



Highway Asset Management Plan (HAMP) 2017 to 2032 Annual Information Report January 2023

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1. INTRODUCTION

In September 2017, Cabinet adopted an updated Highway Asset Management Plan 2017 - 2032 (HAMP). This sets out the Authority's approach to maintaining the highways for which the Authority is responsible over a 15 year period and responds to the Elected Mayor and Cabinet's policy direction which included providing a greater emphasis on footways to help support walking and other means of active travel. It also responds to feedback from residents which has consistently told the Authority that the maintenance of roads and footpaths is a top priority. This is reflected in the Our North Tyneside Plan including a commitment to invest additional capital funding in repairing roads and pavements. A well-maintained highway network is vital for supporting the local economy and general wellbeing of the Borough.

Much has been achieved over the lifetime of the HAMP and around £90m has been invested in maintenance and improvement works. Investment in specialist ICT highway asset management systems has enabled the gathering of very accurate inventory and condition data which allows resources to be targeted in the most effective way. Other innovation includes systems to identify the best treatment options to maximise the life of the asset and get best value for money. The Authority has consistently achieved the highest banding in the Department for Transport (DfT) Highway Maintenance Incentive Fund which rewards highway authorities who can demonstrate excellent highway asset management practice. The following has been achieved over the lifetime of the HAMP:

- 160 km of road renewed and 90km of footways improved
- 50 bridges repaired
- 280 footway improvement schemes completed
- 12 major highway projects delivered (e.g. A1058 Coast Road improvements)

This latest HAMP Annual Information report shows that within the last 12 months:

- The highway network is in a serviceable condition, but recent surveys have shown that future maintenance will be challenging.. This is due to a combination of factors which will be explained in the report
- The maintenance challenge has been exacerbated over the last 12 months by the sudden increase in construction costs due to the inflation crisis and the war in Ukraine. The cost of surfacing materials are now 22% higher than they were 12 months ago. This translates to around 10 less roads being resurfaced in 2022/23 compared to previous recent years. As such, as the Authority looks ahead, it will need to align its core maintenance funding with external investment and targeted interventions where they will have the maximum impact
- Performance in relation to day to day maintenance is generally good with regard to KPIs being met
- Highway asset work programmes have been completed successfully
- The Authority again achieved Band 3 in the latest Department for Transport (DfT) Self-Assessment to ensure that it received its full budget allocation under the DfT Highway Maintenance Incentive Fund

- A number of service improvements have been completed including the production of policies and procedures to satisfy the needs of the Incentive Fund and the Highways Infrastructure Code of Practice
- Over the last 12 months the Authority has completed extensive footway improvements in line with the Mayor's priorities. In addition to the Authority's regular footway improvement programme, £150K of housing footway improvements were undertaken in the last 12 months and a further £150k will be delivered by the end of this financial year
- The North Tyneside and Capita Technical Partnership has been supporting the Authority's carbon reduction efforts. New initiatives have included trials of warm-mix asphalt for road resurfacing which will result in considerable carbon savings
- A full inventory collection of road markings has been undertaken along with a condition assessment and the development of a renewal plan for delivery in 2022/23 and beyond
- An improved road marking testing regime has been introduced
- A number of improved procedures have been developed including a policy for better dealing with vegetation overhanging the public highway

2. THE IMPORTANCE OF HIGHWAY INFRASTRUCTURE

The national highway network comprises the strategic network of motorways and trunk roads and both major and minor local roads. It totals some 235,000 miles and includes assets such as carriageways, footways, cycle-tracks, structures, highway lighting, street furniture, traffic management systems and similar highway infrastructure.

Almost every resident, worker and visitor within North Tyneside uses the highway network in some way on a daily basis, whether as a pedestrian; as a cyclist or motorcyclist, as a car, bus or commercial vehicle driver or passenger, or in other diverse ways such as mobility scooter users etc. The network is used by a range of people including, young and old, disabled persons and by groups such as cyclists and equestrian users. The highway network therefore needs to perform in different ways for different users and social groups each with their own needs and priorities.

A particular driver for the development of the HAMP is the Infrastructure Code of Practice and the Department for Transport (DfT) Incentive Fund which promotes the use of best asset management practices and the effective management of risk.

The local highway network is the responsibility of the Authority, which acts as the Highway Authority. It is the largest, most valuable and most visible infrastructure asset for which the Authority is responsible. Well maintained and accessible highway infrastructure is vital and fundamental to the economic, social and environmental wellbeing of the communities of North Tyneside. The aim to maintain a good highway network is important to delivering the 'Our North Tyneside' Council Plan and the Mayor and Cabinet's commitment to building a better North Tyneside.

The Authority’s highway network is 899.15km in length and comprises of:

- Principal Roads – 105.18km
- Classified B Roads – 37.75km
- Classified C Roads – 34.29km
- Unclassified Roads – 684.73km
- Back Lanes – 37.2km

Within the highway network the Authority is also responsible for the following major asset groups:

Drainage – 32,678 gullies

All highway and infrastructure services are currently delivered by Capita under the North Tyneside Technical Services Partnership.

The Authority is also responsible for a range of bridges and structures as shown below:

Bridges and other Structures	2021	2022
Road Bridges	46	46
Retaining Walls	73	73
Footbridges (inc PROW)	46	46
Bridleway Underbridge	1	1
Bridleway Overbridge	1	1
Culvert	41	41
Subway	25	25
Tunnel	1	1
Underpass	1	1
Total	235	235

Within the highway network there is also street lighting. However the Authority does not manage this as part of the HAMP and the lighting assets are managed separately through a Private Finance Initiative (PFI) contract. As such, street lighting information is not included in this report.

3. CURRENT MAINTENANCE PRIORITIES

3.1. HIGHWAY MAINTENANCE

With regard to roads, around 10 years ago at the start of the first HAMP, the maintenance of the strategic road network (main classified roads) was given a high priority. These are the roads that carry the vast majority of local and through traffic. The prioritisation was based on the condition of the network at the time and feedback

received from residents via customer engagement. As a result, the condition of the main roads has improved allowing more resources to be targeted towards estate roads. More recently there has also been additional investment in footways after further customer feedback was received and the issue became a Mayoral priority. Whilst the strategic highway network remains important, ongoing additional Authority funding has gradually allowed more resources to be allocated to dealing with the condition of residential roads. This year, investment in the classified road network has been significantly less than in estate roads as a proportion of the total resurfacing budget with only 19% of the budget being spent compared to 81% on estate roads. The maintenance of residential roads will however become more challenging under current funding conditions. We will therefore continue to work with Central Government and funding bodies to attract and secure investment into the network.

