<table>
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<tr>
<th>Version</th>
<th>Author</th>
<th>Date</th>
<th>Comments</th>
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<tr>
<td>0.1</td>
<td>Stephen Lilgert</td>
<td>16/4/2015</td>
<td>First draft</td>
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<tr>
<td>0.2</td>
<td>Stephen Lilgert</td>
<td>20/4/2015</td>
<td>Comments from Barrie Mason, Tom Bryant and Mike Douglas (Equalities)</td>
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<td>0.3</td>
<td>Stephen Lilgert</td>
<td>21/4/2015</td>
<td>Comments from Mike Rovberts</td>
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<td>1.0 – Executive members submission</td>
<td>Stephen Lilgert</td>
<td>28/4/2015</td>
<td>Comments from Barrie Mason, Finance and Legal &amp; Democratic Services</td>
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Introduction
At over 9000km in length, North Yorkshire has one of the longest road networks of any highways authority in the country. The annual maintenance budget (both capital and revenue) is almost £50m so it is vital to ensure that the Council is achieving best value for money and delivering the best possible outcomes for the users of the highway network, both the residents of North Yorkshire and visitors.

Efficient and effective management of this network forms a key part in supporting North Yorkshire County Council’s vision.

“We want North Yorkshire to be a thriving county which adapts to a changing world and remains a special place for everyone to live, work, and visit”

Underpinning the management of the network is the principle of highways infrastructure asset management which is where this document along with the highways infrastructure asset management policy and individual asset management plans apply. The interactions within these documents are shown in a diagram further in this document.

Summary
This document sets out the strategy for the way in which North Yorkshire County Council’s Highways and Transportation service (H&T) will look to manage its assets in such a way as to deliver the Highways Infrastructure Asset Management Policy.

It introduces a set of guiding principles by which H&T will undertake the management of the estimated £8.3bn worth of assets (based on the overall cost of replacement) that make up North Yorkshire’s highway infrastructure.

Definition of highways infrastructure assets
A highway asset is defined as any item that is contained within the boundary of either a highway that is maintainable at public expense or a highway that NYCC have adopted. This includes the following specific assets

- Carriageway including verges and gullies and other drainage infrastructure
- Cycleways and footways
- Bridges and structures
- Street lighting
- Traffic management Street furniture (signs, traffic signals et. al)

Each of these asset types is subject to both overarching highways principles and those specific to the asset type with respect to the way in which H&T manage the asset. These principles are given in detail within this document in separate sections for each asset type.

Document context
Highways Infrastructure Asset Management Policy
The parent document to this strategy is the Highways Infrastructure Asset Management Policy. Currently working through the council approval process the policy, which is due for full council adoption in May 2015, describes the County Council’s high level commitment to highway
infrastructure asset management. It sets out five key areas where the delivery of efficient highways asset management will support the overall Council vision.

- Support flourishing local economies by delivering reliable and efficient transport networks and services (local economies)
- Reduce the impact of transport on the natural and built environment and tackling climate change (environment and climate change)
- Improve transport safety and security and promote healthier travel (safety and healthier travel)
- Promote greater equality of opportunity for all by improving people’s access to all necessary services (access to services)
- Ensure transport helps improve quality of life for all (quality of life)

This strategy links the policy with a number of individual asset management plans. It is these plans that provide the detail around how we deliver the highways asset management service. It should be seen in this context.

**Highway Asset Management Plans**
Each of the individual asset areas will have a series of asset management plans that provide the detail as to how the highways assets will be managed and maintained on a day to day basis. The plans concentrate on the delivery of the strategy and ultimately the policy. This delivery will be within the overall Highway asset management framework set down by the policy and subject to the following constraints

- Funding constraints
- Relevant legislation
- Statutory obligations / minimum standards
- Best practice
- Lifecycle planning

Below is a diagram of how the strategy fits into the context of highways asset management.
Local Transport Plan
Feeding in at all levels of highways asset management is the local transport plan, currently at LTP3 but with LTP 4 currently in process. The local transport plan is a set of documents that the government requires all local transport authorities to produce. The documents set out our plans and strategies for maintaining and improving all aspects of the local transport system over a set period of time.

The policy, strategy and plans should all reflect the content of the local transport plan to ensure continuity of service provision.

