

TITLE OF REPORT: Gateshead Highways Asset Management Plan

REPORT OF: Paul Dowling, Strategic Director, Communities and Environment

Purpose of the Report

1. This report seeks approval of updates to the approved Gateshead Highways Asset Management Plan (HAMP).

Background

2. Gateshead's road network provides a fundamental resource, essential both to the economy of the area and for the quality of life for residents and visitors. Its effective management and maintenance has 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.
3. The Council's first HAMP was approved in 2014 (a summary of this is attached as Appendix 3). In order to ensure the document remains relevant and up to date it is important it is reviewed regularly. Failure to undertake such reviews could affect the Council's rating against Department for Transport performance guidelines, with consequent impacts on funding allocations.

Proposal

4. The broad content of the approved HAMP remains relevant. However, since its original publication further work has identified additional matters, and given further emphasis to some existing ones. Accordingly, an addendum to the HAMP has been produced (attached as Appendix 2). This:
 - summarises progress in implementing the HAMP;
 - updates the previous list of priority actions;
 - provides additional information on long term funding needs for highway maintenance.

Recommendation

5. It is recommended that Cabinet approves the addendum to the Highways Asset Management Plan for Gateshead attached as Appendix 2.

For the following reason:

To provide the basis for improved management and maintenance of Gateshead's highway network and ensure the effective use of resources.

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Policy Context

1. The proposals are in line with Vision 2030, and in particular support the big ideas of 'City of Gateshead', 'Sustainable Gateshead' and 'Active and healthy Gateshead'. The proposals also support the Tyne & Wear Local Transport Plan (LTP).

Background

2. Gateshead's road network provides a fundamental resource, essential both to the economy of the area and for the quality of life for residents and visitors. Its effective management and maintenance has 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. Work undertaken to assess the value of the highway asset estimates this to be over £1.8 billion.
3. The preparation of a Highways Asset Management Plan (HAMP) is recognised as best practice in defining the approach towards managing and maintaining the highway network. It is an approach supported by the Department for Transport (DfT) and national industry bodies.
4. The DfT provides capital funding for road maintenance through the Local Transport Plan. Part of the funding allocation is now dependent upon performance, based on a self-assessment questionnaire. Having an up to date HAMP is one of the essential requirements in progressing above the lowest (band 1) rating.

Gateshead HAMP

5. The existing HAMP considers various matters affecting maintenance of the highway network. These range from major background issues such as climate change through to a more detailed appraisal of the current position on different asset types. A summary of the existing HAMP is attached as Appendix 3.
6. The current HAMP identifies priority actions. The Addendum at Appendix 2 reports progress against actions and provides an update based on new issues which have been identified. These include:
 - additional problems with the condition of specific types of asset, notably geotechnical assets (embankments) and vehicle restraint systems (crash barriers);
 - although condition of the main road network has remained stable, the condition of unclassified roads has deteriorated. Although these are the most lightly trafficked roads, they do make up some $\frac{3}{4}$ of the network;
 - anecdotal information suggests the condition of road signs and lines is also deteriorating;
 - a significant backlog of reactive repairs has built up;
 - publication of a revised Code of Practice for highways maintenance management is expected later this year. This will have implications for policies relating to highways inspection and repair.
7. The Addendum also provides additional text in relation future maintenance needs, and the funding needed to support this. This remains at a relatively early stage, with figures likely to be subsequent to further revision. However it does

suggest that there will be a significant gap between needs and anticipated resources, of the order of £2.5-3 million annually. Given the severe constraints on local authority funding generally further work is underway to investigate possible ways of bridging this gap.

Consultation

8. In preparing this report the Cabinet Member for Environment & Transport has been consulted and agrees with its contents.
9. A separate communications strategy has also now been prepared for the HAMP. This is a requirement of the DfT incentive funding process. A copy of the strategy is attached as Appendix 4.

