertakes design and implementation of new installations as identified through development or network management interventions and management of the highway sponsorship programme

We are in the process of drafting a traffic signals lifecycle plan. When this is published it can be found here. In the interim, advice should be sought from the Highways Asset Manager

## 14 – Fences, Guardrails and Safety Barriers

**Policies for Fences, Guardrails & Safety Barriers**
Subject to the availability of resources the county council will undertake works consistent with meeting the objectives for the maintenance of fences, guardrails and safety barriers.

Timber posts will not be used for replacement safety fencing and existing safety fences incorporating timber posts will be eventually replaced or removed if appropriate.

Maintenance work will not normally be undertaken on fences and barriers where mounting heights have been rendered inadequate by resurfacing and /or kerbing. Such defective installations should be referred to the Area Manager.

Safety fences and guardrails will not normally be replaced only on the grounds that they do not comply with current design standards, provided that they complied with design standards at the time of installation.

Where timber fencing is repaired the timbers will be from an approved supplier and properly treated from a sustainable source.

**Objectives for Maintenance of Fences, Guardrails and Safety Barriers**
To maintain fences, guardrails and safety barriers in a sufficiently sound structural condition to serve their function and not be dangerous to road users or pedestrians.
To carry out minor improvements to promote reductions in the frequency and severity of road traffic accidents, in particular;

- To direct vehicles that are out of control and have left the carriageway away from hazards but not back into the path of other vehicles on the highway
- To reduce the consequences of loss of vehicle control
- To prevent vehicles colliding with large signs, retaining walls, bridges, bridge abutments and piers and retaining wall parapets
- To prevent vehicles crossing the central reservation on dual carriageways
- To provide protection for vehicles, cyclists and pedestrians on high embankments
- To provide protection for pedestrians at locations of possible pedestrian/vehicle conflict
- To direct pedestrians to more suitable and safer crossing points
- To consider their prominence in the "streetscape" and their potential for impact on the visual environment

**Definition of Activity**

- The maintenance and replacement of existing safety fencing, pedestrian guardrails, boundary fencing and walls, including painting and cleaning
- Minor improvements to fences, guardrails and safety barriers

**Limitations on Activity**

- Highway boundary fences are presumed to be the responsibility of the adjoining landowner unless there is evidence to the contrary
- Highway fencing and barriers are provided for the safety of users of the highway or to delineate the extent of the highway. The highway authority does not have a duty to prevent livestock from straying onto the highway, although where the highway authority maintains a boundary fence it shall be maintained as stock proof where appropriate.

| MAINTENANCE STANDARDS FOR FENCES, GUARDRAILS & SAFETY BARRIERS | | |
|---|---|---|
| **Category** | **Feature** | **LCC Standards** |
| Steel and wire rope safety fences and guardrails | General Condition | • Detailed inspections to be undertaken following receipt of any defect report from Highway Safety Inspection. |
| | | **Note**<br>• Inspection policy to be reviewed having regard to safety implications.<br>• All safety barriers and fences adjacent to railway lines to be inspected at intervals determined following a risk assessment. |
| | Tensioned Barriers | • Tension Barrier will be reinstated after each accident repair |
| | Damage to Safety Fences and Guardrail | • Make safe dangerous defects within 24 hours and effect permanent repair as soon as possible thereafter. |
| | | **Note**<br>• Guardrails on 20mph and 30mph roads should be removed and not replaced |
| | Painting | • Paint not required. Core standard. Option to paint dependent on local decisions. |
| | Cleaning | • Clean as required only where provided with chevron marking |
| | Replacement | • Safety fences and guard rails shall not normally be replaced on the grounds that they do not comply with current design standards, provided they complied with the relevant standard at the time of installation.<br>• Timber posts will not be used for replacement safety fencing. Existing safety fences incorporating timber posts will eventually be replaced, or removed if appropriate. |
| Timber boundary fencing | Repairs and timber treatment | • Undertake works as required. |
| | | **Note**<br>• Timber to be from an approved supplier properly treated and from a sustainable source. |

Cabinet have recently approved a Vehicle Restraint System Code of Practice which can be viewed here.

# Part F – Regulatory Activities

*The Highways Act 1980 provides the county council, as Highway Authority, with various powers to keep the highways in Lancashire open and unobstructed. In this section you will find out more information about these powers and the requirements we place on third parties so that we reduce the affect that their activities have on the highway.*

## 1 – Control and Placement of Items within the Highway

There is desire by various persons and organisations to place direction signs, advertising signs, goods for sale and various other public amenities within the Highway. Whilst such items can be of benefit to the community, they can also be the cause of potential obstruction and danger.

In order that we can give a consistent approach across Lancashire we are in the process of drafting a Code of Practice relating to the Control and Placement of Items within the Highway. Once approved this will be published on the Highway Asset Management webpage and will be available here. In the interim, advice should be sought from the Highways Asset Manager

This code of practice applies to all publicly maintainable highways for which the county council is Highway Authority and covers:

- Obstructions to use of the highway
- Temporary direction signs
- Advertising signs
- Goods displayed for sale
- Amenities including: access ramps for the disabled; works of art; sponsored landscaping; cafes; etc.
- Planting
- Installation and operation of seasonal decorations on or above the public highway

Responsibility for application of the code of practice shall be with the Director of Community Services whose interpretation, in the event of a dispute, shall be final.