In line with current Mayoral priorities, the Authority has also continued to focus on improving the condition of its footways and during the 2022/23 year it will have spent around £1.08 million on footways. A programme of improvement works has been implemented focusing on, key urban routes and residential areas where older flagged constructed footways, which are susceptible to damage, are replaced with lower maintenance bituminous construction.

3.2. BRIDGES AND INFRASTRUCTURE

This area of work is undertaken mainly using Local Transport Plan (LTP) funding. Maintenance priorities for major work for the next 6 years are set out in a forward plan which is supported by a range of framework documents including Highway Structures – Risk-based Principal Inspections. At present the work can be accommodated provided future LTP allocations remain relatively constant. However, a number of structures have been identified which will require attention within the next 6 years. We will continue to monitor these and will work with partners to identify additional funding if this is available.

Day to day reactive repairs are undertaken using a revenue budget which is managed by Capita. The current programme is focussed and prioritised on locations and schemes which have been identified as requiring general maintenance work or have been identified as requiring work in the next 12 – 18 months following statutory general and principal condition inspections of the Authority's bridges and other infrastructure assets. These inspections are critical in ensuring that the Authority's bridge stock remains in a safe and usable condition.

4. SUMMARY OF WORK UNDERTAKEN DURING THE LAST 12 MONTHS

During the last quarter of the previous 2021/22 financial year, the highway maintenance schemes for the current 2022/23 financial year were finalised in accordance with the Authority's works prioritisation procedures. The following is a summary of the work that has been done to date and what will be achieved by the end of the current financial year.

4.1. CARRIAGEWAY IMPROVEMENT WORKS

In order to achieve better value for money the Authority has continued to use alternative maintenance products. These treatments are in the following treatment groups:

- Structural Maintenance – where renewal of the road is required because the underlying layers have failed and require replacement.
- Preventative Maintenance – where the surface of the road has started to show signs of age and requires this maintenance technique to prolong its life, return a safe running surface and prevent water ingress which is a major cause of deterioration.

By the end of this financial year the Authority will have completed the following works:

Road and Footpath Work Undertaken in North Tyneside in 2020/21 (and comparison with previous years)

Treatment Group	Area Covered in 19/20	Area Covered in 20/21	Area Covered in 21/22	Area Covered in 22/23
Preventative Maintenance	46,425m ² (4.39 miles)	41,831m ² (3.96 miles)	42,665m ² (3.91 miles)	42,647m ² (3.93 miles)
Structural Maintenance	94,320m ² (7.94 miles)	62,154m ² (5.25 miles)	68,141m ² 6.24 miles	70,357m ² 5.68 miles
Patching Sites	52 no.	47 no.	72 no.	67 no.
Footway Improvement Schemes	38 No.	50 No.	11 No.	13 no.

By the end of the financial year all structural, preventative and footway maintenance schemes will have been completed in accordance with the approved programme. The list of road resurfacing schemes for the 2022/23 year can be viewed at the following link:

<https://my.northtyneside.gov.uk/category/749/road-resurfacing>

4.2. DRAINAGE WORKS

The Authority has two gully wagons, one 18 tonne and the other 26 tonnes, which operate across the borough carrying out gully maintenance and dealing with reported flooding problems on the highway. The Authority operates its gully services with the support of an ICT system called Gully Smart. This provides real time data on the level of silt in gullies and allows them to be cleaned on a 'need' basis.

All gullies on high-speed roads such as the A1058 Coast Road are routinely cleaned twice per year.

Each year a boroughwide programme of capital drainage improvements is developed based on information gathered during cleansing operations. This work typically involves CCTV surveys, localised drainage pipe repairs, jetting of drainage runs, replacing defective gully pots etc. During the current 2022/23 year, around £175k of this type of work will have been completed.

4.3. BRIDGES AND INFRASTRUCTURE

Below is a summary of the bridge/highway structures maintenance inspections for the 2022/23 year:

A total of 21 Principal Inspections will be carried out in 2022/23.

Structure Type	2021/22	2022/23
Footbridges	1	1
Underbridges	2	2
Overbridge	0	0
Culverts	3	3
Subways	8	8
Tunnels	0	0
Retaining Wall	7	7
Total	21	21

A total of 22 General Inspections will be carried out in 2022/23

Structure Type	2021/22	2022/23
Footbridges	2	1
Underbridges	10	2
Overbridge	1	0
Culverts	9	3
Subways	6	8
Tunnel	1	0
Retaining Wall	15	7
Total	44	22

The following bridges work has also been carried out in within the last 12 months.

- Weetslade Bridge Inspection, assessment and repairs option study
- Weetslade Bridge refurbishment scheme design
- Harrow Street (Shiremoor) pedestrian bridge repairs outline design

5. INVESTMENT IN THE HIGHWAY ASSET

The following table provides a summary of the budgets that have been allocated to highway and bridges in 22/23 and a comparison with the previous financial years:

Budget	Budget Type	Type of Work	2020/21	2021/22	2022/23
Service Budgets	Revenue	Day to day reactive minor repairs (e.g. potholes), gully cleansing, traffic management, sign repairs and road marking renewal	£1,114,000	£1,114,000	£1,114,000
Housing Revenue Account	Revenue	Housing footway improvement schemes	£250,000	£150,000	£150,000
Local Transport Plan Maintenance Block (including DfT Incentive Funding)	Capital Grant	Road resurfacing, planned footway schemes, drainage repairs, dropped kerb programme, bridges schemes, bridge design work	£2,195,000	£1,253,000	£1,253,000
Additional Highway Maintenance	Authority Capital	Additional road resurfacing and footway schemes	£2,000,000	£2,000,000	£2,000,000
DfT Highway Maintenance Incentive Fund	Capital Grant	Additional road resurfacing and footway schemes	£378,000	£313,000	£313,000
DfT Pothole Fund allocation	Capital Grant	Additional road resurfacing and work to prevent potholes forming in the future	-	£1,253,000	£1,253,000
		Total Investment	£5,559,000	£6,083,000	6,083,000

6. PERFORMANCE

As part of the Technical Services Partnership between the Authority and Capita, a suite of performance indicators is used, monitoring aspects of the Partner's performance in relation to the management and condition of the network. These indicators have been in place since November 2012 and are reviewed on an annual basis. The tables below outline recent data in accordance with the performance indicator methodology.

