

TITLE OF REPORT: Highway Asset Management Plan Update

REPORT OF: Peter Udall, Strategic Director Economy, Innovation and Growth

Purpose of the Report

1. The report provides an update of the Gateshead Highway Asset Management Plan (HAMP) 2018-30 which was initially approved at Cabinet in 2018 with subsequent updates annually. It provides the latest performance information and details of progress with key targets in the plan relating to the management of the Council's highway assets. The Council's HAMP is expected to form part of a regional Transport Asset Management Plan (TAMP) which is one of the obligations of the devolution deal to access future highway maintenance funding and which is under development by Transport Northeast.

Background

2. Gateshead's road network provides a fundamental resource, essential to the economy of the area and for the quality of life for residents and visitors. Its effective management and maintenance have an impact on activity of all kinds, from day-to-day journeys to work, school, shopping or for leisure, through to the needs of the emergency services and the road freight industry. The HAMP provides the strategic framework for the management of this resource.
3. The HAMP must evidence how the Council are planning to utilise their highway maintenance funds and provide benchmarking data and progress reports on the Council's key targets and policies. Failure to conduct regular updates could affect the Council's funding allocations.

Information and Proposals

4. The most recent monitoring data and update on progress with targets is summarised in appendices 2 and 3, respectively.
5. Appendix 2 table1 shows that the A, B and C roads in Gateshead are in very good condition; ranked in the highest road condition quartile of local highway authorities across the country. However, the condition of the unclassified network is, however, relatively poor (residential and industrial estates) with 21% or 143 km in need of immediate repair- (Appendix 2 table1). Although we have targeted considerable resources using different methods and techniques in the last three years to this area, the highway condition indicator for our

unclassified roads has remained constant around 20% indicating the extent of the problem. We will continue to target the unclassified network as shown in (Appendix 2 table 3). Extra capital funding has been provided internally and by government in 2023/24 and it is hoped this will draw the condition indicator down and away from the existing “steady state”. However there has been a reduction in revenue maintenance budgets by 50% since 2010.

6. The number of recorded defects or reactive repairs conducted in 2023 is shown in Appendix 2 table 2. Gateshead’s highway and footpath network is inspected throughout the year based on the Council’s Highway Safety Inspection Policy available online:

<https://www.gateshead.gov.uk/article/4502/Highways-Asset-Management-Plan>

7. The number of pothole and pavement repairs from inspections and reports from the public has increased in 2023 compared to previous years. The trend tends to follow the severity of the winter but is still provides an underlying indicator of the state of the network. The aim of the HAMP is to ensure by timely intervention with repairs, that potholes do not develop and, if they do, to make sure they are prioritised to avoid accidents and damage to vehicles. A sum of £3,385.89 was paid out in compensation last year from 47 claims for damage caused by potholes of which 90% were defended successfully. This is considerably less than most of our neighbouring authorities. The numbers of all types of repairs on footpaths and footways are higher than on the carriageways and this is becoming a concern. A more targeted approach to footpath repairs in higher risk areas is proposed in appendix 3.
8. Recent improvements in management of our traffic signals with a new asset management system and inventory is allowing us to target sites on obsolescence and reliability. This helps the planning of subsequent repair and maintenance programmes. This is a key target of the HAMP in order to manage the 180 signal sites. The conversion of all the traffic signal sites from the existing tungsten halogen lighting to LED is now very much a priority. The conversion is not straight forward as a new controller and equipment is needed at each site but the benefits in energy and carbon savings as well as reliability are excellent. On a single pelican crossing the energy savings are as high as £800 a year using 2kw less power which equates to a carbon saving of 464 kilos. We currently have 48 sites still requiring conversion and recently made a bid to central government for extra funding for this purpose. An updated target relating to this work has been proposed in appendix 3. The successful LED conversion programme with our street lighting estate has provided similar savings and was a target in earlier years for the HAMP.
9. The financial year 2023/24 has been used as the base year to monitor carbon reduction through using new materials. The Council has established a carbon reduction group in partnership with Tarmac which has the Council’s current term maintenance contract. We have begun using warm lay road resurfacing materials (instead of high carbon, hot lay materials) after a successful trial last year. A similar trial with a new thinner surfacing product with a much-improved finish and greater longevity has led to this product replacing the use of micro-asphalt in Gateshead. Annual carbon reductions will be included in future versions of the HAMP monitoring report. With all these materials there is a balance to be found between carbon generation, product suitability and cost.