## 2 - Scaffolds and Hoardings

The placing of scaffolds, other structures and hoardings on the highway will be regulated in accordance with this Section and the following statutory documents:

- Highways Act 1980 Sections 169 (Scaffolding) and 172/173 (Hoardings);
- Disabled Persons Act 1981 Chapter 43;
- Traffic Signs Manual Chapter 8
- The Local Authorities (Transport Charges) Regulations 1998;

No part of any scaffold or hoarding shall project over the carriageway or within 0.5 metres of the kerb face at a height less than 5.7 metres above the road surface (see also Abnormal Load Routes below). A clear 2.5 metres headroom shall be provided over any area open only to pedestrians. Please note many pedestrian areas also permit vehicular access for emergency services and delivery vehicles. In such circumstances a 5.7 metre clearance shall apply.

In respect of the issue of permits for scaffolds and hoardings:

- Permits shall be issued only to the person or company erecting the scaffold, structure or hoarding which, in normal circumstances, will be the scaffolding company
- A permit shall be issued for a maximum duration of 12 weeks, after which time a new permit must be applied for
- The Standard Form of Permit and Conditions and Application Form relating to the control of scaffolding etc. on the highway are described in supporting documentation to this Plan “Regulatory Forms and Conditions”
- In accordance with The Local Authorities (Transport Charges) Regulations 1998, a charge will be made in respect of each week the scaffold, structure or hoarding is positioned on the highway, in accordance with the County Council’s Schedule of Highways Fees and Charges, which is subject to annual review
- A refusal of an application to dispense with the requirement to erect a hoarding under s172 of the Highways Act 1980 will be made by letter, but any notice of refusal must contain a reference to the applicants right to appeal under s172 (4).

Applications in respect of scaffolds to be attached to buildings or other structures arched over the highway shall be referred to the officer having responsibility for abnormal loads to enable the potential impact on abnormal load routes to be considered prior to the permit being issued. As the transit of large loads may be carried out at short notice, certain routes throughout the county may be designated as high load routes. No cross road obstructions will be allowed below 7.5 metres above the carriageway on these routes

## 3 - Builders Skips

The placing of Builders Skips on the highway will be regulated in accordance with this Section and the following statutory documents:

- Highways Act 1980 Sections 139 and 140;
- Road Traffic Regulations Act 1984 Section 65;
- Builders Skip (Markings) Regulations 1984 (SI 1984 No.1933);
- Traffic Signs Manual Chapter 8
- The Local Authorities (Transport Charges) Regulations 1998;

**Requirements for placement**

- Private Land - Preferred option, no permit required;
- Footway - Not normally permitted. A footway position may be permitted provided that the skip can be positioned such that a minimum 1.8 m. width of footway is retained for pedestrian passage. In exceptional circumstances a footway may be permitted to be obstructed where a safe pedestrian walkway can be provided in the carriageway. Any building works associated with the use of the skip must not be permitted to affect or obstruct any pedestrian route adjacent to the skip. A skip shall not be sited on a footway where damage to the footway would result;
- Highway Verge - Not normally permitted where there is a better alternative or where damage to verge or associated footway may result. Siting on the verge may be permitted where the skip owner undertakes, in writing, to meet the costs of reinstating any damage to the verge;
- Carriageway - See below
- Back Street or other highway – See below

**Placing on Carriageways**

Skips will normally be permitted on carriageways except where site circumstances are such as to require consideration, in conjunction with the local Police traffic liaison officer if appropriate, of special arrangements in respect of timing, positioning, traffic control measures, additional signing and guarding, or temporary traffic regulation orders. Such consideration may include granting consent following a documented risk assessment where alternative locations, traffic control or other special measures would cause excessive disruption to traffic or unreasonable difficulties for the skip hirer.

Circumstances where a skip will not be permitted or only permitted subject to consideration of the need for special arrangements include:

- on a road defined as traffic sensitive for the purposes of the New Roads and Street Works Act 1991
- on a road where there are double white lines or where parking is prohibited by a traffic regulation order
- within 40 metres of traffic signals - this distance may be reduced after the exit of a traffic signal junction depending upon the geometry of the site, with an absolute minimum of 15 metres
- within 40 metres or either extremity of a pedestrian refuge or traffic island located in the carriageway
- within 15 metres of a road junction
- on the brow of a hill or on a bend where the presence of the skip would create a danger to road users
- in the controlled area of a pedestrian crossing or on zigzag markings in front of a school, ambulance or fire station
- at a bus stop

Skips shall not be placed, without implementing appropriate additional traffic management measures, parking restrictions or other measures, in consultation with the highway authority and the police, on a carriageway where the lane-width available to traffic would be reduced below the absolute minimum safety standard of 3.0 metres for normal traffic, highway maintenance vehicles and emergency service vehicles.

Where a permit is requested for a skip to be placed on a back street or other narrow highway used by the public, it may be expected that the skip will cause an obstruction and the arrangements will require to be discussed with the operator and other involved users including the District Council as refuse collection and street cleansing authority. In the case of works exceeding the recommended maximum duration, or where the siting of the skip would prevent vehicular access to premises, the person undertaking the works should be advised to seek a temporary closure order or make alternative arrangements for carrying out the works.