With reference to the condition of the main classified roads, independent condition surveys are undertaken, and the data is used to calculate a performance indicator figure (Road Condition Indicator (RCI)). The results for recent years are shown in the table below (note: a lower figure is better).

KPI/PI Reference	Performance Indicator	Target	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
ENG 1.4 (RCI)	Percentage of A class roads that should be considered for structural maintenance	5%	2%	2%	2%	2%	2%	3%
ENG 1.5 (RCI)	Percentage of B and C class roads that should be considered for structural maintenance	5%	3%	2%	2%	2%	2%	3%
Not an indicator	Percentage of unclassified (residential) roads that should be considered for structural maintenance	N/A	14%	6%	4%	4%	5%	6%

The above figures illustrate the percentage of structural maintenance required to improve the road network. It can be seen that, although still within target, there is still an ongoing need for sustained investment in the Highway Network. Generally, there is a high level of confidence that the network is being maintained in the most efficient way, however, this will require ongoing monitoring as:

- Levels of funding have not significantly changed over the years
- The amount of improvement work that can be done now is less each year due to inflation
- The number of highways assets increases each year as new estates are adopted
- Recent world events have had a sharp and adverse impact of the cost of construction work and it will take some time for prices to stabilise

The other performance indicators within the Highways Service relevant to this report are detailed in the following tables:

CATEGORY 1 KPI's				
KPI/PI Reference	Performance Indicator	Target	Average performance over the last 12 months.	
			October 2020 – September 2021	October 2021 – September 2022
ENG 1.2	Roads and Pavements – Permit scheme compliance of Capita workforce	90%	93.1%	90.56%
ENG 1.4	Roads and Pavements – Percentage of pothole and footpath enquiries inspected within 3 working days	80%	94.29%	97.33%

CATEGORY 2 KPI's				
KPI/PI Reference	Performance Indicator	Target	Average performance over the last 12 months.	
			October 2020 – September 2021	October 2021 – September 2022
ENG 2.1	Roads and Pavements – Percentage of routine street care safety inspections carried out on time	95%	98.28%	99.86%
ENG 2.2	Roads and pavements - Percentage of CAT 1 highway defects that were compliant within 24 hours	98%	100%	100%
ENG 2.3	Roads and Pavements - Percentage of CAT 2 highway defects that were made compliant within 10 working days	98%	98.47%	98.69%
ENG 2.5	Roads and pavements - Quality of maintenance repairs	93%	97.15%	86.70%

- 7. THE ABOVE FIGURES DEMONSTRATE THAT THE TECHNICAL SERVICES PARTNERSHIP IS GENERALLY ACHIEVING AND EXCEEDING, IN A NUMBER OF INSTANCES, ITS AGREED PRESCRIBED PERFORMANCE TARGETS WITH REGARD TO UNDERTAKING THE AUTHORITY'S STATUTORY MAINTENANCE DUTIES AND UNDERTAKING REPAIRS IN A SAFE AND TIMELY MANNER, REDUCING THE RISK OF ANY HARM OCCURRING TO USERS OF THE HIGHWAY NETWORK. VALUE OF THE HIGHWAY ASSET**

Under the Whole of Government Accounting (WGA) procedure, all local authorities are required to submit an annual detailed valuation of their highways and infrastructure

assets. Each year, independent condition surveys of roads, footways and structures are necessary to assess their condition. Depreciated Replacement Costs are used for measurement purposes and are disclosed as a separate class of asset on the Authority's Balance Sheet. For asset management, Gross Replacement Cost (GRC) and the Annual Depreciation are the key drivers.

Gross Replacement Cost (GRC) is the estimated cost of replacing an asset or property with the same quality of construction and operational utility. For carriageways it is replacement of the top 100mm. The most recent GRC values for North Tyneside area are shown in the table below:

Asset Type	2018/19 Valuation	2019/20 Valuation	2020/21 Valuation	2021/22 Valuation
Roads	£1,165 million	£1,205 million	£1,165 million	£1,165 million
Footways and Cycleways	£206 million	£221 million	£206 million	£206 million
Bridges	£461 million	£469 million	£469 million	£469 million

As of **September 2022**, the total value of highway assets equates to **£1,840,000,000**.

The previous GRC changes were due to changes in unit rates and inventory and does not reflect changes in condition, just the gross cost in replacing the asset. There is no change between 20/21 and 21/22 due to no changes in the assets recorded. However, the GRC is expected to increase substantially in the 22/23 valuation due to the expected increase in unit rates. The Authority will wait until The Chartered Institute of Public Finance and Accountancy make a recommendation regarding unit rates.

8. CONDITION OF HIGHWAY NETWORK

The Authority uses a specialist computer system, XA©, to model the condition of roads and footpaths under different funding scenarios.

The service standards developed for the Authority's infrastructure assets are 'good', 'early life', 'mid-life' and 'late life'.

- Good
 - These are roads and footpaths which are coloured **green** on the condition maps and reflects that the asset is in as new condition, no or very small amounts of minor defects have been identified in the annual condition surveys. These assets do not require any maintenance, but they are monitored through safety inspections to ensure the Authority maintains its duty of care under section 41 of the Highways Act 1980.
- Early Life
 - These are roads and footpaths which are coloured **yellow** on the condition maps and reflects that the asset has minor defects in small quantities

which have been identified in the annual condition surveys. These assets do not require any planned maintenance, but they are monitored through safety inspections to ensure the Authority maintains its duty of care under section 41 of the Highways Act 1980.

