



HIGHWAY
MAINTENANCE
POLICY &
STRATEGY

**LEICESTERSHIRE COUNTY COUNCIL
HIGHWAY MAINTENANCE POLICY AND STRATEGY****CONTENTS**

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SECTION 1 SUMMARY

1.1 Structure of the Document

- 1.1.1** This document should be read in conjunction with the National Code of Practice for Highway Maintenance Management “Well Maintained Highways” (the Code)
- 1.1.2** The Code has eighteen sections and this document has been written with the section titles mirroring those in the National Code to make it easy to cross-reference between both documents and to make amendments if alterations are made to the National Code
- 1.1.3** **Sections 1 – 4** cover the summary, introduction to the code, its scope and purpose, with links to complementary advice

Sections 5 –7 cover policy and legal framework for highway maintenance

Sections 8 – 14 cover the principles for developing strategy and network hierarchy. Standards for inspections and condition surveys, investigatory levels, benchmarking and assigning priorities. Guidance on planning for winter service and emergencies.

Sections 15 – 18 give guidance on procurement, financial management, sustainability and monitoring.

1.2 Objectives of the Code

- 1.2.1** To encourage the development, adoption and regular review of the policies for highway maintenance, consistent with the wider principles of integrated transport, sustainability and best value.
- 1.2.2** To encourage a focus on the needs of users and the community and their active involvement in the development and review of policies, priorities and programmes.
- 1.2.3** To encourage harmonisation of highway maintenance practice and standards where this is consistent with users expectations, whilst retaining reasonable diversity consistent with local choice.
- 1.2.4** To encourage the adoption of an efficient and consistent approach in the collection, processing and recording of the highway inventory, highway condition and status information for the purpose of both local and national assessment, management and performance monitoring.
- 1.2.5** To encourage the adoption and regular review of a risk management regime in the determination of local technical and operation standards.

SECTION 2 – INTRODUCTION

- 2.1** The Department of Highways, Transportation and Waste Management (the Department) has prepared this document following the framework of guidance, standards and performance management incorporated in the National Code of Practice for Maintenance Management “Well Maintained Highways” July 2005 (the National Code). The object of the National Code is to encourage co-ordination and consistency in the delivery of local highway maintenance services to facilitate sharing of developing best practice, by:-
- a) Following closely the principles of Best Value.
 - b) Meeting the needs of users and the community rather than the convenience of service providers.
 - c) Facilitating the conduct of Best Value reviews.
 - d) Providing a stimulus to the pursuit of continuous improvement.
- 2.2** The importance of highway maintenance and its relevance to the integrated transport agenda has never been more widely recognised. The consequences of under-investment over many years have forced highway authorities to focus on short term repairs in order to ensure safety for all highways users. The progressive deterioration has led to a backlog of renewal work at increased cost.
- 2.3** The government’s 10-year plan stated that additional funding would be made available for local highway maintenance to rectify the backlogs in repairing carriageways, footways and bridges. This extra funding was first allocated in the 2001/02 Local Transport Plan (LTP) settlement when the government pledged to rectify the backlog of repairs by 2010. Both the Leicestershire Community Strategy and the Authority’s Medium Term Corporate Strategy provide a commitment to “halt deterioration of main roads by 2004 and thereafter work to remove the backlog of worn out carriageways by 2010”.
- 2.4** The strong political and public support for investment in highway maintenance required an assurance that the service is integrated with the overall transport policy. This Policy, therefore, needs to:-
- a) be flexible to respond and add value to a wide range of circumstances whilst retaining the level of consistency expected by users, and
 - b) satisfy the principles of Best Value by challenging present practice, comparing outcomes and performance, consulting service users and testing competitiveness to secure continuous improvement.

SECTION 3 – PURPOSE AND SCOPE

Objectives of the New Code of Practice

- 3.1** The purpose of the new Code of Practice is to take forward the objectives of the previous Code, but set them in the new context within which highway maintenance is now required to be delivered.
- 3.2** The Code now recognises the need for local flexibility by satisfying the needs of users and has modified and re-ordered the previous Code's five objectives, which are now:-
- a) To encourage the development, adoption and regular review of policies for highway maintenance, consistent with the wider principles of integrated transport, sustainability and Best Value.
 - b) To encourage a focus on the needs of users and the community, and their active involvement in the development and review of policies, priorities and programmes.
 - c) To encourage harmonisation of highway maintenance practice and standards where this is consistent with users expectations, whilst retaining reasonable diversity consistent with local choice.
 - d) To encourage the adoption of an efficient and consistent approach in the collection, processing and recording of highway inventory, highway condition and status information for the purpose of both local and national needs assessment, management and performance monitoring.
 - e) To encourage the adoption and regular review of a risk management regime in the determination of local technical and operational standards.
- 3.3** The Code has been used as a benchmark to develop this Highway Maintenance Policy and Strategy Document.

Highway Maintenance Strategy

- 3.4** The main purpose of highway maintenance is to maintain the highway network for the safe and convenient movement of people and goods which reflects the economic and social value both locally and nationally.
- 3.5** This purpose needs to be set within the wider contexts of integrated transport, Best Value and the corporate vision of the Authority with the objectives of delivering:-
- a) Network safety**
 - i) Complying with statutory obligations
 - ii) Meeting users' needs.

b) Network Serviceability

- (i) Ensuring availability
- (ii) Achieving integrity
- (iii) Maintaining reliability
- (iv) Enhancing quality

c) Network Sustainability

- (i) Minimising cost over time
- (ii) Maximising value to the community
- (iii) Maximising environmental contribution.

3.6 Highway maintenance is a wide-ranging function which can be broken down into six activities as follows: -

Reactive – Responding to inspections, reports or emergencies.

- All elements – sign and make safe
- All elements – provide initial temporary repair
- All elements – provide permanent repair.

Routine – Regular consistent schedule for patching, cleansing, landscape maintenance and other activities.

- Carriageways, footways and cycleways – minor works and patching
- Drainage systems – cleansing and repair
- Embankments and cuttings – stability
- Landscaped areas and trees – management
- Fences and barriers – repair
- Traffic signs and bollards – cleansing and repair
- Road markings and studs – replacement
- Lighting installations – cleansing and minor works.

Programmed – Planned schemes primarily of resurfacing, reconditioning or reconstruction.

- Carriageways – minor works, resurfacing or reconstruction
- Footways – minor works, resurfacing or reconstruction
- Cycleways – minor works, resurfacing or reconstruction.

Regulatory – Inspection and regulating the activities of others

- Highway register
- Management of utilities
- Licences for highway occupation
- Other regulatory functions – encroachment, illegal signs etc.

Winter Service

- Pre-treatment
- Post-Treatment
- Clearance of snow

Weather and other Emergencies

- Flooding
- High winds
- High temperatures
- Other emergencies

SECTION 4 – COMPLEMENTARY ADVICE

4.1 This document does not provide a detailed technical reference for all aspects of highway maintenance or repeat guidance available elsewhere. Areas referred to but not covered in the National Code include:

- Network management
- Highway improvement and new construction
- Maintenance of bridges and structures
- Installation and maintenance of highway lighting.
- Management of utilities.
- Maintenance of public rights of way
- Management of street cleansing.

4.2 Further advice and guidance on areas not covered in detail can be gathered from the list of publications provided in Appendix K in the National Code.

SECTION 5 – POLICY FRAMEWORK

5.1 The Code states that the requirement for policy integration is a fundamental principle of the duty of Best Value. It requires authorities to define, in consultation with their community, overall strategic objectives which may be unrelated to traditional service areas, thus creating a stimulus for policy integration.

5.2 The County Council's Medium Term Corporate Strategy sets out the following Corporate Objectives:-

- Working with Partners to Deliver Quality and Responsive Services
- Achieving Excellence in Education and Learning.
- Improving Social Care and Support for Vulnerable People.
- Creating a Better Transport System.
- Rising to the Challenge on Waste.
- Seeking a Safer County.

5.3 Highway maintenance has the potential to contribute to achieving these objectives but contributes mainly to "Creating a Better Transport System" by:-

- Identifying key areas of interaction between highway maintenance and the corporate objectives.
- Maximising so far as is practicable the contributions towards them.
- Ensuring that potential areas of conflict are resolved.

5.4 This is the regime of policy integration within which highway maintenance must operate and this theme is continued in the Government's 10-year Plan for Transport. A resume of the Plan identifying key priorities, challenges and targets is given in Section 5 of the Code.