**Applications for permits**

Section 139 of the Highways Act 1980 applies to highways, therefore including routes recorded on the Definitive Map of public rights of way. The county council does not maintain records of privately maintainable highways, other than a few which are shown on the Definitive Map. Therefore permits should not be issued for private streets.

Applications in the form described in supporting documents to this Plan “Regulatory Forms and Conditions” shall normally be made in writing, via fax or email and shall include a plan in all instances where the location cannot be precisely described by a textual description. For example, “outside property no XXX” may not be a sufficiently precise location in the case of a property with a long frontage to the street in question.

Subject to the consent of the relevant Area Office, telephoned applications may be accepted provided that a confirmatory application is submitted by the Applicant, for record purposes, by no later than 12.00 noon on the following working day.

**Duration of permits**

For a front street, a permit will be issued for a maximum period of 21 days after which time a new permit must be applied for.

The highway authority may require a shorter duration, either in the interests of effective coordination of street works or in the interests of residential amenity and orderly use of the highway. Consent may be granted in appropriate circumstances for such permits to be extended, without additional charge, up to a maximum of 21 days.

Where a skip is permitted to be placed on a back street, a permit will be issued for a maximum duration of 3 working days, taking into account any refuse collection requirements. In the case of works exceeding the recommended maximum duration the

developer should be advised to seek a temporary closure order or make alternative arrangements for carrying out the works.

**Issue of permits**

Permits shall be issued only to the owner of the skip, which in normal circumstances will be the skip hire company. Section 139(11) defines circumstances where a long-term hirer would be defined as the owner of the skip, but these circumstances will not normally apply to skips placed on the highway. Notwithstanding the provisions of S139 (11) the highway authority will not normally grant a permit to a person who the authority considers does not have the resources to exercise sufficient control over the skip to be able to comply with the conditions specified in the permit or any directions issued under Section 140 of the Act.

The Permit and Standard Condition and any Special Conditions shall be issued in the form described in supporting documents to this Plan “Regulatory Forms and Conditions”.

Permits will only be issued to persons who possess current Public Liability insurance as specified in the Schedule of Highways Fees and Charges.

In giving consideration to an application the highway authority will consider the following criteria:

- The suitability of the applicant and the adequacy of the information provided in relation to positioning, insurance, arrangements for signing etc. and arrangements for dealing with out-of-hours problems
- The status of the street and whether the consent of the highway authority is required
- The suitability of the site having regard to the recommendations of this Plan and other relevant factors
- Whether the positioning of the skip and the duration of the permit will conflict with local authority and statutory undertakers works programmes, or special events.

**Unlawfully placed skips**

The ability of the highway authority to undertake enforcement action in respect of skips placed on the highway unlawfully is constrained by resource availability and competing priorities, but it will seek to act in accordance with the following procedures:

Where the highway authority identifies a skip placed on the highway without permission, but which is otherwise satisfactory in all respects, the authority will:

- notify the company of the incident in writing reminding the company of their legal liabilities and requesting a skip permit application, and
- where an application is received issue a permit, and
- include the permit with those to be charged to the company, and

- notify the police of the incident for record purposes, and
- record the incident and include photographic evidence if considered necessary

Where the highway authority identifies a skip, placed on the highway, which is unsatisfactory, the authority will:

- if the skip is marked to clearly identify the company, notify the company of the defective situation via telephone and fax, requiring either that the defective situation be remedied or the skip removed within two hours (notification between 08:30 and 17:30 hours Monday to Saturday) or four hours at all other times including Sundays and Bank Holidays, and
- notify the police of the incident, and
- record the incident
- consider taking action under Section 140 of the Highways Act 1980 to obviate danger to the public
- where the skip cannot be identified, arrange for the skip to be removed under Section 140 of the Highways Act 1980

Where a company is found to be repeatedly placing skips on the highway either without permission or not in accordance with a permit, the authority will advise the company that it will, in conjunction with the police, seek to instigate proceedings against the company in accordance with the relevant provisions of Section 139 of the Highways Act 1980.

## 4 - Fees and Charges

Local authorities may, in accordance with a variety of statutory provisions, charge for discharging a number of prescribed functions, including various highways functions, services and regulatory activities as authorised by the following statutory provisions:

- Highways Act 1980 – various sections.
- Local Authorities (Charges for Land Searches) Regulations 1994
- Local Authorities (Transport Charges) Regulations 1998

In accordance with The Local Authorities (Transport Charges) Regulations 1998 a charge will be made for the issue of each permit in accordance with the County Council's Schedule of Highways Fees and Charges, which is subject to annual review and can be viewed here.

No charge will be made in respect of extending a skip permit of duration less than 21 days up to a maximum aggregated duration of 21 days. Applicants may make payment with their application, but normally skip companies will be sent monthly invoices in respect of the aggregated charges payable by the company. Invoices will be generated in accordance with County Council arrangements for income from highways fees and charges.

