

METROPOLITAN BOROUGH OF KNOWSLEY

To: The Leader and Members of the Cabinet
Meeting: 28 January 2015
Wards Affected: All Wards
Portfolio Areas: Regeneration, Economy and Skills
Key Decision Yes

REPORT OF THE ASSISTANT EXECUTIVE DIRECTOR (REGENERATION AND HOUSING)

IMPLEMENTATION OF THE HIGHWAY ASSET MANAGEMENT PLAN FRAMEWORK

1. PURPOSE OF THE REPORT

This report seeks approval to introduce a Highway Asset Management Plan (HAMP) framework to ensure that a planned approach is adopted for all highway investment decisions in securing best value whilst extending the life of the overall highway asset.

2. RECOMMENDATIONS

Members of Cabinet are recommended to:

- (a) Adopt the Highway Asset Management Policy and Strategy (Appendix A to this report), and
- (b) Agree that the future development and delivery of highway maintenance programmes be in accordance with the adopted Policy and Strategy.

3. BACKGROUND

- 3.1 Highways are the Council's most valuable asset which are vital to the economic, social and environmental well-being of the borough and the wider City Region. They provide access for business and communities, as well as contributing to the borough's character and to the quality of life for those who live and work in the borough.
- 3.2 The development of the Highways Asset Management Plan framework has been focused on the outcomes from the Overview and Scrutiny Board's final report '*The Review of the Highways Service (Asset Management) Commissioning*' which was

endorsed by Cabinet on 17th December 2014. The framework now:

- (a) Reflects the HAMP guidance set out by the Department for Transport (DfT) sponsored Highway Maintenance Efficiency Programme (HMEP);
- (b) Contains a plan, policy and strategy and sets out how the Council intends to demonstrate that it uses robust principles and criteria to achieve best value on its investment on the highway;
- (c) Adopts a robust, transparent and fair scheme-prioritisation formula, and
- (d) Contains a series of lifecycle plans in relation to the maintenance of the highway asset groups, reflecting national guidance by placing a greater emphasis on preventative measures.

3.3 Implementation of the HAMP framework will ensure that highway investment decisions are made in the interests of achieving best value and are based on extending the life of the overall highway asset. It will also ensure that resources are moved from reactive programmes to less expensive planned programmes. The planned maintenance programme will be focused to support economic growth in Knowsley. Planned maintenance programmes will be based on a clear and auditable evidence base through the use of technical surveys and engineering inspections. This will also facilitate the Council to bid for additional funding from the Department of Transport "incentive" and "challenge" capital funding pots.

3.4 *Highway Maintenance* - The main types of highway maintenance services are set out below. Within each type, there are various categories of maintenance, which should be considered in terms of their contribution towards the core objectives of safety, serviceability and sustainability:

(a) **Reactive**

Responding to inspections, enquiries, complaints or emergencies. This includes:

- all assets - sign and make safe for safety purposes;
- all assets - provide initial temporary repair for safety purposes;
- all assets - provide permanent repair for safety purposes; and
- all assets - provide small scale schemes to improve appearance

(b) **Routine**

Regular and consistent scheduled work, generally comprising patching, cleaning, grass cutting and landscape maintenance. This includes

- carriageways, footways and cycle routes - minor works and patching;
- drainage systems - cleansing and repair;
- verges - grass cutting;
- fences and barriers - tensioning and repair;
- road markings and studs - replacement; and
- bridges and structures - cleansing and minor works.

(c) **Programmed**

Planned schemes primarily of resurfacing, reconditioning or reconstruction. This includes:

- carriageways - major and minor works, resurfacing or reconstruction;
- footways - major and minor works, resurfacing or reconstruction;

- cycle routes - minor works, resurfacing or reconstruction; and
- bridges and structures - major works.

(d) **Regulatory**

Inspecting and regulating the activities of others. Much of this will be undertaken by the Traffic Manager under the statutory duty for network management. This includes:

- maintenance of the Street Gazetteer and the Definitive Map;
- co-ordination of road and street works (Traffic Manager responsibility);
- charging schemes and permits for highway occupation (Traffic Manager responsibility); and
- other regulatory functions - encroachment, illegal signs, parking.