- Mid Life
 - These are roads and footpaths which are coloured **amber** on the condition maps and reflects that the asset has large quantities of minor defects and small quantities of major defects which have been identified in the annual condition surveys. These assets require planned preventative maintenance techniques to prolong the life and deliver acceptable service levels. They are monitored through safety inspections to ensure the Authority maintains its duty of care under section 41 of the Highways Act 1980.

- Late Life
 - These are roads and footpaths which are coloured **red** on the condition maps and reflects that the asset has large quantities of major defects which have been identified in the annual condition surveys. These assets require planned structural (major) maintenance. They are monitored through safety inspections to ensure the Authority maintains its duty of care under section 41 of the Highways Act 1980.

Over the summer of 2022, the Authority commissioned the specialist partner, XAIS Asset Management Ltd, to undertake a comprehensive review to:

- assess the current state of the infrastructure on the highway network
- review highways documentation to check it meets the requirements of the DfT Incentive Fund and the infrastructure code of practice
- carry out an engineering assessment of all the roads within North Tyneside

XAIS have been heavily involved in pavement management since the early 1990s, were directly involved in the creation of specialist asset management systems and helped design the national framework which most systems are based upon in the UK. XAIS have been a specialist technical advisor to all the highway maintenance PFI contracts in the UK and several Design Build Finance and Operate (DBFO) companies, creating working models for the lenders and banks in litigation and bidding for major works throughout the UK and Europe. XAIS are therefore well placed to support the Authority in evaluating the current state of the highway network.

A major improvement this year is the use of 360-degree video surveys and artificial intelligence to help better understand the condition of the highway asset. Further details are given in Section 12.2 of this report.

The following section of the report sets out the findings of the condition assessment element of the XAIS review.