## 5 - Encroachments on the Highway

The county council will take enforcement action in respect of encroachments on the highway, which occur when areas of highway land are enclosed or obstructed unlawfully. We can neither condone nor ignore such encroachments for a number of reasons:

- The county council has a statutory duty to assert and protect the rights of the public to use any highway for which it is the highway authority
- The encroachment may affect private rights of access and it is unreasonable to expect a member of the public to assert a private right where the highway authority does not meet its statutory duty
- There may be implications for safety
- Access to statutory undertakers and highway authority apparatus may be affected

Action must be taken to obviate any dangerous situation for users of the highway, caused by an encroachment or alleged encroachment. In this case the appropriate action will normally be signing and guarding, though in some cases it may be appropriate to remove the obstruction without notice under common law powers or S149 of the Highways Act 1980. Where this course of action is felt to be unavoidable, reasonable efforts must be made to contact the landowner to advise them of the Council's intention.

As Highway Authority we must ensure that the land concerned is public highway, and that it is still required. If the Authority considers the land to be no longer necessary as highway, the issue may be able to be resolved by means of a stopping- up order.

It is possible that the person responsible for encroaching on the highway is unaware that they have done so. Generally, the first contact should therefore be a polite letter to the landowner or householder informing them of the situation, and requesting them to remove obstructions, return boundaries to their correct alignment, and restore the highway to its original condition, as appropriate.

Legal action must be taken if the encroachment is not removed. Notice should be served, usually under S143 or S149 of the Highways Act 1980, on the person having control or possession of the obstruction. Notice may be served by recorded delivery or by hand, preferably with witnesses present.

Following the expiry of any notice and time allowed for appeal, the Highway Authority may carry out any works that are necessary to return the ground to its original line, level and condition, and can recover the costs incurred. If such action has to be taken it must be carried out as a last resort, and preferably with a police presence.

S322 of the Highways Act 1980 describes the full procedure for the Service of Notices. These must be followed implicitly.

## 6 - Debris and Mud on the Highway

The county council considers that debris arising from road traffic collisions to be a highway hazard and the costs of its removal will, wherever possible, be recharged to the insurance companies of those parties involved in the collision. Oil and diesel spillages are included within such debris and the cost of clearing up will also be recharged where possible.

Deposits of mud and soil can cause danger and inconvenience to road users. This can be a problem when vehicles track mud from farmer's fields, landfill or construction sites adjoining the public highway. The deposits can lead to vehicles losing traction, and can lead to debris being thrown into the path of other vehicles or pedestrians. Where the deposits of mud in the highway is such as to constitute a hazard, the county council will take action in liaison with the Police, to obviate danger to users of the highway.

Ideally, an off-road wheel-wash facility should be installed. Adequate warning signs should be erected and maintained on the approaches to the entrances to such sites.

At sites where there are frequent vehicle movements, and mud is tracked onto the adjoining road network, the county council expects those responsible ensure the road surface is regularly and adequately cleaned.

If the highway authority becomes aware that significant or potentially dangerous amounts of mud or soil have been deposited on the adopted highway or footway, the parties responsible should be contacted by either the Highway Authority or the Police and instructed to clean the road immediately. If the problem persists, the county council will itself erect warning signs and serve notice under section 149 of the Highways Act 1980 also notifying the Police. The Council also has a statutory power to remove the nuisance and will seek to recover its costs from the person responsible

**Litter**

District Councils have a statutory duty under the Environmental Protection Act 1990 to keep adopted highways clear of litter and, as far as is practicable, clean. However, the highway authority also has a duty to keep the surface of a highway in a safe condition for users of the highway, and there can never be a perfect delineation of responsibilities between authorities.

The classification of fallen leaves is difficult. A deep accumulation of leaves can represent an obstruction and, once wet, fallen leaves can constitute a highway hazard. However, it could be argued that in the vast majority of cases the leaves should have been swept as litter before such conditions arise.

**Fly-Tipping**

The removal of fly-tipping is a District Council function. This includes builders waste deposited on the highway and "side-waste" not collected as part of household refuse

collections. In respect of hazardous materials, such as asbestos, the highway authority may need to take measures at the scene to ensure public safety before removal of the material by appropriate specialists, such as the Fire Authority.

## 7 - Statutory Undertaker's Works under New Roads and Street Works Act 1991

The overall principle behind the county council's policies is, wherever possible and practical, to minimise the duration of statutory undertaker's works. This will improve network availability by reducing the disruption and inconvenience inherent in statutory undertaker's works

Statutory Undertakers have a legal right to excavate in the highway to install, maintain and remove their apparatus. The conduct of this is regulated by the New Roads and Street Works Act 1991 (NRSWA), Transport Act 2000 and associated Regulations and Codes of Practice.

Section 50 of the Act also permits private builders to install, maintain or remove private apparatus such as sewers and drains in the highway under licence. The builder or person granted a Street Works licence becomes an Undertaker for the purposes of the New Roads and Street Works Act and therefore attracts the relevant duties and responsibilities imposed by the Act and associated secondary legislation and Codes of Practice.

Reinstatement of the highway is the responsibility of the Statutory Undertaker. The role of the county council is to monitor their performance within a prescribed inspection regime, but not to supervise the whole works.

The legal duty for the provision of a safe highway still resides with the highway authority, notwithstanding any other duties imposed upon Statutory Undertakers.

