

SAFE WELL PROSPEROUS CONNECTED

# Transport Asset Management Plan

## 2022 – 2027

### Policy & Overview Document

Version & Document Control	
Information Marking	Official
Document title	Transport Asset Management Plan
Lead Officer	Mike Brown/David Palmer
Version	2022 update
Status	Draft
Approved by	
Date approved	
Last updated	31 March 2022
Change history	31 March 2022
Review date	31 March 2023
Retention period	
Storage location	TOPdesk

## Contents

Foreword by Cabinet Member	2
Associated Documents	3
Responsibility	3
1. Introduction	4
2. Asset Description	6
3. Community Requirement	7
4. Future Demands	8
5. Service Standards	10
6. Asset Management Practice	11
7. Value of the Highway Asset and the Financial Strategy for its Management	12
8. Risk Management	24
9. Funding Allocations	25
10. Collaborative Working	26
11. Conclusions	27

## Foreword by the Cabinet Member for Connectivity

The highway network in North Lincolnshire comprises 1402 km of roads. With an asset value in excess of £1.72 billion (excluding land), it is the most valuable infrastructure asset owned by the Council.

As a highway authority, the Council has a statutory duty to maintain the highway. We do so in the face of increasing pressures.

We manage the highway network on behalf of the travelling public, whether they are pedestrians, cyclists, bus operators, taxi operators, freight operators or car users. How we maintain our highway network impacts on the outcomes for our residents. Ensuring residents are: Safe, Well, Prosperous and Connected.

A Transport Asset Management Plan (TAMP) has been written to provide a summary of how we go about managing the maintenance of our highway assets.

The TAMP focussed on the following asset groups:

- Carriageways
- Footways
- Cycleways
- Street Lighting
- Drainage
- Structures (Bridges & culverts)
- Traffic Management (Traffic Signals)
- Street Furniture

The purpose of the Transport Asset Management Plan is to:

- Formalise strategies for investment in highway asset groups.
- Define affordable service standards.
- Improve how the highway asset is managed.
- To assist in delivery of a better Value for Money highways service.

The TAMP is a live document and we will continue to review and update our policy and processes in response to emerging best practice in this field.



This document presents the annual update on the policy and overview of the TAMP 2022-2027.

Councillor Robert Waltham MBE, Leader of the Council, Cabinet Member for Place Shaping and Connectivity

### Associated Documents

The following North Lincolnshire Council documents are essential components of the council's approach to transport asset management and complement and support this plan;

- H&P Quality Manual
- Local Transport Plan 3
- Highway Maintenance Strategy
- Winter Maintenance Plan
- Risk Management Strategy and Action Plan
- Road Safety Strategy
- Information Management Policy
- Traffic Signs Policy
- Street Lighting Policy
- Code of Practice for Highway Inspections

Other reference documents;

- CIPFA – Code of Practice on Transport Infrastructure Assets 2016.
- Highways Maintenance Capital Funding Self-Assessment Questionnaire for Incentive Funding.
- Highways Maintenance Funding Formula and Indicative Incentive Fund Allocations 2015-2020.

### Responsibility

Implementation of each of the Transport Asset Management Plan elements is the responsibility of the following people;

Economy and Environment Plan Element	Main Council Position(s) Responsible
TAMP Document	<ul style="list-style-type: none"> <li>• Council Cabinet</li> <li>• Elected Member (portfolio holder) responsible for Highways</li> <li>• Director responsible for Highways</li> </ul>
TAMP implementation and practice improvements	<ul style="list-style-type: none"> <li>• Director responsible for Highways</li> <li>• Asset Manager (Assets &amp; Infrastructure)</li> </ul>
TAMP document updating and reporting	<ul style="list-style-type: none"> <li>• Asset Manager (Assets &amp; Infrastructure)</li> </ul>
Finance and Valuation	<ul style="list-style-type: none"> <li>• Asset Manager (Assets &amp; Infrastructure)</li> <li>• Council Finance Section</li> </ul>
TAMP Data	<ul style="list-style-type: none"> <li>• Asset Manager (Assets &amp; Infrastructure)</li> <li>• Highways UKPMs / data section (Asset Evaluation Team)</li> <li>• Council GIS section</li> </ul>
TAMP Risk	<ul style="list-style-type: none"> <li>• Asset Manager (Assets &amp; Infrastructure)</li> <li>• Council's Corporate Risk section</li> </ul>
Asset strategy options reports	<ul style="list-style-type: none"> <li>• Asset Owners</li> </ul>

## 1. Introduction

This section provides a brief introduction to the Transport Asset Management Plan and identifies how it is aligned with other council documents.

### Overview

The Government encourages councils to develop asset management plans for their infrastructure assets via the Highways Maintenance Efficiency Programme (HMEP).

The purpose of the Transport Asset Management Plan (TAMP) is to:

- Formalise strategies for investment in highway asset groups.
- Define affordable service standards.
- Improve how the highway asset is managed.
- To assist in delivery of a better value for money highways service.

### Links to the Council Plan and Other Plans

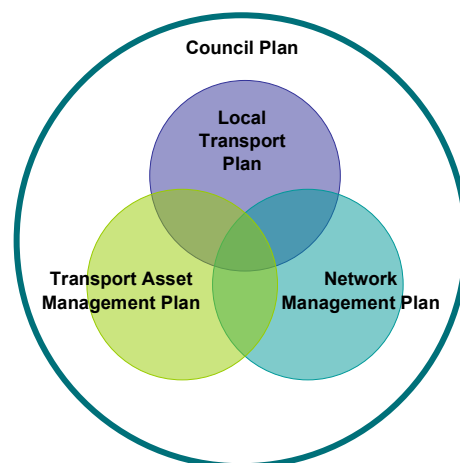
This TAMP follows the principals laid out in the **Council Plan 2022-25**, as well as other council plans as illustrated.

The 2014 Local Transport Plan (LTP) sets out the transport policies for the council and indicates potential financial allocations for Integrated Transport and Highway Maintenance – these being the two funding streams within the LTP award. An **Integrated Transport Strategy** is in development of which a large part of that will be the Local Transport Plan. This was produced in October 2021. This is also being aligned with the **Local Plan** for North Lincolnshire.

The Network Management Plan (NMP) is produced to document our arrangements in respect of carrying out our network management duty in relation to the Traffic Management Act 2004. The NMP has a direct bearing on our way of working and the allocation of funding for management of the highway network.

The adoption of asset management for highway assets is an on-going process of the use of more structured management processes and adopting a long-term planning approach.

The long-term planning process requires the assimilation of all information, together with the whole life costs, for each and all of the assets being considered. These whole life costs include not only the 'life cycle' costs for each of the assets, but also the non-construction costs, income from the asset and externalities associated with the asset. This can be seen in the flow chart on the following page.