10. Updates to the targets for the HAMP are proposed in appendix 3. New targets specifically relate to carbon measurement (2), the conversion of traffic signals to low carbon LED (2 and 6) and the management of footpath repairs (7). These, together with updated information summarised in appendices 2 and 3 will be incorporated into a revised HAMP, the full version of which will be available online at:

<https://www.gateshead.gov.uk/article/4502/Highways-Asset-Management-Plan>

11. **Recommendation**

It is recommended that Cabinet approves the updated HAMP targets as set in appendix 3.

For the following reasons:

- (i) To optimise investment in the local transport network.
- (ii) To provide the basis for improved management and maintenance of Gateshead's highway network and to ensure the effective use of resources.
- (iii) To maximise external funding streams awarded to highway authorities who conduct effective highway management.
- (iv) To introduce measures to reduce carbon production in highway maintenance materials and operational maintenance procedures.

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Policy Context

1. The proposals support the pledges within Making Gateshead a Place Where Everyone Thrives. They also support the aims and objectives of the Councils' Climate Change Strategy, Transport Plan for the Northeast and the Gateshead Highway Asset Management Plan.

Background

2. The total length of the highway network in Gateshead is more than 560 miles (900km). The road network reflects the mixed character of Gateshead, ranging from major urban routes carrying large volumes of traffic to more lightly used rural roads providing access to outlying villages and farms. It includes 740 miles (1,191km) of footway, 32,000 streetlights, 289 bridges & other highway structures, and 180 traffic signalled junctions or crossings.
3. The purpose of the HAMP is to ensure that available resources are directed to maximum effect. It seeks to identify the main difficulties and problems affecting maintenance of the network and how these should be tackled.
4. The Council's first HAMP was introduced in 2014. In 2018 a new three-part strategy for the HAMP was adopted by the Council for the period 2018 to 2030 comprising the highway asset management framework (HAMF); the highway asset management plan (HAMP); and the highway maintenance plan (HMP). All three documents are published on the Council's website. To meet the Department for Transport's (DfT's) performance rating guidelines the HAMP is required to be updated regularly. Failure to carry out the update could affect the Council's funding allocations.

Consultation

5. In preparing this report the Cabinet Member for Environment and Transport has been consulted and agrees with its contents.
6. The Council's highway asset management policies are available to view by the public on the Council's website.

Alternative Options

7. There are no alternative options.

8. **Resources**
 - a) **Financial Implications** – the Strategic Director, Resources and Digital confirms that there are no financial implications arising directly from this report.
 - b) **Human Resources Implications** – there are no human resources implications.
 - c) **Property Implications** – no property implications have been identified.
9. **Risk Management Implications** – there are no risk management issues.
10. **Equality and Diversity Implications** – maintaining and improving the highway network through the schemes identified above will assist in reducing social exclusion by improving access for the young, elderly, unemployed/low waged and people with disabilities.
11. **Crime and Disorder Implications** – not applicable.
12. **Health Implications** – transport and highway improvements are vital in achieving Active and Healthy Gateshead.
13. **Climate Emergency and Sustainability Implications** – maintenance of highways, forms part of a sustainable transport system capable of supporting the borough’s environmental, social, and economic objectives sustainably. The Plan has specific targets related to carbon reduction.
14. **Human Rights Implications** – there are no human rights implications.
15. **Ward Implications** – the policy affects all wards.

Key Highway Performance Indicators

1 Annual Highway Maintenance Key Performance Indicators

(% of carriageway network needing immediate repair)

Table 1

Road Class	Length (km)	2017	2018	2020	2021	2022	2023
Principal (A)	78	1	1	1	1	1	1
B & C	141	2	2	2	2	2	2
Unclassified	682	18	20	18	20	20	21

2 Annual Recorded Defects

(Repairs carried out after inspections)

Table 2

Defects	2018	2019	2020	2021	2022	2023
Trips / footway kerb	7,456	5,576	4,023	3,484	3,433	4,176
Potholes	4,740	3,191	2,628	4,226	2,625	3,725
All Defects **	18,104	13,469	10,563 *	12,937	12852	16,279

* Includes lockdown period in second quarter where no work was issued

** for traffic signs, lines, street-furniture, ironwork, kerbs

3 Carriageway length treated 2022/23 (km)

Table 3

Type of treatment	A road	B roads	C roads	Unclassified roads
Reconstruction	0.2	0.2	0.35	1.9
Overlay	0	0	0	2.8
Resurfacing	0.22	0	0	1.9
Surface dressing	0	0	0	4.4
Thin surfacing*	0	0	0	0
Programmed patching	1.9	2.5	3.3	3.6
Total	2.32	2.7	3.65	14.6

