



# Network Maintenance Management Plan

2017 Version



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## 1.0 Executive Summary

The scope of this Network Maintenance Management Plan [NMMP] is to provide and maintain a highway network, supporting the transport needs of Central Bedfordshire's communities and businesses and enhances the local environment.

The aim is to deliver Best Value in highway maintenance.

The outcomes of the service are to:

- Improve travelling conditions for all highway users
- Provide a safer highway network
- Give greater consideration to the local environment

The objectives of this plan are as follows:

- To develop, adopt and regularly review policies for highway maintenance, consistent with the principles of integrated transport, sustainability and Best Value
- To act upon the needs of users and the community by involving them in the development of works programmes
- To adopt efficient and consistent collection, processing and recording of highway inventory, condition and status information for the purposes of asset assessment, management and local benchmarking
- To develop, adopt and regularly review a risk management approach in the determination of technical and operational standards

## 2.0 Introduction

The transport infrastructure is one of the most important assets owned by the authority. Being able to conveniently and safely use the local transport network is vital to the authority's plans for economic growth. It is used to access local services important to maintaining a good quality of life, and is a link between local communities and more strategic transport assets, such as motorways or the rail network. It is therefore essential that the local transport infrastructure is managed effectively.

In exercising its duties to maintain, operate, and improve the local transport network, the authority needs to consider a number of different challenges:

- Limited resources compared to the levels of work, particularly in terms of finance, staff, and skills
- A significant backlog of maintenance works arising from an ageing transport network
- Increasing levels of public expectations and awareness, particularly on the maintenance of the local road network
- Increased level of accountability of statutory bodies to local people
- Winter maintenance and the unpredictability of weather patterns

Efficient management of the highway can improve the quality of life for the travelling public and the residents of Central Bedfordshire, whilst reducing the environmental impact of works.

Central Bedfordshire Council (CBC) will manage the maintenance of the highway asset in accordance with the principles of Best Value and risk based assessment. This Plan identifies the targets, sets out the policy, strategy and process by which CBC will deliver and develop its Highway Maintenance service. CBC, as the Highway Authority, has a duty to maintain and has powers to make improvements to the adopted highway network, all as defined by the Highways Act 1980.

This plan is written to be read and followed in conjunction with the following documents:

1. Well-managed Highway Infrastructure; A Code of Practice 2016
2. Well Lit Highways, 2004 and amendments
3. Management of Highways Structures, 2005
4. CIPFA Transport Infrastructure Assets Code of Practice 2013
5. CBC LTP3 and associated Appendices
6. CBC Highways Asset Management Policy
7. CBC Highways Maintenance Service Plan (merged into current NMMP)
8. Winter Service Operational Plan
9. Central Bedfordshire Council Resilience Plan
10. Outdoor Access Improvement Plan [2013 to 2031]
11. Associated Acts and Documents:
  - Highways Act (1980)
  - New Roads and Streetworks Act (1991)
  - Traffic Management Act (2004)
  - Local Government (Miscellaneous Provisions) Act (1953)
  - Countryside and Rights of Way Act (2000)
  - Wildlife and Countryside Act (1981)
  - Flood and Water Management Act (2010)
  - Manual for Streets 2 (2010)
  - Shared Space advisory leaflet (2011)
  - Bridge Management Procedure ( 2011)
  - Highways Contract Service Information

The NMMP is to be reviewed on an annual basis, with a summary available online.

## 3.0 Structure of the Network Maintenance Management Plan

The NMMP is split into annexes which draw together all relevant information on each asset.

1. Introduction to Network Maintenance Management
2. Annex A: Carriageways, Road Markings and Studs
3. Annex B: Footways, Cycle ways and Public Rights of Way
4. Annex C: Bridges, Highways Structures and Safety Fencing
5. Annex D: Street Lighting
6. Annex E: Traffic Signals including Pedestrian and Cycle Crossings Signals
7. Annex F: Soft Estate and Drainage
8. Annex G: Traffic Signs, Bollards and Street Furniture
9. Annex H: Embankments and Cuttings

## 4.0 Network Maintenance Overview

### 4.1 Form of Contract

Central Bedfordshire Highways has a Term Maintenance Contract with Ringway Jacobs. This arrangement provides the Council with greater control compared with the previous Management Agent Contract over what happens on its network and brings improved engagement and communication with both residents and road users.

### 4.2 ADEPT

CBC is a member of the Association of Directors of Environment Economy Planning and Transport (ADEPT) East.

The group meets on a quarterly basis to discuss:

- Transport Asset Management
- Waste Management
- Behavioural change/Demand Management
- Economic Development
- Economic Growth
- Innovations

### 4.3 Delegation of Highways Duties

Some street lighting and grass cutting network maintenance functions are delegated to Town and Parish Councils.