# Council Plan

2022-25

## Our priorities...

Keeping people safe and well

Enabling resilient and flourishing communities

Enabling economic growth and renewal

## Our values...

Equality of opportunity Excellence

Integrity Self-responsibility

## Ambition

#BestPlace for our residents

#BestCouncil we can be

Goal: sustainable • commercial • enabling • progressive

## Outcomes for North Lincolnshire

### Safe

- Safer roads
- Safer people
- Safer communities
- Safer environments
- Safer spaces

### Well

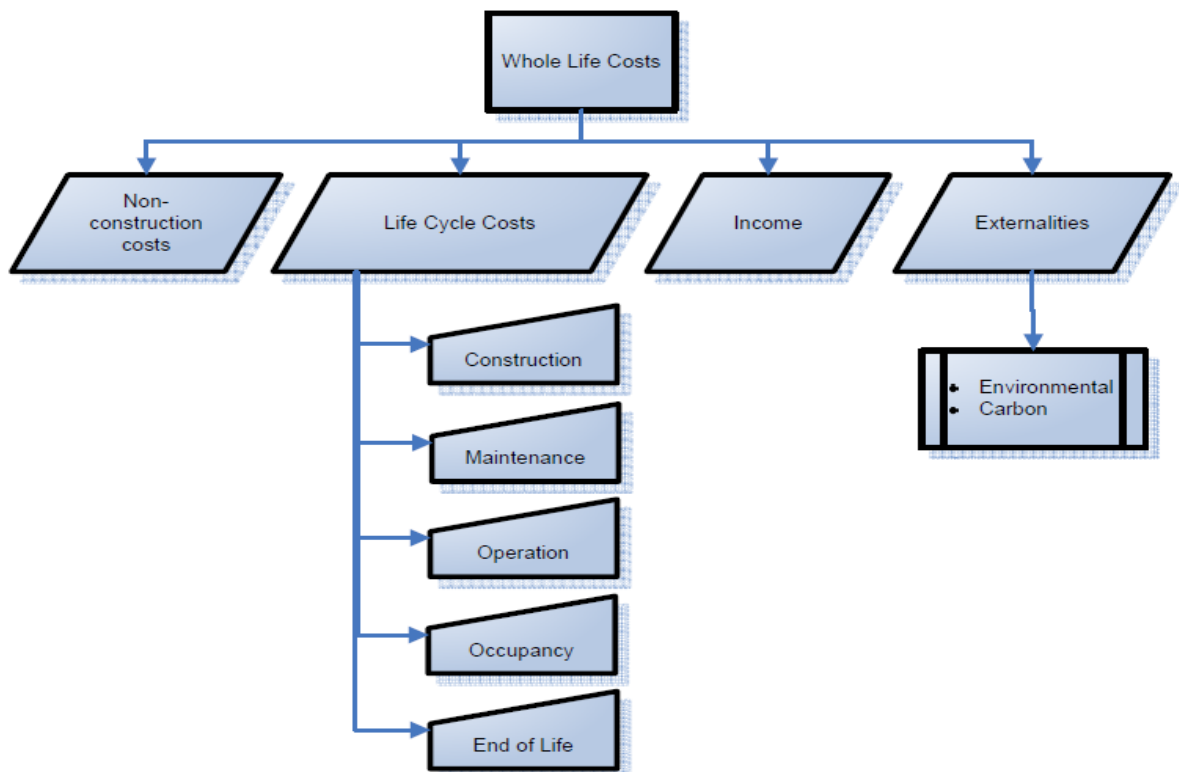
- Cleaner and greener spaces
- Good health and wellbeing
- Quality housing
- Vibrant leisure and culture
- Improved quality of life

### Prosperous

- More jobs, better paid jobs
- Improved skills
- Excellent education
- Thriving businesses
- Accessible childcare

### Connected

- Accessible transport
- Flourishing communities
- Superfast digital connectivity
- Better roads and rail
- Strong sense of pride and belonging



## 2. Asset Description

This section outlines the size and extent of the asset that is included within this Management Plan.

### 2.1 Highway Assets Covered by the Transport Asset Management Plan

Asset Group	Element	Quantity
Carriageway	Road construction including lay-bys, bus lanes etc.	1,402 km.
	The carriageway group also includes: Kerbs, line markings and studs, traffic calming features – including tables, humps, chicanes etc., hard strip / shoulder / verges / vegetation, boundary fencing	
Footways and footpaths	Footway – adjacent to the carriageway	960 km.
	Public Rights of Way remote from the carriageway including byways, restricted byways, bridleways and footpaths.	534 km.
	The footway and footpaths group also includes; Roadside signposts (207), waymark posts (1,593), small pedestrian bridges (192), stiles (212), gates (135), flights of steps (25), countryside car parks (7), Interpretive panels (10) and boardwalks (6).	
Cycleways	Cycleways – either on carriageways or shared with footways included in carriageway section	N/A
	Cycleways - remote from the carriageway – included in carriageways and/or footways	N/A
Structures	Bridges	144
	Footbridges	5
	Culverts (large diameter piped drains under the road)	131
	Retaining Walls	2
	Underpasses / Subways	1
Street Lighting	Lighting columns	24,378
	Illuminated signs	1,230
	Illuminated bollards and beacons	292
	Feeder pillars (council owned)	160
	Cabling for street lighting	142 km
Traffic Management Systems	Signal installations at junctions	36
	Signal installations at pedestrian, pedestrian/cycle, pedestrian/horse crossings	17
	Variable message signs	15
	Vehicle activated signs	20
	Safety and speed camera equipment	1
Drainage	Gullies	22,519
	Manholes and catchpits	44,680
	Piped drains	1,840 km
	Pumping stations	19
	Oil interceptors	Unknown
	Hydrobrakes	4
	The drainage group also includes; Balancing ponds, roadside ditches, swales, soakaways, inlets and outfalls etc	
Street Furniture	The street furniture group includes; Vehicle safety fences, non-illuminated signs (warning, regulatory and local direction/information signs/posts), bollards, pedestrian guardrail, street name plates, litter and grit bins, seating, bus stops (1,102), highway trees (approx 8,000) etc.	

## 2.2 Assets not covered by this plan

Some highway related assets are the responsibility of other council departments for maintenance purposes. The assets that are not covered by this TAMP are:

- Scunthorpe bus station
- Barton Interchange (bus station)
- Car Parks
- Public Transport Facilities

## 3. Community Requirements

This section describes information about the community's requirements for the transport/highways asset. It outlines how this information is obtained and what it says in relation to community preferences.

### 3.1 Customer Consultation

The consultation process for LTP3 allowed us to build on the extensive consultation exercises we undertook with the community as part of the LTP2 midterm review. Various community groups and local forums were consulted. The key issues raised as part of this process related to winter maintenance & safety of roads in bad weather and the condition of footpaths. Both issues have been addressed over the early part of the Plan period.

More recently North Lincolnshire Council have taken part in the annual NHT Public Satisfaction Survey. This survey collects public perspectives on, and satisfaction with, Highway and Transport Services in Local Authority areas nationally. It is a unique, standardised, collaboration between Highway Authorities across the UK enabling comparison, knowledge sharing, and the potential to improve efficiencies by the sharing of good practice.

Further consultation opportunities with various stakeholders is planned as we develop the Integrated Transport Strategy.

Additionally, individual highway schemes are consulted on with various stakeholders and their view is often incorporated within the design.

In general terms - members of the public can contact us 24 hours a day, seven days a week, through various formats, to provide any comments on the highway network. All carriageway complaints are monitored through the Confirm Customer Service Database.

As technology developments then consultation methods need to adopt to ensure maximum reach to communities and anyone who come into contact with the highway network.



## 4. Future Demands

This section outlines the anticipated demands that will be placed on the asset over the duration of the plan. These have been considered when formulating the plan and presenting the risks associated with it.

### 4.1 Asset Growth

New highway assets are continuing to be added thereby creating an additional need for maintenance and management. The asset is growing marginally year on year due to the adoption of additional roads into the network and through improvement activities such as traffic safety schemes and construction of new road links.