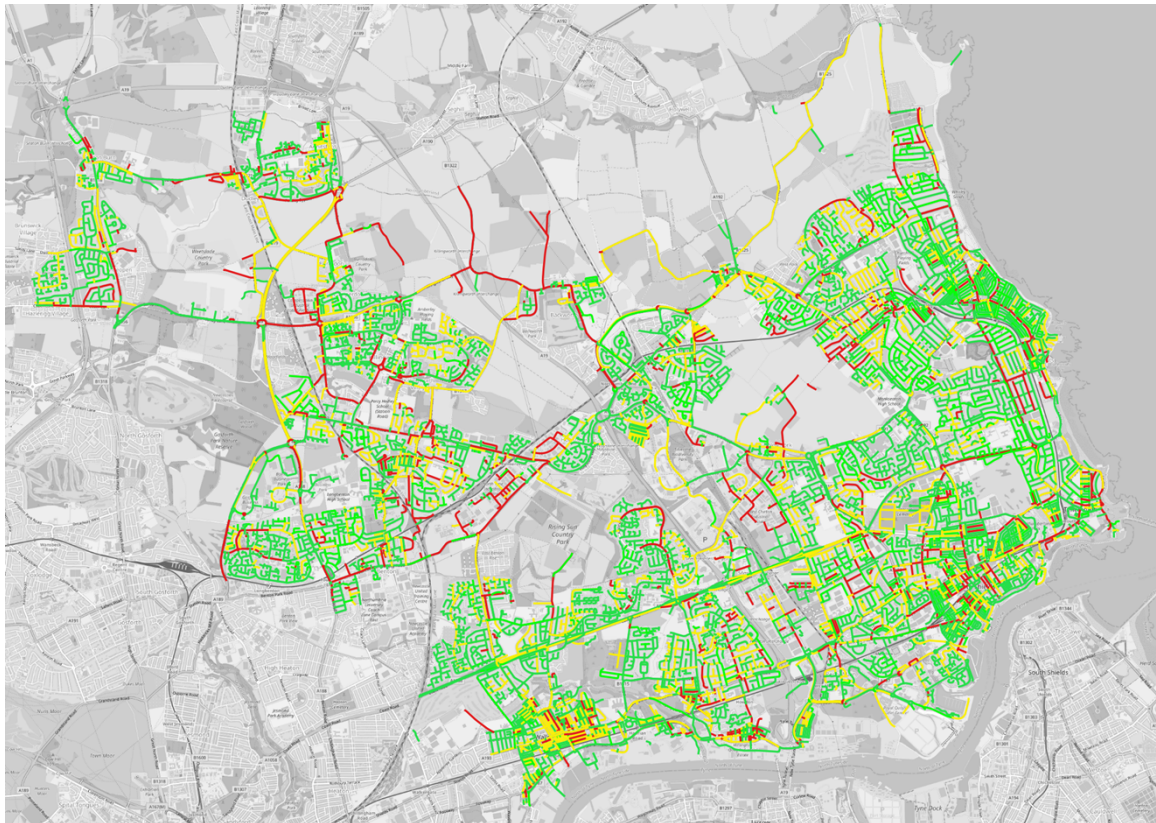


Working in partnership with

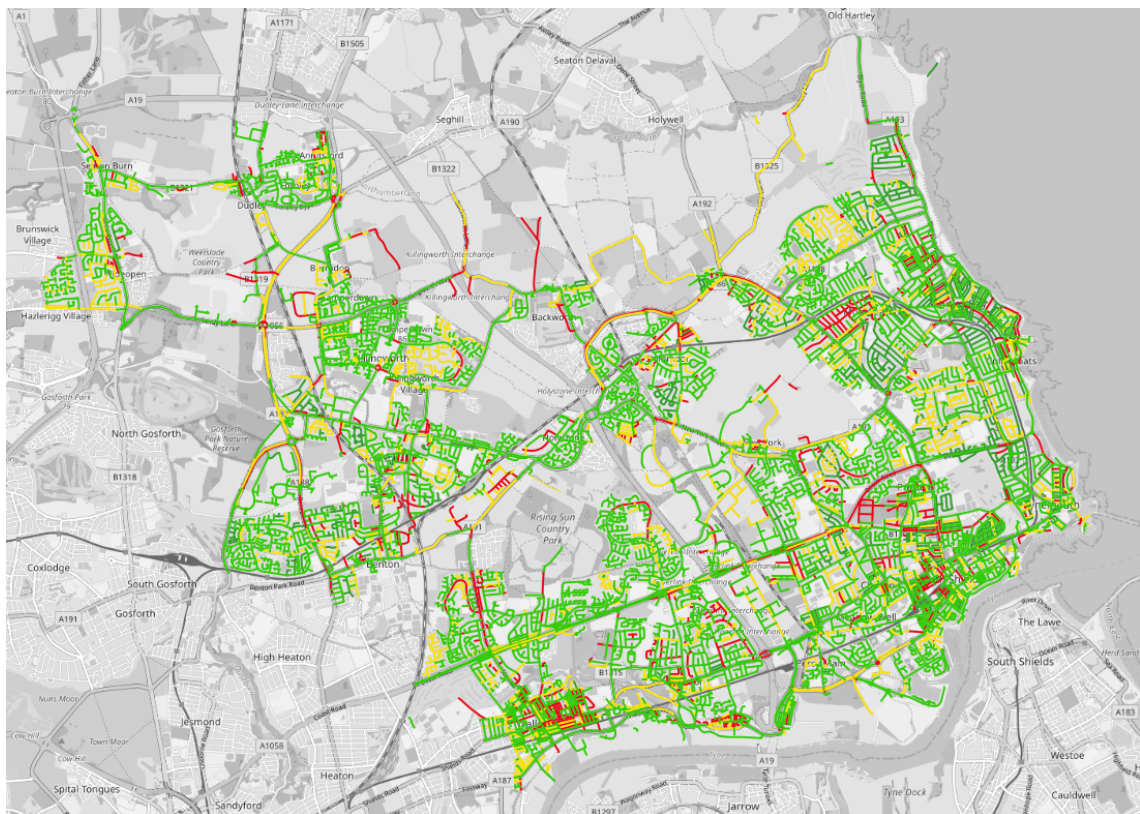


8.1. CURRENT CONDITION OF THE ROAD NETWORK

The following plan illustrates the current condition of the whole of the road network compared to a year ago. As a result of the continued investment and the application of asset management principles, the percentage of red routes has remained relatively steady. The authorities additional £2m investment has made a significant contribution to maintaining the Network. Sustained investment, that reflects the ongoing challenges and pressures will now be required in order to maintain the current position.

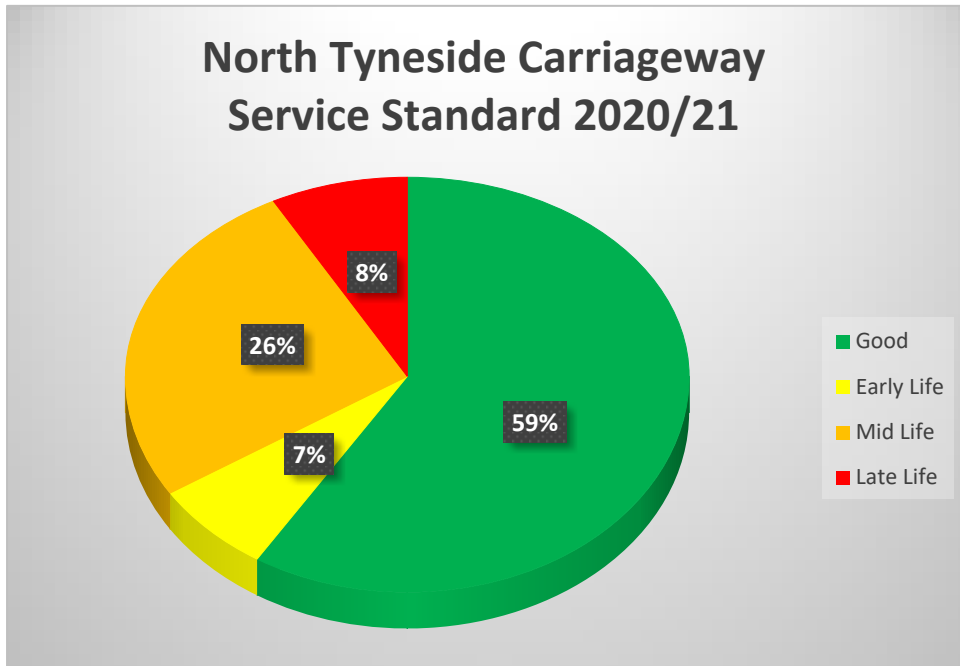


Plan showing condition of highway network – August 2021

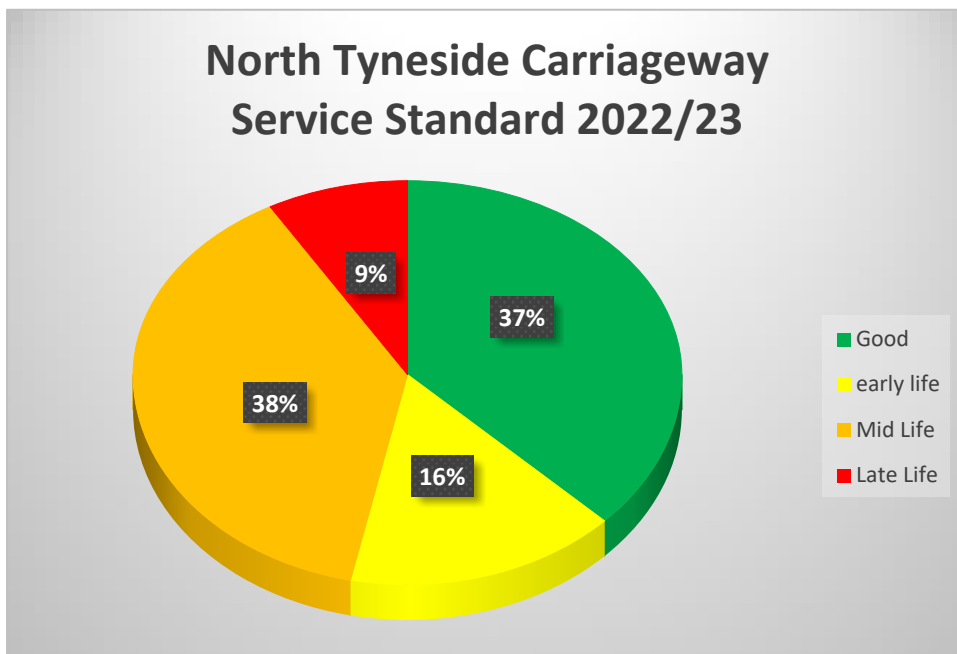


Plan showing condition of highway network – August 2022

The pie chart below demonstrates that under current funding arrangements, 37% of the road asset is good, with 59% of the network is in this condition band. However, 34% of the network requires some form of maintenance.