Under the Traffic Management Act, the county council also has a responsibility to co-ordinate all works in the highway to minimise inconvenience to residents and road users. Quarterly meetings are held with the Statutory Undertakers to aid co-ordination with the larger projects and the Council's own programmed works.

To facilitate co-ordination and inspection, works are notified in advance to the county council electronically via ETON (electronic transfer of notices) or a paper equivalent. The amount of notice can be a matter of hours or can be retrospective in the case of urgent or emergency works. In accordance with the Traffic Management Act, planned works will require three months' notice. The county council has powers to designate certain streets to restrict working hours or to require special procedures or materials to be used, for instance in conservation areas.

The Symology computer system is used in Lancashire to manage such works. The centrally administered system is accessed by local maintenance management offices that undertake inspections and day-to-day liaison with the statutory undertakers.

The performance of each Statutory Undertaker and their contractors is monitored and recorded. This includes accuracy and timeliness of the notices, the quality of the signing and guarding, the quality of the excavations and the quality of the reinstatements.

Utility work is subject to sample inspection, for which a fee is recoverable from the relevant undertaker. These inspections are to ensure that utilities work complies with national standards. Target levels of inspection are using a national formula to ensure that inspections are representative and fee income is maximised.

Signing and guarding of works should conform to the “Safety at Street works” Code of Practice. Utilities are required to implement the Code of Practice for the Reinstatement of Openings. There are other codes of practice covering co-ordination and inspections.

Section 74 of the Act imposes financial penalties on utilities that fail to comply with the requirements of the Act. The county council has appointed a Street Works Manager and additional staff to monitor statutory undertaker’s S74 performance, and charges are imposed as appropriate circumstances are identified and evidenced.

The performance standards that apply to the execution of the works themselves are set down in Regulations and Codes of Practice. These are nationally determined and the County Council cannot impose more onerous standards or grant relaxations.

Performance issues are raised with individual undertakers at local coordination meetings and the Lancashire Highways Authorities and Utilities Meeting.

Ironware comprising covers, gratings, frames and boxes set in carriageways, footways and cycle-tracks have the potential to compromise safety and serviceability and in certain cases cause noise and disturbance to local residents. Although responsibility for defective ironwork where this is part of the apparatus installed by a Utility may lie with that Utility, it must be emphasised that the county council is responsible for safety on the highway at all times and a notice to a Utility will not absolve this responsibility. Claims are often also pursued against the authority.

## 8 - Repairs to Private Streets

This section applies to all streets that are not highways maintainable at public expense, whether or not they are highways, and the term ‘private street’ has been used in this section for simplicity. Section 48 of the New Roads and Street Works Act 1991 defines a street as the whole or any part of any of the following, irrespective of whether it is a thoroughfare:

- Any highway, road, lane, footway, alley or passage, any square or court, and any land laid out as a way whether it is for the time being formed as a way or not.

A private street is defined by section 203 of the Highways Act 1980 as a street that is not maintainable at public expense. For more information regarding highways maintainable at public expense see the LCC Code of Practice on Highway Status and Adoption.

The highway authority is not under any statutory duty to maintain private streets. The highway authority only has a duty to maintain highways that either existed as highways before 31st August 1835 or has become a highway maintainable at public expense since that date via a formal legal process (see Highways Act 1980 S.36).

Neither the owners of the street, nor the owners of land having a right of access along the street, are under any automatic obligation to maintain the street. Such an obligation may exist in certain circumstances, for example:

- Where a maintenance obligation has been conferred upon a person to whom a right of access has been granted;
- Where maintenance obligations exist by virtue of management agreements.

An owner of a private street is generally considered to have a right to undertake repairs and make improvements to the street, provided he does not interfere with other rights of way.

A person with a private right of way, acquired either by grant or prescription, is generally considered to have a right to undertake repairs consistent with maintaining his right of way, but there is no right to undertake improvements such as would change the character of the street.

## 9 - Private Retaining Walls near Streets

Local authorities, i.e. District Councils, are empowered to act in accordance with the provisions of Section 167 of the Highways Act 1980 in respect of private retaining walls near a street where the wall is in such condition as to be liable to endanger persons using the street. Local authorities are also empowered to act pursuant to Sections 77 and 78 of the Building Act 1984 in respect of private walls and buildings considered dangerous. The Building Act empowers Local Authorities to carry out works at the property owner's expense to obviate danger to the public and these powers have traditionally been more widely used in respect of private retaining walls.

The Highway Authority, where S167 powers have not been exercised by the Local Authority, may request the Local Authority to exercise the powers and the Highway

Authority may act in default where the Local Authority refuse to comply with the request or fail to act within a reasonable time.

Section 167 applies to any length of a retaining wall (not being a wall for which the highway authority are responsible) any cross section of which is wholly or partly within 4 yards (3.66 metres) of a street and which is at any point of a greater height than 4 feet 6 inches (1.37 metres) above the level of the ground at the boundary of the street nearest that point. The Section does not apply to land owned by a transport undertaking where the land is primarily used by them for the purpose of their undertaking.

For procedures to determine whether a wall is maintainable by the Highway Authority see PART E – HIGHWAY INFRASTRUTURE MAINTENACE 6 – Highway Structures.