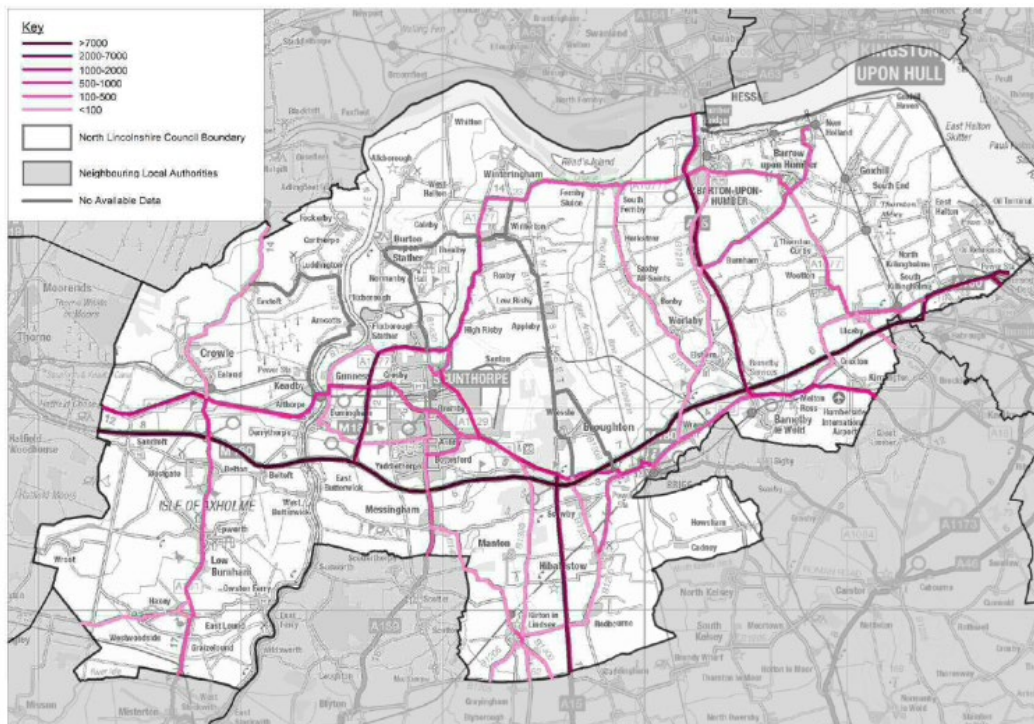
In addition to this our obligations in relation to the drainage network have been significantly increased as a result of the Flood and Water Management Act 2010. The council are the sustainable urban drainage systems approval body. This allows us to manage more closely the potential impact of drainage issues relating to new development schemes.

### 4.2 Traffic Growth

Traffic growth is monitored on major and 'A' class roads by the Department for Transport. There is clear indication that traffic growth on some parts of the road network greatly exceeds that on others with the greatest growth being on the A160 West of Immingham.

### 4.3 Traffic Composition

Traffic composition is a major factor affecting the rate of deterioration of our highway infrastructure. Where there are heavy wheel loadings the damage and deterioration of the road surface is much greater. The map below is an indication of the Heavy Goods



Vehicle traffic flow on the network.

#### 4.4 Environmental Issues

In addition to the need to consider climate change in terms of maintenance methods and materials used there is also the real issue of impact on the carriageway infrastructure of long periods of very wet or dry conditions. These have a particular impact on roads in the Isle of Axholme, which are constructed on a water sensitive base material which, on drying, shrinks significantly and unevenly. This has the effect of significantly reducing the carrying capacity of the road construction and of creating surface alignments that are not consistent with high or medium speed traffic requirements.

Recycling of road construction material during maintenance schemes is a significant part of our contribution to minimising the impact of highway maintenance issues on the environment.

#### 4.5 Green Strategy

The council is in the process of producing a Green Strategy which will have an impact on all aspects of what the council does. With this will come new opportunities and challenges in maintaining and upgrading our highway network.

The Highways Team are committed to improving energy efficiency with a view to contribute towards the council objective to be net zero carbon by 2030

To deliver this objective we aim to reduce the carbon footprint by:

- Following Highways England Guidance and the DFT Transport Decarbonisation Plan
- Incorporating emissions standards into contracts with suppliers.
- Environmental considerations and exploiting “new thinking and technology” wherever possible.
- Procurement of low carbon surfacing materials. A shift towards using energy efficient materials such as Warm Mix Asphalt (WMA) will need to become the preferred choice of road surfacing.
- Use of reclaimed asphalt
- Greater use of carriageway ‘cold’ recycling techniques
- Source energy from renewable sources
- More efficient working to reduce emissions
- Greater use of longer life maintenance treatment processes
- Using energy-efficient lighting for roadsides and signage.
- Planting trees for capturing carbon near major projects.
- Transition to green fleet
- Battery powered plant and equipment
- Use LED light sources
- De-illumination of traffic signs where regulations permit
- All capital replacements to be LED where possible
- Encourage Walking and Cycling. We need to do things differently, but at the same time ensure that our way forward does not disadvantage those for whom travel by car is the only practical option.

## 5. Service Standards

This section outlines standards what users can expect from the council's transport assets. It records how these are measured and presents the targets that have been set for the duration of the plan.

### 5.1 Purpose

The TAMP is based upon delivery of identified service standards. We measure and monitor performance against the service standards in order to determine if the levels of service being provided match up with customer expectations and are in line with both national and local goals and objectives. Therefore, there is a direct link between levels of service, corporate objectives, LTP priorities and funding levels. Publishing these standards enables everyone to understand what they can expect from our highway assets.

### 5.2 Service Standard Targets

The service standards are given in the TAMP and these are set to deliver a road network that allows our residents to be Safe, Well, Prosperous and Connected. Benefitting from a road network that is as fit for purpose as possible within current funding and resource constraints.

### 5.3 Well-Managed Highways Code of Practice

October 2016 saw the introduction of 'Well-Managed Highway Infrastructure: A Code of Practice'. This document is a new combined version of three previous codes of practice. It is important the TAMP follows the recommendations outlined in the Code of Practice.

The code is designed to promote the adoption of an integrated asset management approach to highway infrastructure management based on establishing local levels of service through risk based assessment.

North Lincolnshire has worked with the East Riding of Yorkshire in producing an area wide document, as recommended in the code, and has brought Hull City and North East Lincolnshire on board. The code is now a live document, as of October 28th 2018.

## 6. Asset Management Practice

This section defines the asset management practices and documentation that the council uses. The application of good practice and its documentation is essential to the achievement of this plan.

### 6.1 Asset Management Policy

Our asset management policy, the principles of which are, to:

- Apply asset management systems to manage transport assets
- Publish a Transport Asset Management Plan
- Report achievements and performance annually (outcomes)

### 6.2 Highway Asset Management Framework

The systems used to manage our transport assets are set out in the Highway Asset Management Framework. The framework defines how and when we:

- i. Inspect
- ii. Categorise and prioritise reactive repairs
- iii. Assess condition
- iv. Identify and prioritise sites for resurfacing (or reconstruction)
- v. Choose the materials used
- vi. Prepare works programmes
- vii. Procure and manage works
- viii. Record and report costs
- ix. Record and respond to customer contacts

### 6.3 Asset Investment Strategies

Specific investment strategies have been compiled for the major asset groups of carriageways, footways, structures, street lighting, drainage and traffic signals. Each strategy defines how the target service standards are to be delivered. In particular they address the types of works that are planned and state where a “prevention is better than cure” approach has been adopted.