CBC does not have responsibility for the trunk roads (M1, A1, A5 and A421) in Central Bedfordshire; these are within Highways England Area 8. Certain parish and town councils have responsibility for their streetlights.

#### **4.4 Works on or in the surface of the Highway by others**

Where works involve the placing, replacing or maintenance of any apparatus under the Highway the undertaking body must apply to Central Bedfordshire Council for a Street Works Permit.

Where works result in a permanent change to the surface of a Cycleway or Public Rights of Way, the undertaking body shall be required to apply using our “Application to Alter the Surface of a Public Right of Way form”.

## **5.0 Community Services Policy and Strategy**

### **5.1 Council Vision, Priorities and Values**

#### **Council Vision:**

The Council’s vision drives the work of the entire Council. It describes our overall objectives as a Council and the type of place we want Central Bedfordshire to be; “a great place to live and work”.

#### **Council Priorities:**

The Council has clear and explicit ambitions for Central Bedfordshire:

- Enhancing Central Bedfordshire.
- Great resident services
- Improving education and skills
- Protecting the vulnerable and improving wellbeing
- Creating stronger communities
- A more efficient and responsive council

## Council Values:

The Council's values describe the type of organisation we want to be and the principles that will guide us in achieving our priorities and vision. These set out the way we will work and interact with our customers, members and each other.

Our values are:

- **Respect and empowerment** – we will treat people as individuals who matter to us
- **Stewardship and efficiency** – we will make the best use of the resources available to us
- **Results focused** – we will focus on delivering the outcomes that make a tangible difference to people's lives; and
- **Collaboration** – we will work closely with our colleagues, partners and customers to deliver on these outcomes

## 5.2 Local Transport Plan (Core Strategies)

At the time of writing a new LTP is being prepared, however this is still in development and so the core strategies presented in Local Transport Plan 3 (LTP3) are still relevant.

LTP3 under the title of *My Journey*, was adopted in April 2011 and sets out a long term framework for investment in transport across Central Bedfordshire.

It establishes a strategic approach to deal with key transport issues, a series of objectives, and broad areas of intervention through which schemes are identified and improvements made to the transport network.

There are various appendices which affect the highways service and how it manages the asset, ranging from the capital improvements scheme identification and programme of works, to maintenance requirements for certain assets on the network.

### 5.2.1 Freight Strategy (LTP Appendix D)

The Freight Strategy provides a policy framework to support the management of freight transport in Central Bedfordshire, and addresses the carriage of freight by roads, rail and pipeline.

The Freight Strategy examines key freight issues under five themes:

- Managing freight on roads;
- Freight facilities for road based transport;
- Servicing and deliveries;
- Information and working with stakeholders; and
- Non-road freight modes



These themes and associated policies are considered in the NMMP as they will affect how the network is managed and repair works prioritised. The main policy affecting network management and maintenance is:

“Maintain a Designated Road Freight Network of primary and secondary routes, in order to protect the safety of other road users, the amenity of communities and their local environments, and the integrity of highways infrastructure. In managing the route the Authority will identify diversionary routes during road works and traffic incidents.”

### **5.2.2 Walking strategy (LTP Appendix E)**

The Walking Strategy provides a policy framework to support improvements to the level, frequency and safety of walking as a sustainable mode of transport in Central Bedfordshire, and addresses key issues such as access to facilities and promotion of health in the communities of Central Bedfordshire.

### **5.2.3 Cycling Strategy (LTP Appendix F)**

The Cycling Strategy provides a policy framework to support improvements to the level, frequency and safety of cycling as a sustainable mode of transport in Central Bedfordshire, and addresses key issues such as access to facilities and promotion of health in the communities of Central Bedfordshire.

### **5.2.4 Road Safety Strategy (LTP Appendix I)**

The appendix focuses on the principles of design and the identification of solutions to safety issues and therefore generally affects design practices only.

The safety of road users will be considered in the general maintenance practices which the Council undertakes on the network, and will be considered when looking to categorise and prioritise highway defects and repairs.

## **6.0 Customer Service and Liaison**

As a front line and customer focussed service, our contact and communication with the residents of Central Bedfordshire is vital. The Customer Service Centre and online reporting portal (provided by the Service Provider) aim to offer a customer service experience that allows residents to interact with the Council conveniently, simply and quickly, including during out of hours, but at the same time managing expectation.

## 6.1 Procedures for Customer Reporting

CBC operates a Customer Service Centre as well as an online reporting tool for potholes, street lighting and other highway matters.

Contact details are as follows;

Telephone; 0300 300 8049 [24 hour help desk]

Email; Customer.Services@centralbedfordshire.gov.uk

<http://www.centralbedfordshire.gov.uk/reportit>

Reports of defects which are made by the public online through the Highway portal or by telephoning the Customer Service Centre are automatically sent to the CBC Highways Database Insight provided by Symology. Email notification from Insight is received by relevant Highways Service team to investigate.