Where a private retaining wall is considered to be in such a condition as to be liable to endanger persons using a street, the following procedure will be adopted:

- If necessary, following a site inspection, work will be undertaken to make the site safe for highway users. Normally, such works will be the minimum necessary to obviate danger, but more extensive works e.g. the removal of debris, may be appropriate to alleviate obstruction and consequential congestion on more heavily trafficked routes;
- The relevant District Council will be requested to take action under the Building Act 1984 or Highways Act 1980 (Section 167) to require the owner of the wall to carry out works such as will remove the source of danger to users of the street. The District Council will be reminded that Section 167 applies to any reconstruction works undertaken pursuant to the Building Act 1984. The Highways Asset Manager requires to be informed of action undertaken in respect of private retaining walls near streets to enable a database of such structures to be maintained and updated;
- In the event that the District Council refuse to take action or fail to take action within a reasonable time, ownership of the wall will be established and the owner/occupier will be requested to take action
- If no action is taken, the owner/occupier will be warned of possible legal action under Section 167 and we be requested undertake repairs within 28 days;
- If no action is taken within the required period Legal Services will be requested to serve Notice in accordance with Section 167 of the Highways Act 1980.

## 10 - Vehicular Crossings

The provision and construction of vehicular crossings is regulated in accordance with Section 184 of the Highways Act 1980. Details of our Vehicular Crossing Code of Practice which sets out requirements for both applicants and the county council can be found here.

## 11 - Overhanging Vegetation, Dead or Diseased Trees and Hedges

Section 154 of the Highways Act 1980 gives competent authorities the power to serve notice on the owners of overhanging trees, hedges or shrubs or the occupier of the land on which they are growing.

Details of how we carry out tree inspections and deal with overhanging vegetation, dead or diseased trees and the serving of notices etc. is set out in various tree documents which can be viewed on our webpage here

Tree Safety Management Guidance which, when approved will be published on the Highway Asset Management webpage can be viewed here.

## 12 - Parking on Footways

Parking on footways will be regulated by Police enforcement or the introduction of a traffic regulation order, having regard to the availability of resources and the severity of inconvenience to pedestrians, wheelchair users, the visually impaired and other vulnerable user groups.

Bollards may be installed to prevent pavement parking and the over-riding of footways and verges:

- where Police enforcement or the introduction of a traffic regulation order is impractical, ineffective or undesirable, and;
- where damage has been caused to the surface of the highway or where damage to private property has occurred or is likely to arise as a consequence of not taking action to prevent over-riding

## 13 – Illegal and Unauthorised Signs

We will on safety grounds, and at other locations considered appropriate, remove illegal and unauthorised signs that are located within the highway boundary.

Where the placement of such signs causes or has the potential to cause an accident we may take legal action against the person(s) or organisation, where known, responsible for erecting the signs.

**Appendix 1**

# Scheme Prioritisation Strategy - Highway Capital Programme

## Introduction

As the number of schemes we would like to carry out across our footway and carriageway networks far exceeds the available budget, we have devised a strategy that enables us to assess each potential scheme in a structured, consistent and quality controlled manner using 'value management' criteria in line with the provisions of the WMHICoP.

The process has been developed by applying the principles contained in the TAMP, which identifies the key strategic priorities of the county council over the period 2015/16 to 2029/30, best practice guidance and in collaboration with other UK authorities.

The strategy is written in accordance with the Highways Maintenance Efficiency Programme guidance, lifecycle planning, whole life costs and deterioration modelling It is based on managing our assets holistically which recognises the relative importance each asset group contributes towards delivering an effective transport system and that with limited budgets, schemes should be selected and prioritised on a needs basis and driven by assessment of network condition and a number of strategic significance indicators.

The aim of this strategy is to

- keep the carriageway and footways safe for passage
- reduce the amount of defects on the carriageway and footway networks
- reduce the number of claims against the authority
- reduce the number of accidents
- reduce the future levels of revenue funding for reactive maintenance
- maintain a steady condition or improving the condition in line with the service standards detailed in the TAMP

This will be achieved by:

- prioritising schemes on the strategic network
- investing in preventative maintenance - this is a more economic treatment to reduce the rate of deterioration of roads and footways
- investing in locally accessible green infrastructure that helps to make cycling and walking to work, school and local services a practical safe choice
- investing in our town and city centres

## Overall Investment Strategy between 2015/16 and 2029/30

A fundamental principle of this TAMP is to move away from the philosophy of tackling 'worst first only' and adopting a new approach whereby the underlying condition of the

network is addressed. We believe this will enable us to make more efficient use of our resources.

| Outline Capital Allocations 2015/16 to 2029/30 at 2014 Values | | | | |
|---|---|---|---|---|
| **Asset Group** | **Allocations 2014/15** | **Phase I 2015/16 - 19/20** | **Phase 2 2020/21 - 24/25** | **Phase 3 2025/26 - 29/30** |
| A, B and C Roads | £4.8m | **£8m** | £3m | £3m |
| Footways | £2.1m | **£3m** | £1m | £1m |
| Rural Unclassified Roads | £1.3m | £2.2m | **£5.5m** | £2m |
| Moss Roads | Nil | £0.5m | £0.7m | £1m |
| Residential Unclassified Roads | £1.9m | £2m | **£5.5m** | £2m |
| Bridges | £5.7m | £3m | £3m | **£6m** |
| Retaining Walls | £0.9m | £0.5m | £0.5m | £0.5m |
| Street Lighting | £1.7m | £2m | £2m | **£4m** |
| Drainage | £1.2m | £2m | £2m | £3m |
| Structural Defects | £1.5m | £1.5m | £1.5m | £1.5m |
| Traffic Signals | £0.3m | £0.3 | £0.3 | £0.3 |
| **Total** | **£21.4** | **£25m** | **£25m** | **£24.3 m** |