5.5 This Policy has therefore been developed to:-

- Provide a consistent standard of service on similar categories of highway.
- Consider the implications for all road users, particularly vulnerable road users such as people with disabilities, cyclists and motorcyclists.

5.6 Planning for highway maintenance should take into account the opportunities to incorporate added value to the safety, priority, integrity or quality of:-

- Footways and cycleways including crossing facilities.
- Horse riding and crossing facilities.
- Facilities for and reliability of public transport.
- Facilities for freight movement.

and wherever possible take into account all elements of local transport strategy including: -

- Accident reduction and prevention programmes
- Safer routes to schools
- Routes to bus and rail stations, airports and other public transport facilities.
- Quality bus and freight partnerships

- Urban and rural regeneration programmes.

5.7 Planning and budgeting for highway maintenance must also recognise that integrated transport schemes, especially in urban areas, are likely to result in a more complex and diverse street scene. A wider range and increase in the number of road signs, road markings and use of coloured surfaces will be necessary for regulation and management. The overall maintenance requirement to keep these more complex arrangements in good order will have a significant impact on highway maintenance requirements.

SECTION 6 – CONTEXT OF BEST VALUE

- 6.1** From 1st April 2000 the Government placed a duty of Best Value on local authorities, establishing new arrangements to fund, procure and deliver services to:
- Ensure that services are responsive to the needs of citizens not the convenience of service providers.
 - Secure continuous improvement in the exercise of all functions undertaken by the authority having regard to a combination of Economy, Efficiency and Effectiveness.
- 6.2** Best Value authorities need to demonstrate Best Value through a challenging process involving:
- Best Value reviews of services.
 - Publishing a Best Value Performance Plan.
 - Independent assessment.
- 6.3** Each Best Value review has to follow the process of:
- Challenging why and how the service is being provided.
 - Comparing performance with others.
 - Embracing fair competition as a means of securing economic, efficient and effective services.
 - Consulting with users and the wider community.
- 6.4** The Department has undergone two Best Value reviews which were inspected by the Audit Commission during summer 2002, the main one being the Highway Network Management Review.
- 6.5** This Review was carried out in 2001/02. The scope of the review comprised the complete range of highway network management functions and included:
- Transportation Policy and Strategy.
 - Development of Highway Network Improvements.
 - Traffic Management.
 - Travel and Road Safety Management.
 - Street Lighting.
 - Highway Development Control.
 - Highway Maintenance and Administration.
- 6.6** The review was overseen by a Member Panel and resulted in an implementation plan comprising 65 recommendations intended to provide service improvement. Many of the recommendations resulted from information provided by users, stakeholders and employees. The service was inspected by the Audit Commission in June 2002 and their judgement was “good” (III) with “promising prospects for improvement” (IIII). The Audit Commission also recommended that a Communication Plan for the service be developed to establish service delivery

outcomes that more clearly demonstrate the benefits to customers with measurable targets. The implementation plan was approved by the County Council in July 2002

6.7 Significant progress has been made in implementing the recommendations for example: -

- The launch of a single free phone number “Roadline” 0800 62 62 03 on the 1st April 2003 to improve customer contact arrangements.
- Extending the weekly “Whats on” giving information on Roadworks to Parish Councils.
- Local Member Forums were established in each District during 2003 to involve both County and District Members in the local issues.
- The implementation of a new Customer Care module as the first stage of introducing a computerised Highway Management System throughout the County.
- Improvements to highway defect and street lighting reporting through the internet and at five service shops.
- Production of a Highway Charter

6.8 The remaining review actions are now all incorporated in the Highways and Transportation Service Plan or Group Local Actions Plans and monitored by the Strategic Performance Improvement Group.

SECTION 7: LEGAL FRAMEWORK

- 7.1** Leicestershire County Council is the Highway Authority for all highways in the County with the exception of motorways and trunk roads for which the Secretary of State for Transport is the Highway Authority.
- 7.2** Much of highway maintenance activity is based upon statutory powers and duties contained in legislation and precedents developed over time as a result of case law. The Code recommends that it is crucially important that all those involved in highway maintenance, including Members, have a clear understanding of their powers and duties, and the implications of these.
- 7.3** Even in the absence of specific powers and duties, highway authorities have a general duty of care to users and the community to maintain the highway in a condition fit for purpose, as far as is reasonably practicable.
- 7.4** In addition to the duty of care there are a number of pieces of legislation which provide the basis for powers and duties relating to highway maintenance that are worthy of specific reference:
- Highways Act 1980
 - Section 41 – imposes a duty to maintain a highway which is maintainable at public expense.
 - Section 41 (1A) – imposes a duty to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice.
 - Section 56 – any person may apply to the Courts for an order requiring the Highway Authority to take remedial action within a reasonable period, specified by the Court.
 - Section 58 – provides for a defence against action relating to alleged failure to maintain on grounds that the authority has taken such care as in all the circumstances was reasonably required to secure that the part of the highway in question was not dangerous for traffic.
 - The Local Authorities (Transport Charges) Regulations 1998
 - Provides a power to charge for a number of regulatory activities including skip, hoarding or scaffolding licences and the clearance of accident debris.
 - The New Road and Street Works Act 1991
 - Section 53 – highway authorities shall keep a street works register for each street for which they are responsible showing information about current or proposed works.
 - Section 56 – highway authorities have the power to give directions as to the timing of undertakers work that are likely to cause serious disruption to traffic.

- Section 59 – highway authorities have a duty to co-ordinate works to minimise inconvenience and disruption, protect the structure of the street and integrity of apparatus and ensure safety for all users.
- Section 66 – highway authorities can issue a notice to an undertaker who has failed to complete work within a reasonable period requiring him to take such reasonable steps as specified to mitigate or discontinue an obstruction that is causing unnecessary delay.
- Section 74 – as amended by the Transport Act 2000 requires an undertaker executing works in a maintainable highway to pay a charge where the work is unreasonably prolonged.
- Road Traffic Act 1988
 - Imposes a duty on highway authorities to promote road safety, including accident studies, and to take such measures to reduce the possibilities of accidents when new roads come into use.
 -
- The Traffic Management Act 2004
 -
 - Imposes a duty of network management, principally securing the expeditious movement of traffic including avoiding, eliminating or reducing disruption.
 -
- The Transport Act 2000
 - Highway authorities may designate any road as a quiet lane or home zone.
- Wildlife and Countryside Act 1981
 - Provides a framework of legislation relating to environmental and countryside issues with which highway maintenance operations must comply.
- Environmental Protection Act 1990
 - Provides the statutory basis for other environmental issues affecting all County Council land and property with which highway maintenance operations must comply. It also deals with District Council responsibilities and duty to keep all highways clean and free from litter and refuse.
- Noxious Weeds Act 1959
 - Places a responsibility on highway authorities to take action to inhibit the growth and spread of injurious weeds growing in the highway.
- Health and Safety at Work Act 1974, Management of Health and Safety at Work Regulations 1992 and Construction (Design and Management) Regulations 1994
 - Provides for a requirement to carry out work in a safe manner and establish arrangements for the management of construction work.

SECTION 8 - STRATEGY AND HIERARCHY

8.1 The Network Hierarchy and inventory forms the base for a coherent and consistent maintenance strategy. It forms the link between maintenance policy and implementation and its establishment will assist in : -

- Determining appropriate inspection frequencies.
- The allocation of resources and maintenance priorities
- Decisions regarding safety issues, e.g. Winter Service.

Carriageway Hierarchy

8.2 The Carriageway Hierarchy shown in Table 1 has been developed, in line with the National Code, to reflect the actual use of each road, and its associated maintenance standards, within the network. These are not necessarily reflected by the road's formal classification (A road, B road etc).

Footway and Cycleway Hierarchy

8.3.1 As with carriageways, the footway and cycleway hierarchies, shown in Tables 2 and 3, are based on usage and maintenance standards are not necessarily reflected by the road classification. The importance of particular footways/ cycleways may well conflict with both the road classification and carriageway hierarchy.

8.3.2 Public Rights of Way

Leicestershire has more than 3000 kilometres of footpaths, bridleways and byways. This network provides local routes linking communities and giving access to shops, schools and other facilities. We are currently producing a rights of way improvement plan. The plan aims to develop and manage a rights of way network that meets the current and future needs of the local community, it will also provide a high quality rights of way service, including working effectively with other agencies and authorities. The plan has been written in line with the principles set out in the new code of practice.