The relevant team will assess the enquiry and update the Customer Report Number (CRN) within the timescales below.

Defect Category	Timescale
Trees	10 working days
Streetlights	10 working days
Traffic Management	28 working days
Rights of Way surface defects	28 working days
All other defects including Footway and Carriageway surface defects	5 working days

All reports will subsequently be relayed to and inspected by a highways officer/technician and the priority confirmed or changed. The Insight system is updated with the outcome of the inspection.

### 6.1.1 Emergency Defect Reporting (Category 0)

If the customer deems defect to be dangerous, the portal directs them to call the Customer Service Centre.

#### During Working Hours

The Customer Service Advisor [CSA] will log the defect with an appropriate response time after they have spoken to the customer. If it is deemed by the CSA that an emergency (2 hour) response is required, then the Area Team Inspector will be contacted directly by the CSA.

#### Out of Working Hours

The out of hours call centre will log the defect with an appropriate response time after they have spoken to the customer. If it is deemed by the out of hours call centre that an

emergency (2 hour) response is required then the on call Service Provider supervisor will be notified.

For both during working hours and out of hours, the CRN is to be updated with actions taken within 24 hours.

### 6.1.2 Other defect reporting (Category 1 and 2)

Should the Customer Service Advisor or the out of hours call centre deem the defect not to require immediate attention then the defect will be logged via the portal and automatically sent to Insight.

## 6.2 Customer Feedback

The Customer Service Centre will advise customers during initial contact that the Engineer has 5 working days to deal with a standard request and 1 day for an emergency request. They will be informed about the tracking facility within the web portal which provides the customer with the latest standard response regarding the status of the defect from the investigating officer. Should the customer call again then they will be advised of the latest update on their report in Insight.

It is the responsibility of the Highway Area Custodians or relevant Team Leaders to ensure their team members adhere to the above timescales. Central Bedfordshire Council will monitor this procedure to ensure targets are met.

### 6.2.1 Escalation Process

Should the timescale for customer feedback not be followed then the escalation process below will be followed:

Sequence	Missed deadline	Action Required	Timescale
1.	No update after 5 working days	Reminder sent to the relevant officer to assess & update customer	5 working days
2.	Still no update after 10 working days	Referred to next level above either Principal Officer or Highway Area Custodian	5 working days
3	Still unresolved after 15 working days	Pass to Customer Liaison Officer to resolve	

## **6.2.2 Formal Complaints**

There are two types of complaint:

- Escalations – see above
- Formal complaints

Formal Complaints can be made:

- where either a customer has already made a request for service and the deadlines in the escalation timetable have not been followed  
**or**
- other complaints (which are not requests for service) and in which the customer specifically stipulates they wish to make a formal complaint. For example complaints about CBC staff or contractor actions.

This procedure links in with Central Bedfordshire Council's Customer Feedback Procedure, Compliments, Comments, Complaints and the timescales within it.

When the escalation timetable deadlines have been missed the Customer Liaison Officer will receive and take ownership of the complaint. It will be logged with the Customer Relations Team and the Highway Customer Liaison Officer will investigate the complaint and insure that the Customer receives a timely response.

CBC complaints procedure will be followed.

## **6.2.3 Stages of Complaints (from Customer Feedback Procedure)**

Stage 1 Local resolution - by Highway Customer Liaison Officer

Stage 2 Service Investigation – by Team Leader/Assistant Director

Stage 3 Independent Investigation – by Customer Relations Manager

## **6.3 Claims Management**

Central Bedfordshire Highways minimises the risk of claims by applying the procedures detailed in this Plan.

It is recognised that a claims management approach will not prevent claims from being pursued; Central Bedfordshire Highways will therefore record service requests, complaints, claims and compliments, together with its actions, including no action where appropriate, so that it may offer a proper defence against claims.

It is not the intention to be overly defensive but focus resources upon delivery of the highway maintenance duty, reduce risk to highways users and offer a financially-sustainable position to Central Bedfordshire Council.

Claims are processed by the CBC Legal and Democratic Service.

## **6.4 Town and Parish Council Liaison Meetings**

In order to build closer working relationships with Town and Parish Councils, Central Bedfordshire Highways will meet each Council annually to discuss highway issues.

The aim is to gain a greater understanding of the concerns of local councils, together with giving Town & Parish Councils an appreciation of budgets, workloads and intervention levels.

### **6.4.1 Procedure**

- The Town or Parish Council nominates a 'highways' representative to act as the focal liaison point with Central Bedfordshire Highways
- Central Bedfordshire Highways will inspect all areas of concern, with the Town/Parish representative
- Central Bedfordshire Highways will identify and record all issues that are discussed
- Central Bedfordshire Highways will email the representative of the Town or Parish Council within 15 working days of the visit to advise of all outcomes and agreements and to confirm exactly what maintenance work will be undertaken. If required a copy of this email will be sent to the Town / Parish Council Clerk
- Frequent contact will be made with the Town / Parish Council to keep them informed of the progress of promised work

It is important to note that not all expectations will be able to be fulfilled via the implementation of this procedure. Central Bedfordshire Highways will give reasons if any requested work cannot be undertaken.