### 6.4 Annual Status and Options Report

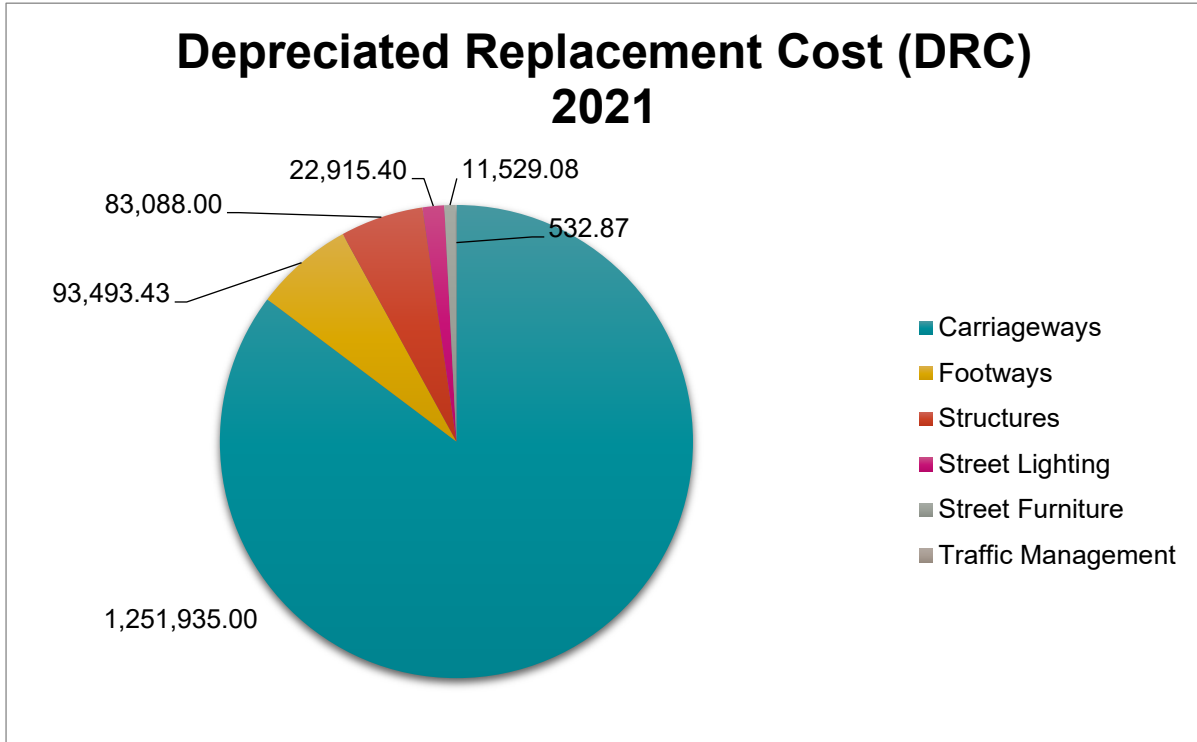
This report annually summarises the status of each asset group. The report describes the result of the previous year’s investment in terms of meeting the target service standards. A more detailed report is in development and also includes long term predictions of levels of defects and condition and is used to enable the council to choose how to best allocate the following years’ budgets and to decide whether any of the service standards contained in the plan need to be revised.

## 7. Value of the Highway Asset and the financial strategy for its management

This section describes the financial issues associated with asset management practices. Effective financial management and its documentation are both essential to the achievement of this plan.

### 7.1 Asset Valuation

As of July 2021 the transport asset is valued as shown in the chart below:  
 Total Asset Depreciated Replacement Cost (DRC) £1,463,493.78 (excluding land)



Typically assets are carried on local authorities Balance Sheet at their market value, which is known as their current value. For property, plant and equipment, where a market exists, this is based on the estimated market value in existing use. For the Highways Network Asset, there is no market and it is not usually possible to sell the asset. For assets where no market exists, the Accounting Code requires the use of depreciated replacement cost (DRC).

### 7.2 Long Term Funding Needs - Asset Investment Strategies

Long Term Cost Prediction modelling enables the authority to understand the relationship between future funding needs and resulting condition / performance levels. The level of complexity of each asset model is dependent on the asset data available and the deterioration mechanism used.

The following outlines the asset investment strategies being developed for each of the main asset groups as part of the TAMP;

### 7.3 Carriageways

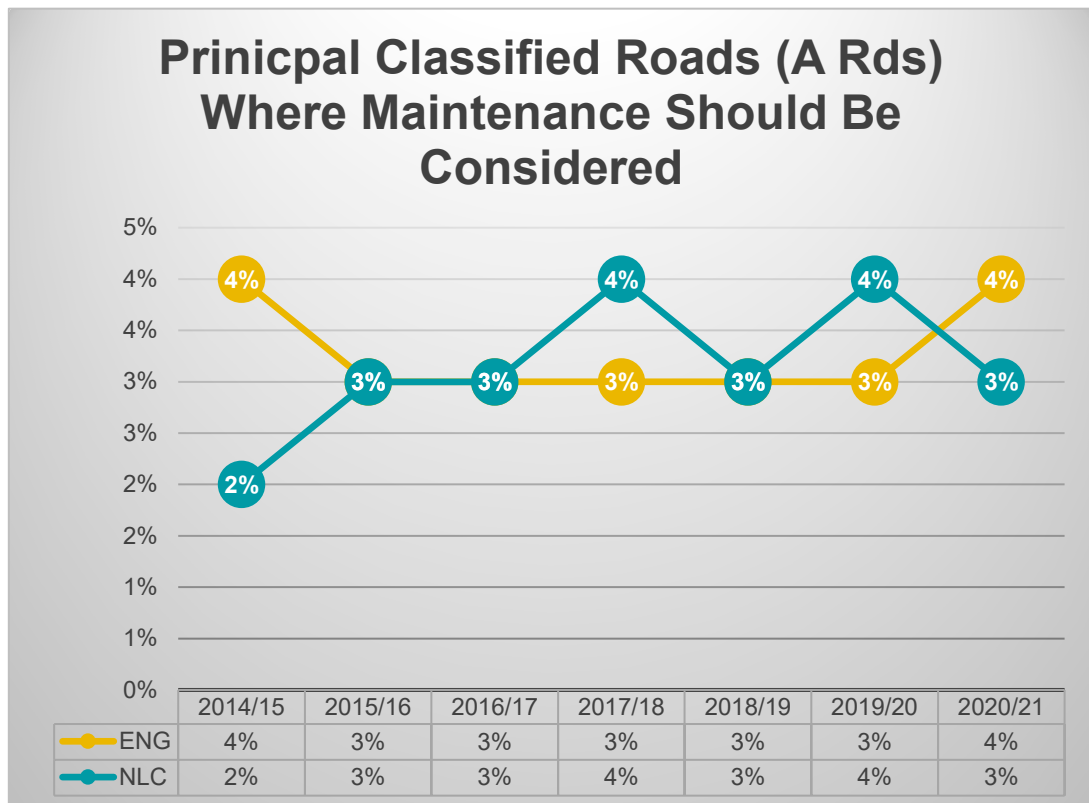
For the carriageway asset we are concentrating on a process of surface repair where possible and only using deeper strengthening treatments where the carriageway construction has failed. Examination of condition trends and combining this with local