Alternative Options

10. Not to update the HAMP would put at risk elements of highway maintenance funding.

Implications of Recommended Option

11. Resources

- a) **Financial Implications** - The Strategic Director Finance & ICT confirms that there are no direct financial implications arising from this report. However the updated information does emphasise the need for a further consideration of how the Council will meet its highway maintenance duties in the longer term in the absence of additional sources of funding.
- b) **Human Resources Implications** - Nil.
- c) **Property Implications** - Nil.
7. **Risk Management Implications** – the revised HAMP will enable better identification of risks related to the highway network.
8. **Equality & Diversity Implications** - Nil.
9. **Crime & Disorder Implications** - Nil.
10. **Health Implications** – a well maintained highway will help support the promotion of active and healthy travel.
11. **Sustainability Implications** - The HAMP will help protect the integrity of Gateshead's highway network.
12. **Human Rights Implications** - Nil.
13. **Area & Ward Implications** – The HAMP relates to all wards.

Background Information

14. The following background information has been used in preparing this report:
 - Gateshead Highways Asset Management Plan (HAMP), June 2014.

Update addendum to Gateshead Highway Asset Management Plan (HAMP)

This document provides an update to the Gateshead Highway Asset Management Plan (HAMP). It summarises progress in taking forward the priority actions for the HAMP, and identifies new issues emerging in the interim. It also provides an initial estimate of longer term highway maintenance funding needs.

Progress on HAMP actions

Progress on the identified priority actions in the approved HAMP is summarised in the attached table. Those actions shown green are effectively complete and can be removed from the action list.

New actions

The following new issues of sufficient importance to warrant inclusion in the HAMP as priority actions have been identified:

Geotechnical assets (embankments)

There have been a number of reported slips and rock-falls from embankments and cuttings within the highway boundary. The frequency of these events may be affected by climate change and recent heavy rain fall. In the future remedial works to the geotechnical assets may require substantial funding.

Problems at the following locations have been identified:

- A184 Consett Route – slippage of embankment has undermined vehicle restraint barriers.
- Victoria Garesfield - reconstruction of embankment associated with the only access into village is required.
- Crawcrook Lane - previous remedial works associated with the cuttings within the highway boundary have failed due to a lack of vehicle clearance. In order to rectify this problem works are required to regrade the cutting.
- A694 Lintzford Road - tension cracks have appeared at the back of the footpath. Preventative measures are required to protect pedestrians.

Work is underway to assess the urgency and extent of works required to resolve the problems.

Vehicle restraint systems (VRS)(crash barriers)

The Felling By-pass has a section of central reserve with pedestrian guardrail running along it. This is not appropriate for this type of road, for which a more robust vehicle crash barrier is required.

A similar problem is also found on Chainbridge Road, Blaydon. In this location the reduction and rationalisation of speed limits in the area may provide a more cost effective option, enabling existing street furniture to be removed, and signage upgraded as opposed to replacement by a full vehicle restraint system.

Unclassified road condition

Monitoring of road condition undertaken annually suggests that, while the overall condition of main roads is good and remains stable, that of unclassified roads is

deteriorating (see below). Although these are the most lightly trafficked roads, they do make up some ¾ of the network.

Gateshead roads where maintenance should be considered (%)

	2011/12	2012/13	2013/14	2014/15	2015/16
Principal roads	4	2	2	2	2
Other classified	8	5	4	4	4
Unclassified roads	7	7	11	14	16

Source: annual road condition surveys

While the current levels of unclassified roads in need of maintenance remain below the national average, the upward trend is a matter of concern. The worsening condition of these roads reflects increasing overall budgetary constraints.

Road signs and lines

The very large number of road signs (about 15,000) and lines (some 700km in length) in Gateshead make regular monitoring of their condition difficult. However anecdotal information suggests the condition of these is deteriorating. Signs and lines can play an important role in providing directions and clarity for road users, contributing to safety, convenience, and supporting effective enforcement of waiting restrictions, speed limits etc. This again reflects wider budgetary constraints.

Repairs backlog

The Council approved a revised policy for highway inspection and repairs in 2015. While this sought to provide some increased flexibility in the timing of reactive repairs to the highway it has not been sufficient to stem an increasing backlog of repairs. While performance in responding to more urgent repairs has largely been sustained, resources have not allowed for the carrying out of non-urgent repairs identified as part of routine highway inspections. The current backlog is estimated to be in excess of 3,000 repairs, with a combined value of some £250,000.

