



Report Title: **Highways Asset Management Plan**

Forward Plan reference number (if applicable): **[add reference] TBC**

Report of: **Niall Bolger, Director of Urban Environment**

Wards(s) affected: **ALL**

Report for: **Key Decision**

### **1. Purpose**

- 1.1 To consider the Council's first Highways Asset Management Plan (HAMP) and agree the action plan developed.
- 1.2 To agree that the draft be approved as the first HAMP but recognise the need for a lot of work to make it a truly meaningful document.
- 1.3 This report also notes the status of the current asset valuation and the need for significant investment in survey work; software enhancements and ongoing staff costs in order to compile and maintain a proper asset register in order to be able to produce the current asset valuation at any time in the future.

### **2. Introduction by Cabinet Member**

- 2.1 This report considers the first Highways Asset Management Plan for the Council and gives an implementation plan that will be monitored regularly and updated to Cabinet annually.

### **3. Recommendations**

- 3.1 That the Cabinet approve the draft Highways Asset Management Plan (HAMP) as an important first stage towards Infrastructure Asset Management for local borough roads and their associated structures which will be required in the future for the Whole of Government Accounts.
- 3.2 Agrees that the Highways Works Programme (see separate report to this Cabinet) is used annually to update members on the development and implementation of the

plan. In particular to consider the future work programme based on the principles of the HAMP and where necessary updates the HAMP.

Report Authorised by: Niall Bolger, Director of Urban Environment



Contact Officer: **Mike Tobin, Interim Head of Highways**

#### **4. Chief Financial Officer Comments**

- 4.1 Work undertaken to date on developing the Highways Asset Management Plan indicates that substantial additional investment funding will be needed to meet the resources shortfall identified to improve highways assets so that they are fit for purpose and on-going costs to maintain them in decent condition. Different sources of funding both external and internal needs to be assessed and prioritised to meet this need including the possibility of using prudential borrowing and other funding mechanisms as appropriate to renew or improve assets. The plan should be taken into account in formulating the annual Highways Works Programme and used as a basis for bidding for funds either through the Council's financial planning process or from external sources.
- 4.2 The HAMP Improvement Plan identifies some actions for which currently there are no approved budgets. These proposals cannot be implemented until funding has been clearly identified, reported and approved, ideally through the Council's budget planning process.

#### **5. Head of Legal Services Comments**

- 5.1 The Head of Legal Services draws Members' attention to Paragraph 8.4 of the report. The Government is working towards the production of commercial-style accounts for the whole of the public sector including local authorities. The valuation of highway assets under this system will not only to assess replacement value, but also to assess the level and rate of depreciation - demanding a detailed knowledge of condition and maintenance plans.

#### **6. Local Government (Access to Information) Act 1985**

- 6.1 Haringey Council Highway Asset Management Plan – volume 1 (Main Text) (March 2007)
- 6.2 Haringey Council Highway Asset Management Plan – volume 2 (Appendices) (March 2007)
- 6.3 London Borough of Haringey Programme of Need (Forward Work Programme) & Asset Valuation (August 2005)