The work on the improvement plan, carried out in conjunction with LTP2, has identified an initial set of schemes that reflect work on the shared priorities and wider quality of life issues. We are taking this work forward through a rolling programme of inspections and works, focussing on these urban and close-to-urban areas. Each inspection reveals firstly the requirements for maintenance – particularly repairs to surfacing, stiles and signing, the removal of barriers and clearance of vegetation. We also use the inspections to help identify where improvements should be made, particularly cases where hard surfacing is justified to make rights of way suitable for all-year-round access use.

Maintenance of the Hierarchies

- 8.4** Hierarchies of publicly maintainable highways will be reviewed and updated annually by the Group Manager – Network Management. It is vital that the hierarchy is a living document and reviewed to reflect changes in the network characteristics. The hierarchy must always reflect the actual network usage rather than that expected when the hierarchy was defined. It must take into account changes in the network, for example reclassifications, developments and changes in traffic/ driving patterns and standards of maintenance. Maps detailing the carriageway and footway hierarchies are produced by the Network Management Group and made available on the LCC intranet. These will also be available on the County Council website in due course.
- 8.5** Feedback from Area staff, and other stakeholders, is vital to maintaining an up to date Hierarchy and inventory that accurately reflects the nature and use of the highway network. Requests, or suggestions, for changes are investigated by the Highway Management Group. Any change of hierarchy grouping from the initial road classification will have to be justified. A traffic count will be undertaken to determine the 24hr Annual Average Daily Traffic (AADT) to determine if it meets the traffic flow criteria and any other contributory factors will be documented.
- 8.6** Any changes to the footway and cycleway hierarchy will follow the same principle as stated in 8.5.

Network Inventory

- 8.7** Critical to the effective management of the network is the need to hold information on all aspects of the highway network, including its condition and an inventory. The Council currently operates several inventory based systems which are routinely updated, this allows decisions for highway maintenance investments, programmes of works etc. to be made on a rational structured and consistent basis. Also bids, through the LTP, to the Department for Transport (DfT) for Local Transport Capital Finance are made using supporting data from these systems.

Table 1 - Carriageway Hierarchy

| Category | Hierarchy Description | Type of Road (General Description) | Detailed Description |
|----------|---------------------------------|---|---|
| 1 | Motorways | Motorway.* | N/A |
| 2 | Strategic Routes | Trunk Roads* and Primary A Roads. | Routes between Primary Destinations, for fast moving long distance traffic in rural areas where speed limits are generally in excess of 40 mph, and in urban areas the most important traffic links with more than a local significance. |
| 3a | Main Distributor | Non primary A Roads and important/ Heavily Trafficked B Roads. | Routes between Strategic Routes and linking urban centres to the Strategic Network, with relatively short origins and destinations. In urban areas the speed limits are usually 40 mph or less. 3a Heavily Trafficked B Road:- Total / HGV Urban >30,000 / 1500 Rural >12,000 / 1000 |
| 3b | Secondary Distributor | B Roads and Heavily Trafficked C Roads. | In rural areas these roads are HGV routes and link the larger villages to the Strategic/ Main Distributor Network. In urban areas these roads usually have a 30 mph speed limit and high levels of pedestrian usage. 3b Heavily Trafficked C Road:- Total / HGV Urban >20,000 / 300 Rural > 7,000 / 150 |
| 4a | Locally Important Roads | Routes linking into the main/ secondary distributor network, which are normally C Class Roads and have greater local significance in rural areas, plus heavily trafficked unclassified roads. | In rural areas these roads provide inter village links and connect smaller villages and industrial estates (HGV Generators) to the distributor network. In urban areas they are residential or industrial interconnecting roads, usually with 30 mph speed restriction. 4a Heavily Trafficked U/C Road:- Total / HGV Urban >15,000 / 150 Rural >5000 / 100 |
| 4b | All other <u>metalled</u> Roads | All other C roads and the majority of the unclassified network. | In rural areas these roads serve smaller villages and provide access to a limited number of properties and land. Many are single lane only and unsuitable for HGV traffic. In urban areas they are predominately residential in nature with 30 mph speed restriction. |

NOTES

- 1)* Maintenance of Motorways and Trunk Roads in Leicestershire is the responsibility of the Highways Agency's managing agents.
- 2) Traffic Figures are AADT = Annual Average Daily Traffic.
- 3) Urban defined as 40 mph or less speed limit.
- 4) The plans maintained by the Network Management Group take precedence over the above text descriptions and are to be read as the definitive plans of the network.
- 5) Un-metalled Roads – These will be inspected on an ad hoc basis and in response to customer reports.

Table 2 - Footway Hierarchy

| Category Number | Category Name | Description |
|-----------------|--------------------------------|---|
| 1a | Prestige Walking Zones | Not applicable in Leicestershire |
| 1. | Primary Walking Route | Main shopping areas which attract visitors from outside the vicinity. |
| 2. | Secondary Walking Route | The shopping areas of larger villages, plus links between primary footways, car parks , rail & bus stations, business and industrial centres and larger schools (> 500 pupils) from main shopping area. |
| 3. | Link Footways | These provide a link from local access footways to local amenities such as surgeries, village halls, shops, public houses, leisure centres and sports facilities, schools (100 – 500 pupils), visitor centres, hospitals, clinics and care homes etc. All flagged footways not included in Group 1 or 2. |
| 4 | All Other Footways | All footways not included in category 1a, 1, 2 and 3. |

NOTES:

1)Metalled public rights of way in urban areas are included in the relevant hierarchy category, depending on their function and use.

2)The plans maintained by the Network Management Group take precedence over the above text descriptions and are to be read as the definitive plans of the network.

3)Non metalled urban footways (urban grassed footways)

This footway type will be inspected annually to assess the overall condition and safety. Defects identified by the inspecting officer as being hazardous will be recorded and appropriate remedial action taken.

Defect definition

- Hazardous – Likely to result in serious injury to people.
- Obstruction – Blocks use of a path
- Inconvenience – Minor problem that does not stop a person using the path

Table 3 - Cycleway Hierarchy

| Category | Description |
|----------|--|
| A | Cycle lane forming part of the carriageway, commonly 1.5 metre strip adjacent to the nearside kerb Cycle gaps at road closure point (exemptions for cycle access) |
| B | Cycle track (a metalled highway route for cyclists, not forming part of the carriageway). This includes shared cycle/pedestrian paths, either segregated by a white line or other physical segregation, or unsegregated. |
| C | Metalled cycle trails, leisure routes through open spaces where, exceptionally, these are publicly maintainable highways. |

SECTION 9 - INSPECTION ASSESSMENT AND RECORDING

9.1 An effective regime of inspection, assessment and recording is a crucial component of highway maintenance. Inspections and assessment surveys can be considered in the following categories: -

- **Safety Inspections**
- **Service Inspections**
- **Structural Condition Surveys**

9.2 All information obtained from the inspections and assessments surveys, together with the nature of the response, including nil returns, should be recorded consistently to facilitate analysis. Safety and Service Inspections are the responsibility of the Area Managers. Structural Condition Surveys are the responsibility of the Group Manager – Network Management.

9.3 Safety Inspections

9.3.1 These inspections are designed to identify all defects likely to create danger or serious inconvenience to users of the network or the wider community. Such defects include those that will require urgent attention (within 24 hours) as well as those where the locations and sizes are such that longer periods of response would be acceptable. A robust safety inspection regime will support a defence under Section 58 of the Highways Act as referred to in Section 7 of this document. The County Council's **Highway Inspections Operational Manual** is the procedural guide for all employees involved in the inspection of Leicestershire's highway network. It covers highway safety inspections and does not attempt to address more detailed inspections and condition surveys. This guide does not cover inspections of Public Rights of Way (generally rural footpaths and bridleways as shown on the Definitive Map record) other than metalled ways in urban areas.

9.3.2 Carriageway inspections will normally be undertaken in a slow moving vehicle, using a two-person operation. Footway inspections are generally undertaken on foot. Cycleways that form part of the carriageway will be covered when the carriageway is inspected, cycleways that are remote from the carriageway will be inspected on foot or bicycle. Additional inspections may be necessary in response to user or community concern, as a result of incidents or extreme weather conditions, or in the light of monitoring information.

9.3.3 The safety inspection regime covers:-

- Frequency of inspection
- Items for inspection
- Degree of deficiency
- Nature of response

9.3.4 The regime has been developed in accordance with the principles of risk assessment and provides a practical and reasonable approach to the risks and potential consequences identified. The inspection regime takes account of potential risks to all highway users and in particular those most vulnerable.

9.3.5 The category within the hierarchy is the main determinant of inspection frequency. However, other factors are taken into account in deciding whether consideration should be given to increasing or reducing the frequency. Such factors include:-

- Traffic use, characteristics and trends
- Incident and inspection history
- Characteristics of adjoining network elements
- Operational considerations.