**Scheme Identification**
Schemes are identified from a number of sources including:

- analysis of condition data collected by SCANNER or CVI surveys which places sections of road into various 'condition bands'
- locations identified by LCC engineers and other officers
- dangerous defect data from the Highway Safety Inspections
- VIP queries and requests for information
- enquiries from the general public

This information is imported into various highway asset management software packages so that a range of prioritising factors can be applied. Each potential scheme is scored against the appropriate weighting factor, to show transparency and to evidence that scheme selection has not been influenced or favoured by other 'outside factors. In addition, we carry out deterioration modelling of all proposed carriageway / footway schemes to help identify preventative treatments and optimum treatment times.

**Capital programme prioritisation methods**
Schemes are prioritised according to:

**a) Condition**
Objective condition as collected by either SCANNER or Coarse Visual Inspection (CVI) surveys. These place sections of road into various 'condition bands' which allows the material lifecycle and deterioration rate to be identified. This information is imported into

mapping software so that the condition of the whole network can be viewed. In addition another layer is created within the mapping software which shows the number and extent of defects that have been brought to our attention from a variety of sources including Highway Safety Inspections, specialist inspections, public enquiries, Report It, public reported defects, claims and other defects. These two mapping layers are overlapped so that 'overall' condition of the road and footway network at any given location can be viewed and determined.

**b) The Strategic Network**

Each potential scheme is scored according to the strategic importance it has on our ability to maintain a resilient network in Lancashire. As part of this process a number of weighting factors have been developed which are then applied to each potential scheme. The factors are reviewed on a regular basis and their weighting is amended as considered appropriate. In addition, different factors and weightings apply to different schemes and to different road classifications.

The Priority network is comprised of:

a) Primary and secondary gritting routes which take into account the following critical economic elements:

- Main distributors between settlements
- Schools
- Ambulance, Fire and Police Stations
- Hospitals and A&E
- Crematoria and Cemetery's
- Nuclear Sites
- Lancashire WtWW (Water to Waste Water)
- Retails Cores
- COMAH Sites (Control of Major Accident Hazards)
- Prisons

b) Bus routes and bus stops
c) Higher Risk Routes
d) Defra Noise Areas
e) Abnormal load routes
f) Diversion routes

**Weighting Factors**

The capital allocation for carriageway and footway schemes is currently split into a number of separate scheme types as shown below:

- A, B & C roads - resurfacing
- A, B & C roads - surface dressing

- Urban unclassified roads - resurfacing
- Urban unclassified roads - surface dressing
- Rural unclassified roads - resurfacing
- Rural unclassified roads - surface dressing
- Footway – reconstruction
- Footway - preventative

The scheme score is calculated by multiplying the number of occurrence of a condition indicator e.g. pothole by a factor determined by its significance on the impact on the network either in terms of the indication of condition or strategic significance. The weighing factors for each scheme type are detailed below:-

**A, B, C Roads - Resurfacing**

| Condition Indicators | Score | % |
|---|---|---|
| Potholes | 30 | 8 |
| Public Complaints | 20 | 5 |
| Failed Patches | 50 | 13 |
| Public Reported Complaints, that met intervention level | 5 | 1 |
| Special Inspections | 30 | 8 |
| Red Scanner | 40 | 11 |
| Amber Scanner | 5 | 1 |
| Claims | 40 | 11 |
| Other Defects | 20 | 5 |
| Condition Survey Grade 5 | 80 | 21 |
| Condition Survey Grade 4 | 60 | 16 |

| Strategic Significance | Score | % |
|---|---|---|
| Primary Gritting | 50 | 9 |
| Secondary Gritting | 25 | 5 |
| Bus Routes | 100 | 19 |
| High Risk Routes | 150 | 28 |
| DEFRA Noise Areas | 5 | 1 |
| Abnormal Loads | 100 | 19 |
| Diversion Routes | 100 | 19 |

**A, B, C Roads - Surface Dressing**

| Condition Indicators | Score | % |
|---|---|---|
| Potholes | 30 | 8 |
| Public Complaints | 20 | 6 |
| Failed Patches | 50 | 14 |
| Public Reported Complaints, that met intervention level | 5 | 1 |
| Special Inspections | 30 | 8 |
| Red Scanner | 5 | 1 |
| Amber Scanner | 40 | 11 |
| Claims | 40 | 11 |
| Other Defects | 20 | 5 |
| CVI - Grade 3 | 60 | 16 |
| CVI - Grade 4 | 40 | 11 |
| CVI - Grade 2 | 30 | 8 |

| Strategic Significance | Score | % |
|---|---|---|
| Primary Gritting | 50 | 9 |
| Secondary Gritting | 25 | 5 |
| Bus Routes | 100 | 19 |
| High Risk Routes | 150 | 28 |
| DEFRA Noise Areas | 5 | 1 |
| Abnormal Loads | 100 | 19 |
| Diversion Routes | 100 | 19 |

