



North East Lincolnshire's Asset Management Strategy For Highway Services

April 2015

1. Implementing Effective Asset Management

- 1.1 North East Lincolnshire Council recognises the importance of the highway infrastructure in the context of the well-being of all who use it. The Council as Highway Authority is committed to the good management of the highway asset not only for now but also, for future generations, and recognises that effective asset management is essential to deliver clarity around standards and levels of service, and to make best use of available resources.
- 1.2 To this end, North East Lincolnshire have been working on implementing asset management principles over a number of years. A Transport Asset Management Plan (TAMP) was approved in 2005, connecting together various key documents to provide a consistent and uniform approach to the management of the highway infrastructure.
- 1.3 Following the approval of the 2005 TAMP, the Council has further developed its asset management approach. Priority is given to the management of asset information and its effective use, as well as the development of processes that deliver required outcomes, through the use of appropriate tools which support budget and lifecycle management planning.

2. Asset Management Framework in North East Lincolnshire

- 2.1 This Asset Management Strategy underpins the Highway Asset Management Policy and is one of the key strategic documents related to the delivery of the Council's highway services.
- 2.2 This document reflects the guidance laid down in the suite of national Codes, in particular the Code of Practice '*Well-maintained Highways*' and the guidance issued by the Highway Maintenance Efficiency Programme (HMEP) on the use of asset management principles.
- 2.3 In addition to the development of strategic documents and in order to embed and promote Asset Management practices, the Regeneration Partnership has set up a highway asset management team within the organisational structure, which promotes and delivers asset management practices in the delivery of highway services, as described in Figure 1.