(e) **Winter Service**

- pre-treatment;
- post-treatment; and
- clearance of ice and snow.

(f) **Weather and other emergencies**

- flooding;
- high winds;
- high temperatures; and
- other emergencies.

- 3.5 In terms of reactive maintenance the service currently responds to approximately 8,000 ad-hoc enquiries every year. In previous years, it was possible to address many of these enquiries from within existing budgets, however, given the reduction in the highways maintenance budget and the continuing need to secure best value, such service requests will now need to be prioritised and where possible incorporated into a planned maintenance programme.
- 3.6 If the Council is to provide a service which meets the long-term needs and expectations of the Borough then a systematic, long-term approach to highways maintenance, need to be adopted. The culture and processes of the highway maintenance provision within the Highways and Transportation Service will need to change and adapt, moving away from a reactive service towards a more planned approach. The implementation of the HAMP framework represents an opportunity to introduce and manage such change and affords the best chance of success.
- 3.7 *Highway Asset Management Framework* - Under the Highways Act 1980, there is a statutory duty placed upon the Council to maintain the borough's public highway infrastructure. However, government cuts have had a profound impact on Council budgets, with Knowsley being the hardest hit metropolitan borough in the country. This has in turn led to the Council having to make difficult decisions including to reduce the amount of financial resource available for highways maintenance works from £2.942m in 2013/14 to £1.987m in 2014/15. Inevitably, this poses a significant challenge for the Highways and Transportation Service with demand showing little sign of diminishing; service-user expectations are high and the asset continues to deteriorate. It is therefore essential that the Council's investment in its public highway assets should be managed and targeted in such a way so as to

secure the longest possible lifecycle and provide for Knowsley's long term future by focusing on medium to long-term growth aspirations. The implementation of a HAMP framework is the industry's recognised and recommended means of achieving this.

3.8 The Highway Asset Management Plan framework will deliver value for money and improved longer-term outcomes in relation to the commissioning of highway maintenance works which is evidenced by the following contributions:

- The Department for Transport (DfT)
The Government, through organisations such as the UK Roads Liaison Group and the Highway Maintenance Efficiency Programme (HMEP), is encouraging local highway authorities to produce and develop a HAMP. The DfT has informed local authorities that it intends to top-slice and incentivise 10% of its national capital maintenance pot (this is the money distributed to local authorities by the DfT), exclusively for those Councils who can show that they have introduced and adhere to a HAMP strategy.
- All Party Parliamentary Group on Highway Maintenance (APPG)
In its publication, *Managing a Valuable Asset: improving local road condition (October 2013)* the APPG made reference to the current financial climate and recognised that funding was a key issue facing local authorities. The report finds that “prevention is the best cure” and presses highway authorities to achieve a level of maintenance which achieves a “satisfactory steady state”, thus making planned, preventative maintenance possible over the long term.
- CIPFA - Transport Infrastructure Code
The aim here is to achieve value-for-money and improve accountability when delivering a service. The CIPFA Code for Transport Infrastructure Assets provides advice on how asset management must be implemented for local highway authorities to meet Whole of Government Accounts (WGA) requirements. WGA requires a valuation of the highway network which takes into account levels of deterioration, expected life estimates for components of the asset and long-term funding need assessments. The Highways and Transportation Service is a member of CIPFA's HAMP Network.
- CIPFA/HM Treasury - The Prudential Code
All future capital borrowing under this Code will have to be supported by sound asset management information. Justification of such borrowing will be required and the highway asset management approach - and in particular whole life costing - will be a key component of any such justification.
- Audit Commission
The Audit Commission's report *Going the Distance* recommends that local highway authorities in England should adopt the principles of asset management when making investment decisions in order to optimise the use of available resources.