Code of practice for highway management

The national code of practice for highway management provides the basis for the Council’s inspection and repair policies. A revised code is expected to be published this year, introducing major changes to previous approaches. Rather than specific recommendations for repair policy based on the type and function of street, this will be moving towards a more explicitly risk based approach.

Local authorities will have a period of two years the date of publication of the code to review their policies in line with the new requirements.

Funding needs

Funding through the HAMP is needed to cover the following:

- Renewal of assets as they reach the end of their useful life;
- Urgent repairs relating to major immediate needs;
- Reactive maintenance to rectify defects identified from routine and other highway inspections.

The following sections set out initial estimates of the funding required. One of the main future task for the HAMP will to be refine these estimates through improved monitoring and estimation of actual (as opposed to theoretical) deterioration.

Asset renewal

The renewal of all elements of the highway is needed over the long term. For some types of asset life cycle plans are being developed while for others, such as signs or street furniture, replacement will be required.

The Whole of Government Accounts (WGA) exercise provides baseline information from which levels of funding required for asset renewal can be estimated. This would seek to maintain the network at a steady state, without any further improvement or deterioration in condition. Current estimates of funding needed to achieve this are some £6.3 million per annum (excluding structures, footways and lining), as set out in table 1.

Table 1: Annual investment requirement (asset renewal)

Asset item	Investment needed (£000)
Carriageways	3,284*
Footways	Tbc
Structures	Tbc
Street lighting	2,040
Traffic management equipment (traffic signals)	252
Street furniture (including pedestrian guidelines, VRS etc.)	710
Lining	Tbc
Total	6,286

*Includes elements of reactive maintenance funding.

The main sources of capital funding for highway maintenance are the Local Transport Plan (LTP) maintenance funding main line (Council) capital funded through prudential borrowing. Smaller sums are available from the LTP Integrated Transport block and the Government's Pothole Action Fund.

Future LTP maintenance allocations are predicted to be stable to 2020/21, at just under £2.7 million per year, subject to Gateshead attaining 'band 3' status as part of the self-assessment of performance. Should it not be possible to progress beyond the current 'band 2' status then by 2020 the annual allocation could fall by some £300,000. Additional capital funding from the Council's own resources has also been made available (£750,000 in 2016/17).

The figures above suggest an annual shortfall of some £2.5-3 million for highway asset renewal.

Urgent repairs

Surveys of elements of the highway asset have identified a level of disrepair in some areas that are likely to require major intervention in order to restore them to a serviceable state. These are set out in table 2 below and identify a requirement for investment of some £6.1 million

Table 2: Urgent repairs

Asset item	Comment/status	Funding required (£000)
Street lighting	Replacement of all remaining cast iron and concrete columns	4,000
Strategic	Need for strategic upgrading of existing	2,100

Vehicle Restraint Systems (VRS)	provision identified at locations on Felling By-pass and Chainbridge Road	
Traffic signals	Full survey of asset has identified major problems in relation to obsolescence of equipment and condition of poles	Estimates in preparation
Geotechnical assets	Problems identified at two location – further investigation underway	Investigation underway

The Council is making funding available for a major programme of replacement of older street lighting columns. Some funding, together with Local Transport Plan funding, is also being used to carry out work on the other items. However the latter funding is unlikely to be sufficient to meet needs.

Reactive maintenance

Reactive maintenance is a continuing activity dealing with defects identified from routine and ad hoc inspections of the highway. Whatever the underlying condition of the highway asset there will still be a need to respond to problems such as potholes, knock downs etc. The relationship between asset condition and demands on reactive maintenance remain unclear, with the latter being affected by a range of factors. The HAMP will monitor trends in this area with a view to understanding better any relationships which do exist.

Budgets for reactive maintenance have reduced and have fallen by nearly 50% since 2010/11, to some £2.5 million for 2015/16. In the light of this a significant backlog of repairs has built up, suggesting that this reduced level is insufficient to cope with demand. In addition further cost pressures of some £100,000 per year have been identified associated with the need to support additional structural and safety testing of street lighting. It has not been possible as yet to quantify the impact of under-funding in areas such as drainage and routine gully cleaning.