Table 4 sets out the safety inspection frequencies for publicly maintained highways.

Table 4 - Safety Inspection Frequencies.

| Feature | Category | Hierarchy Description | Frequency |
|--------------------|-----------------|---------------------------------|--------------------------------------|
| Carriageway | 1 | Motorways | Not applicable |
| | 2 | Strategic Routes | 1 month |
| | 3(a) | Main Distributor | 1 month |
| | 3(b) | Secondary Distributor | 1 month |
| | 4(a) | Locally Important Roads | 3 months |
| | 4(b) | All Other Metalled Roads | 12 months |
| Footways | 1(a) | Prestige Walking Route | Not Applicable |
| | 1 | Primary Walking Route | 1 month |
| | 2 | Secondary Walking Route | 3 months |
| | 3 | Link Footway | 6 months |
| | 4 | All Other Footways | 12 months |
| Cycleways | A | Part of the Carriageway | As for the carriageway |
| | B | Associated with a footway | As for the footway, but max 6 months |
| | B | Not associated with a footway | 6 months |
| | C | Cycle trails and leisure routes | 12 months |

Although the defined inspection frequencies should be maintained wherever possible, some flexibility will enable the effects of weather and resource availability to be managed more effectively. The following flexibilities are acceptable for one inspection cycle:

Set Frequency

1 Month
3 Months
6 Months
1 Year

Flexibility

3 Working Days
5 Working Days
7 Working Days
10 Working days

Defect Categories

9.3.6 There are three categories of defects: -

- **Category 1** – Those that require prompt attention because they represent an immediate or imminent hazard or because there is a risk of short-term structural deterioration.
- **Category 2** – Those that require attention but do not represent an immediate or imminent hazard.
- **Category 3** - These are those defects which are highly unlikely to become Cat 1 before the next safety inspection

9.3.7 **Category 1** defects should be corrected or made safe at the time of the Inspection, if reasonably practicable. In this context, making safe may constitute displaying warning notices, coning off or fencing off to protect the public from the defect if it is not possible to correct or make safe the defect at the time of inspection. Repairs of a permanent or temporary nature should be carried out as soon as possible and in any case within a period of 24 hours. Permanent repair should be carried out within 28 days.

9.3.8 Where defects with potentially serious consequences for network safety are made safe by means of temporary signing or repair, arrangements should be made for a special inspection regime to ensure the continued integrity of the signing or repair is maintained until a permanent repair can be made.

9.3.9 **Category 2**

Category 2 defects have been categorised according to priority, high (H) and low (L).

Category 2 (High) defects are those that are expected to become Cat 1 within 3 months if not attended to. Our target is to repair 90% of Cat 2 (H) within 28 days and 100% within 90 days.

Category 2 (Low) defects are those that are likely to become Cat 1 in 3-12 months time. Repair of these defects is undertaken within 90 days, subject to available resources.

Category 2 defects should be repaired within planned programmes of work, with priority depending on the degree of deficiency, traffic and site characteristics. These priorities should be considered, together with access requirements, other works upon the road network, traffic levels, and the need to minimise traffic management, in compiling the programmes of work.

9.3.10 **Category 3**

These are those defects which are highly unlikely to become Cat 1 before the next safety inspection. They will be recorded, but repair work will not normally be undertaken.

9.3.11 It will still be necessary however for those undertaking inspections, or responding to reported incidents, to judge whether any individual observed or reported defect should be recorded as Category 1 and the consequent urgent action put in hand.

Each and every such decision could be critical to the safety of users and may also potentially be subject to legal scrutiny in the event of an accident occurring at or near to the site, and complete and accurate records will be essential.

9.4 Service Inspections General Requirement

9.4.1 Service inspections are focussed on ensuring that the network meets the needs of users. They comprise of more detailed specific inspections of particular highway elements and inspections for regulatory purposes, including NRSWA. They also include less frequent inspections for network integrity.

9.4.2 Service inspections are primarily designed to identify deficiencies compromising the reliability, quality, comfort and ease of use of the network, from the users' point of view. Although not intended for identifying defects that could potentially compromise user safety, any such defects observed during service inspections should be recorded and dealt with in the same way as for a safety inspection.

9.4.3 Table 5 details the Service Inspection Frequencies for the follow items

- Drainage systems
- Road Markings and Studs
- Trees
- Illuminated and Non Illuminated Signs/ Bollards

9.4.4 Culverts under carriageways

Currently the inspection of culverts is carried out on a reactive basis and known problem locations.

Table 5 - Service Inspection Frequencies

| Hierarchy Description | Drainage Systems | Road Markings & Studs | Trees and Embankments | Illuminated & Non-illuminated signs / bollards |
|---------------------------------|---|--|------------------------------------|--|
| Strategic Routes | Piped drainage Soakaways inspected at not more than 10 year intervals | Annual check in darkness for Category 2 & 3 roads only | Detailed inspection every 2 years. | General condition - inspected annually |
| Main Distributor | | | | |
| Secondary Distributor | | | | |
| Locally Important Roads | | | Detailed inspection every 3 years. | General condition - inspected every 2 years |
| All Other Metalled Roads | | | | |

9.5 Structural Condition Surveys

9.5.1 In order to ensure value for money it is essential to have information on the nature and severity of deterioration in order to determine the most appropriate maintenance treatment. This information is also used to allocate funds to areas of greatest need.

9.5.2 There are a number of types of condition surveys used within the County Council, each providing information from a differing perspective and which in combination provide a comprehensive picture of the network.

Conditions surveys currently used include: -

- United Kingdom Pavement Management System (UKPMS) – Course Visual Inspection (CVI) and Detailed Visual Inspection (DVI)
- SCANNER Surveys – Machine Based Surface Condition Survey
- Deflectograph – Machine Based Structural Condition Survey
- Sideways Force Coefficient Routine Investigation Machine (SCRIM) and Griptester – Skidding Resistance Survey.
- National Road Maintenance Condition Surveys (NRMCS) – Visual Condition Survey

9.5.3 The frequencies of the surveys are shown in Table 6 for carriageways and Table 7 for footways. Those necessary for the production of Best Value Performance Indicators (see Chapter 10) must follow national guidance. The amount of network that is to be surveyed as shown in the tables will be reviewed each year and may change year to year.

Table 6 – Frequency of Carriageway Condition Surveys

| Road Type | Principal (A Roads) | Non Principal Classified (B & C Roads) | Unclassified (All Other Roads) |
|----------------------------------|--|---|---|
| UKpms CVI Sureys | 20% of network surveyed annually | 50% of network surveyed annually(may reduce to 20% in 2005) | 20% of network surveyed annually |
| SCANNER(TTS) Surveys | 100% of network surveyed annually in one direction | 100% of network surveyed annually in one direction | Not Surveyed |
| Deflectograph Surveys | 20% of A and B road network surveyed annually | 20% of A and B road network surveyed annually | Not Surveyed |
| NRMCS Surveys | 50 Sites | 110 Sites | 90 Sites |
| Griptester Surveys | 33% of network Surveyed annually | Site specific surveys only | Not surveyed |

Table 7 – Frequency of Footway Condition Surveys

| Category | Hierarchy | UKpms DVI Surveys | UKpms CVI Surveys |
|-----------------|-------------------------|----------------------------------|--|
| 1a | Prestige Walking Route | Not applicable in Leicestershire | Not applicable in Leicestershire |
| 1 | Primary Walking Route | 50% of network surveyed annually | Surveyed as part of the CVI surveys for carriageway. See Table 6 above. |
| 2 | Secondary Walking Route | 50% of network surveyed annually | |
| 3 | Link Footway | Not Surveyed | |
| 4 | All other Footways | Not Surveyed | |

9.6 Skid Resistance Strategy

At the time of preparing this document, the skid resistance strategy is under review to take account of the latest national guidance and regional best practice as suggested by the Highways Maintenance Midlands Service Improvement Group. Once approved, the strategy will form part of this document.