## **6.5 Member and Town and Parish Council Communications**

Central Bedfordshire Highways will provide support for Ward Members and local Town and Parish Councils through a variety of methods. Day-to-day advice, comments and collaboration is key and encouraged via the Area Teams. This will ensure wider understanding and appreciation of the highways service.

Ward Members and local Town/Parish Council Clerks shall be informed of the nature of routine maintenance via an Annual Plan which includes the Structural Maintenance Programme, the Capital Drainage Programme and the Integrated Transport Plan.

If individual schemes require publicity, then this shall be entered into in accordance with the service Communications Strategy.

### **6.5.1 Members Portal**

A portal for members is being developed which will provide reports on a variety of Highways statistics including number of reported defects, outstanding repairs, cyclic programmes etc. and will allow members to report issues.

## **6.6 Surveys**

Central Bedfordshire Highways participates in the annual National Highway and Transport Survey (NHT).

CBC shall endeavor to undertake satisfaction survey work including questionnaires to Town/Parish Councils, Officer and elected Members, telephone and public perspective surveys and social media.

These surveys shall raise the issues of:

- Perception of Value and Service Delivery
- Adequacy of communication
- Quality of the finished product
- Perceptions upon overall condition of the highway network
- Suggestions for service improvement

The results shall be used to inform and improve wider service delivery.

## 7.0 Network Maintenance – Asset Register and Management Systems

Central Bedfordshire Highways utilises asset registers, currently ‘Insight’ provided by Symology and CAMS (Public Rights of Way) provided by Exegesis, These registers are hierarchical systems with all highway inventory, inspections, surveys and customer complaints referenced to the relevant highway asset. This approach allows full reporting of data at all levels to monitor performance and cost and derive future maintenance programmes.

The inventory allows warranty information to be held against assets such as vehicle activated signs. Inventory data can be automatically updated, e.g. a bulk lamp change.

The modules that identify how best to invest in maintaining roads are used to produce a four year programme for structural maintenance and enables funding to be targeted to sites that give the best improvement in condition.

Insight is used to manage the following:

Core Element	Sub-section
Asset Register	Standard UKPMS inventory
	Structures
	Street Lighting
Streetworks and utility works management and control	
Customer Complaints and correspondence (link between Service Provider and Customer Service Centre)	Response times for complaints
	Actions undertaken recorded in system
	Linked to Service Provider’s order system
Inspection and Cyclic Maintenance Management	Programme and record outcome of safety/service inspections
	Create appropriate works orders
	Defence against 3 <sup>rd</sup> party claims
Works management	All works ordered and tracked in Insight
	Orders added to Streetworks module
	Performance indicators for completion of Category 0 and 1 defects
UKPMS Surveys	CVI/DVI, SCANNER SCRIM and Deflectograph

## 8.0 Network Maintenance – Emergency Events and Winter Service

All major adverse weather and emergency events and their immediate affects will be managed through the Central Bedfordshire Resilience Plan. The role of Central Bedfordshire Highways is to continue to provide its services, whilst simultaneously providing support alongside voluntary agencies, utility companies and national agencies.

Outside normal office hours the Service Provider undertakes emergency decision making to co-ordinate the reactive maintenance response for the Authority area.

## **8.1 The Resilient Network**

Central Bedfordshire Council follows DfT guidance in identifying a resilient network to which will be given priority in terms of maintenance and inspection so that it is open and available during adverse events including extreme weather. The main concern being maintaining access to key services such as hospital, fire and police stations, schools, railway stations, key food shops and economic activity to town centres, industrial estates and business parks. This network will in the main be the same as the network that will receive salting between October and April. This has been developed by CBC and the Bedfordshire Local Resilience Forum, consulted on and will be reviewed every 2 years.

## **8.2 Bedfordshire and Luton Emergency Response Plan**

In the event of a major emergency affecting Central Bedfordshire the procedures defined in the Bedfordshire and Luton Emergency Response Plan shall apply. The Council will respond alongside other organisations, the role of the Highway Service and Service Provider is summarised below:

- Provide staff, equipment, transport, plant and other resources
- Maintain essential routes and bridges
- Provide geographical and technical information
- Carry out enforcement duties
- Implement elements of the relevant Emergency Plans



Following such events and where the opportunity exists to do so, the Council shall seek to obtain Government grant aid to

- Meet the cost of reactive measures
- Provide alleviation works

Where successful in its application, the Council shall direct resources obtained in accordance with spending instructions. Highway maintenance, routine and programmed works will be delivered compliant to these instructions, to mitigate the long-term effects upon the highway network.