Investment strategies

The above analysis suggests that existing funding sources are inadequate to meet needs in all three areas of:

- Continuing investment and renewal;
- Urgent repairs;
- Reactive maintenance.

This gives rise to a need for additional funding:

- In the short term to deal with urgent and immediate needs;
- As part of a longer term process to ensure the integrity of the highways asset, and meet the Council's statutory duty to maintain the highway.

Scope may exist to meet the first of the above through bids to external bodies (e.g. Local Growth Fund, Highway Maintenance Challenge Fund). Failing this prudential borrowing may be an option to bring failing assets up to an acceptable standard, and avoid much higher longer term liabilities.

For the second area bidding or borrowing will not be a long term option given the unpredictability of the former and inherent unsustainability of the latter. This means that

alternative sources of additional funding need to be identified if the risk of serious deterioration of the network is to be avoided.

Actions arising from the above are:

- Develop business cases for funding short term urgent repair needs. This will help maximise the ability to take advantage of possible external funding or, in their absence, justifying prudential borrowing;
- Investigating possible sources of funding to meet longer term needs.

Approved HAMP actions - update

	Action	Update	Priority/ status
	<i>Strategic/general</i>		
1	The development of life cycle plans for different asset types within Gateshead	Initial work has been undertaken on life cycle planning for carriageways. Further work is required to revise this, and extend it to other highway assets.	High
2	Assessment of the impacts of climate change for future maintenance regimes	Little progress - some preliminary work is underway in relation to improving the resilience of the road network, including climate related events such as flooding.	Medium
3	Develop approach to communications/consultation	Strategy completed (attached as Appendix).	Medium
4	Ensure input into planning guidance regarding use of highway materials to embody HAMP principles	Technical guidance on highway materials for use in planning applications now available.	Medium
	<i>Maintenance programmes</i>		
5	Address the increasing incidence of potholes in carriageways	Funding secured from Government's Pothole Action Fund (£340,000 in 2014) and Pothole Fund (£143,000 in 2016). Additional Council resources of £100,000 also secured in both 2015/16 and 2016/17. The number of potholes recorded has fallen significantly from a peak of 3380 in 2013 to 2374 in 2015. However caution is needed in interpreting such figures as short term fluctuations, for example as a result of severe weather, can be significant.	High
6	Replace obsolete traffic signals equipment	A full survey of traffic signals equipment in Gateshead has been undertaken. This shown a significant level of obsolescence and disrepair. In	High

		the interim additional funding from Local Transport Plan and Council resources has been allocated to enable immediate repairs.	
7	Develop programme for improving footway condition	An additional £100,000 from Council resources has been secured in both 2015/16 and 2016/17 for footway improvement schemes.	Medium
8	Develop programme for replacement of older lighting columns	Major investment secured from Council resources for a programme of replacement of older street lighting columns.	High
9	Review regime for structural testing of smaller lighting columns	Review of regime yet to commence.	High
	<i>Information/analysis</i>		
10	Improve links to actual cost information for schemes	Progress delayed by transfer of asset management IT systems.	High
11	Link footway inventory data to asset database	Will take place as part of new IT system	Medium
12	Identify future approach towards updating inventory information	Under discussion as part of Whole of Government Accounts process. New inventory survey of classified network commissioned.	Medium
13	Assess scope for switching off street lights	Street lights on a number of main routes are now switched off between midnight and 5.30am. Further power savings are achieved by dimming of lights in residential areas.	High
	<i>Funding</i>		
14	Review capital and revenue allocations in face of changing budget pressures and emerging priorities	Initial estimates of future funding needs made. Further refinement of estimates required.	High
15	Assess options for meeting funding shortfalls	Initial work underway on options	Medium
16	Improve benchmarking of costs for maintenance and improvement works	National 'CQC' benchmarking initiative joined in 2016.	Medium

Gateshead Highway Asset Management Plan (HAMP) Summary of approved (2014) HAMP

The existing approved HAMP considers various matters affecting maintenance of the highway network. These range from major background issues such as climate change through to a more detailed appraisal of the current position on different asset types.