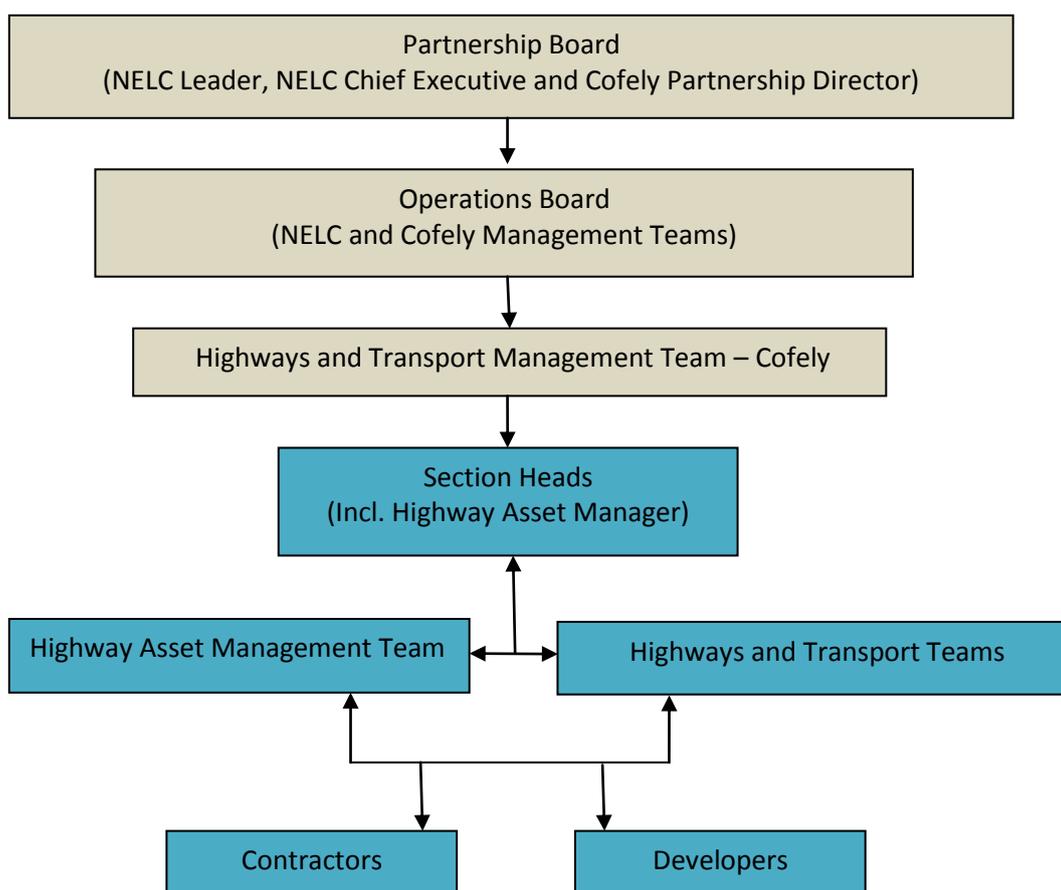


Figure 1: Organisational Structure

2.4 The Highways and Transport Management Team provide strategic guidance for the successful adoption of the Asset Management Strategy. They promote understanding of the role of highway asset management within the Regeneration Partnership, and support the Highway Asset Manager and Highway Asset Management Team with the delivery of asset management planning.

2.5 This Asset Management Strategy sets out how the Councils' Highway Asset Management Policy is to be achieved. In particular, it provides the framework for delivering North East Lincolnshire Council's corporate priorities through effective, informed and defensible decision making. It describes how the Regeneration Partnership is using and developing an asset management approach to the management of the Authority's highway network.

2.6 This strategy establishes the basis for the development of detailed asset management planning and its implementation including, enabling the partnership functions including, its technology and processes.

2.7 This strategy is based on the framework shown schematically in Figure 2, and outlined in the following sections. This framework clearly identifies the relationships between asset management, the influences of national and local drivers, and the internal processes within the regeneration partnership. This Asset Management Strategy will inform priorities in the delivery planning process and therefore support continual improvement in the management of the highway asset.