- 3.9 *Practical Benefits from the Development and Implementation of a HAMP Framework* - The extensive analysis of the condition data for each element of the highway asset (roads, bridges etc.) will produce a lifecycle plan which will provide the Council with a sound indication of the level of investment required to:
- improve the condition of highway asset;
 - maintain the highway asset to its current condition;
 - manage a decline in the condition of the highway asset.
- 3.10 Similar to many local authorities around the country, Knowsley in the main has previously adopted a short term “worst-first” approach to highways maintenance in the main due to the reactive nature of the service and the high level of public interaction. Whilst this approach has served us well in the past it no longer serves the longer term needs of the borough as well as it might and it does not deliver the best possible value.
- 3.11 An optimum asset management plan involves a combination of major resurfacing works along with regular *preventative* maintenance work on roads that are in a serviceable condition. For example, thin surface repairs will improve antiskid and seal a road that has surface wear but is otherwise structurally sound. Thin surfacing is a third of the cost of major carriageway reconstruction works per km – but can extend the life of a carriageway considerably, meaning that 3kms can be treated for the price of 1km of full reconstruction.
- 3.12 Developing a long-term plan to refresh and maintain an asset on a regular basis is known as lifecycle planning, and this is the central tenet of highway asset management. In relation to carriageways, we now have a clear understanding of carriageways age, condition, usage and function in order to assess their lifespan and therefore the frequencies by which preventative maintenance and/or major resurfacing work should be undertaken. This approach forms a sound evidential basis of asset management planning.

4. IMPLEMENTATION OF A HIGHWAY ASSET MANAGEMENT PLAN FRAMEWORK

- 4.1 In accordance with the current guidelines, published in May 2013 by the UK Roads Liaison Group and Highways Management Efficiency Programme, there are three distinct elements within the overarching HAMP framework:

(a) HAMP Policy (Attached at Appendix A)

These are the principles and mandated requirements consistent with the organisational strategic plan. It provides a framework for the development and implementation of the asset management strategy and the setting of the highway asset management objectives.

The Knowsley HAMP Policy sets out the following definition of Highway Asset Management: "Systematic and coordinated activities and practices through which Knowsley Council will optimally and sustainably manage its highway assets and highway asset systems, their associated performance, risks and expenditures over their life cycles for the purpose of achieving its organisational strategic plan".

The Policy commits the Council to focussing on achieving the following outcomes:

A Safe Network

- complying with statutory obligations; and
- meeting users' needs for safety.

A Serviceable Network

- ensuring target level of availability;
- achieving and maintaining desired degree of integrity;
- maintaining target level of reliability; and
- achieving and maintaining target condition of all assets.

Network Sustainability

- minimising cost over time;
- maximising value to the community;
- maximising environmental contribution; and
- efficient use of natural resources.

(b) HAMP Strategy (Attached at Appendix A)

This sets out a long-term optimised approach to the management of the highway assets, derived from and consistent with the Council's strategic plan and the HAMP Policy.

The Knowsley HAMP Strategy establishes the argument for embracing Highway Asset Management principles. It confirms how the Council expects to be the custodian of its highway assets into the future, and how it understands that the way it manages and maintains those assets today will have effects on the way they will have to be managed and maintained in the future.

It commits the Council to using best practice and whole life cost analysis to make engineering decisions for repair and treatment options and to avoid reactive repair and treatments that only serve to defer problems.

(c) HAMP

The HAMP consists of the following:

- Asset management roles and responsibilities;
- Levels of service, performance management, monitoring and reporting;
- Lifecycle planning and investment strategies;
- Scheme prioritisation and works programmes;
- Risk management;
- Procurement strategy; and
- Training and competency.

Appendices to the HAMP will comprise at this time:

- Skid Resistance Policy;
- Highway Inspection Policy;
- Footway Crossing Policy;
- Winter Service Policy; and

- lifecycle planning calculations for;
 - Carriageways
 - Structures (bridges etc.)
 - Traffic Signals
 - Footways
- 4.2 The HAMP framework will evolve over time as circumstances change in relation to asset, legislative, budgetary or technological variables.