### **8.3 The Winter Service**

The winter service of salting and snow clearing is a key element of network maintenance. The service affects the safety of the travelling public and the availability and reliability of the network throughout the winter period. The defined season for delivery is set out in the Highways Contract.

Due to the complex and detailed nature of this part of network maintenance, a separate Winter Service Operational Plan is produced by the Service Provider annually before the start of the winter maintenance season. Elements of this Plan, including which routes receive treatments, along with advice for driving in winter are produced on the CBC website.

Production and delivery of the current Winter Service Plan is a duty carried out by our Service Provider. The Service Plan is reviewed on an annual basis as part of this function.

## **9.0 Network Maintenance – Sustainable Development**

### **9.1 CBC Policies in relation to the Environment**

CBC is committed to the protection and the enhancement of its natural and built environment and peoples' health and well-being. It recognises that the Council can have significant impacts on the environment, both in the delivery of services and as a major employer and landowner.

CBC also recognises its capability to encourage and influence others in the community to improve their environmental performance, the need to work in partnership with others in the pursuit of this, and the need to consult widely on proposals and report publicly on our achievements.

CBC and its partners are committed to preventing pollution and managing our policies and practices to achieve a continual improvement in our environmental performance. In doing so we will ensure the Council meets all relevant environmental legislation and regulations, and other voluntary requirements to which we subscribe.

In setting and reviewing our environmental objectives and targets we will address:

- The sustainable use of renewable resources and the conservation of non-renewable resources;
- The minimisation of environmental impacts associated with highways;
- The protection and enhancement of natural species and habitats;
- The conservation of cultural heritage
- The minimisation of waste, and the re-use or recycling of materials
- The purchase of supplies, services and equipment in ways which minimise adverse environmental impacts;
- Improved public access to information on our environmental performance.

Central Bedfordshire's LTP3 sets out ambitious objectives for sustainable travel via a four-year programme of works, involving many types of project aiming to promote modal shift away from the private motor vehicle.

The "Well Managed Highway Infrastructure" Code of Practice contains a maintainability and sustainability checklist, which considers the whole life cost of the materials used, future maintenance of materials and the re-use and recycling of materials to reduce environmental impact, improve the community value of the works, and maximise any environmental contribution the maintenance works may contribute to towards.

## **9.2 The conservation of non-renewable resources**

Highway maintenance uses large quantities of aggregates each year. However, modern materials allow greater percentages of recycled materials within the asphalt mix.

The Council uses local materials and providers wherever possible, to reduce transportation cost and impact upon the environment, and will also use recycled materials wherever practicable for all types of highway assets.

## **9.3 Quality Management**

The quality of materials and workmanship can have a great bearing on the sustainability and environmental impact of maintenance schemes. If material or workmanship is of a poor quality, then this could mean additional works to remediate. It should therefore be ensured that not only are the council's quality management procedures met through such procedures as Quality Assurance, Environmental Management and certification such as Investors in People, but only quality materials and products are used which can be identified by certification such as HAPAS.

## **9.4 The conservation of the highway's natural habitat**

Roadside verges are important for fauna to feed and flora to grow. There are lengths of verge in Central Bedfordshire that are either designated as Roadside Nature Reserves or Sites of Special Scientific Interest (SSSI). These are signposted on site and available on GIS overlay. These verges are only cut and taken away in early autumn under direction of the CBC Ecologist.

Where a Town / Parish Council or land owner wishes to plant trees in the highway verge, CBC's Tree Officers are consulted in order to minimise damage or possible third party claims. All third party work in planting within the highway is carried out by a Licence under s142 of the Highways Act 1980.

## **9.5 Waste Management**

Wherever possible the Council will reduce and recycle the by-products from its highways works. This action will include:

- Retaining and re-using materials on site;
- Maximising the value of re-used material rather than only low grade fill;
- Make use of in-situ recycling in appropriate situations;
- Wherever possible look to a procurement process to include procurement of recycled material; and
- Ensure that where waste products cannot be reduced or recycled that waste is disposed in a responsible way.

## **9.6 Pollution Control**

Numerous processes that are used to maintain and repair highways and associated assets have the potential to cause pollution, which could be via, noise, air or water.

Advice should be sought from the relevant Environmental Health Department or Environment Agency to look to reduce and mitigate the impacts wherever possible.

Consideration should also be given to storing contaminating materials such as diesel in appropriate containers in bunded areas to ensure that spillages during storage do not spread. Where materials are being taken out of these areas, mitigation should be provided to ensure that any spillage can be contained, or prevented from entering any drainage system or waterway.

## **9.7 Environmental Impact Assessments (EIA)**

Environmental management issues of schemes shall be addressed by the use of an Environmental Impact Assessment (EIA).

The Town and Country Planning (Environmental Impact Assessment) (amendment) Regulations 2015 stipulates the requirements for the production of EIA's at threshold levels. Schedule 2 stipulates in table 10 part (f), that for the scheme to be classified as a Schedule 2 development if the scheme includes the construction of roads (unless included in schedule 1) or the area of works exceeds 1 hectare.