## **7. Strategic Implications**

- 7.1 The London Borough of Haringey's highways infrastructure is by far the most valuable set of assets for which the council is responsible. It provides a vital contribution to the prosperity of the borough. The availability of a safe, serviceable highways network is essential to allow ready access around and through the borough, as well as providing access for business and residents. The borough's economic vitality depends upon highway links that are safe and fit for purpose. Efficient, effective management of this valuable asset is therefore one of the council's key responsibilities.
- 7.2 The highways network comprises 313.5km of carriageway (roads) and 652km footways (pavements). These assets alone have been valued at approximately £224million. On top of this are assets including street lighting, bridges, drainage, signs, street furniture, car parks, trees and amenity areas, the value of which are currently unknown but certainly run into many millions of pounds.
- 7.3 The Highways Asset Management Plan (HAMP) seeks to develop a strategic approach to managing this vital asset and uses tools and techniques to enable better, more robust and accountable management of the highway infrastructure. Development of the strategic approach draws on the corporate vision of Haringey Council coupled with the council's commitment to the Mayor's Transport Strategy through the production of the Local Implementation Plan.
- 7.4 The Highway Asset contributes to many of the Council Priorities including:
- Greenest Borough
  - Better Haringey – cleanliness and safety
  - Customer perception
  - Regeneration
- 7.5 To deliver these priorities, the Highways Service has developed the HAMP. It aims:
1. To develop knowledge and understanding of the network in terms of what is owned (inventory), condition and treatment options.
  2. To develop longer term programming of work and a better understanding of funding needs over time and implications on change in budgets with regards to service levels defined or expected.
- 7.6 This enables better financial planning and capital programme planning and will feed into the Highways Works Plan each year which is also at Cabinet this cycle.
- 7.7 The aim is to have an action plan in place to improve not resolve all the issues, as it will take many years to carry out the necessary actions and this will also be monitored annually through the Highways Work Plan.

## **8. Financial Implications**

- 8.1 There are significant financial implications of the HAMP. The Council, like most in UK, spends only around £3.0M in terms of asset improvement (capital but not including LIP funding) or just over 1% per annum of the capital valuation of the asset. This brings into focus the long term needs of the asset. In future the more robust valuation each year will enable us to monitor whether the value of the asset is decreasing or increasing with the expenditure.
- 8.2 The current financial year's the Highways Revenue budgets allow £4,204,600 for depreciation of the capital on the Highways account and £1,214,400 for insurance. Therefore about £5.5M (excluding notional interest charges) is spent on these overheads on the asset and yet only just over £1.5M of revenue investment in maintaining the asset.
- 8.3 Knowledge of the various elements of the highway infrastructure, their lifecycles and the comparative risks to the Council as the Highway Authority to adopting particular budget strategies for each of the assets allows the effects of increases or decreases of resource to be assessed objectively. Hence best use can be made of available resources.
- 8.4 The CSS (County Surveyors' Society) has produced the "Guidance Document for Highway Infrastructure Valuation" to help drive this process. Asset management will help produce the key inputs to enable valuation in accordance with this guidance.
- 8.5 The Guidance Document for Highway Infrastructure Asset Valuation prepared for CSS/TAG (The Local Government Technical Advisory Group) Asset Management Working Group, was used as guidance for doing Haringey's asset valuation. Asset Valuation is the calculation of the current monetary value of an authority's assets. The current monetary value is equivalent to the Depreciated Replacement Cost (DRC) which was calculated as follows:

$$\text{DRC} = \text{Gross Replacement Cost} - \text{Accumulated Consumption}$$

- 8.6 The Gross Replacement Cost (GRC) is the cost to replace the asset as new. This includes the cost of demolishing and rebuilding the asset. The 'accumulated consumption' is the cost of maintenance work needed to get each asset back to this new condition.
- 8.7 The DRC for the carriageway and footway assets was calculated at £224,165,653. This forms 85% of the GRC of the footways and carriageways. This indicates that approximately £35m of investment would be required in the short term to bring the network up to standard. Current rates of investment spending are inadequate to halt the deterioration and deliver the improvements required. An in depth review of resources is necessary if significant improvements are to be achieved within the next 3 to 5 years.

8.8 Full results of the valuation and recommendations on future funding requirements can be found in the document London Borough of Haringey Programme of Need and Asset Valuation August 2005.

8.9 A valuation for all other highways assets has not yet been made. This will have to be done in order to facilitate effective asset management. There will be significant costs involved in doing this as it requires a full inventory to be compiled. This will need further resources in order to carry out and will be a consideration for the financial planning process for 2009/10.

## **9. Legal Implications**

9.1 There are no direct legal implications arising out of this report.

## **10. Equalities Implications**

10.1 The delivery of Highways and Street Lighting maintenance and improvement works will be of significant benefit to all residents.