### Unclassified Urban Carriageways - Resurfacing

| Condition Indicators | Score | % |
|---|---|---|
| Potholes | 10 | 3 |
| Public Complaints | 20 | 6 |
| Failed Patches | 50 | 15 |
| Claims | 50 | 15 |
| Special Inspections | 40 | 12 |
| Public Complaints, that met intervention level | 20 | 6 |
| CVI - Grade 5 | 80 | 25 |
| CVI - Grade 4 | 60 | 18 |

| Strategic Significance | Score | % |
|---|---|---|
| Primary Gritting | 50 | 16 |
| Secondary Gritting | 25 | 8 |
| Taxi Ranks | 15 | 5 |
| Bus Routes Stops | 100 | 33 |
| DEFRA Noise Areas | 15 | 5 |
| Diversion Routes | 100 | 33 |

### Unclassified Urban Carriageways – Surface Dressing

| Condition Indicators | Score | % |
|---|---|---|
| Potholes | 10 | 3 |
| Public Complaints | 20 | 6 |
| Failed Patches | 50 | 16 |
| Claims | 50 | 16 |
| Special Inspections | 40 | 12 |
| Public Complaints, that met intervention level | 20 | 6 |
| CVI Grade 3 | 60 | 19 |
| CVI Grade 4 | 40 | 13 |
| CVI Grade 2 | 30 | 9 |

| Strategic Significance | Score | % |
|---|---|---|
| Primary Gritting | 50 | 12 |
| Secondary Gritting | 25 | 6 |
| Taxi Ranks | 15 | 5 |
| Bus Routes stops | 100 | 23 |
| DEFRA Noise Areas | 5 | 5 |
| Diversion Routes | 100 | 23 |

### Rural Unclassified Carriageways - Resurfacing

| Condition Indicators | Score | % |
|---|---|---|
| Potholes | 10 | 3 |
| Public Complaints | 20 | 6 |
| Failed Patches | 50 | 15 |
| Claims | 50 | 15 |
| Special Inspections | 40 | 12 |
| Public Complaints, that met intervention level | 20 | 6 |
| CVI Grade 4 | 60 | 18 |
| CVI Grade 5 | 80 | 25 |

| Strategic Significance | Score | % |
|---|---|---|
| Primary Gritting | 50 | 17 |
| Secondary Gritting | 25 | 9 |
| Bus Stops | 100 | 35 |
| DEFRA Noise Areas | 15 | 5 |
| Diversion Routes | 100 | 34 |

### Rural Unclassified Carriageways – Surface Dressing

| Condition Indicators | Score | % |
|---|---|---|
| Potholes | 10 | 3 |
| Public Complaints | 20 | 7 |
| Failed Patches | 50 | 16 |
| Claims | 50 | 17 |
| Special Inspections | 40 | 13 |
| Public Complaints, that met intervention level | 2 | 6 |
| CVI Grade 3 | 60 | 20 |
| CVI Grade 4 | 40 | 13 |
| CVI Grade 2 | 30 | 10 |

| Strategic Significance | Score | % |
|---|---|---|
| Primary Gritting | 50 | 12 |
| Secondary Gritting | 25 | 6 |
| Bus Routes | 100 | 23 |
| DEFRA Noise Areas | 5 | 5 |
| Diversion Routes | 100 | 23 |

### Footway Reconstruction

| Condition Indicators | Score | % |
|---|---|---|
| Pothole Counts | 15 | 4 |
| Slab Profile | 15 | 4 |
| Public Complaints | 20 | 6 |
| Failed Patches | 30 | 9 |
| Block Profile | 15 | 4 |
| Claims | 50 | 15 |
| Trip Hazard on Black Top | 15 | 4 |
| Public Reported Complaints, that met intervention level | 50 | 14 |
| FNS Grade 6 | 80 | 23 |
| FNS Grade 5 | 60 | 17 |

| Strategic Significance | Score | % |
|---|---|---|
| Footway Gritting Route | 50 | 14 |
| Bus Stops | 80 | 23 |
| Taxi | 50 | 14 |
| Primary | 60 | 17 |
| Secondary | 30 | 9 |
| Crossing Points | 80 | 23 |

### Footway - Preventative

| Condition Indicators | Score | % |
|---|---|---|
| Pothole Counts | 15 | 6 |
| Public Complaints | 20 | 8 |
| Failed Patches | 15 | 6 |
| Claims | 50 | 21 |
| Trip Hazard on Black Top | 15 | 6 |
| Public Reported Complaints, that met intervention level | 30 | 12 |
| FNS Grade 4 | 60 | 25 |
| FNS Grade 3 | 40 | 16 |

| Strategic Significance | Score | % |
|---|---|---|
| Footway Gritting Route | 50 | 14 |
| Bus Stops | 80 | 23 |
| Taxi | 50 | 14 |
| Primary | 60 | 17 |
| Secondary | 30 | 9 |
| Crossing Points | 80 | 23 |