The "area or works" is defined as "including any area occupied by apparatus, equipment, machinery, materials, plant, spoil heaps or other facilities or stores required for construction or installation."

Schemes which are exempt from this criterion and will need an EIA are classed as Schedule 1 development under paragraphs 7 (b) and (c):

"(b) Construction of motorways and express roads;

(c) Construction of a new road of four or more lanes, or realignment and/or widening of an existing road of two lanes or less so as to provide four or more lanes, where such new road, or realigned and/or widened section of road would be 10 kilometres or more in a continuous length."

## **10.0 Network Maintenance – Staff Structure and Partners**

### **10.1 Client Staff Structure**

The staffing structure of Highways, and its support teams, is as follows:

Within Community Services, the Assistant Director for Highways has overall professional responsibility for work carried out through the contract and manages the Highways Service Teams.

The Highways Service Teams, which are responsible for the operational management of the Highway:

- 3 Area Teams
- Asset Management
- Contract Management
- Traffic Management
- Business Support

Supporting teams with a bearing on the public highway or its users are as follows:

Also within the Community Services Directorate

- Within Community Safety, Parking and Programme – Manages parking enforcement and Community Safety

- Within Environmental Services, Waste Operation – Manages Street cleansing and grass verge cutting

From the Development and Infrastructure Directorate

- Within Planning Delivery, Highways Development Control – Manages the highway aspects of new developments and highway adoptions

From Regeneration and Business Directorate

- Within the Client and Development Services, Building Control including Flood Risk Management – Dealing with risks from land drainage issues

From the Public Protection and Transport Directorate

- Public Protection, Emergency Planning – Dealing with the Council’s ability to discharge its services in the event of major national, international or local incidents

## **10.2 Other partners within the wider community**

The following stakeholders have key influence for Central Bedfordshire Highways:

- Special interest groups and statutory consultees
- Environment Agency, Internal Drainage Boards, riparian owners – liaison on environmental impact assessments, consents and drainage
- Statutory Undertakers – co-ordination of works, liaison with respect to emergencies and improvements affecting the network
- Historic England – assent with respect to Scheduled Ancient Monuments
- English Nature – liaison with respect to environmental impact assessments and consent for SSSIs
- Police – close contact on issues such as traffic management, highway safety, crime prevention and emergency planning
- Network Rail, Office of Rail Regulators (ORR)
- Public Transport Providers
- The Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire – liaison with respect to Roadside Nature Reserves
- Business Chamber of Commerce – monitoring of proposals
- Primary Care Trust – Health Improvement Plan (road safety)
- Neighbouring authorities and the sub-region
- Highways England

## 11.0 Network Hierarchy

A hierarchy is the foundation of a coherent, consistent and auditable network maintenance strategy. It is important that the hierarchy adopted reflects the needs, priorities and actual use of each road in the network. These may be determined by:

- Road classification
- Traffic flow
- Functionality e.g. adjacent to shopping centres, schools or hospitals.
- Environment e.g. urban
- Non-vehicular traffic factors

Central Bedfordshire Council Highways operates a detailed network inventory which is regularly updated in response to any new works and is stored / maintained via Insight which is a compliant UK Pavement Management System (UKPMS) supplied by Symology.

In accordance with the recommendations of Well Managed Highway Infrastructure, and taking into account Council policy documents, the Council has adopted the following network hierarchy.

Category	Hierarchy Description	Type of Road General Description	Detailed Description
2	Strategic Route	Principal 'A' roads between Primary Destinations, and all other roads within the Resilient Network.	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.
3a	Main Distributor	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 such as pedestrian crossings.
3b	Secondary Distributor	Classified Road (B and C class) and unclassified urban bus routes carrying local traffic with frontage access and frequent junctions	In rural areas these roads link the larger villages and HGV generators to the Strategic and Main Distributor Network. In built up areas these roads have 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

4a	Link Road	Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions	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. In urban areas they are residential or industrial interconnecting roads with 30 mph speed limits random pedestrian movements and uncontrolled parking
4b	Local Access Road	Roads serving limited numbers of properties carrying only access traffic	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 roads or cul-de-sacs.
5	Minor Road	Little used roads serving very limited numbers of properties (typically less than 5).	Locally defined roads.

A route or section of a route may be reallocated within the hierarchy in response to a change in local circumstances of a relatively permanent nature. Examples of reasons to consider altering a road’s place in the network hierarchy include:

- Adoption of a new road
- Special environmental considerations
- Special traffic zones
- Winter service routes
- Vulnerable users or with special needs
- Freight routes
- Public transport routes
- Cycle routes
- New restrictions and TRO’s

Any review shall take into account increases in traffic flow by analysis of traffic flow data or modelled traffic flow. A hierarchy review to include such circumstances may be delegated to the Service Provider by the Traffic Manager.