## **11. Consultation**

11.1 The Highways Asset Management Plan is not required to have formal consultation but a consultation carried out in June 2007 with over 3500 responses showed several key issues that local residents prioritised. Overall the results showed that pothole repairs and pavement replacement are the main priorities for residents throughout the borough. Street Lighting was also high on their list of priorities. This can be reflected into the HAMP as part of the Levels of Service (see above) as this provides the linkage between customer aspirations and engineering need.

## **12. Background**

12.1 The Council has spent several years developing its Strategic approach to Highways Asset Management and this report highlights the major strategic issues contained in the first HAMP.

12.2 Asset Management is used around the world to enable prudent stewardship of infrastructure. Managing and maintaining the highway asset is perhaps the most important element of the council's responsibility to ensure economic prosperity, accessibility and safety of the public.

12.3 In 2004 the County Surveyors Society published "Framework for Asset Management". This saw the start of local authorities seeking a better understanding of the benefits asset management principles could bring to the management of the network. Since this time it has become a strong focus of leading councils in delivering and managing their highway infrastructure and is an intrinsic element of the Local Implementation

Plan. The council needs to understand what it will cost to maintain the existing network as well as the cost of improvements to the network and new assets, today and into the future.

- 12.4 Principles of asset management are not wholly new to highway management and elements of asset management practice will already be in place. However what is generally new is the bringing together of principles and techniques to provide better information to decision makers.
- 12.5 Within the Mayor's Transport Strategy the maintenance of the asset is an essential element of good practice. In addition to this the Local Implementation Plans (2006) required a statement on progress and expected progress through to 2011 demonstrating Transport for London's commitment and expectation in developing an asset management approach.
- 12.6 The Highways Asset Management Plan (HAMP) has reviewed current management processes, highlighted issues with these processes and developed methods to improve delivery of the highways maintenance service. The major management areas covered in the plan are listed below along with a brief description of the findings and recommendations.

#### **Inventory and Condition Data**

- 12.7 Effective asset management planning requires knowledge of an asset, its condition and its use. This entails the collection and maintenance of asset data that can assist managers to assess, analyse and report on performance and progress.
- 12.8 The plan highlights deficiencies in the extent and reliability of the exiting data and the ways in which some of the data is stored and managed. It would not be cost effective or indeed necessary to collect every piece of "missing" asset data. A specification of asset data that is required to implement effective asset management practices has therefore been developed which targets the collection of the most critical items of data. The plan has also laid down procedures to ensure that the data is managed such that it is utilised to it's full potential.

#### **Levels of Service**

- 12.9 Understanding what road users and residents want from the highway asset is essential to providing a good quality service. Presenting these desires in language that can be actioned by engineers and understood by users is essential in ensuring investment is placed where it is expected and needed.
- 12.10 Asset management uses levels of service to provide this linkage between customer aspirations and engineering need. Aspiration of the customer will general focus on aesthetics and safety related condition whereas engineering need will be based on detailed, and often complex, condition surveys coupled with knowledge and experience of how assets behave over time.

- 12.11 Asset management, through development and understanding of aspiration, and corporate and service goals and objectives leads to better decisions focused on the needs, and risk of the highway infrastructure.

### **Risk Management**

- 12.12 Risk plays a huge part in managing the highway asset. The council has a fundamental duty under the Highways Act 1980 to maintain the highway at public expense. This requires the highway to be safe and fit for purpose.
- 12.13 Within asset management the awareness of risk aligned with delivery of the expected levels of service will provide a better understanding of the influencers of the service both in terms of user expectation and engineering need – which are not necessarily the same thing.
- 12.14 An appreciation of risk and an understanding of risk in the asset management framework therefore provides a strong base to help determine where funds should be directed and help to maintain the highway assets, mindful of the levels of service expected and the risk impact of such an approach. Such information will provide the decision makers with important and robust information that ensure the outcome delivery of the highway infrastructure is aligned with the corporate goals and objectives.