Key Highways Infrastructure Asset Management Strategy assertions
- The Highways Infrastructure Asset Management strategy will always reflect and support the overall policy
- The highways infrastructure asset management strategy will set out a framework for the maintenance of the highway assets. Within this framework will sit the overarching plans for highways asset maintenance and individual plans specific to the asset type.

Consultation and engagement
Throughout the lifecycle of the H&T asset management documentation, it will continue to be produced with a level of suitable and proportionate consultation and engagement with the relevant stakeholders. A breakdown of these stakeholders is given in a section below on governance of the whole policy, strategy and plans documentation.

Funding constraints
NYCC funding pressures
With the expectation of continuing financial pressures within local government, the highways service will continue to be asked to deliver the highest quality service while ensuring that is done so in a manner that achieves best value for money. The 2020 North Yorkshire Programme identified over £4.5m worth of savings that could be made within H&T through a combination of efficiencies and reviews of the minimum standards.

This requirement to deliver best value sets the financial context for the asset management strategy. It is widely recognised that efficient management of the highways infrastructure assets can assist a highway authority in achieving better value.

Key Highways Infrastructure Asset Management Strategy assertions
- We will manage the highways assets ensuring that we strive to achieve best value for money
- We will continue to look at ways in which asset management can be improved
- When/if the future demands any changes relating to funding, we will review the Highways Infrastructure Asset Management strategy to meet new demands.

Highways Maintenance Efficiency Programme
Asset management promotes a business-like way to highway maintenance. It makes better use of limited resources and delivers efficient and effective highway maintenance. It takes a long term view
of how highways may be managed, focusing on outcomes by ensuring that funds are spent on activities that prevent expensive short-term repairs. This makes the best use of public money whilst minimising the risk involved in investing in highway maintenance.

A portion of the funding that highways authorities provide comes from the Department for Transport (DfT) as the Local Authority Capital Maintenance funding. From 2016/17 onwards a portion of this funding will be allocated based on an assessment of the efficiency of highways maintenance within an organisation. This is known as Incentive funding and as the name suggests it rewards authorities that are or are working towards an efficient highway maintenance service.

In 2015/16, the amount allocated to NYCC was £29.6m. Depending upon what the NYCC rating within the DfT assessment programme is, this allocation could remain the same or as a worst case scenario, fall to £23.9m by 2018/19. It is therefore important that that we can demonstrate efficient highways maintenance.

The assessment itself is set to have a significant emphasis on highway asset management since it recognises that efficient management of highway assets is vital to being able to deliver an efficient highways service. The Highways Infrastructure Asset Management guidance document produced by DfT gives an outline of the areas that will make up the asset management portion of the assessment.

Aside from the potential for loss of DfT capital funding, a report commissioned by the Chartered Institute of Public Finance and Accountancy estimated that the full implementation of highways asset management may achieve saving of 5% in the long term.

Key Highways Infrastructure Asset Management Strategy assertions

- We will manage the highways infrastructure assets in such a way that we work towards achieving and retaining the highest assessment within the asset management portion of the HMEP framework. This will contribute to the wider highways strategy of ensuring that we receive the full Local Authority Capital Maintenance funding.

Relevant legislation

There are a number of specific pieces of legislation which provide the basis for powers and duties relating to highway maintenance.

The Highways Act 1980 sets out the main duties of highway authorities in England and Wales. In particular, Section 41 imposes a duty to maintain highways maintainable at public expense.

Other duties and powers are prescribed by:

- The New Roads and Street Works Act 1991
- Road Traffic Regulation Act 1984
- Traffic Signs, Regulations & General Directions 2002
- Road Traffic Act 1988
- The Traffic Management Act 2004
- Railways and Transport Safety Act 2003

Key Highways Infrastructure Asset Management Strategy assertions
The Highways Infrastructure Asset Management Strategy asserts that we will manage the highways assets in accordance with the legal requirements as set down within the legislation.

Where legislation changes, we will amend this strategy, and any associated plans, accordingly.

Statutory obligations / Minimum standards
As budget pressures increase within the Council, the drive to identify those areas within H&T where we provide services to a higher standard than the required statutory obligations increases.

As defined by the various pieces of legislation, we have a duty of care to provide a safe environment for the users of the highway and its associated assets. As part of a way of ensuring that we receive maximum benefit from the overall Highways maintenance budget, investigations into what constitutes minimum standards as far as asset management have been carried out and will continue to be explored.