Service Standard – Carriageway 2020/21



Service Standard – Carriageway 2022/23

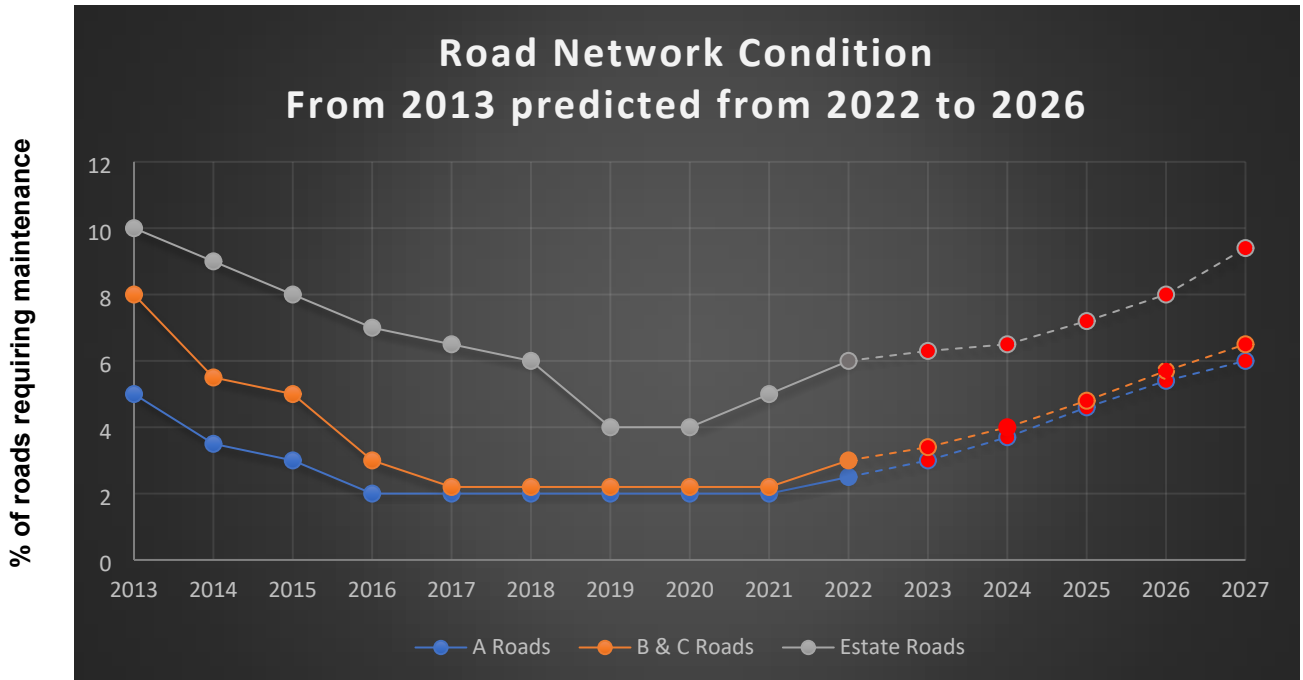
The key to achieving best use of resources to ensure that the majority of the road asset in good condition is to target early and mid-life roads with preventative maintenance treatments to prolong their life. By carrying out preventative cost-effective surface treatments the Authority will stop further deterioration and keep mid-life roads from moving into the red band at which point maintenance work is far more expensive. To ensure the Authority targets its early and mid-life roads it gathers annual condition survey data and inputs this into XA© system which allows the identification of the roads in early and mid-life state. It is this information which the Authority uses to inform its forward works programme for improvement works on the highway.

It can be seen from the charts above, whilst the proportion of red roads is staying similar, the number of amber roads is increasing considerably. The sections requiring immediate preventative maintenance has risen from 26% to 38% over a two year period.

As the above chart shows, 9% of the borough's roads are in late life condition where structural resurfacing should be considered. This has slightly increased from 8% last year.

8.2 FORECASTED CONDITION OF THE ROAD NETWORK

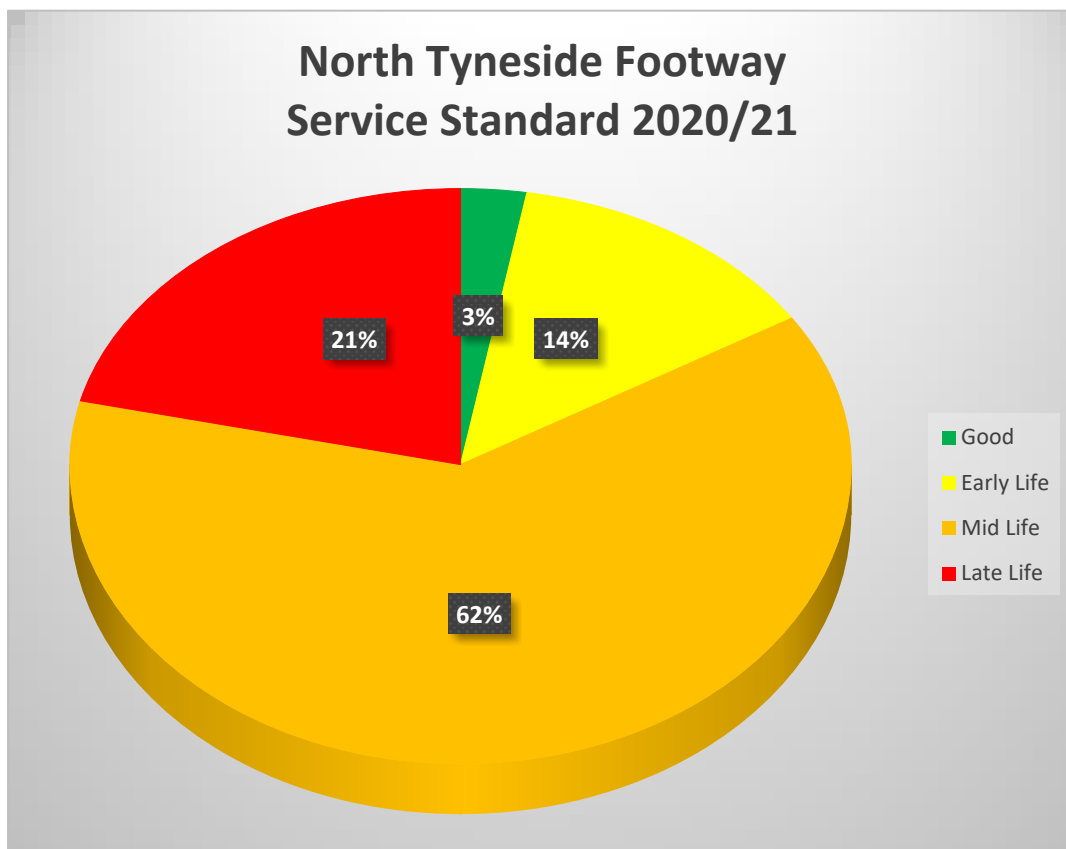
The XA© system can accurately predict future highway condition under different funding scenarios. Given the concerns around early indications that the network is facing challenges around funding, the Authority's specialist partner XAIS has undertaken a condition modelling exercise to determine how the network will look in 5 years time if current investment levels remain unchanged. The modelling assumes an ideal asset management system is being applied and does not factor in potential unexpected events such as abnormally severe winters. The graph below shows that under current investment conditions, there will be a sustained increase in the percentage of roads requiring maintenance across all road types.