### **Lifecycle Planning**

- 12.15 The plan includes in its appendices individual lifecycle plans for each asset group. These serve the purpose of documenting how the particular asset is managed and to identify current and future needs in terms of predicted works and anticipated funding need. Each lifecycle plan is effectively a mini asset management plan specific to that asset group and includes all of the processes discussed.

### **Valuing the Authority's Highways Assets**

- 12.16 The government is working towards a more commercial style of accounting with the introduction of Whole of Government Accounts. Under these requirements local authorities will be required to value their highway asset, as a private business is required to value its assets. Transport for London (TfL) will also be requiring valuations over the next two to three years.
- 12.17 Valuations, and more importantly changes in value, provide a useful tool to understand the impact of investment, a full understanding of the needs of the network and provides robust information to the decision makers (fed by a robust inventory of known condition) to identify desired levels of service.
- 12.18 In 2005 Haringey commissioned a valuation of the borough's carriageway and footway assets. These assets combined were valued at a Depreciated Replacement

Cost of £224million. It is interesting to note that these assets receive approximately £1.5 million annually for maintenance. This amounts to less than 1 percent of the value of the assets.

### **Forward Works Programming**

12.19 Forward works programmes (FWP) are a tool with which the asset manager can plan maintenance works over a period of time. The HAMP provides the vehicle to extend the duration of FWPs up to 10 years in order to allow longer-term planning, identification of budget requirements and efficient and cost effective management of assets considering their whole life costs.

### **Performance Management**

12.20 It is the intention that the effectiveness of the implementation of the HAMP is measurable using, as far as possible, existing performance indicators.

### **Implementation and Improvement Actions**

12.21 Continuous improvement is an essential element of asset management enabling better decisions to be made with better information. It is the intention of the HAMP to deliver key improvement actions within a time-bound framework.

12.22 A comprehensive Improvement Action Plan has been developed, and the latest version of this is given in Appendix A. But in summary Haringey is committed to the following improvement actions over the term of the plan:

- Improve asset inventory
- Develop a level of service and risk management approach
- Improve condition knowledge on a wider range of assets
- Develop asset valuation
- Develop long-term programming for key asset groups

12.23 It is important to recognise that the HAMP is intended to be an active document which evolves over time with changes in management practice, funding levels and customer demands.

## **13. Approach**

13.1 The London Borough of Haringey has the following aspirations for Highways:

- Improve safety on the network
- Improve CPA ratings
- Improve ability to secure funding
- Reduce congestion on the network



- Minimise third party liability
- Provide value for money
- Provide sustainable transport
- Maximise network reliability
- Arrest asset deterioration
- Integration of transport network
- Customer satisfaction
- Have mechanisms in place to monitor network performance

13.2 The Asset Management Plan takes those aspirations into account as well as the following key documents with their highway maintenance relevant objectives:

**Mayors Transport Strategy**

- Reducing traffic congestion
- Improving journey time reliability for cars
- Local transport initiatives, including improved access to town centres and regeneration areas, walking and cycling schemes, Safer Routes to School, road safety improvements, better maintenance of roads and bridges, and improved co-ordination of streetworks
- Improving the accessibility of London's transport network system

**LIP Guidance**

- Improving road safety
- Improving bus journey times
- Relieving traffic congestion and improving journey time reliability
- Improving accessibility and social inclusion on the transport network
- Improving the working of parking and waiting arrangements
- Encourage walking
- Encourage cycling
- Bringing transport infrastructure to a state of good repair

**Code of Practice (Well maintained Highways)**

- Network Safety
  - Complying with statutory obligations
  - Meeting users' needs for safety
- Network Serviceability
  - Ensuring availability
  - Achieving integrity
  - Maintaining reliability
  - Enhancing condition
- Network Sustainability
  - Minimising cost over time
  - Maximising value to the community

- Maximising environmental contribution

#### **14. Conclusion**

14.1 The adoption of the Highways Asset Management Plan is the first stage of a more rational, justifiable, and transparent approach to identifying and prioritising the actions and associated need for funding to make a more sustainable use of its vital road network asset.