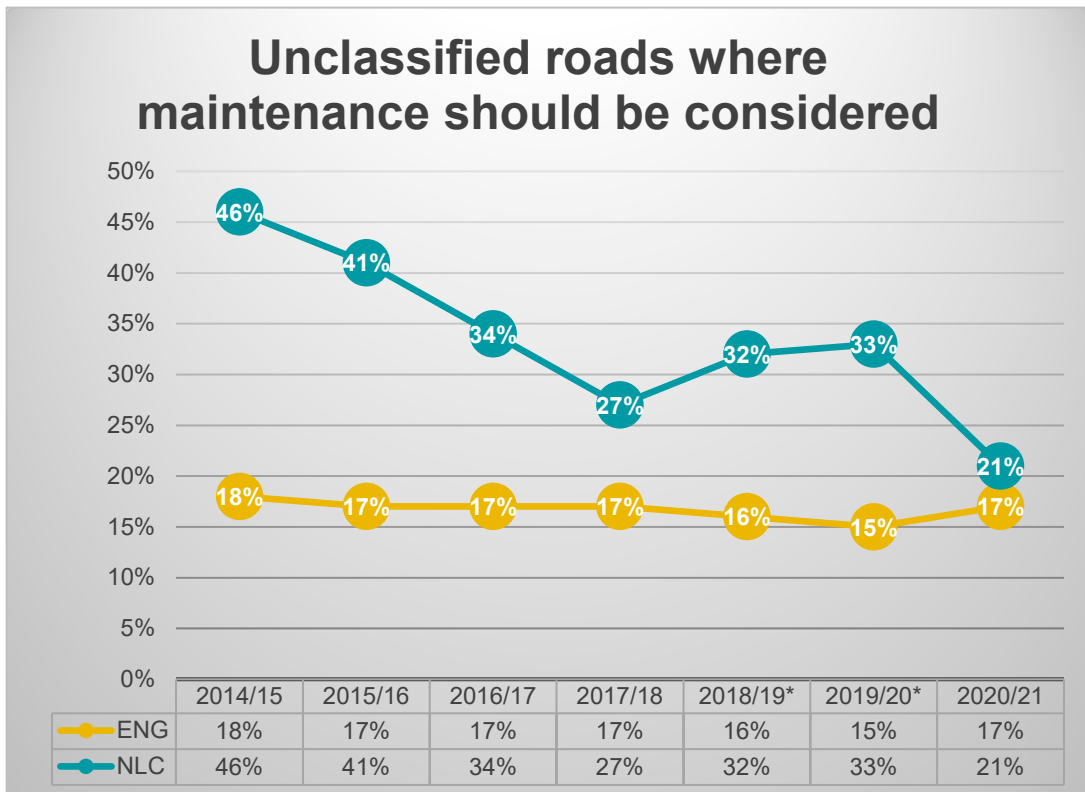
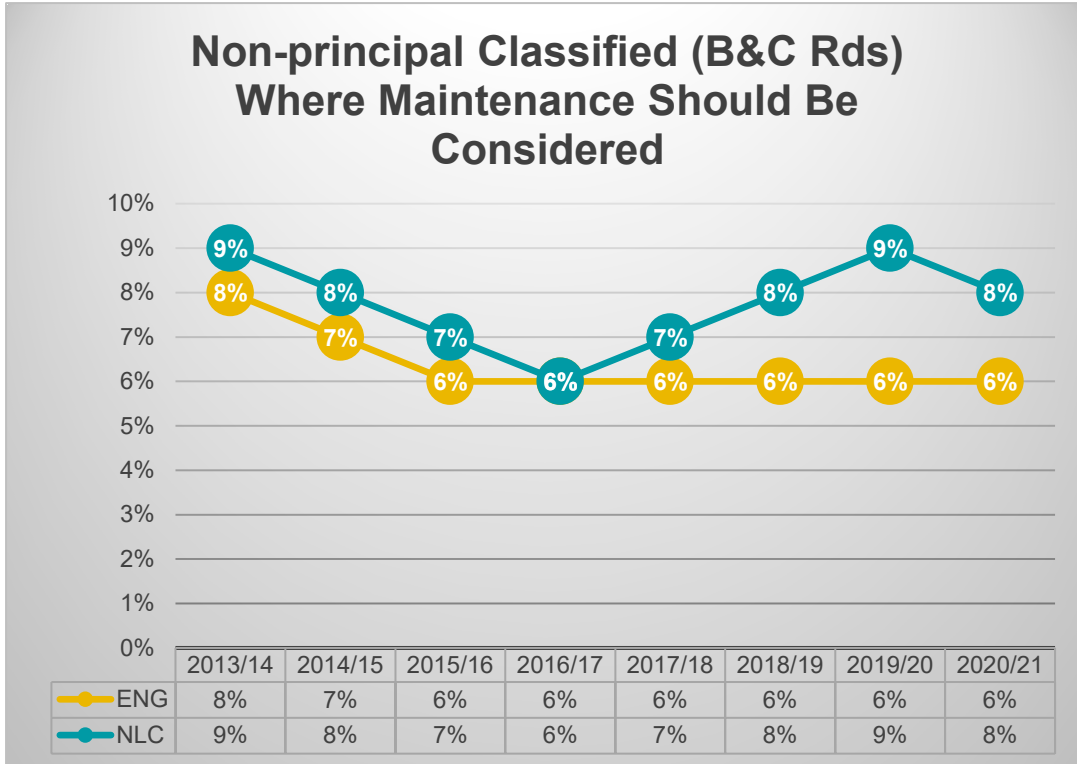
knowledge indicates that our unclassified roads are those that need the greatest attention in the short to medium term. We also need to start investing in our B&C road network.

Alongside the maintenance issues there are a number of carriageway infrastructure development schemes either under way or in the pipe line, these being;

- Carriageway strengthening schemes at C154 Godnow Road, Crowle.
- Major carriageway strengthening works on the B1206 Bonby Lodge to Barrow upon Humber
- Reconstruction of CU2 Doncaster Road, Scunthorpe. Berkeley Roundabout to Exeter Road
- Carriageway improvement – C202 Idle Bank
- Humberside Airport access improvements, including A18 Melton Ross Bridge
- Lincolnshire Lakes infrastructure, creating six new villages, as well as including the de-trunking of the M181
- Barton Bypass

Carriageway Performance Indicators







Detailed Current Condition (Classified) Roads

The detailed information in the table below is used to report on the national performance indicators for road condition, as shown in the previous graphs. The red condition is the figure used nationally for roads where maintenance should be considered. The figures below indicate where all forms maintenance should be considered on our network red, amber and green.

		12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21
A Roads	Red	3.4	3.3	2.1	3.1	3.1	3.9	3.0	3.8	2.7
	Amber	24.5	23.2	21.5	22.1	22.4	25.1	23.0	23.2	22.3
	Green	72.1	73.5	76.4	74.8	74.5	71.0	74.0	73.0	75.6
B Roads	Red	7.3	8.3	7.1	5.6	5.3	6.3	6.2	7.0	6.5
	Amber	35.7	34.2	34.3	33.5	32.7	33.9	36.0	36.5	38.4
	Green	56.9	57.5	58.4	60.9	62.0	59.7	57.8	56.5	51.1
C Roads	Red	9.5	9.7	8.7	8.1	6.1	7.5	9.7	10.6	9.3
	Amber	43.5	44.5	36.1	37.6	32.3	36.9	44.6	41.4	37.2
	Green	47.0	55.7	55.2	54.6	61.6	55.5	45.7	48.0	53.5

Carriageway Maintenance Backlog (2020 AEI Survey)

Road category	Treatment	Value	Notes
PRN	Reconstruct 200mm	£0	<b>Note..</b> £... Calculated using a road width of <b>7.5m</b> 200mm = £64m <sup>2</sup> 100mm = £32m <sup>2</sup> 40mm = £20m <sup>2</sup> Surface Treatment = £8m <sup>2</sup>
	Reconstruct 100mm	£3,924,240	
	Resurface 40mm	£443,100	
	Surface Treatment	£2,187,304	
	<b>Total</b>	<b>£6,554,644</b>	

Road category	Treatment	Value	Notes
B RDS	Reconstruct 200mm	£2,750,406	<b>Note..</b> £... Calculated using a road width of <b>7.3m</b> 200mm = £64m <sup>2</sup> 100mm = £32m <sup>2</sup> 40mm = £20m <sup>2</sup> Surface Treatment = £8m <sup>2</sup>
	Reconstruct 100mm	£5,178,445	
	Resurface 40mm	£999,960	
	Surface Treatment	£5,348,856	
	<b>Total</b>	<b>£14,277,667</b>	

Road category	Treatment	Value	Notes
C RDS	Reconstruct 200mm	£6,977,600	<b>Note..</b> £... Calculated using a road width of <b>7.0m</b> 200mm = £64m <sup>2</sup> 100mm = £32m <sup>2</sup> 40mm = £20m <sup>2</sup> Surface Treatment = £8m <sup>2</sup>
	Reconstruct 100mm	£13,082,272	
	Resurface 40mm	£2,962,820	
	Surface Treatment	£9,044,280	
	<b>Total</b>	<b>£32,066,972</b>	



Road category	Treatment	Value	Notes
<b>CLASSIFIED ROADS</b>	Reconstruct 200mm	£9,728,006	Amount £ required to treat the full Classified network and bring up to good condition or a specific point in the carriageways lifecycle.
	Reconstruct 100mm	£22,184,957	
	Resurface 40mm	£4,405,880	
	Surface Treatment	£16,580,440	
	<b>Total</b>	<b>£52,899,283</b>	

Road category	Treatment	Value	Notes
<b>UNCLASSIFIED ROADS</b>	Reconstruct 200mm	£14,126,528	<b>Note..</b> £... Calculated using a road width of <b>6.5m</b> 200mm = £64m <sup>2</sup> 100mm = £32m <sup>2</sup> 40mm = £20m <sup>2</sup> Surface Treatment = £8m <sup>2</sup>
	Reconstruct 100mm	£29,942,640	
	Resurface 40mm	£7,084,610	
	Surface Treatment	£13,619,840	
	<b>Total</b>	<b>£64,773,618</b>	

From the information we can work out the amount in £'s required in order to treat the sections deemed to require maintenance. Amount £ required to treat the full network and bring up to good condition or a specific point in the carriageways lifecycle. These costs far exceed the amount available hence asset management principals must be followed in identifying the correct treatment for the point in the carriageways lifecycle.

