Highways Asset Management Plan

Code of Practice Recommendations

Recommendation 1 – Use of the Code

"This Code, in conjunction with the UKRLG Highway Infrastructure Asset Management Guidance, should be used as the starting point against which to develop, review and formally approve highway infrastructure maintenance policy and to identify and formally approve the nature and extent of any variations."

Gap

A number of actions are required to ensure compliance with the Code, which relate to the other 33 recommendations. These actions are likely to result in changes that require a review of the Highways Asset Management Plan, which will need Executive Councillor approval.

Recommended Actions

- Review Highways Asset Management Plan to reflect the Code's recommendations, particularly in relation to the risk based approach.

- Gain Executive Councillor approval through formal political process.

Priority – Medium

Recommendation 2 – Asset Management Framework

"An Asset Management Framework should be developed and endorsed by senior decision makers. All activities outlined in the Framework should be documented. (HIAMG Recommendation 1)."

Gap

There is currently no documented risk-based approach for all of the key highway infrastructure assets.

Recommended Actions

- Include a more comprehensive section on risk management in the Highways Asset Management Plan describing details of the risk based approach for all key infrastructure assets.

Priority – Medium

Recommendation 3 – Asset Management Policy and Strategy

"An asset management policy and a strategy should be developed and published. These should align with the corporate vision and demonstrate the contribution asset management makes towards achieving this vision. (HIAMG Recommendation 3)."

Gap

The Highways Asset Management Policy and Strategy were not written specifically referencing a risk-based approach.

Recommended Actions

- Amendments making reference to the Code of Practice and risk-based approach to be drafted (as previously indicated in Recommendation 1) and signed off at next review before October 2018.

- Rights of Way currently have to be reviewed every 10 years. The next review will be required by November 2017 so the risk based approach for ROW should be included as part of this wider review and incorporated in the revision of the Highways Asset Management Plan.

Priority – Medium

Recommendation 4 – Engaging and Communicating with Stakeholders

"Relevant information should be actively communicated through engagement with relevant stakeholders in setting requirements, making decisions and reporting performance. (Taken from HIAMG Recommendation 2)."

Gap

The changes in highway management policy and standards that result in adopting the risk based approach require a process of consultation. There is a particular requirement (as indicated in recommendation 5) to consult with adjoining authorities and other relevant stakeholders.

Recommended Actions

- Undertake an internal consultation process around the draft revised Highways Asset Management Plan and the risk based approach for all key highway infrastructure assets.

- Following completion of an internal consultation, there should be an external consultation with adjoining authorities and other relevant stakeholders.

Priority – High

Recommendation 5 – Consistency with Other Authorities

"To ensure that users' reasonable expectations for consistency are taken into account, the approach of other local and strategic highway and transport authorities, especially those with integrated or adjoining networks, should be considered when developing highway infrastructure maintenance policies."

Gap

There has been a lack of consideration given to consistency with other authorities in terms of developing the risk-based approach. Whilst there has been some work done through the Midlands Service Improvement Group over response times to highway defects, this needs applying across the whole plan.

Recommended Actions

- Consultation with North Lincolnshire, North East Lincolnshire, Nottinghamshire, Leicestershire, Cambridgeshire, Peterborough and Norfolk.

- Continued regional discussions with Midlands Service Improvement Group and the Midlands Highways Alliance.

- Consultation with the EM Area Bridge Conference and the ADEPT National Bridges Group for issues relevant to structures.

Priority – High

Recommendation 6 – An Integrated Network

"The highway network should be considered as an integrated set of assets when developing highway infrastructure maintenance policies."

Gap

Lack of evidence of how the network is being managed so there is consistency in the functions of asset management, traffic management, parking etc. In planning maintenance schemes there should be consideration of all road users.

Recommended Actions

- Include a new section in the Highways Asset Management Plan that describes how the desire for an integrated Network is being applied on the Lincolnshire highway network.

Priority – Medium

Recommendation 7 – Risk Based Approach

"A risk based approach should be adopted for all aspects of highway infrastructure maintenance, including setting levels of service, inspections, responses, resilience, priorities and programmes."

Gap

- Carriageways – No current documented evidenced risk based approach for safety inspections.

- Footways – No current documented evidenced risk based approach for safety inspections.

- Structures – No current documented evidenced risk based approach for general inspections.