In order to focus resources the HAMP concentrates on the main elements of the highway network, including carriageways, footways, street lighting, traffic signals and bridges/structures. It does not cover traffic signs or green spaces associated with the highway. Nor does it cover elements of the transport network outside the adopted highway (for example Council owned car parks).

The HAMP identifies three general challenges:

- the impacts of climate change on the approach to highway maintenance, and the potential for increased damage in future due to freak weather events;
- the pressures on capital and revenue resources available to support highway maintenance, with particular constraints on revenue maintenance funding in the context of wider Government cuts to spending;
- the need to develop the approach to information collection, updating and analysis.

In respect of specific types of asset a number of matters are identified:

- condition surveys suggest that carriageways are generally in a reasonable condition. However there has been a worrying increase in the numbers of potholes identified in recent years;
- deteriorating footway condition;
- a significant level of obsolescence in existing traffic signal equipment;
- the large number of older street lights whose replacement will be needed.

The HAMP also considers the funding position with regards to highway maintenance, noting in particular the significant reductions for revenue funding for highway maintenance. While capital funding received from the Government has largely been sustained it identifies that this may be insufficient to cover requirements for the widespread renewal needed for some types of asset. This places further emphasis on the need for effective management of available resources and the examination of potential alternative funding.

Performance management (including assessment of consequent risks) also forms an important element of the HAMP. An initial HAMP monitoring report was produced in 2015 and it is intended to produce a further report for 2016.

Gateshead HAMP – communications strategy

Gateshead Highways Asset Management Plan - Communication Strategy

The importance of the highway network means that the interests affected by its management range widely, from government bodies and agencies to local business and individuals (see Appendix). In communicating with these it is important that information is accessible, comprehensible, and provides the appropriate level of detail reflecting the different depth and perspective of the differing bodies and individuals.

The HAMP document itself is likely to be of limited interest, principally being a *tool to assist in improved implementation of highway asset principles within Gateshead Council. It will provide information for members and officers on the resources and practices required to manage highway assets effectively, while also demonstrating the links to the Corporate Aims and Objectives of the Council*

Of more importance to external bodies and the public is how proposed actions will affect users of the network on day to day basis. As such wider communication will be based around targeted information on relevant parts of the HAMP.

It is anticipated that engagement will take place at three levels:

Strategic

- The HAMP and related policy documents will be approved formally by the Council's Cabinet.
- The approved HAMP together with subsequent monitoring reports and complementary documents will be available on the Council website.
- Existing liaison arrangements with interested parties including adjoining local authorities, public transport operators, other public bodies, public utilities etc. will continue.
- In order to understand better the wider demands and satisfaction of highway users of our stakeholders the Council will continue to participate in appropriate consultation and surveys, such as the National Highway and Transport Survey. Relevant outcomes from future Council resident surveys will also continue to be monitored.

Programme

- Ward members will continue to be consulted on the formulation of highway maintenance programmes.
- Maintenance programmes will continue to be approved formally by the Council's Cabinet.

Local

- Residents and business on roads affected by maintenance work will continue to be informed in advance.

- Travellers will continue to be warned of anticipated major disruption through press releases, signs and use of other media. The permanent Variable Message Signs planned for main routes will strengthen further the ability to convey important messages.
- Planned roadworks and other street works will continue to be notified via the Tyne and Wear UTMC system.
- The Council's Customer Services Unit will continue to provide a facility for reporting faults and problems by phone, post, e-mail or through the Council's website.

Appendix: key interests

The main identified interests for the HAMP are:

- Residents and visitors
- Businesses
- Council Members
- Council service areas
- Chambers of Trade
- Neighbouring Councils
- Highways England
- Nexus
- Bus and Taxi Operators
- Emergency Services
- Utility Companies
- Environment Agency
- Local Access Forum
- Network Rail
- Specialist interest groups
 - e.g. cycling groups, Public Right of Way groups
 - Motoring Groups and Associations
 - Community groups
 - Haulage associations
 - Partner contractors
- Developers
- North East Combined Authority
- NELEP