*Micro asphalt

HAMP Targets and Progress 2022/23

	Action / Target	Priority	Progress 2022/23	Status
	Strategic / General			
1	The development of life cycle plans for different asset types in Gateshead.	High	Life cycle plans now available for all assets (Traffic signals added 2022/3.) (Complete)	
2	Assessment of the impacts of climate change for future maintenance regimes. Development of carbon measurement (carbon calculator for materials).	High	<p>Conversion of traffic signal installations to LED now high priority to provide carbon/energy savings and reliability gains.</p> <p>Conversion of all Street lighting lanterns to LED complete. Carbon/energy savings being accrued.</p> <p>Tarmac partnership commenced with carbon reduction baseline.</p> <p>New warm mix and ultrathin products now being used to replace more traditional higher carbon materials. (ongoing)</p>	
3	Review inspection and repair policy to reduce repair numbers using new risk-based code of practice.	High	New risk related highway inspection policy now achieving target to reduce repair numbers and improve repair times. New policy continues to provide benefits in safety and cost savings in 2023/4 (Complete)	
	Maintenance Programmes			
4	To arrest the declining condition of the Council's unclassified carriageway network (residential estate roads) to bring it in line with other Northeast authorities.	High	Extra funding continues to be targeted into this area. The decline may have been arrested; improvements may require more resources.	

	Action / Target	Priority	Progress 2022/23	Status
5	Deal with the increasing incidences of potholes in carriageways using new methods and techniques where appropriate.	High	External funding provided to assist in 2022/23, however numbers remain weather dependent. (ongoing)	
6	Replace obsolete traffic signals equipment with new longer lasting and more energy and carbon-efficient equipment.	High	Maintenance programme commenced guided by the Imtrac asset management system. (Ongoing seeking further funding)	
7	Develop evidence-based ward programme for improving footway condition based on footpath hierarchy, condition, and defect records.	High	Utilised extra funding and used new footway maintenance survey (FMS).	
8	Assess and where necessary act to remedy geotechnical problems.	High	Priority areas addressed.	
9	Tackle problems relating to vehicle restraint systems.	High	Full survey conducted and repair programme commenced. (ongoing)	
10	Develop programme for the continuous replacement of older lighting support columns.	High	1090 new lighting support columns have already been planted as part of the ongoing column support replacement scheme.	
11	Structural testing of lighting columns.	High	Structural programme nearing completion	
12	Tackle deteriorating condition of signs and road markings.	Medium	Extra funding provided and programme of works continues.	
13	Improve the management of highway gullies using a new risk-based approach.	High	New risk based computerised management system now operational (October 22). Analysis of first year's data and optimised routes will follow. And new strategy development will follow.	

	Action / Target	Priority	Progress 2022/23	Status
	Information / Analysis			
14	Improve links to actual cost information for schemes.	High	Some work completed. (Ongoing)	
15	Link footway inventory data to asset database.	Medium	Completed.	
16	Identify future approach towards updating inventory information.	Medium	New asset information strategy completed.	
17	Develop new skidding resistance policy and work programme expanded to B and C roads.	High	Network analysis completed. 2nd year of B and C road surveys completed and remedial work underway. Policy requires an update.	
18	Update Imtrac traffic signals asset management system to manage performance and future maintenance programmes. Fault reporting system to be centralised.	High	Inventory now updated. Allowing accurate billing, life cycle planning and fault reporting. (Complete)	
	Funding			
19	Review capital and revenue allocations in face of changing budget pressures and emerging priorities.	High	Considered as part of capital and revenue budget setting and in identifying potential funding. (Cabinet report)	
20	Assess options for meeting funding shortfalls.	Medium	Continue successful capital bidding. And ongoing monitoring	
21	Improve benchmarking of costs for maintenance and improvement works.	Medium	Latest survey completed with Tyne & Wear partners in July 2023	
22	Develop business cases for funding repairs to specific asset types.	High	Both street lighting and traffic signal maintenance have had successful bids. (Ongoing)	
23	Investigating sources of funding to meet longer term maintenance and renewal needs.	High	Continue monitoring and bidding for capital. Traffic signals in 2022/3 and 2023/4 (ongoing)	