The carriageway maintenance backlog totals approximately **£117,672,901** The total LTP budget for 2022 is **£9,927,000**

#### 7.4 Footways:

Similar to carriageways, we utilise a footway prioritisation system that allows identification of specific elements and sections of the footway network where the condition is below standard. This information, when allied to use and importance of the sections of the footway network allow us to identify and select those sections of footway that are in greatest need of attention.

#### Footway Backlog (2020 AEI Survey)

An independent 'Annual Engineers Inspection' (AEI) forms the basis of the footway prioritisation system. Appropriate maintenance treatments are recommended for sections deemed below standard. From the specified treatments, it enables the following maintenance backlog to be calculated.

Footway category	Treatment	Value	Notes
<b>FOOTWAYS</b>	Bituminous Resurface	£755,460	<b>Note..</b> £... Calculated using a Footway width of <b>1.7m</b> Bit Resurface = £14m <sup>2</sup> Bit Patch = £10m <sup>2</sup> Flag Replacement = £40m <sup>2</sup> Slurry Seal = £2m <sup>2</sup>
	Bituminous Patch	£437,223	
	Flag Replacement	£882,640	
	Slurry Seal	£2,055,929	
	<b>Total</b>	<b>£4,131,252</b>	

### 7.5 Cycleways:

There is an ambition to expand our offer to the public for a better and more connected cycling and walking network across North Lincolnshire.

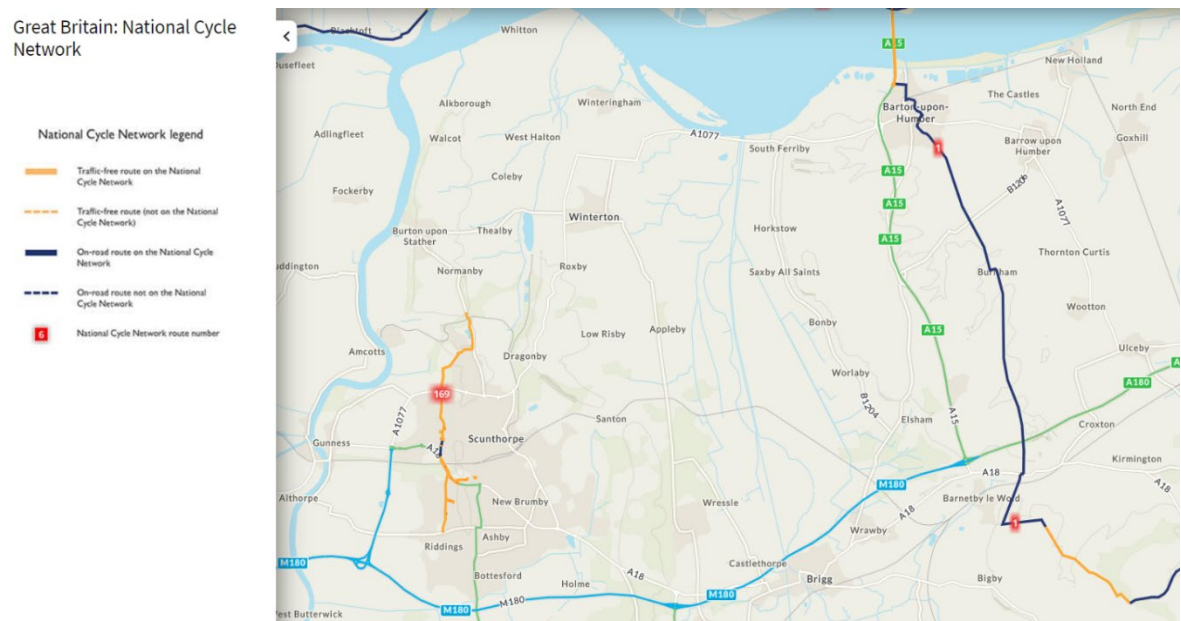
As a council, we have a clear strategic focus to enhance our transport offer to the public. The Integrated Transport Strategy sets out ambitions to transform transport networks to connect people, products and places and support the delivery of the Council’s Key Priorities:

- Grow the economy
- Keep people safe and well
- Enable communities to flourish.

With this in mind, there is a desire to promote active travel across North Lincolnshire, with a key element being cycling in the community. By realising these ambitions, there is significant potential to be catalysts in promoting and enabling healthier and more active lifestyles, as well as, sustainable and environmentally friendly means of travel over the council plan period and Beyond.

### Sustrans: National Cycle Route

North Lincolnshire is fortunate to have two routes on the National Cycle Network



Route 1 passes some of the UK’s most stunning scenery, running in sections from Dover up to the Highlands of Scotland.

Predominantly rural, the 18km section within North Lincolnshire, runs from Barnetby in the south of the region up to the town of Barton and the Humber Bridge. It is shared with the C159 carriageway.

**Route 169** of the National Cycle Network, known locally as the Scunthorpe Ridgeway, travels for 8km, north to south through Scunthorpe and passes through green, open spaces with beautiful views of the Trent Valley.

This route was designed to link communities together, providing better access for everyday journeys to schools, local shops and workplaces.

The Ridgeway forms a spinal route through Scunthorpe, from Manor Park in the south through to Normanby Hall to the north of the town. There are plans to link the Ridgeway to the large neighbouring village of Winterton in the future.

### Other Cycleways

In addition to the NCR, North Lincolnshire Council Cycle Network comprises of the following.

Type of cycle route	Total Km
Cycle Route (existing)	73.08
Footpaths (existing)	11.06
Off road cycle tracks/shared route (existing)	56.76
On road cycle lane (existing)	15.15
Recreational cycle route (existing)	318.27
Right of Way network (existing)	38.64
Walking the Way to Health (existing)	46.22
Walking Trail	25.21

Within the next 10 years we plan to build a further 9.8km of new cycleway, and have aspirations for a further 6.7km.

We currently have 1 Parallel Crossing. A further 8 are due to be installed in 2022/23. This will enabling cyclists a safer crossing over some of North Lincolnshire's busiest roads.

### 7.6 Street Lighting:

We are currently coming towards the end of a Light Emitting Diode (LED) investment programme. This work is being carried out in conjunction with replacement of lighting units, where this is suitable. This is considerably more energy efficient in reducing maintenance costs.

#### Current Strategy

The priority in street lighting is to maintain the stock in a steady state and safe condition. In addition, wherever possible, opportunities are taken to invest in the stock to reduce our overall energy consumption.

We have invested in replacement of time expired and faulty lighting columns. This work is being carried out in conjunction with replacement of lighting units, where this is suitable, with modern Light Emitting Diode (LED) units that are considerably more energy efficient and reducing maintenance costs.

Street lighting is maintained in accordance with the recommendations contained within 'Well-managed Highway Infrastructure: A Code of Practice'.

Cyclic maintenance routes have been established with extended frequencies to match available resources. Data is being collated to support risk based strategy and investment.

It should be noted the lighting stock increases year on year with new developments and highway improvement schemes. There is no increase in funding to support the maintenance of this additional stock.

#### Reactive Maintenance

The costs for reactive maintenance includes the costs of maintaining street lights, illuminated signs, traffic bollards and school wig wag signs.

Following historic reviews planned service level efficiencies were implemented to align service provision with available budgets. Current service levels are:

Night time inspections – None

Repair faulty light – Within 5 working days (dependent on location due to cost associated with traffic management on roads like the A18 Mortal Ash Hill.)