Key Highways Infrastructure Asset Management Strategy assertions
- As part of the overall strategy of ensuring that we deliver best value for the Highways maintenance budget, we will continue to look at the delivery of statutory minimum standards for services that we provide

Risk management
The principle of risk management is at the heart of all highways maintenance. As a highway authority, we have a duty of care to maintain the highway and are bounded by significant legislation to ensure that we provide a safe infrastructure for all users. We are also bound by the requirement as an organisation to obtain best value from the resources allocated to us a highway authority.

In order to navigate between these two potentially conflicting paths, we will adopt a risk management based approach to highways asset management. This will take in the two components of likelihood and consequence using the following formula with specific scoring and weighting

- Risk = Likelihood x Consequence

An asset management approach will allow us to have a better level of control for the two components which will further allow us to more accurately assess the risk that any particular asset or group of assets poses to the delivery of the service. It also feeds into the overall process of lifecycle planning.

Key Highways Infrastructure Asset Management Strategy assertions
- We will continue to adopt a risk management based approach to highway asset management to ensure that our statutory duties are met along with obtaining best value for the highways maintenance budget
Lifecycle planning
Lifecycle planning comprises the approach to the maintenance of an asset from construction to disposal. It is the prediction of future performance of an asset, or a group of assets, based on investment scenarios and maintenance strategies.

Part of an effective highways asset management strategy is having information on the assets that can be used to provide a long term view of the infrastructure and how that is expected to deteriorate over time. Such an approach allows more efficient planning of the limited resources, both financial and non-financial, to be applied to the best effect.

A lifecycle approach requires, as its name suggests, a cyclical way of working. Where any specific asset or group of assets may have remedial or preventative maintenance completed, details of this work is fed back into the asset details thus completing the circle and updating its status.

Key Highways Infrastructure Asset Management Strategy assertions
- Building on our current methods, we will look to adopt a full lifecycle planning approach to the management of the highways assets ensuring that information about an asset is used in determining its maintenance and management.
- We will also ensure that any maintenance of an asset feeds back into the lifecycle process providing up to date information on all our highways assets.

Published guidance documentation
There are a number of organisations that provide guidance around the management and maintenance of highways. All of this documentation is designed to assist highway authorities to more efficiently manage and maintain the whole of the highway function.

The UK Roads Liaison Group / Highways Maintenance Efficiency Programme (HMEP) have produced series of guidance documents specifically around the management of the assets within the highways infrastructure. The key document is as follows.

- Highway Infrastructure Asset Management Guidance

This gives an overall set of principles by which highways asset management should be adopted by an organisation. This document will provide a number of the assessment questions that will determine the level of highways funding.

As well as a general guidance document, other specific publications address the main asset management asset types

- Well-maintained Highways: Code of Practice for Highway Maintenance and Management
- Management of Highway Structures
- Well Lit Highways
- Management of Electronic Traffic Equipment

All the UKRLG documents champion the principle of best/good practice and advocates the use of benchmarking to ensure that the services performance is measured in a consistent way.

http://www.highwaysefficiency.org.uk/
The organisation Code of Practice on Transport Infrastructure Assets (CIPFA) have guidance documents and toolkits designed to promote good and best practice within highways asset management.


Key Highways Infrastructure Asset Management Strategy assertions

- As part of an on-going commitment to the use of good/best practice within the service, we will continue to use and review information produced by third party and government sources
- We will look to benchmark our asset management performance where considered beneficial

**Individual asset type principles**

There are a number of internally created documents that set out the principles of how we manage and maintain the highway as a whole. Contained within these documents are specific appendices related to the various highway asset types.

The documents are based on the overarching principle guidance detailed above being either a specific NYCC response to a specific statement within a guidance document or a full document based on the content of the published information.

There is also an amount of local expertise, both individual and team based, that is used and not necessarily documented. This has the potential to create single points of failure and silos of knowledge that may impact on effective service delivery.

Strategically, there would be benefit if there was a level of standardisation for these internally created documents along with some consistent method of creation, review and amendment cyclical process. Additionally where local expertise contributes to the overall asset management principles, this should be recorded within the relevant plans.