Hierarchies are reviewed to reflect changes in network characteristics and functionality, so that maintenance policies, practices and standards reflect the current situation.

Temporary alterations of a route’s status within the network hierarchy shall only take place for short periods (not longer than 18 months) at the discretion of the Traffic Manager. All temporary alterations shall be documented centrally by the Traffic Manager and disseminated to stakeholders.

## 12.0 Network Maintenance – Defect Categorisation

A 'Risk Matrix' shall be used to classify the degree of risk posed by identified defects. The Matrix shall serve to quantify the probability of an incident occurring and level of severity of the harm or damage that would occur.

The impact is likely to rise with factors such speed, the level of traffic, types of user, the classification within the network hierarchy and the defect location and so all important considerations in any assessment.

The risk factor is the product of its impact and probability, and is in the range of 1 to 25. This factor identifies the overall seriousness of the risk and consequently the speed of response to remedy the defect. The priority for dealing with a defect can be determined by correlation with the risk factor, as shown in the Risk Matrix below.

	Probability	Very Low (1)	Low (2)	Medium (3)	High (4)	V. High (5)
Impact						
Negligible (1)		1	2	3	4	5
Low (2)		2	4	6	8	10
Noticeable (3)		3	6	9	12	15
High (4)		4	8	12	16	20
V. High (5)		5	10	15	20	25
<b>Response Category</b>						
		Category 2 (Low)	Category 2 (Medium)	Category 2 (High)	Category 1	Category 0

Degree of Deficiency	Timeframe for action
Category 0 Defects	Emergency make safe response in 2 hours
Category 1 Defects	These require prompt attention and will require a permanent repair to be made within 5 working days of the defect being assessed.
Category 2 Defects	All other defects. These will be prioritised and considered for repair within planned programmes of work

Where two or more defects are in close proximity (within a radius of 1m) they shall be classified as a cluster. Where normally defects would be given an individual risk factor, thought should be given to whether it should be increased, due to the effects of the clustered defect affecting a larger area and therefore having a higher risk probability.



Assessing the hazard presented by a defect is a judgement of 'reasonable foresight of harm' to users of the highway. When assessing defects, all users of the Highway shall be considered, including cyclists, horses and other non-motorised users, as well as disabled and elderly users as a lesser defect for these users could be deemed more dangerous by a Court.

When considering the risk factor, the inspector shall also consider whether the defect is in an unlit location. In this instance the probability of the defect causing an incident should be increased proportionately to account for poor visibility of the defect by users.

All individuals making these decisions on site will be suitably experienced or qualified.

Guidance is supplied to the out of hours service to enable them to categorise defects which may require an emergency response or until the defect can be re-assessed by the Area Teams in hours.

### **13.0 Network Maintenance - Holistic principles in reactive maintenance**

When assessing a reported defect, Officers should consider whether it is appropriate and economic to undertake repairs, under the same works order, to other defects within and adjacent to the carriageway (e.g. signage) utilising the opportunity afforded by the traffic management measures.

This will require the officer to use reasonable judgement as to the rate at which defects may deteriorate. It is reasonable to assume that deterioration will be faster with the trafficking speed, volume and HGV content likely on classified roads, in cold or inclement weather, or if the defect is located in a high-stress area, for example in areas of HGV slewing.

Permanent repair is favoured at all times. The aim is to reduce repeat visits to site. Holistic working will require gangs with plant, labour and materials suited to multiple repair techniques in the same site visit.

Holistic working is not confined to one team, discipline or budget. It is an ethos all officers should observe. Therefore if defects are found on other assets they too should be considered for repair in the same traffic management. This will require close liaison, including programmed works.

Officers are not absolved of proper budget management through holistic working. Resilience against claims must be maintained: budget pressure may dictate that only defects requiring immediate repair can be delivered at times during the financial year.

## 14.0 Network Maintenance Types

### 14.1 Reactive Maintenance (Response to Category 0 and 1 defects)

Typical reactive measures for the separate elements of the highway asset are described in the relevant asset section of this Plan. Where an identified defect falls outside the described types the responsible officer shall undertake appropriate measures they see fit to render the defect safe in line with the above time scale targets.

In the case of dangerous defects to utility apparatus or trenches the responsible officer shall contact the CBC Streetworks Team and ask them to make a report to appropriate utility company. The responsible officer shall instigate measures to render the site safe if:

- the identity of the utility responsible is unknown;
- the utility responsible cannot be contacted
- the utility cannot make the inadequacy safe within 2 hours
- no response is received from the undertaker within 2 hours of the logged telephone call

The costs of rendering the defect safe shall be borne by the utility concerned.

Information concerning the measures taken, including no action where necessary, shall be recorded, maintained and utilised as appropriate in reviews of maintenance strategy and practices.