Cyclic Maintenance – Electrical testing and inspection – as resource permits, (target 6 years)

#### Planned Maintenance

Capital funding for planned maintenance is aimed at replacing end of life lighting stock and reducing energy consumption. Cyclic structural inspections are carried out on all steel lighting columns in excess of 25 years old. The data from these inspections is then used to prioritise replacements based on condition.

### 7.7 Drainage and Flood Risk Management:

Drainage assets have the problem of some being buried and therefore we may not know exactly what we have, where it is and in what condition it is in. Because of this we are limited to maintaining that which we know about and developing a record of what exists within the highway. To our knowledge we currently look after,

- 19 Pump Stations however only 3 are NLC assets.
- 3 Ponds, 1 dry pond and 1 currently going through the stage of adoption to the authority.
- 4 Hydrobrakes.
- 3 Swales.
- 3 ditches (aware of presently).
- 328 Soakaways (approx).
- 22519 Gullies (approx)
- 44680 Manholes and catchpits (approx.)
- 1840km Piped drains (approx.)

We recognise the increased risk of flooding damage and safety issues resulting from water on the carriageway and our plan is to invest in developing a system that more effectively deals with management of drainage issues

### Future Actions

North Lincolnshire Council have contributed significantly to flood risk over the last ten years with many schemes aimed at preventing future flooding to properties within North Lincolnshire.

The Local Flood Risk Management Strategy (LFRMS) was approved in 2016 and published. This document will guide the future flood risk schemes over the next few years. From this document many studies will be required to identify future flood risks.

Since the publication of the LFRMS, the council have carried out approximately 40 major flood alleviation schemes throughout the district. These schemes have ranged from new high capacity highway drainage systems, upsizing of significant ditches and culverts, installation of robust flood banks, strategically placed flood bunds and walls to divert flows, and reshaping/renewing highways to control the flow of water away from properties.

The LFRMS is due for update this year, however EA are currently redeveloping their UK flood models in order to consider the latest data with regards to climate change and it's effects. It is therefore likely that the existing LFRMS will receive a light touch update this year with a full review of the document likely to take place in 2024 when the latest model data is available.

The Scunthorpe Surface Water Management Plan (SWMP) Phase 3 has been developed for the 3 highest risk locations identified. 4 options have been developed to mitigate flooding for the following 3 areas:

- Scunthorpe General Hospital
- Baldwin Avenue/Ellison Avenue, Bottesford
- Warley Road, Scunthorpe

The proposed way forward is ongoing with Severn Trent Water on what is most economically beneficial and deliverable in the near future.

### 7.8 Structures (Bridges):

Our long term strategy with our structures asset is to maintain them such that significant costs do not arise there are instances – as at present – where a bridge on a strategic route is showing signs of distress and requires urgent attention. Currently our main issue is with the A18 railway bridge just to the west of Humberside Airport. This is on a section of the A18 that provides a critical connection between the airport and the strategic road network at Junction 5 of the M180.

In order to deliver this strategy the structures team have a programme of works which includes

- Maintenance painting
- Safety improvements at high risk bridge sites
- Structural improvements to avoid bridges becoming obsolete
- Replacement of damaged and ineffective expansion joints
- Condition intervention – general maintenance works necessary to prevent further deterioration of the stock.

#### Current Condition

The current, and historic, condition of the structures stock is demonstrated in the following table. BSCI is the Bridge Stock Condition Indicator which provides an overview of the condition of the bridge stock. BSCI values are published as average values for the stock as a whole and for the “critical” elements of the structures stock. A value of 100 indicates that the entire stock is in good condition and as the index reduces towards zero then the condition also reduces.

BSCI	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Structures BSCI (ave)	89*	N/A	N/A	80	N/A	77	77	77	77
Structures BSCI (critical)	80*	N/A	N/A	76	N/A	71	71	71	71

\*Sample only in these years, not full results.

In line with the CSS Bridge Group document – BCI Vol 3: Evaluation of Bridge Condition Indicators, our stock condition value lies between 65 and 84 indicating that the overall condition of our asset is FAIR with the A18 Melton Ross Bridge being in such a condition as to require replacing.

## Structures – Major Maintenance Programme (since 2017)

Asset Name - Scheme Description	Parish	Estimated Cost(as at 2016)	Intervention Date	Maintenance Details	Outcome if Intervention Not Taken
A18, Wrawby Railway Bridge – Side Arch Infilling	Wrawby	£350,000	2017	Removal of historic partial infilling of side arches and infilling with foamed concrete	Introduction of weight limit (possibly 7.5T)
A18, Melton Ross Railway Bridge - Replacement	Melton Ross	£7,000,000		Full replacement of existing bridge and approaches	Reintroduction of 7.5T weight limit on A18, possibly reducing with time, long diversion route
A161, Crowle Flyover – Bearing Replacement	Crowle	£350,000		Full replacement of all bridge bearings and bearing plinths	Risk of loss of proper support to bridge deck causing structural damage to deck possibly requiring closure of A161 or weight restriction
A18, Glanford Bridge - repainting	Brigg	£100,000	2020	Repainting of all structural steel elements of the bridge deck	Rusting will cause deterioration of the structural steel requiring repair work prior to future repainting
A15, Bonby Lodge Bridge – rewaterproofing and joint replacement	Bonby	£100,000	2025	Replacement of the deck waterproofing membrane and the movement joints	Ingress of de-icing salts through the deteriorated waterproofing and joints will damage the concrete deck of this bridge
A15, Horkstow Bridge – rewaterproofing and joint replacement	Barton	£130,000	2026	Replacement of the deck waterproofing membrane and the movement joints	Ingress of de-icing salts through the deteriorated waterproofing and joints will damage the concrete deck of this bridge
A18, Melton Ross Railway Bridge – Demolition of Existing Bridge	Melton Ross	TBD	TBD	Removal of redundant bridge	On-going maintenance responsibility for redundant structure over railway

## 7.9 Traffic Management (Traffic Signals):

We hold a comprehensive Traffic Signal Inventory which is constantly updated. From this we can develop schemes based on the information obtained. So far we have identified schemes for the oldest asset, most frequently maintained and are currently working towards identifying options for better connectivity and communication between sets of signals to improve traffic flows.

The overall priority is to ensure traffic signal equipment is maintained in a steady state and safe operational condition. In addition, the equipment is operated to minimise delays and to respond to incidents that occur on the highway network.

We have a collaborative working partnership with North East Lincolnshire Council for the maintenance of Traffic Signals.

New technology is being utilised to improve efficiency of operations such as LED signal aspects and above ground detection equipment.

### Signalised Junctions and Pedestrian Crossings:

The intention is to replace traffic signal installations at 25 years old due to the deterioration of electrical and structural components.

When an installation reaches 20 years of age it is assessed to determine if:

- a partial refurbishment is required to keep the installation operational for another 5 years
- a full refurbishment is necessary at 20 years
- intervention is required before it is 25 years old.

In organising the planned works programme, a one year detailed programme is produced plus a 5 year programme to assist with planning funding requirements and to take advantage of shared projects (e.g. development schemes) to reduce costs.

The assessment of the priorities for future work includes consideration of the asset condition data collected during annual inspections.

In previous years there has been significant growth in the signals stock. There are also existing stock that will be due for replacement over the next few years. In more recent years the economic climate has meant that the stock has remained static as there has been very little increase in new signals. However, it is anticipated that with increased economic activity in North Lincolnshire the stock may increase further adding some pressure to routine maintenance budgets.

### Active Travel

Additional Traffic Signal equipment is anticipated as North Lincolnshire looks to promote Active Travel. As part the Councils aim to improve people's health and wellbeing we will seek to provide more Walking and Cycling facilities throughout the authority.