8.3 CURRENT CONDITION OF THE FOOTWAY NETWORK

As such investing in our footways is a Mayoral commitment included within the Mayor's manifesto. It is therefore a priority to ensure footways are in a good condition and are invested in. A Footway Network Survey (FNS) was completed in 2020 on 100% of the footway network and the condition is presented in the pie chart below. As with roads, the data is held in XA© and is used to complete the Whole of Government Accounts (WGA) return as well as identifying future footway schemes in line with the Authority's asset management principles. Given improvements to footways is currently a Mayoral priority, they will be considered accordingly as part of current and future work programmes.

The pie chart below shows the current condition of footways across the Borough for the period 2022/23. This has not changed because a footway survey has not been undertaken since 2020. The reason for not carrying out a survey is that they are inspected annually for safety only and the DfT recommendation is to undertake a detailed condition survey of the footway network every 4 years. Therefore, it is the intention to re-survey the footway network next financial year to assess the effect of the additional investment in footways since it became a Mayoral priority.



Footway Service Standard as of 2020/21 (last survey year)

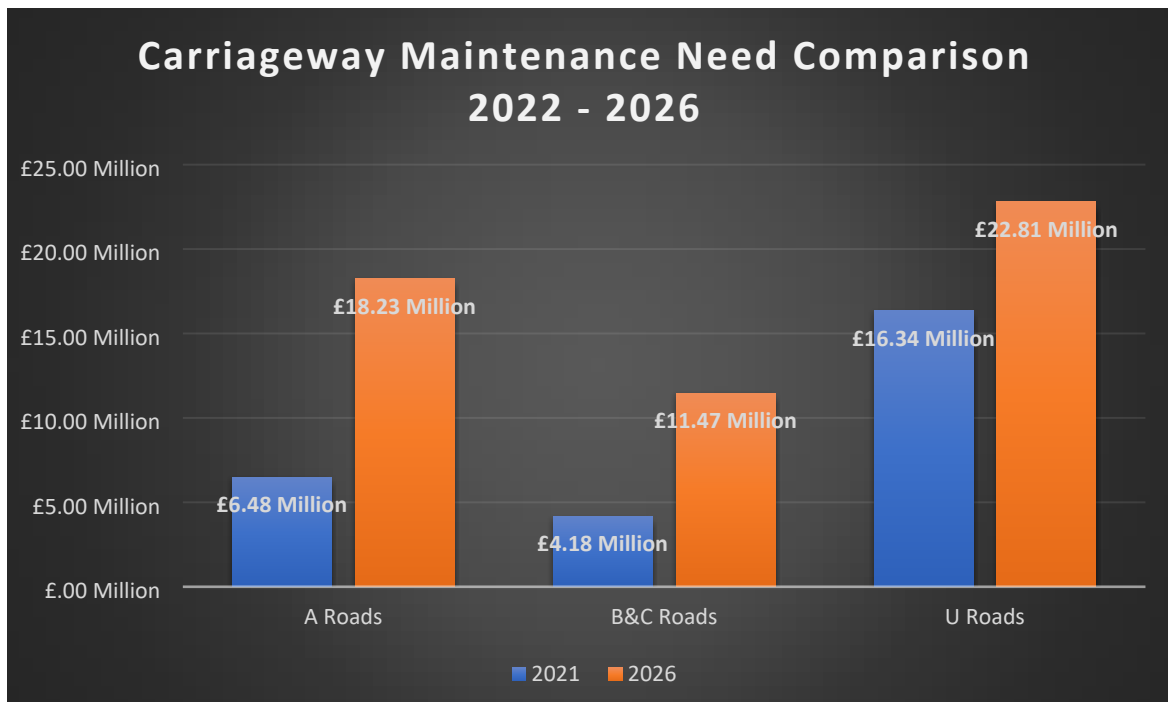
9 HIGHWAY MAINTENANCE BACKLOG

The XA© system can also be used to calculate the current backlog of highway repairs i.e.. the cost of rectifying highway defects.

In the 2021 report the estimated cost for the carriageway maintenance backlog, for carriageways identified as red category of repair, was circa. £25 million which represented steady state as indicated by the percentages reported.

However, in 2022 carriageway widths (collected by more advanced 360 degree camera surveys) were captured to ensure the maintenance backlog calculation is as accurate as possible. A review of unit rates was also carried out to see the effect of the current economic climate. This has resulted in the maintenance need increasing to £27 million.