SECTION 10 – CONDITION, STANDARDS AND INVESTIGATORY LEVELS

- 10.1** The Code requires Authorities to define standards for the condition of each element of the highway network, which meet the requirement for safety, serviceability and sustainability. Where they are not met they should set targets for attaining and sustaining them in the long term.
- 10.2** Each element of the network could have different standards of condition. A minimum one to satisfy requirements for safety and higher ones designed to meet local requirements for serviceability or sustainability. These higher standards are now defined as “Investigatory Levels”(The standard of asset condition below which the need for treatment should be considered) as failure to achieve the defined standard could give rise to a range of responses needing further investigation prior to action being taken.
- 10.2.1** A previously used term “intervention level” has been retained only for use with the automatic selection criteria in Pavement Management Systems (PMS) as the system does actually “intervene” at the defined condition standard. However to avoid confusion it is now referred to as “System Intervention Levels” (SILs), (The standard of asset condition at which a Pavement Management System automatically applies a treatment)
- 10.2.2** The following sections set out the standard of condition for elements of the highway network in Leicestershire.
- 10.3 Condition of Carriageways**
- 10.3.1** The County Council uses the nationally accredited MARCH UKpms computerised pavement management system to analyse SCANNER, and both coarse and detailed visual inspections (CVI and DVI). The rules and parameters that configure the algorithmic processing in the system, including the SILs, are built in and fixed for producing BVPI’s and are user definable to meet local requirements for serviceability and sustainability.
- 10.3.2** System Intervention levels (SILs) are used to set the value of a Road Condition Index (RCI) at which treatment is applied. The value of each SIL is quoted by Base Hierarchy which, in principle, allows treatments to be invoked at different levels of condition according to the classification of the road. SIL’s exist for all features and hierarchies.
- 10.3.3** The Best Value Performance Indicators BVPI 223 and BVPI 224 are a direct application of the RCIs from the current UKpms default rule set. The Road Condition Indices that are utilised in the current rules and parameters set vary according to feature and pavement type.
- 10.3.4** For Non-Principal Roads the emphasis is on a range of condition indices relevant to rural and urban roads, and with some weight given to factors other than structural deterioration. Assessment is based on the percentage of the network where at least one of the Structural, Edge and Wearing Course condition indices matches or exceeds the current thresholds.

10.3.5 The PMS system includes various treatment options, appropriate for each feature and pavement type, for selection according to pavement condition. Currently these options are limited, as the output should be regarded primarily as a guide to the likely nature and scale of treatment required.

10.3.6 Locally determined treatment costs have been input into the system to calculate the budget need and assist in the annual allocation of the structural maintenance budgets to the maintenance areas.

10.4 Condition of Footways

10.4.1 The condition of the footways is monitored by undertaking CVIs and DVIs on a sample of footways each year. As with carriageways the data is input into the MARCH UKpms software and processed to produce treatment options and costs. Footway SILs are built in and fixed for producing BVPI 187 on Category 1, 1a and 2 footways.

Table 10 - Structural Condition Index for Category 1, 1a & 2 Footways (derived from DVIs)

| Structural Condition Index (CI) | Definition |
|---------------------------------|---|
| + 20 | Intervention level of concern. Immediate action may be required. Percentage of Cat 1, 1a & 2 footway with a condition of index greater than the defined threshold for deficiency. |
| 1 to 20 | Investigatory level of concern. The deterioration is becoming serious and may require investigation. |
| 0 | Low level of concern. The deterioration is of a minor nature and no action is needed. |

10.5 Condition of Cycleways

10.5.1 The condition of cycleways shall be considered in light of their position in the highway. However, the surface of a cycleway is crucial to its acceptability to cyclists.

10.5.2 Where carriageway cycle lanes are established Area Staff are required to: -

- Ensure that all ironwork does not pose a hazard to cyclists.
- Install road gully gratings that are of the flat type and laid within 10mm of the road surface.
- Provide and maintain suitable road markings and coloured surfacing where appropriate.

10.5.3 Where designated cycleways with combined footway and cycle lanes are provided Area staff are required to: -

- Prevent the ponding of water and accumulation of grit or silt particularly where a converted footway runs through a wide verge at a lower level than the carriageway
- Ensure that drop kerbs across a cycleway are not greater than 3mm higher than the carriageway surface particularly where cyclists cross them obliquely.
- Ensure a minimum headroom of 2.7m beneath signs and branches.

- Pro-actively encourage landowners to trim hedges to prevent obstruction and to remove all cuttings from the paved surface.
- Provide District Councils with up to date schedules showing the cycleway network to assist them in their duty to keep the network clean.

10.5.4 The condition along with treatment options and costs of cycleways is monitored by including them in the CVI and DVI surveys on carriageways or footways as appropriate.

10.6 Condition of Highway Drainage Systems

10.6.1 The frequency of cleaning highway drainage systems depends upon their location in relation to industrial sites and trees. Depending on these factors, there may be a need to vary the cleaning frequency, but the following table is given as a general approach.

Table 11 –Drainage Systems – Cleansing Frequencies

| Item | Frequency | Notes |
|----------------------------------|---|--|
| Gullies/ Kerb offlets | Gully emptying is undertaken to minimise highway drainage problems. Frequencies vary depending on location and flooding risk. | |
| Grips | Cleaned once per year. | |
| Manholes, Catch pits and Outlets | Cleaned out on average twice a year | Action to be taken to remedy persistent problems |

10.7 Condition of Embankments and Cuttings

10.7.1 The inspection of embankments and cuttings is concerned with the safety of highway users and the risk of injury from loose material falling.

10.7.2 All embankments and cuttings will receive a cursory inspection by the highway Inspector at the same time as the carriageway is inspected. Any defect noted will be passed on to the County Council's Forestry Team to enable a detailed inspection to be undertaken by a suitably qualified person. All embankments and cuttings will receive a detailed inspection in accordance with table 5 in Section 9.

10.7.3 If there are trees on the embankments or cuttings and there is a problem with soil stability or slippage, then the trees will be managed as a coppice, being cut down to ground level, every 5 – 10 years

10.8 Condition of Landscaped Areas, Trees and Verges

10.8.1 Grass cutting is predominately concerned with the safety of the Highway user, preserving visibility and sight lines. All trees both on the public highway and adjoining it will receive a cursory inspection by the Highway Inspector at the same time as the carriageway is inspected. Any defect noted will be passed on to

the County Council's Forestry Team, to enable a detailed inspection to be undertaken by a suitably qualified person. At the time of preparing this document, a County Council Tree Management Strategy is under preparation. Once approved, the strategy will form part of this document.

10.8.2 Grass cutting has two purposes. The first is to ensure safety by preserving visibility and sight lines. The second is to preserve a good appearance. Table 12 shows the general frequencies required to meet these objectives, with more frequent cutting in urban areas for appearance reasons. However, there are instances where increased frequency of cutting is required:

- In areas where there are particular visibility issues requiring the grass to be kept shorter
- Where roads with speed limits above 40mph are in conspicuous semi-urban areas requiring increased frequency of cutting for appearance reasons
- Occasionally, where speed limits of 40mph or less apply in more rural areas where cutting to urban frequency for appearance reasons is not justified
- In areas where District Council funding supports extra cuts on an amenity area

10.8.3 The Highway Area Managers for north and south areas will produce and annually update plans showing exceptions to the frequencies set out in Table 12. These will be determined on the basis of safety, appearance and budgetary availability and will be approved the Director and Lead Member.

Table 12 – Grass Cutting Frequencies

| Item | Frequency |
|-----------------------------------|---|
| Grass Cutting – Urban Roads | 9 times per year |
| Grass Cutting – Rural Roads | 2 Single-swathe width cuts per year. 1 Full width cut per year towards the end of the growing season |
| Grass Cutting – visibility splays | As per Rural grass cutting plus additional cutting depending on the growth rate |
| Grass Cutting - Obstacles | Grass around obstacles, such as trees, lamp columns and posts to be cut to same height as surrounding area. |

10.8.4 Highway Verges

Highway verges suffer damage from vehicles in many situations and the main causes include:

- i) Inappropriate parking when suitable parking facilities are available
- ii) Lack of parking facilities
- iii) Over-running due to road layout
- iv) Over-running due to road width

It is increasingly difficult within the limitations of the highway maintenance budget to give priority to highway verges that are damaged through either parking or over riding. Therefore, these will no longer be repaired except in the following circumstances:

- Where repair or improvements of a highway verge are required as part of a scheme to address road safety, meeting the usual criteria required in

bringing forward road safety improvements.

- Where repair or improvements to a highway verge should reasonably be included within highway maintenance works proposed at the same location, (the highway maintenance works meeting the usual criteria to be undertaken).
- Where repair or improvements to a highway verge should reasonably be included within highway improvement works proposed at the same location, (the highway improvement works meeting the usual criteria to be undertaken).
- Where another authority or third party wholly funds repairs or improvements to a highway verge.