Highway Asset Management Framework

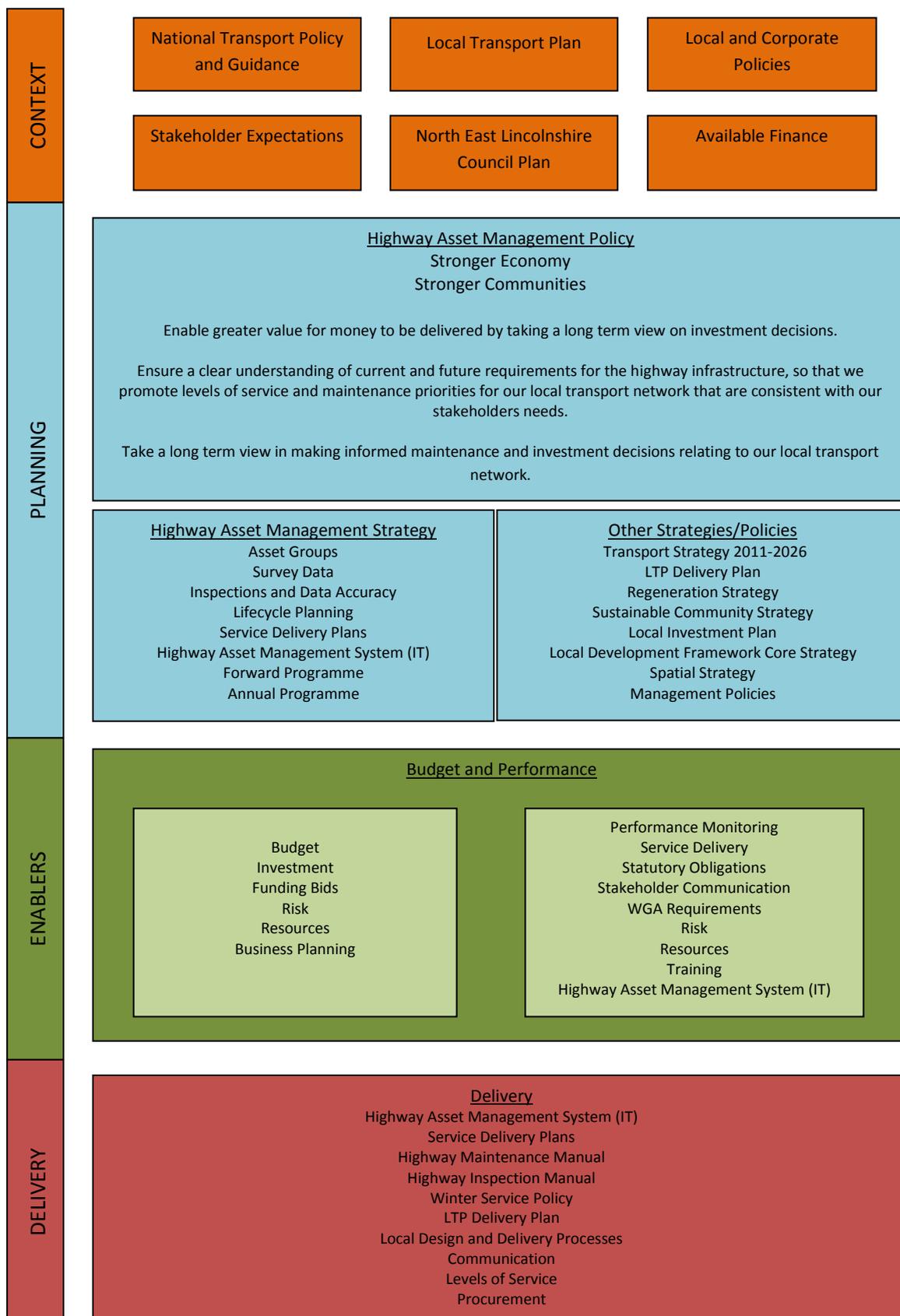


Figure 2: North East Lincolnshire Council’s Highway Asset Management Framework

2.8 This strategy covers all service led activities supported by capital and revenue funding.

2.9 This strategy explains how individual asset groups and components fit in the framework, it describes how the asset management planning process is implemented in the workplace and refers to tools currently employed, as well as links to other key documents. Finally, the strategy describes how the Highways and Transport Management Team will embed a continuous improvement approach to highway asset management, including how national developments and good practice are taken into consideration, as well as how the work carried out in North East Lincolnshire can influence the national asset management agenda.

3. Strategy for Individual Assets

3.1 As part of the asset management framework, and in accordance with other national guidance, the highway asset has been divided into asset groups. Each group is then broken down into asset components and activities. The asset groups and components are described in Section 4 below.

3.2 A key function of the asset management process is to understand the funding needs of each asset group, component and activity against performance, aims and objectives. This means understanding funding requirements, which will meet the following:

- LTP objectives;
- Delivery Planning
- Performance Targets.

3.3 Key to this process is a need to understand the impact of financial decisions on customer satisfaction and the delivery of the corporate priorities. The impact that investing in one asset component may have on the overall performance of other asset components as well as the whole asset, is considered during the assessment process.

3.4 For the delivery of the highway service, North East Lincolnshire Council and its partner organisation (Cofely) undertake all highway operations including all routine and operational functions along with planned maintenance and regeneration schemes.

3.5 In line with national guidance and good practice, North East Lincolnshire is developing a whole lifecycle approach to managing its highway maintenance activities. Understanding how long specific maintenance treatments last, the relative cost of these treatments and the Levels of Service (LoS) provided are essential pre-requisites to good asset management. North East Lincolnshire's goal is to continue to provide a safe and effective highway network, demonstrating value for money and efficient service delivery, in line with Council priorities.

4. Asset Groups and Components

4.1 North East Lincolnshire's highway asset has been divided into key assets groups and components, as described in the following Table (Table 1). The table details the desired outcomes for each of the Asset Groups.

Asset Group	Asset Component	Desired Outcome	
Carriageway	Carriageway Road Markings Winter Maintenance Street Cleansing Traffic Calming Features	<ul style="list-style-type: none"> - Deliver an improvement in overall condition. -Strategic network – resurfacing made a priority for repair instead of surface treatments. - Preventative works continue as a priority to deliver best value for money. Treating roads in the early stages of deterioration and extending the whole life of the asset by stopping/delaying deterioration. -Develop annual visual condition surveys to enhance current decision making processes. 	
Footway	Footway Cycleway Pedestrianised areas Street Cleansing Winter Maintenance	<ul style="list-style-type: none"> - Enable improvement in overall condition of all footways with an emphasis on category 1 footways (high use). - Maximise the use of preventative treatments where possible. - Develop annual visual condition surveys to enhance decision making processes. 	
Lighting	Lighting Columns Lamps Cabling Ducts Feeder Pillars Illuminated signs and bollards Seasonal illuminations Subway Lighting	<ul style="list-style-type: none"> -Successful completion of the NELC LED project to replace 16500 Street Lamps with LED lamps across the network. - Replacement of further 2000 lamps with LED lamps by summer 2015 to complete 95% of network operating with LED lamps. - Develop annual visual condition surveys in conjunction with electrical testing to enhance current decision making processes. 	
Structures	Bridges Culverts Embankments Retaining Walls Vehicle restraint systems	<ul style="list-style-type: none"> -To maintain safe structures and continue to meet statutory duties via a regime of inspections and management of abnormal loads and bridge use. -Make steady progress in addressing structures where maintenance or strengthening is necessary, prioritising on condition and location. 	