### 7.10 Street Furniture

At present we are not working on a strategy to cover the street furniture assets in the short term. They are currently being maintained with available funds. A strategy for data inventory collection will be required as this forms part of the Whole Government Accounts and Asset Management Guidance, key topics.

## 8. Risk Management

Risk management and control is essential to the effective delivery of this Plan.

### 8.1 Risk Management Strategy

The Corporate Risk Management Strategy sets out how the council manages risk corporately. This strategy is also applied to managing the council’s transport assets. A risk register is compiled for the risks associated with the transport/highway asset. The methods used to create and manage this transport risk register are set out in the asset management manual. The highest rate risks that were considered when compiling this plan are shown in the table below:

The risks that could prevent the achievement of the targets set by this plan are:

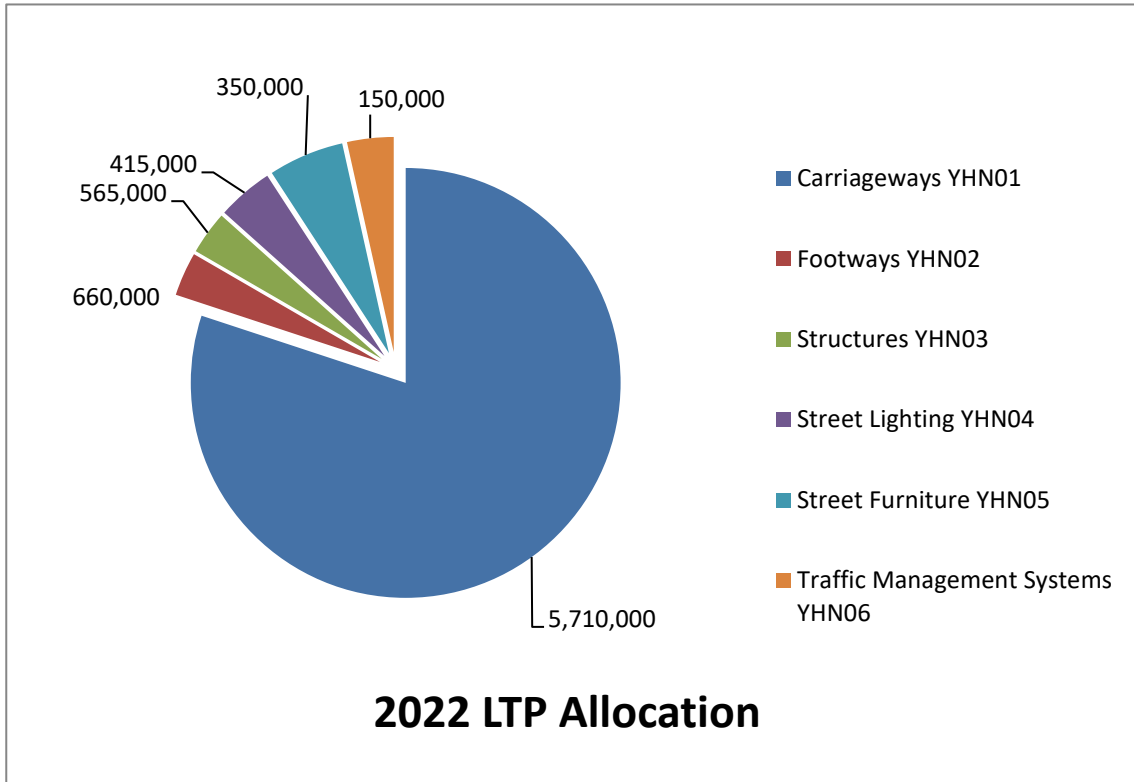
Plan Assumption	Risk	Action
The plan is based upon winters being normal.	Adverse weather will create higher levels of defect occurrence and deterioration than have been allowed for.	Budgets and predictions will be revised and this plan updated if abnormally harsh winters occur.
Available budgets are as assumed.	External pressures may mean that government will reduce the funding available for highways.	Re-assess budget allocation annually to reflect external pressures. Prepare business cases to request additional funding from other authority budgets.
Construction inflation will steadily increase.	Exceptional inflation of construction costs may increase the cost of works (particularly oil costs as they affect the cost of road surfacing materials).	Re-assess budget allocation annually to reflect external pressures. Prepare business cases to request additional funding from other authority budgets.
Levels of defect occurrence and deterioration are based on current condition data.	Continuing collection of condition data may identify that asset condition is worse than predicted and the investment required to meet targets may be insufficient.	Re-assess budget allocation annually to reflect improved extent of condition data.
Resources are available to deliver the identified improvement actions	Pressures on resources may mean that staff is not allocated to service improvement tasks.	Monitor the situation regularly and advice council accordingly.

## 9. Funding Allocations

This section outlines existing funding and future funding streams from government. Effective financial management and its documentation are both essential to the achievement of this plan.

### 9.1 Current Allocations

The LTP funding allocations identified are as follows:



Note: Surface Treatments includes work on the Principal Road Network (PRN) and the Non Principal Road Network (NPRN). It comprises of reconstruction schemes, surface dressing, micro asphalt, plane and inlay and recycling schemes.

The above chart relates to the LTP funding allocations. There are further funding sources that are used, where possible, to fund other transport / highways related issues. In addition to this the council has committed capital funding specifically for larger highway construction schemes, drainage and flood defence, street lighting works and general highway works, including pothole repair.

## 9.2 Future Allocations

Future funding will now be determined by two methods

Highways Maintenance Funding Formula (Needs Based Formula) + Incentive Funding

Internal Council allocated funding

The Department for Transport (DfT) have presented multiyear funding figures. The tables below show this Highway Maintenance Funding Formula along with the possible money available subject to which “Band” North Lincolnshire fits into, for the incentive funding element.

The incentive funding element is produced from a self-assessment ranking questionnaire that is to be presented to DfT on an annual basis. There are three possible “Bands”. North Lincolnshire Council was a “Band 3” at the time of submission for the deadline of March 2022.

Local Authority	Pothole Funding 2022 to 2025	Highway Maintenance Block Needs Element 2022 to 2025	Highway Maintenance Block Incentive Element 2022 to 2025	Integrated Transport Block 2022 to 2025	Annual Total
North Lincolnshire	£2,553,000	£2,553,000	£638,000	£1,168,000	<b>£6,913,000</b>

## 10. Collaborative Working

North Lincolnshire and the East Riding of Yorkshire Council have implemented a single shared Code of Practice for Well Managed Highways. It is hoped to extend this code to cover street lighting and structures in the future.

North Lincolnshire and North East Lincolnshire currently have a framework for the collection of highway survey data and are also working closely together on the whole government accounts aspect of the highway asset.

## 11. Conclusions

Significant progress has been made by North Lincolnshire Council in delivering the actions identified in the Transport Asset Management Plan.

Systems are in place to monitor the long term condition of all key assets and plans are in place to maintain these at an appropriate condition which reflects the funding available.

The continuing deterioration in the condition of our minor roads and particularly the unclassified road network is still a concern, while significant progress has been made in improving the condition of this part of the network, it will still require significant additional funds in the short to medium further improve condition. In the short term budgets have been prioritised and reallocated to support the increase in preventative maintenance, like surface treatments, but there are now a number of larger, more expensive, structural repair schemes that also need attention and are higher spending treatments.

Large development in North Lincolnshire, such as the Lincolnshire Lakes development will bring increased population growth, business and money for the area but will have a significant impact on the highway asset, all of which will need to be maintained in the medium to long term.

The council is in the process of producing a Green Strategy which will have an impact on all aspects of what the council does. With this will comes new opportunities and challenges. The Highways Team are committed to improving energy efficiency with a view to contribute towards the council objective to be net zero carbon by 2030

North Lincolnshire Council has a robust TAMP which is supported by well-developed systems and data which helps ensure that the available budgets are spent effectively.

The continued support of Members is essential in identifying appropriate funding, over and above existing government grants for the highway asset is vital to enable it to remain in a steady state of maintenance or ideally improve on its current condition.