10.9 Condition of Fences and Barriers

10.9.1 A visual inspection of these items will be undertaken at the same time as the carriageway safety inspection is undertaken. The following table shows the standards that have been adopted

Table 13 – Fences and Barriers – Safety Inspection Frequencies

| Item | Frequency |
|---|---------------|
| Pedestrian Guard rails, Inspection/testing | Every 5 Years |
| Painting | When Required |

10.9.2 Safety Fences

Currently Leicestershire do not operate a programme for safety fence inspection and renewal. Repairs to safety fence are carried out on a reactive basis. As part of Asset Management process we will embark on a process of data collection to identify safety fence location, type, and condition. In the first instance a risk management approach will be adopted with higher risk roads assessed first.

10.10 Condition of Traffic Signs and Bollards

10.10.1 The safe and efficient use of the highway network depends on the presence of traffic signs and bollards, both illuminated and non-illuminated. All signs and bollards will receive a cursory inspection at the same time as the carriageway safety inspection is undertaken

Table 14 - Illuminated and Non-Illuminated Signs and Bollards – Cleansing and Safety Inspection Frequencies

| Item | Standard |
|--------------------------------------|--|
| Cleansing | All low signs and all bollards on Strategic roads and Main and Secondary Distributor roads to be cleansed six times per year |
| | All high signs on Strategic roads and Main and Secondary Distributor roads to be cleansed twice a year. |
| | Signs and Bollards on all other roads to be cleaned annually |
| Replacement/ Repair of damaged signs | All signs and bollards should be checked for degradation and retro-reflectivity at night, once per year |
| Painting of signs/supports | When required |
| Electrical Inspection | As per Street Lighting Policy and Strategy |
| Internal Inspection and Cleaning | Once per year |

10.11 Condition of Road Markings and Studs

10.11.1 Road markings and studs contribute to the safe and efficient use of the highway network. They must be visible both in the day and at night. They will be inspected at the same time as the carriageway safety inspection is undertaken.

Table 15 – Road Markings and Studs - Renewal and Replacement Standards

| Item | Standards for Renewal and Replacement |
|--|---|
| All mandatory markings that exist before resurfacing, surface dressing or other surface treatment | Immediately – temporary reinstatement of all “Give Ways” and “Stop Lines” with white spray paint. Permanent reinstatement should be carried out no longer than 1 week after the work is completed. |
| All other road markings that exist before resurfacing, surface dressing or other surface treatments | To be replaced within 4 weeks |
| Road markings on Strategic, Main and Secondary Distributor roads and all mandatory markings on all other roads | Will be renewed within 4 weeks of a visual inspection if 30% or more of their area is ineffective |
| All other road markings | Will be renewed as soon as possible when 40% or more of their area is ineffective |
| Reflective Studs | All studs will be replaced when missing or defective, individually or in bulk depending on the individual highway circumstances. The aim is to achieve 90% reflectivity prior to the winter period. |

10.12 Condition of Traffic Signals, Pedestrian and Cycle Crossings

10.12.1 The correct and efficient operation of traffic signals and crossings is important to road safety and the reduction of traffic congestion. This item also includes the maintenance of non-signal controlled crossings and school crossing lights

Table 16- Traffic Signals, Pedestrian and Cycle Crossings –Inspection and Cleansing Standards

| Item | Standard |
|----------------------|---|
| Illumination | As per Street Lighting Policy and Strategy |
| Maintenance of Bulbs | As per Street Lighting Policy and Strategy |
| Painting | As required to maintain structural integrity of the unit |
| Road Markings | To be inspected at the same time as the carriageway. Markings to be replaced if 30% or more are ineffective or have deteriorated. |

10.13 Condition of Street Lighting

10.13.1 Suggested standards for condition of street lighting are given in the National Code of Practice for Street Lighting Maintenance, together with the Street Lighting Policy and Strategy document.

10.14 Standards for User and Community Response

10.14.1 The Department is undertaking the phased implementation of a Highway Management System. The Highway Management System currently provides a single database for:

- Recording and tracking of customer contacts
- Street Lighting management
- Management of routine highway safety inspections
- NRSWA management
- Asset inventory and management

The system is linked in to the LCC website to allow reports of highway and street lighting defects from the public to be logged directly in to the Highway Management System.

10.14.2 The use of the customer care element of the system is being extended across the Department to provide a standardised system for logging and tracking customer letters and e-mails. It is planned to further develop the system in the areas of works ordering and inventory management to provide a comprehensive audit trail.

SECTION 11 -PERFORMANCE INDICATORS COMPARISON AND TARGETS

11.1 Introduction

11.1.1 Performance indicators are a tool for assessing effective performance management. Some of the indicators are specified nationally, others are determined locally. The department works with 13 other Authorities in a Midlands Service Improvement Group to investigate the introduction and testing of new performance measures. Those currently in place are specified as appropriate in the County Council Annual Plan, Highways and Transportation Service Plan and Local Action Plans.

11.2 Performance Indicators

11.2.1 Performance can be measured in a number of ways, but in respect of Best Value these can best be summarised in four basic methods:

- Input – the resources (human, material or financial) utilised in delivering the function or service
- Process – the methodology and procedure of committing the resources in the pursuit of fulfilling the function
- Output – the resultant effect (often numerical) of completing the process with the resource input
- Outcome – the ultimate impact on the community and the best way of measuring performance

11.3 National Performance Indicators

11.3.1 The following National Performance Indicators are currently being used by the Highways and Transportation service:-

| | |
|------------------------------|--|
| BV223 (SCANNER) | This is the proportion of the principal road network in poor overall condition which is likely to require planned maintenance soon. |
| BV224a (SCANNER) | This is the proportion of the non-principal classified road network in poor overall condition which is likely to require planned maintenance soon. |
| BV224b(BV97 b) | Percentage of unclassified roads with significant defects (visual inspection) |
| BVPI 99(a) | All people killed and seriously injured in road accidents. |
| BVPI 99(b) | Children Killed and seriously injured in road accidents. |

| | |
|-------------------|--|
| BVPI 99(c) | All people slightly injured in road accidents. |
| BVPI 100 | Number of days of temporary traffic controls or road closure on traffic sensitive roads caused by a local authority's work per Km of traffic sensitive road. |
| BVPI 102 | Local bus services (passenger journey per year) |
| BVPI 103 | Percentage of users and residents satisfied with public transport information |
| BVPI 104 | Percentage of users and residents satisfied with local bus services |
| BVPI 165 | Percentage of pedestrian crossings with facilities for disabled people |
| BVPI 180b | Average street lamp circuit wattage divided by the national average |
| BVPI 186a | Proportion of the principal road network not needing major repair as a ratio of the cost per Km of structural maintenance of principal roads |
| BVPI 186b | Proportion of the non-principal road network not needing major repair as a ratio of the cost per Km of structural maintenance of non-principal roads |
| BVPI 187 | Percentage of category 1,1a and 2 footways with significant defects. |

SECTION 12 PROGRAMMING AND PRIORITIES

12.1 Financial Allocation

12.1.1 The County Council is notified by the Government's Regional Office in December of the financial allocation for the financial year commencing in the following April. The following February the Authority sets the budget for both Capital and Revenue highway maintenance schemes.

12.2 Programming

12.2.1 The Department will adopt the following sequence of events, which will provide a systematic approach to programming and allocation of finance to schemes.

- April through to September – Griptest, Deflectograph and CVI surveys completed
- September to October - Survey results provided by Highways Management Group to the Area Offices along with accident statistics.
- October – Area Offices identify schemes. They will provide estimates, initial priority of the scheme, recommendations and the proposed treatment.
- November – Area Offices submit to the proposed list of schemes and a programme including reserve schemes. The Network Management Group appraises draft programme against outcome requirements and discusses any changes with Area offices
- January – Network Management Group seek programme approval from Lead Member
- February – Detailed allocations agreed by Network Management Group and Area offices notified.
- April –Area Offices prepare a quarterly forecast of expenditure.

12.2.2 Area offices will provide quarterly expenditure returns together with details on the progress of schemes.

12.2.3 All work will be carried out in accordance with the Department's Roadworks Protocol document.

SECTION 13 -WINTER SERVICE

13.1 Introduction

13.1.1 The Council, as the Highway Authority, has a statutory duty to provide a winter service on all highways maintainable at public expense within the County except for motorways and trunk roads. The service covers the precautionary salting and snow clearance of the network.

13.1.2 The need to carry out winter service operations is determined by predicted or actual adverse weather conditions. The local topography, temperature, humidity, precipitation, wind speed and salinity influence actual conditions and likely duration.