<p>Traffic Signals</p>	<p>Signalised junctions Pedestrian and cycle crossings UTC systems Detection equipment Cabling and Ducting CCTV equipment in the highway</p>	<ul style="list-style-type: none"> -To maintain a reliable and safe traffic signals stock. -Continue to update the reliability of the signal stock by way of inspections and reactive repair. - Develop annual visual condition surveys to enhance decision making processes. - Successfully replacement of UTC system to cloud based SCOOT system. - Successful migration from BT fixed lines to wireless MESH system. 	
<p>Drainage</p>	<p>Gullies and linear drainage channels(road and footpath) Highway drains (including pipework, manholes and outfalls) Pumping stations and telemetry Land drainage ditches and watercourses Roadside ditches</p>	<ul style="list-style-type: none"> -Complete asset inventory. -Continue to update the reliability of the drainage stock by way of inspections and reactive repair. - Continue visual condition surveys in line with cyclic cleansing to enhance decision making processes. -Continue to provide annual investment in drainage improvements-effective drainage systems will prolong the life of roads and footways. 	
<p>Street Furniture</p>	<p>Signs (advance direction, warning, regulatory, local direction/information, parish) Sign posts Non illuminated bollards Fences Guardrail Barriers Information boards Cycle Stands Street name plates Bus stops Bus shelters Litter bins Benches/seats Cattle Grids</p>	<ul style="list-style-type: none"> -Complete asset inventory. -Develop annual visual condition surveys as part of footway condition inspections, to enhance current decision making processes. 	
<p>Rights of Way</p>	<p>Footpaths and bridleways (both surfaced and unsurfaced) Gates Stiles Bridges Marker Posts and footpath signs Steps Boardwalks Barriers Handrails</p>	<ul style="list-style-type: none"> -Continue to carry out routine maintenance inspections on a 18 month rolling programme to enhance decision making processes. -Make steady progress in addressing PROW structures where strengthening or replacement is desirable, prioritising on condition and location. -develop annual visual condition inspection of all PROW structures by structural engineer to enhance 	

		decision making process.	
Trees	Highway Trees	Continue to manage and maintain safe and healthy trees for the benefit of the local environment, in accordance with national Code of Practice. Operational maintenance of highway is trees carried out by Neighbourhood Services and as such is not covered in this Strategy.	
Green Space	Verges Areas of planting Hedges	Continue grass cutting to meet minimum standards set in national Code of Practice. The operational services relating to green spaces are carried out by Neighbourhood Services service area and as such is not covered in this Strategy.	

Table 1: Asset Groups and Components

4.2 A number of activities are included under each group, as described in Appendix A.

4.3 This approach has been adopted to allow a clear understanding of funding allocation across the different asset groups, facilitating the recording of investment, and hence linking expenditure to activities. Identifying where money is invested, allows the Regeneration Partnership to monitor performance against service delivery and thus allows the implementation of a continuous improvement process, within the constraints of available funds.

4.4 Dividing the asset into component parts and identifying the relative costs and demand for planned, routine and reactive maintenance activities is seen as an essential process which is currently being developed.

5. Critical Assets

5.1 North East Lincolnshire’s critical highway assets are those defined where failure would result in significant impact on the local, and potentially the national economy. North East Lincolnshire has identified its critical carriageway and structures infrastructure, and identified the risk associated with failure of these assets. Appropriate planning for such a failure event has been determined, and relevant protocols established should a failure event occur.

6. Asset Management Planning

6.1 The asset management team has developed a process for carriageways, which allows lifecycle aspirations to be considered and compared with condition targets, budget constraints and stakeholders wishes, offering options for route and treatment strategies.