5. DEVELOPING THE HIGHWAY MAINTENANCE PLANNED PROGRAMME

- 5.1 To create a list of schemes, the following technical surveys and resultant data is utilised:
- Surface Condition Assessment for the National Network of Roads (SCANNER);
 - Sideway-force Coefficient Routine Investigation Machines Surface (SCRIM)
 - Enhanced Footway Network Survey;
 - Course Visual Inspection (CVI); and
 - Safety Defect Inspections.
- 5.2 Locations requiring treatment are identified by the use of the above technical surveys and those that do not score highly enough will not be considered for intervention as part of a planned maintenance scheme. For those that do score highly the appropriate works are then further defined by:
- an engineering assessment of each site;
 - a value management process;
 - grouping works into treatment types (i.e. resurfacing, surface treatment etc.); and
 - procurement of work "packages" to ensure the most advantageous price is secured with the minimum of disruption to the highway network.
- 5.3 It is intended that the 2015/16 maintenance programme will set out a three to six year programme in line with the Department of Transport introduction of a six year capital settlement (three years allocated and three years indicative) from 2015/16.

6. RESOURCE IMPLICATIONS

6.1 Financial

The development of the Highway Asset Management Plan framework, undertaken by Mouchel in conjunction with the Highways and Transportation service, was funded from by £0.030m within the Transport Capital block. The HAMP will be developed further over the next financial year, with lifecycle plans being fine-tuned and further asset lifecycle plans developed and in order to support this, a further item of £0.020m was included in the 2014/15 Transport Capital allocation. The Highway Asset Management Plan will guide both revenue and capital expenditure related to the Highways Maintenance Budget which including revenue and capital elements amounts to £4.611m.

6.2 Human Resources

There are no direct human resource implications arising from this report.

6.3 Information Technology

Specialist "lifecycle" and scheme development software has been developed by a number of organisations, and the intention is to evaluate several products to establish if it will add value to the implementation of a HAMP framework. It is likely that additional software will need to be purchased and this will be contained within the service budget allocations.

6.4 Physical Assets

The introduction of a Highway Asset Management Plan framework will play a significant role in the management and maintenance of the Borough's Highway asset. A well maintained highway benefits all road users, residents and businesses.

7. PERFORMANCE AND RISK

7.1 The move towards a more planned approach within an environment of declining budgets will mean that there is less funding available to respond to small-scale, ad-hoc requests for remedial works. Rather, remedial works of this type will be considered and prioritised within the overall planned maintenance approach.

7.2 The planned approach will seek to refocus highway investment so that it better supports the economic growth of the borough meaning that a greater emphasis will be placed on maintaining the borough's main roads. This will support business growth in the Borough particularly in logistics and warehousing, however, this will also mean that less funding will be available to invest in residential areas. Highway inspections will identify hazardous defects which will continue to be addressed in accordance with the Government's Code of Practice for Highways Maintenance Management and the Council's own Safety Inspection Policy.

7.3 It should be noted that if the Highway Asset Management framework is not implemented the Council will fail to secure best value and will be placed at a significant disadvantage when bidding competitively for additional Department for Transport capital pots or other third-party funding.

8. EQUALITY AND ENVIRONMENTAL ASSESSMENT

8.1 Equality and Diversity

The Council's Equality Impact Assessment Toolkit has been utilised and there are no direct equality implications arising out of these proposals.

8.2 **Environmental Policy**

The report takes account of the Council's Environmental Policy. Whilst the impact is not significant, the works associated with the delivery of the HAMP will serve to maintain the borough's highway network connectivity and protect and enhance the visual appearance of the highway asset.

9. **COMMUNICATIONS ISSUES**

The introduction of the HAMP Framework and the rebalancing of highway asset management towards a more planned approach will need to be communicated not only to those who live and work in the borough but also to Members and other Council officers. A new Highway and Transportation webpage is to be created which will explain the drivers behind the Council's approach to highway asset management and a Member workshop is also being developed.

10. **CONCLUSION**

Highway asset management promotes a commercial approach to highway maintenance, making better use of limited resources whilst delivering an efficient and effective highway maintenance programme. This proactive focus on outcomes will ensure the best use of public money and minimises the risk involved in investing in highway maintenance whilst securing the long-term future of the borough.

LISA HARRIS
Assistant Executive Director (Regeneration and Housing)

Contact Officer: Andy Millar, Group Manager, Highways & Transportation, Ext 2235

Appendices

Appendix A: Policy and Strategy for the Highway Asset Management Plan

(NB:- A copy of Appendix A has been circulated to Cabinet Members and placed in the Members' Rooms. The document is also stored alongside the agenda on the Council's website. Copies are available to all other Members electronically and on request.)

Background Documents:

None