#### **15. Use of Appendices / Tables / Photographs**

15.1 Appendix A - HAMP Improvement Action List December 2007



**APPENDIX A – HAMP Improvement Action List December 2007**

<b>Area / Asset</b>	<b>Improvement Action</b>	<b>Way forward</b>	<b>Officer Responsible</b>	<b>Target Implementation Date</b>	
General Management	Management of Improvement Action List	Monthly at Highways Management Team	Head of Sustainable Transport	Ongoing	
	Develop levels of service and risk approach	Ensure levels of service are agreed at member level and reviewed annually as part of Highways Works Plan (HWP)	Head of Sustainable Transport	March 08	
	Establish strategy for using customer demand information to inform the setting of priorities and target levels of service	Use recent public survey Road to improvement perception	Head of Sustainable Transport		
	Investigate use of GIS in Asset Management	Tunji to develop with Confirm Mick Bird Confirm/TMA project Stream W5	Head of Sustainable Transport	June 08	
	Conduct comprehensive asset valuations	4km sample in 2008/09 with perception survey related - Salome	Head of Sustainable Transport	Sept 08	
	Develop a procedure for annually updating a needs-based assessment of funding requirements	HWP and keep asset register - depreciation to be calculated	Head of Sustainable Transport	March 09	
	Review procurement options well before tender of new highways maintenance contract to identify potential improvements to support asset management approach	Part of procurement of Highways and Street Lighting Contract	Head of Sustainable Transport	May 08	
	All Asset Groups	Identify desired length of forward work programme and establish information required to achieve this	Suggest initially 5 years with Target of 10 years once bedded in	Individual Asset Manager (as below)	March 08
		Use HWP to identify future funding needs	Introduce as part of this years HWP with potential funding needs shown.		March 08
		Develop target levels of service informed by risk analysis	Repeat of previous item (2) but specific targets for each asset group		March 08
Carriageways & Footways	Utilise deterioration modelling to inform the planned maintenance regime		Laurence Pratt		
	Identify way of improving confidence in non-principle road and footway data		Laurence Pratt		

Drainage	Investigate potential for a dedicated drainage management team	Being considered as part of restructure, but definitely needs to be included in new Highways contract.	Laurence Pratt	May 08
	Convert non-gully data to electronic storage	Needs funding	Laurence Pratt	
Structures	Make case for a dedicated highway structures maintenance budget	As part of pre business plan but now looking for capital	Mike Tobin	
	Improve confidence in mandatory non-principle data	Needs Budget	Mike Tobin	
Street Lighting and Lit Signs	Identify method of including condition data in surveys/inspections	Ensure included in new contract, consider whether potential for implementation under extension to existing	Steve Lain	May 08
	Identify methods of improving confidence in inventory data for EDF quarterly inventory updates	Ensure included in new contract, consider whether potential for implementation under extension to existing	Steve Lain	May 08
Unlit Signs and Street Furniture	Identify methods of improving inventory and condition information to inform planned maintenance	Consider options and budgetary issues. Possible to include as part of new contract or to have as part of inspection regime. – Add to scheme	Laurence Pratt	
Trees and Amenity Areas	Full use of Confirm for all tree inspections, collection of data and issuing of tree work	Confirm/TMA Project Stream W2	Alex Fraser	Feb 08
	Put together case for increased funding to increase frequency of winter works and speedier implementation of tree renewal strategy	Need for identification in HWP as financial need for future years	Alex Fraser	Mar 08
	Increase data collection frequency to improve confidence in mandatory data	Needs budget	Alex Fraser	
Road Markings and Studs	Establish inventory of key data for lines in order to allow planned work, bidding and development of FWP	Needs Budget – essential for safety and parking revenue	Laurence Pratt	
Parking	Improve communication links between Parking team and the rest of the highway team	Action ongoing	Carol M	
	Use Confirm for data storage Look at ways to improve the confidence in key data	Tunji to look at Confirm issues if any Needs Budget	Tunji	