13.1.3 The service is essential for public safety and to the national and local economy in maintaining the safe movement of vehicular traffic (including cycles) and pedestrians. To deliver the service within the available resources, the precautionary salting routes reflect the importance of the various traffic routes and are adaptable to the prevailing weather conditions.

13.1.4 It should be noted that the service does not guarantee that at any given time the highway will be free of ice or snow, even following treatment.

13.1.5 The Winter Service Operational Plan should be read in conjunction with this section

13.2 Objectives

13.2.1 The objectives of the winter maintenance service are to: -

- Meet the statutory requirements of the County Council.
- Ensure as far as reasonably practicable the safe movement of vehicles and pedestrians on the highway network.
- Minimise delays, accidents and damage to the highway resulting from ice and snow
- Undertake the winter service effectively and efficiently.

13.3 Treatment of the Carriageway

13.3.1 Normal precautionary salting is carried out on approximately 45% of the road network. Each route is a combination of Priority 1 and 2 roads.

- Priority 1 Roads (P1) comprise Main Distributor roads (as defined in the carriageway hierarchy), commuter routes (rural roads carrying more than 2,000 vehicles per day) and major bus routes (in urban areas roads with 8 or more service buses per hour and in rural areas 2 or more service buses per hour).

- Priority 2 Roads (P2) comprise Secondary Distributor and Locally Important roads in the carriageway hierarchy and at least one route in to all villages as far as is reasonably practicable.
- Priority 3 Roads (P3) Less important local, village and estate roads
- Priority 4 Roads (P4) All other adopted metalled roads not covered by Priority 1-3 above. These are very minor, lightly trafficked, local, village and estate roads including cul-de-sacs.

13.4 Legislation

13.4.1 The County Council, as local highway authority, has certain duties under the Highways Act 1980 to maintain the highway: -

- Section 41
Imposes a duty to maintain a highway which is maintainable at public expense
- Section 41 (1A)
A highway authority has a duty to ensure, so far as reasonably practicable, that safe passage along the highway is not endangered by snow or ice.
- Section 150 (1)
A highway authority shall remove any accumulation of snow from the highway if it is causing an obstruction.
- Section 150 (2)
This gives a magistrate court the power to enforce the removal of an obstruction.
- Section 150 (3)
If considering making an order under section 150 (2) the court may take the following into account: -
 - i) The character of the highway and the nature and amount of traffic using the road.
 - ii) The nature and extent of the obstruction
 - iii) The resources of manpower, vehicles and equipment available to the highway authority and the extent to which those resources are being, or need to be, employed elsewhere on such work
- Section 150 (4a)
A highway authority may take any reasonable steps (including the placing of lights, signs and fences) for warning users of the highway of the obstruction.

13.5 Precautionary Salting of the Carriageway

13.5.1 The Council operates a system of precautionary salting routes for the carriageway, from depots throughout the County covering approximately 45% of the network. They are reviewed annually taking into account any complaints or comments received in the previous winter season.

13.5.2 Priority 1 and 2 Routes

Precautionary salting of these routes will be undertaken as a direct result of the weather information provided and as defined in the Winter Service Operational Plan.

13.5.3 Priority 3 Routes

These routes will not normally receive any precautionary salting and will only be salted in periods of prolonged adverse weather (as defined in the Winter Service Operational Plan) and on the condition that priority 1 and 2 routes have been completed.

13.5.4 Priority 4 Routes

These routes will not normally receive any precautionary salting and will only be salted in periods of prolonged adverse weather (as defined in the Winter Service Operational Plan) and on the condition that priority 1, 2 and 3 routes have been completed.

13.6 Treatment of Footways

13.6.1 No precautionary salting will be carried out on footways.

13.6.2 As far as is reasonably practical, footways will normally only receive treatment when ice or snow is lying on the footway and when resources are available. They will be cleared and/or treated with either grit or a grit/salt mixture. This work will only be undertaken on the following footways if resources are available: -

- In main shopping areas.
- Adjacent to heavily trafficked roads where the footway has high pedestrian usage.
- Outside hospitals, schools and similar locations where there is a heavy concentration of pedestrians.
- Outside health clinics, elderly persons dwellings, homes for the blind or similar locations where there is above average use by the elderly, infirm or disabled.

13.7 Treatment of Cycleways

13.7.1 The precautionary salting of cycleways is limited to those that form part of a carriageway which is on the precautionary salting route. No precautionary salting or treatment of cycleways that are remote from the carriageway or are shared use with a footway will be carried out.

13.8 Snow Clearance

13.8.1 Snow clearance will be carried out to either prevent the accumulation of or to clear snow. Priority will be given to clearing and maintaining P1 and P2 routes. Once P1 and P2 routes are completed, P3 will be completed. Snow clearance of P4 and footways will be carried out when resources are available.

13.9 Salt Bins

13.9.1 Salt bins will only be provided in villages and urban areas if the route is not on a precautionary salting route and the local parish or district council has met the cost of such provision. The salt bin locations shall be agreed with the County Council. Whilst the County Council will fill such salt bins at intervals that it deems appropriate, the parish or district council shall meet any replacement costs in the event of vandalism, damage or general misuse

13.10 Parish Council Snow Wardens

13.10.1 The County Council will continue to develop a network of Snow Wardens. The larger parish councils shall be invited to appoint a Snow Warden and their functions during severe weather conditions will be: -

- To provide information to the County Council on the local situation during the period of severe weather conditions.
- To consult with the County Council on the local needs and determine jointly what local action to take, if necessary, to supplement the operation of the Department.
- To organise that action utilising the local resources agreed with the County Council.

13.10.2 The County Council will reimburse parish councils for any activities undertaken on the authority of the Snow Warden, provided that prior agreement of the rates/prices has been confirmed.

SECTION 14 -WEATHER AND OTHER EMERGENCIES

- 14.1** The County Council has an Emergency Management Section, who under the County Emergency Management Officer are responsible for the production of the County Council's emergency plan, in consultation with all other relevant agencies.
- 14.2** The Department provides a single Customer Service Centre number (0116 3050001) to enable callers to report highway problems and defects and to seek advice on highway related issues.
- 14.3** All offices are open Monday – Friday between 8:30am – 5pm (4:30pm on a Friday). Outside these hours an answerphone message provides the caller with emergency contact details for a Duty Officer.
- 14.4** Out of hours, there is a rotational system to provide a Duty Officer in each of the Areas. These officers are available to deal with Highway emergencies and assist, if required, in other emergencies.
The Duty Officer has operatives available to deal with the highway emergency.

SECTION 15 – MATERIALS, TREATMENTS AND PROCESSES

15.1 Quality Management and Sector Schemes

15.1.1 The County Council supports the National Highway Sector Schemes, but will continue to carry out audit sampling and testing of all materials and products used on the highway, by either in-house or external sample testing. All materials supplied to the County Council will comply with all the relevant British Standards applicable at the time.

15.2 Processes

15.2.1 The Highways Branch, which is part of the Department has an accredited Quality System to ISO 9001:2000.

The QA system covers: -

- Construction
- Drain Maintenance
- Forestry
- Highway Design
- Lighting and Signs
- Mobile Lane Closures
- Patching and Reinstatement
- Small Works and Maintenance Services
- Specialist Sign Services
- Surface Dressing
- Traffic Management
- Traffic Signals
- Vehicle Safety Barrier
- Winter Services

15.3 Material Utilisation and Recycling

15.3.1 The County Council will, as far as is reasonably practicable, in recycle materials removed from the highway. All clean, non contaminated material, such as kerbs and concrete, will be washed, crushed and used as Type 1 sub-base. Surplus surface dressing chippings that are swept up when the road has been dressed will be screened washed and re-used. Bituminous materials will be re-mixed.

15.3.2 The County Council has two asphalt recyclers, which are able to recycle asphalt material excavated from the highway. The material is placed in the drum of the asphalt recycler and a small amount of new bitumen is added to replace that lost by oxidation, it is heated to produce a well-mixed workable material. This is then laid and rolled as a new base course in footway construction

The main advantages of this system are: -

- Mobile operation
- Reduces tipping and transport costs
- Recycles 100% of break-out material
- Low raw material costs

15.3.4 The County Council also has an ECO patch repair system. The system uses infra-red technology to heat up asphalt surfaces in-situ. The softened section is reworked and a close graded surface course added to provide a level surface. A rejuvenator is then added to the existing material before compaction takes place. The main advantages of the system are: -

- Cost effective repair
- Minimal traffic disruption
- Seamless joint
- Eliminates the need for excavations.