Where suitable data is available this concept can, and will be implemented across other asset groups.

6.2 Packages of information are prepared annually, allowing the design team to formulate programmes of work based on the allocations identified in the previous stages. To further support and inform local needs a prioritisation process is being developed for carriageways to formulate programmes of work that relate to the high level aspirations, bringing customer focus and economic influences into the decision process. Where suitable data is available and where appropriate this concept will be extended to encompass other Asset Groups. This will allow decisions to be made that consider criteria as well as condition and develop work programmes that are not necessarily based upon 'worst condition first'.

Gross Replacement Cost and Depreciated Replacement Cost

6.3 Whole of Government Accounts (WGA) has set new requirements for the way the value of the highway asset is reported to the HM Treasury in the Authority's audited accounts. The new approach has now been fully implemented. Authorities are now required to report the Depreciated Replacement Cost (DRC) of the highway asset. For this to be achieved on a yearly basis, there is clear need for accurate and detailed inventory information and performance data. This requirement is supporting asset management by providing an improved understanding of network deterioration and combining it with the levels of service to be achieved.

6.4 A strategy is being developed with the Councils Finance team to ensure asset management practices are in place to satisfy the financial reporting requirements defined in the Transport Infrastructure Assets Code, published by CIPFA in May 2010. North East Lincolnshire embraces this approach and is developing the processes for collating the data needed to meet the WGA requirements, whilst developing good asset management practices that will lead ultimately, to a refinement of the service.

7. Data Management and Information Systems

7.1 North East Lincolnshire recognise that good and robust data is key to implementing asset management and delivering potential benefits. However, the Authority believes that the collection, management and use of data needs to be based on a process, which identifies;

- ownership
 - responsibilities
 - usefulness of data
 - costs to manage and maintain data
- all of which need to be clearly defined.

7.2 North East Lincolnshire recognise that effective asset management and its implementation relies on systems that can be used as tools to support decision making at all levels. The following tools are currently in use by the Authority:

- Symology Insight: covering most of highway management needs, including works ordering, public enquiries, street works, network management, and some inspection processes;

- UKPMS;
- GIS (as the core of asset management); and
- Bespoke tools to support all of those.

8. Future Demand on the highway network

8.1 Planned expansion of the existing Ports of Grimsby and Immingham, and considerable investment in new housing developments within the borough will lead to a predicted traffic growth of 3.85% in 10 years. Good asset management of the existing network and any planned new schemes will enable lifecycle management principles to be fully implemented, and predicted future growth to be suitably planned for in long term works programmes.

9. Maintainability

9.1 One of the aims of good asset management is to improve co-ordination between highway improvement and highway maintenance schemes. Taking into account the cost and implications of maintaining the asset at the design stage will ensure that whole life costs of schemes are optimised. The Asset Management Strategy aims to raise awareness of the this issue, in accordance with national guidance.

10.2 North East Lincolnshire has developed and is implementing a process for incorporating new works into the existing highway network. The process advocates lifecycle management values and introduces early communication between teams and contractors to ensure that asset management principles have been considered, agreed and applied as part of the scheme implementation.

10.3 This process aims to ensure that all capital and revenue investment options have been considered fully, so that new works should only require maintenance in line with expected lifecycles.

10. Good Practice

10.1 North East Lincolnshire is committed to the development of good practice and benefits from lessons learnt at National, Regional and Local levels. Officers from North East Lincolnshire Regeneration Partnership regularly contribute to and attend:

- National and regional conferences;
- The CIPFA Highways Asset Management Planning Network;
- East Midlands HAUC

10.2 Furthermore, North East Lincolnshire is committed to the sharing of knowledge and experiences in implementing asset management with other Highway Authorities across the Country. To this end, officers from North East Lincolnshire's Regeneration Partnership regularly present examples of good practice at national conferences and regularly attend meetings with the following groups:

- Highways Asset Management Financial Information Group (HAMFIG);

- The Chartered Institute of Public Finance and Accountancy CIPFA
- Highway Maintenance Efficiency Programme HMEP
- UK Roads Board
- National and regional conferences
- East Midlands HAUC

11. Supporting Documentation

11.1 The Asset Management Strategy refers to, and is linked to a number of key documents, as listed below, that combined allow for the asset management approach to be implemented and support the delivery of the desired level of service. These include documents in Table 2:

National	North East Lincolnshire
UKRLG Codes of Practice	LTP3
CIPFA Financial Reporting Code	Council Plan
PAS 55	Corporate Strategy
CSS Framework for Highway Asset Management	Highway Asset Management Policy
Maintaining a Vital Asset	Highway Maintenance Policy
HMEP Highway Infrastructure Asset management- Guidance Document	Street Lighting Policy
HMEP A LEAN Toolkit for Highway Services	Highway Maintenance Status Report
	Winter Service Policy and Plan

Table 2: Supporting Documentation

12. Review Process

12.1 This strategy will be updated annually with minor amendments and reviewed on a three yearly basis by the Highway Asset Management Team.

13. Benefits of our Asset Management Strategy

13.1 The benefits of implementing the asset management strategy are as follows:

- Encourages engagement with other stakeholders, including Elected Members, Senior Officers and the public;
- Readiness to respond to changes resulting from climate change, weather emergencies, contractors, resilience and finance,
- Close working and integration of efforts with other parts of the Council, including Corporate aims and objectives;
- Improved delivery within budget constraints – including procurement;
- Efficiencies – better ways of doing things, or improved service, enhancing performance in a challenging environment.
- Improved understanding of customer aspirations and expectations;
- To influence and focus on the better use of resources.

Appendix A

Asset Groups, Components and Activities

Asset Group	Asset Component	Activity / What's Included
Carriageway	Carriageway Road markings Winter Maintenance Street Cleansing Traffic calming Features	Routine inspections Reactive inspections Routine and reactive repairs Planned and reactive patching Resurfacing Structural reconstruction Surface treatments Special surfacings New Schemes Mechanical Surveys Gritting Routes Cyclic cleansing
Footway	Footway Cycleway Pedestrianised areas Street Cleansing Winter Maintenance	Routine inspections Reactive inspections Routine and reactive repairs Planned and reactive patching Resurfacing Structural reconstruction Surface treatments Special surfacings New Schemes Gritting routes Cyclic cleansing
Lighting	Lighting Columns Lamps Cabling Ducts Feeder Pillars Illuminated signs and bollards Seasonal illuminations Subway Lighting	Routine inspections Reactive inspections Routine and reactive repairs Replacements and Upgrades Contractor Support Energy Telecommunications
Structures	Bridges Culverts Embankments Retaining Walls Vehicle restraint systems Cattle Grids	Routine inspections Reactive inspections Routine and reactive repairs, Structural renewals Strengthening/restrictions New Structures Painting Graffiti/refurbishment Safety work Lifting Bridge Equipment
Traffic Signals	Signalised junctions	Reactive inspections

	<p>Pedestrian and cycle crossings UTC systems Detection equipment Cabling and Ducting CCTV equipment in the highway</p>	<p>Reactive repairs Replacements and Upgrades Contractor Support Energy Telecommunications</p>
Drainage	<p>Gullies and linear drainage channels(road and footpath) Highway drains (including pipework, manholes and outfalls) Pumping stations and telemetry Land drainage ditches and watercourses Roadside ditches and grips</p>	<p>Routine Inspections Reactive inspections Reactive and routine repairs Cyclic cleansing New Systems Structural repairs Pumps</p>
Street Furniture	<p>Signs (ADS, warning, regulatory, local direction/information) Sign posts Non illuminated bollards Fences Guardrail Barriers Information boards Cycle Stands Street name plates Bus stops Bus shelters Litter bins Benches/seats</p>	<p>Routine Inspections Reactive inspections Reactive and routine repairs Cyclic cleansing New Furniture</p>
Rights of Way	<p>Footpaths and bridleways both surfaced and unsurfaced Gates Stiles Non highway bridges Marker Posts and footpath Signs Steps Boardwalks Barriers Handrails</p>	<p>Routine Inspections Reactive inspections Reactive and routine repairs Structural inspection and repair Grass cutting (3 per annum) Weed spraying (2 per annum)</p>
Highway Trees	<p>Trees</p>	<p>Routine Inspections (trees) Reactive Inspections (trees) Safety Work (trees)</p>
Green Spaces	<p>Verges Areas of planting Hedges</p>	<p>Cyclic cutting Routine maintenance</p>