The following graph compares the maintenance need now to the expected maintenance need in 2026, with current budgets. An increase to £52.5 million



The footways maintenance backlog is currently **£6million** which is unchanged.

10 CUSTOMER ENGAGEMENT

In recent years, corporate resident satisfaction surveys have shown that a well-maintained highway network is very important to residents and customer satisfaction in this area has proved to be a challenge.

The Highways Service utilises a range of customer engagement methods including the Annual Residents Survey and the National Highways & Transportation Survey. These provide an indication of satisfaction in the condition of roads and pavements. Feedback is also obtained from residents that have benefited from road resurfacing via a post-scheme survey that is carried out by contractors.

The Highway Asset Management Plan (HAMP) recognises that improvement to the network will always be constrained by available resources and so there is a need to prioritise. With this in mind, over the next 12 months the Authority will be developing more in-depth customer engagement to better understand customer priorities and where residents would like to see resources spent. Feedback from these surveys will help to inform future programmes of planned works in line with expectations set out by the Department for Transport and the Incentive Fund. Further information on the Incentive Fund is set out in Section 11.1.

Following a successful trial, a member of Capita's communications team has been providing engagement support in advance of selected road resurfacing schemes in the 2022/23 programme. This will be continued in future years.

11 OTHER AREAS OF INTEREST

This section of the report advises of other items of interest within the Highway Maintenance Service and emerging issues which the Authority needs to be made aware of.

11.1 SELF-ASSESSMENT QUESTIONNAIRE BY THE DEPARTMENT FOR TRANSPORT (DFT)

Several years ago, to encourage local authorities to adopt good asset management practices, DfT introduced changes to the highway maintenance formula funding mechanism. Each highway authority is required to complete a self-assessment questionnaire against a set of criteria aimed at assessing performance in relation to asset management, resilience, customer engagement, benchmarking, efficiency and operational delivery.

The self-assessment bandings are based on the maturity of the Authority in key areas, which are described in each question. The principle on which the levels of maturity for each question were determined is described as follows: Band 1 – has a basic understanding of key areas and is in the process of taking it forward; Band 2 – can demonstrate that outputs have been produced that support the implementation of key areas that will lead towards improvements; Band 3 – can demonstrate that outcomes have been achieved in key areas as part of a continuous improvement process.

The Authority successfully achieved Band 3 some years ago and has since maintained this position. It is important that Band 3 is sustained in order to receive maximum funding from the Government.

The funding allocation for the Authority over recent years is presented in the table below.

Year	Total needs/formula allocation (£) announced in December 2014	Indicative incentive element by “band” of self-assessment ranking (£)		
		Band 3 (highest band = 100% of maximum incentive) ¹	Band 2 (medium band of =100% maximum incentive) ¹	Band 1 (lowest band = 90% of maximum incentive) ¹
2016-17	2,070,000	125,000	125,000	113,000
2017-18	2,007,000	188,000	169,000	113,000
2018-19	1,817,000	378,000	265,000	114,000
2019-20	1,817,000	378,000	189,000	38,000
2020-21	1,817,000	378,000	114,000	0
2021-22	1,253,000	313,000	94,000	0
2022-23	1,253,000	313,000	94,000	0

12 FUTURE PLANS AND SERVICE IMPROVEMENTS

This section outlines plans for the next 12 months and new service improvements.

12.1 ACTION PLANS

The Technical Partnership is committed to continuous service improvement and a number of action plans are set out in the Partnership Annual Service Plan which can be viewed on request. A summary of the action plans that have been developed over the last 12 months is shown below:

- Introduction of improved procedures for income recovery following road traffic accidents
- Introduction of an improved process for dealing with overhanging vegetation
- Implementation of a new road marking testing regime to ensure that road markings are laid to the correct quality and specification

12.2 IMPROVEMENTS TO TECHNICAL SURVEYS

As mentioned in Section 8, within the last 12 months the Authority has introduced new cutting-edge road condition surveys. 360-degree cameras capture data on all highway assets. Artificial intelligence technology is then applied to detect, measure and highlight defects and data is then uploaded and accessible in the Authority's XA© Asset Management System. This gives users an unparalleled overview of current infrastructure assets and condition. Keeping track of assets and preventing avoidable degradation is a must for local authorities. This technology produces very accurate data across the whole network and enables much more precise projection modelling to forecast the future condition of the network.

12.3 SUPPORTING CARBON REDUCTION

The highways service is supporting the Authority's carbon reduction efforts and this is the subject of a specific action plan within the Technical Partnership Annual Service Plan. Trials have commenced using low temperature resurfacing materials in a number of streets across the Borough. These materials use less energy in the production and laying operations resulting in significantly lower carbon emissions compared to traditional hot laid materials. The performance of low temperature surfacing (compared to traditional) is currently uncertain across the industry so, for now, the treatment has been limited to 3 locations on different road classifications. The performance will be monitored and if deemed suitable, this type of treatment will be rolled out more widely leading to further carbon savings.

13 CONCLUSIONS

The following conclusions can be drawn from this report:

- The highway network is the most valuable asset in the Authority's ownership
- The current total value of highway assets is **£1.84 billion**
- The successful implementation of the HAMP policy and investment strategy is demonstrating that, over the years, the adoption of asset management principles by the Authority has gradually improved the condition of the road network.

However, the Authority is now at a point where improvement will be difficult to sustain without significant financial support from Central Government.

- Due to continued additional Authority investment over the years, the highway network is currently in a serviceable state, but its condition is forecasted to decline. This is to be expected when taking into account inflation and recent world events having had a serious impact on the cost of highway maintenance
- Consideration now needs to be given to increasing investment or changing maintenance priorities. Highway officers will commence discussions with the Elected Mayor and Cabinet and the Senior Leadership team around what options might be available for managing the network in the most effective way and addressing any backlogs on road and footway maintenance
- The Technical Services Partnership continues to be successful and is generally exceeding its Key Performance Indicator targets and through its Annual Service Plan is identifying innovative ways of working, service improvements and efficiencies which is evident in the report
- Bridge maintenance is under control and can be managed within existing LTP budgets. However, there are some emerging future schemes which may place a future pressure on budgets
- The Highways Service is supporting the Authority in its carbon reduction efforts