15.3.5 A new Road Water recycling facility at the Billesdon depot provides an environmentally friendly process of dealing with the wastewater collected from all of the County's road gullies. The wastewater is taken to the depot and the soil and silt is drained off and rubbish removed. The solid waste is turned into a soil substitute. The water goes through a series of reed filter beds to remove any oil and metals in the water, before it is returned to the river.

The main advantages of this system are: -

- Less waste going to landfill
- Long term stability and predictability of costs
- Producing a useable material from waste

15.4 Biodiversity

15.4.1 The County Council, in partnership with other organisations, has produced and adopted a Biodiversity Action Plan, covering a variety of life in all forms and the habitats where it occurs.

15.4.2 Particular attention should be given to the section titled "Roadside Verge Habitat Action Plan"

15.5 Noxious Weeds

15.5.1 The control of injurious and noxious weeds is a statutory responsibility under the Weeds Act 1959 and Wildlife and Countryside Act 1981.

15.5.2 The weeds listed in the Weeds Act 1959 are:-

- Ragwort
- Broad Leafed Dock
- Curled Dock
- Creeping Thistle
- Spear Thistle

15.5.3 Glyphosate is the only approved herbicide for use on highway hard surfaces for the control of emerged weeds. The application rate will depend upon the site, growth encountered, environmental conditions and the type of equipment used. Reference should be made to the manufacturer's recommendations.

15.5.4 All chemical products must have the approval of the Advisory Committee on Pesticides of the Ministry of Agriculture, Fisheries and Food. Corrosive, toxic, flammable or parquet products will not be used, together with weedkiller 2,4,5-T

SECTION 16 -PROCUREMENT AND SERVICE DELIVERY**16.1 General**

16.1.1 The Council operates a “mixed economy” in relation to procurement with works and services provided directly, in partnership with other service providers and contractually through external providers.

16.1.2 The fundamental determinants of our procurement policy are the needs of the service user and the community of Leicestershire. All procurement options are assessed in relation to the principles of Best Value.

16.1.3 The Department is currently reviewing its current procurement strategy with a view to adopting the new strategy in 2007/08

16.2 Procurement

16.2.1 The Council believes that all services, supplies and works, procured should be fit for purpose.
The Council will support in-house providers where they offer value for money and operate in the best interest of service users.

16.2.3 The Council will adhere to and promote the following principles of Best Value Procurement: -

- Be driven by planned outputs and outcomes
- Ensure the most advantageous balance of quality and cost.
- Be timely
- Allow flexibility in developing alternative procurement arrangements.
- Encourage competition where appropriate.
- Support the Council’s corporate policy objectives
- Comply with the Council’s regulatory framework and all applicable legislation and good practice guidance.
- Be transparent and accountable

16.2.4 The Council requires all services to demonstrate

- Commitment to users of the service
- Commitment to the vision and strategic priorities of the Authority
- Value for money
- Commitment to continuous improvement
- Commitment to quality and equality
- Operational efficiency
- Effective management, systems and procedures
- Flexible working arrangements to meet user requirements

16.3 Partnerships

16.3.1 The Council acknowledges the importance of partnerships in delivering Best Value both with the private and public sector. The Department will implement partnering arrangements with the private sector for the delivery of mainstream highway functions and is actively developing a procurement strategy to achieve this aim. It is anticipated that the development of a partnering approach to procurement will deliver services more efficiently, effectively, economically and take into account whole-life costs to meet the needs of the Leicestershire community.

16.4 Competition

The objective of the Authority's procurement policy is to provide a means to drive performance by harnessing competition. This policy aims to use competitive forces to achieve Best Value: -

- Through **indirect competition** (i.e. benchmarking) the council will assess the competitiveness of different functions by reference to other bodies in the public and private sector. Services provided in-house will be supported and encouraged to achieve equivalent levels of performance or better.
- Through **direct competition** (i.e. alternative means of procurement). The Council will consider, having regard to current performance and suitability whether an alternative means of procurement is appropriate. Contracts will be awarded to the provider offering the most economically advantageous balance of quality and cost.

16.4.1 Where direct competition is deemed appropriate and the in-house provider is competing, the in-house provider will be given the opportunity to compete on equal terms with external providers.

16.4.2 The following will be considered essential elements of competition irrespective of whether indirect or direct: -

- Performance standards and monitoring strategies will be developed.
- Cost information will be properly identified and collated.
- Innovation will be encouraged.
- Probity, accountability and competitive neutrality will be ensured.
- The responsibilities and accountabilities of all parties must be explicit.
- Good practice guidance in tendering, contract formulation and compliance with financial regulations will be maintained.

SECTION 17 FINANCIAL MANAGEMENT

17.1 Introduction

17.1.1 This section relates to Section 17 of the Code of Practice and its application to the financial management of Highways Maintenance within the Department.

17.1.2 Key documents that should be read in conjunction with this section are:

- The Leicestershire County Council annual revenue budget and capital programme
- The Leicestershire County Council Medium Term Corporate Strategy
- The Local Transport Plan and Delivery Reports
- The Highways and Transportation Service Plan
- Leicestershire County Council Constitution, Financial Regulations and Standing Orders
- Report on the Probity of awarding work within Leicestershire Highways

In addition, the financial management of Highway Maintenance should comply with the reporting requirements set out in the CIPFA Code of Practice on Best Value.

17.1.3 The current versions of all of the above can be obtained from Financial Services.

17.2 Leicestershire Highways

17.2.1 Leicestershire Highways is responsible for planning, undertaking and monitoring Highway Maintenance work on behalf of the Highway Authority.

17.2.2 The delivery of the works programmes (capital and revenue) will be subject to the following parameters:

- All schemes over £150,000 will be subject to external competition with Leicestershire Highways submitting a tender if it wishes to do so. The award of such tenders will be managed outside of Leicestershire Highways (ie Transportation Branch or ESPO).
- Schemes under £150,000 and general maintenance works (including Winter Maintenance) will be subject to a make or buy decision within Leicestershire Highways. This decision will be based on capacity, capability and comparison criteria as set out in the Probity Report.
- Value for money will be determined through the quarterly comparison process set out in the Probity Report and monitored by the Departmental Management Team.

17.3 Planning

17.3.1 The production of the revenue and capital works programmes should reflect the maintenance strategy of the Department. This in turn will be informed by the requirements of the LTP, MTCS and the Highways and Transportation Service Plan (amongst others).

17.3.2 The national Code of Practice recommends that budgets (capital and revenue), are drawn up over a rolling five year period.

17.4 Budgetary Control

17.4.1 Medium Term Financial Planning

17.4.2 Managers are required to identify service pressures during July and August for the next three years. Service pressures can include changes in levels of demand, significant price changes, introduction of new legislation and changes in service delivery.

17.4.3 Budget Process

17.4.4 Proposed budgets are submitted by managers to the Finance Group by mid October. These proposed budgets will be developed according to the sequence of events outlined in section 12.2.1 and take account of the current years approved budget and the full year effect of any price changes, growth and savings within the current budget. The proposed budget will form the basis of comparison with the Department's Target Budget allocated by the Resources Department. If there is a growth requirement beyond the Target Budget then this needs to form part of a 'growth bid'.

17.4.5 The Target Budget plus any growth and savings are taken to Cabinet. The Cabinet put together their proposals for the County Council's Budget and after due consultation, report to full Council for approval in February.

17.4.6 Budgetary Control

17.4.7 Following completion of the budget process, the Finance Group circulates the approved budgets to managers. Managers are responsible for controlling their expenditure and income against these budgets. Financial Management Information is circulated monthly by the Finance Group and together with local records, should be used to manage income and expenditure. It should be used to establish the budgetary position before placing orders.

17.4.8 Throughout the financial year budget performance (both revenue and capital) is reported to Departmental Management Team, Branch Management Teams and the Director of Resources on a monthly basis. Information is provided on actual and forecast expenditure for the financial year based on information provided by budget holders.

17.4.9 Regular meetings are held with budget holders to discuss any issues regarding their budget.

SECTION 18 MONITORING REVIEW AND REPORTING

18.1 Monitoring

18.2.1 As stated earlier there are a number of best value performance indicators applicable to the provision of highway maintenance these being the responsibility of individual Group Managers. Progress on all the performance indicators is reported to Strategic Performance Improvement Group, which meets bi-monthly to ensure that progress towards the agreed targets is maintained.

18.2.2 Progress on the County Council Annual Plan indicators is reported to the Corporate Management Team and the Council's Cabinet

18.2.3 Benchmarking with other local authorities that form part of the Midlands Service Improvement Group is be carried out, where specific comparative data can be monitored.