The main documents listed are

- Highway maintenance plan
- Highway safety inspection manual

Both of these documents are significant works however it is recognised that the highways maintenance plan is quite old, having been published in 2006. The highway safety inspection manual is more recent with the most recent version (1.6) approved in October 2013 and, although, as the name suggests the document is a manual providing detailed inspection guidance, it is important from a risk management point of view.

Asset types are broadly split by the various teams that manage that asset.

**Carriageways, footways, cycle-ways and other assets**

In addition to the overall internal plans, there are a series of existing and emerging documents plans around highways asset management.
Also included in this asset type are documents on verges, drainage systems and road markings for example.

**Bridges and structures**
The document outlining the guiding principles for bridges and structures is an appendix to the Highways Maintenance plan. This plan was written with respect to the Code of Practice for the Management of Highway Structures mentioned above.

**Street-lighting**
The street lighting document is also an appendix to the Highways Maintenance Plan and is again based on the official UKRLG document, Well Lit Highways listed above. Its format takes the individual principles listed in the UKRLG document and describes how these are implemented with NYCC.

**Traffic management information assets and street furniture**
As with street-lighting, this document is also an appendix to the Highways Maintenance Plan and is composed in the same format although is based on Management of Electronic Traffic Equipment UKRLG document

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<tr>
<th>Key Highways Infrastructure Asset Management Strategy assertions</th>
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<tr>
<td>❖ The Highways Infrastructure Asset Management Strategy document will continue to exist as a framework into which the various plans and documentation will fit.</td>
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<tr>
<td>❖ We will regularly review the individual highway asset management plans to ensure currency and continued adherence to industry good/best practice</td>
</tr>
<tr>
<td>❖ We will look to standardise the format of the documentation where appropriate, implement more robust version control and ensure that all documentation from policy through to plans are stored in a location where the relevant people can gain access</td>
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**Continuous improvement**
Similar to the lifecycle approach for asset management, continuous improvement ensures that the documentation around the service remains up to date and reflects the changing landscape of the industry.

Whereas the overall asset management policy is unlikely to change unless there are significant policy changes within the organisation or wider industry, the asset management plans should be working documents that are updated as and when there are changes to the overarching and individual principles mentioned above. These will in turn inform the asset management strategy either as a top down or bottom up approach where necessary and appropriate.

The outcome will be a set of documents that are current, and represent an end to end solution from the high-level policy, a mid-level strategy (both with full council sign off) through to the individual asset management plans that guide the delivery of the service.

- Key Highways Infrastructure Asset Management Strategy assertions
  - We will ensure that the highways asset management policy, strategy and plans form a cyclical set of documentation that can where appropriate be modified to reflect changes within the industry
  - Any potential changes to the documentation would require approval at the relevant level.
Published Standards
As part of the overall increasing awareness within Highways of the services that it provides, there is an intention to make available published standards for the way in which H&T manage the highway and its associated assets.

To this end it is the overall strategy that H&T will work towards providing greater information to North Yorkshire’s residents and visitors that demonstrates where we provide intervention with respect to a highways asset. The expectation is that there will be a series of these published standards based on the management and maintenance plans available on the web.

Key Highways Infrastructure Asset Management Strategy assertions
❖ In order to better inform North Yorkshire’s residents and visitors of the highways service, we intend to make available published standards, based on our asset maintenance and management plans.

Governance
Shown below is a diagram of the governance of the various Highways Asset documents.

<table>
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<th>Documentation level</th>
<th>Governance Responsibility</th>
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<tbody>
<tr>
<td>Highways Infrastructure Asset Management Policy</td>
<td>Full council</td>
</tr>
<tr>
<td>Highways Infrastructure Asset Management Strategy</td>
<td>Executive</td>
</tr>
<tr>
<td>Local Transport Plan</td>
<td>Overview and Scrutiny Committee</td>
</tr>
<tr>
<td>Individual Highways Asset Management Plans</td>
<td>Corporate Director BES</td>
</tr>
<tr>
<td>Non exhaustive list – examples only</td>
<td>BES Executive members</td>
</tr>
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<td>Highways Heads of Service</td>
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The key point is that the policy and the strategy require sign off at full council level after consultation with Transport, Economy and Environment Overview & Scrutiny Committee and approved by Council Executive. This ensures that the overall aims of the Asset Management strategy are in line with those of the organisation as governed by members.

Overall governance of the way in which H&T choose to implement those agreed policies is governed by the Corporate Director BES in consultation with the BES Executive Members.