Measures taken will wherever practicable, take the form of a permanent repair to avoid the necessity to revisit the site in the short term. Where this is not possible a temporary make safe repair will be considered. If this is not achievable, traffic control measures, such as traffic lights or a road closure, will be put into place.

#### Emergency Reactive Maintenance

Out of hours following a report of Category 0 defect the Service Provider shall co-ordinate the reactive maintenance response to render the site safe within 2 hours.

In working hours, upon identifying a Category 0 defect either by report or by inspection, the responsible officer shall instigate measures to render the site safe within 2 hours.

## **14.2 Planned Maintenance**

Planned maintenance of the highway network is targeted at two areas:

- meeting the need identified through highway inspections that are identified as Category 2 defects.
- preventative maintenance, working ahead of highway inspections when budgets allow to address defects while they are in their 'infancy' as well as consideration of defects/improvements brought to the Area Teams attention by ward members or local Town & Parish Council representatives

Whenever possible, measures taken shall be in the form of a permanent repair.

The typical routine measures for each element of the highway asset are described in the relevant asset appendix of this plan.

Where an identified defect falls outside the described types the Area Team shall undertake the measures he or she sees fit to repair defects prior to it deteriorating to become a hazard or in line with the appropriate time scale target.

## **14.3 Programmed Maintenance - 4 Year Works Programme**

CBC Highways maintains prioritised lists of capital funded works to be undertaken over the next 4 years:

- Integrated Maintenance Schemes (as identified in the Local Transport Plan)
- Structural Maintenance Schemes (carriageway and footway resurfacing)
- Street Lighting including column replacement programme
- Drainage (drainage improvement schemes)
- Major Schemes including Structures
- Planned Maintenance activities (minor works)

The programme must reflect CBC's highway policies and objectives (including Local Transport Plans). This programme will feed into the Annual Works Programme which is a definitive list of schemes and targets that are scheduled to be completed in the current financial year.

### **Aim of the 4 Year Works Programme Development Process**

- To enable all the main interested parties to work together to identify and prioritise the works to be done
- To identify basic information on each scheme (e.g. location, parish, nature of work, estimated costs and preferred dates for completion)

- To define a mechanism so that schemes may be fairly assessed and prioritised without political or regional bias. The priority mechanism should reflect CBC policies and strategies as well as other factors such as road condition
- To prioritise all schemes using the approved mechanism, such that the most worthy schemes will be undertaken early on in the programme
- To formally discard any schemes that do not merit completion or meet the minimum priority criteria
- To allocate the annual CBC budget to each objective and category of scheme as necessary

In establishing and updating the programme, account will be taken of:

- Safety
- Serviceability
- Sustainability
- Community Effect

Environmental management issues shall adhere to the Town and Country Planning (Environmental Impact Assessment) Regulations 2011. Account will be taken of the advice given in the BRE publication: 'Guidance on specifying recycled content in Local Authority contracts for highway maintenance'

Works shall be permanent and will, wherever practicable, adopt a holistic approach to management of the highway network. The potential to include such works shall be considered for all programmed schemes. This holistic approach promotes the inclusion of works upon all elements of the highway assets when undertaking programmed works. It facilitates works which have the potential to add value at minimum cost, for example by the inclusion of dropped kerbs to assist disabled people, modification of unclear signage or road markings. The scope for inclusion for such works within each scheme will depend upon the key aims of the scheme and available resources.

## 15.0 Deviation from NMMP

If for reasons of necessity, and/or valid engineering reasoning, processes that differ from those within this Plan then approval from a Principal Officer (or above) must be obtained and a procedure note should be filed detailing the following:

- The actual process undertaken
- The time scale of response
- Reasoning
- Comment upon its success
- Implication on others

## Appendix A: Bibliography

### National Guidance

- PAS55-1: Specification for Optimised Management of Physical Assets
- PAS55-2: Guidelines for the Application of PAS55-1 (2008)
- Highways risk and liability Claims 2<sup>nd</sup> edition (2011)
- Well Managed Highway Liability Risk-Institute of Highway Engineers (2017)
- Well Managed Highway Infrastructure: A Code of Practice (2016)
- Design Manual For Roads and Bridges
- Code of audit practice - Local Government Bodies (2010)
- Manual for Streets 2 [CIHT]
- BS 7669-3: Vehicle Restraint Systems, Guide to the installation, inspection and repair of safety fences (1994).
- ISO 31000:2009 Risk Management Principles and Guidelines.

### CBC Strategy Documents

LTP3; Appendices D-J

[Central Bedfordshire Community Engagement Strategy](#)

[Central Bedfordshire Council Design Guide 2014](#)

### Other CBC Documents Affecting Delivery of the Service

- Highways Contract
- Organisational chart

## Appendix B Version Control

Version	Author	Checked	Approved	Comment
03 Nov 2017	C Nicol	J Cross		Revised draft for Committee

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