- Street lighting and all other electrical equipment – Statutory requirement to undertake electrical inspection every 6 years. This forms part of more general inspection this is not on a risk based approach and there is no prioritisation by type or road hierarchy

- Cycleways - Inspection frequency currently based on a hierarchy that is linked to location i.e. in-carriageway, on footway or remote.

- Rights of Way – Inspection frequency based on a 5 year cycle i.e. one fifth of each Parish per annum.

- Safety barriers – 95% inventory. 5 year general inspection frequency which is not prioritised based on road hierarchy.

Recommended Actions

- Carriageways – Undertake a review of current level of safety inspections is necessary to reflect a evidenced risk based approach this should be documented in the revised Highways Asset Management Plan (see recommendation 2) and based on a more comprehensive carriageway hierarchy (see recommendation 12).

- Footways – Undertake a review of current level of safety inspections is necessary to reflect a evidenced risk based approach this should be documented in the revised Highways Asset Management Plan (see recommendation 2).

- Structures –Undertake a review of the current frequency of bridge inspections is necessary to reflect an evidence risk based approach this should be documented in the revised Highways Asset Management Plan (see recommendation 2).

- Street lighting and all other electrical equipment – Introduce some overarching prioritisation that links inspection frequency with carriageway and footway hierarchy.

Develop comprehensive evidenced risk-based approach and document this as part of the revised Highways Asset Management Plan (see recommendation 2).

- Drainage – Complete gully cleansing review and develop an evidenced risk based approach which should be documented as part of the revised Highways Asset Management Plan (see recommendation 2).

- Cycleways – Develop a separate cycleway hierarchy base on usage. Once this is in place develop an evidenced risk-based approach and document this as part of the revised Highways Asset Management Plan (see recommendation 2).

- Rights of Way – Develop an evidenced risk-based approach that is related to hierarchy. This should be documented as part of the revised Highways Asset Management Plan (see recommendation 2).

- Safety Barriers – Complete the inventory. Once a detailed inventory is in place, develop an evidenced risk-based approach based on road hierarchy for safety and condition inspections.

Priority – High

Recommendation 8 – Information Management

"Information to support a risk based approach to highway maintenance should be collected, managed and made available in ways that are sustainable, secure, meet any statutory obligations, and, where appropriate, facilitate transparency for network users."

Gap

No gap identified.

Recommended Actions

- N/A.

Recommendation 9 – Network Inventory

"A detailed inventory or register of highway assets, together with information on their scale, nature and use, should be maintained. The nature and extent of inventory collected should be fit for purpose and meet business needs. Where data or information held is considered sensitive, this should be managed in a security-minded way."

Gap

No gap identified.

Recommended Actions

- N/A.

Recommendation 10 – Asset Data Management

"The quality, currency, appropriateness and completeness of all data supporting asset management should be regularly reviewed. An asset register should be maintained that stores, manages and reports all relevant asset data (HIAMG Recommendation 5)."

Gap

No gap identified.

Recommended Actions

- N/A.

Recommendation 11 – Asset Management Systems

"Asset management systems should be sustainable and able to support the information required to enable asset management. Systems should be accessible to relevant staff and, where appropriate, support the provision of information for stakeholders (HIAMG Recommendation 12)."

Gap

No gap identified.

Recommended Actions

- N/A.

Recommendation 12 – Network Hierarchy

"A network hierarchy, or a series of related hierarchies, should be defined which include all elements of the highway network, including carriageways, footways, cycle routes, structures, lighting and rights of way. The hierarchy should take into account current and expected use, resilience, and local economic and social factors such as industry, schools, hospitals and similar, as well as the desirability of continuity and of a consistent approach for walking and cycling."

Gap

- Carriageway – Needs to be reviewed as the current hierarchy has only 5 levels in place which appears out of step with other highway authorities who have up to 12.

- Cycleways – Hierarchy is based on location i.e. in-carriageway, on footway or remote rather than usage.

Recommended Actions

- Carriageway – Review hierarchy. Areas that should be considered are introducing a new hierarchy for a designated Major Route Network (MRN). Recognising the size of the County's unclassified network and currently having only 2 hierarchies is too broad and limits the benefits that can be realised by adopting a risk based approach. Consideration could be given to introducing to 3-4 different hierarchies based on usage and urban /rural split for this unclassified network.

- Cycleways – Review hierarchy in relation to usage not location.

Priority – High

Recommendation 13 – Whole Life/Designing for Maintenance

"Authorities should take whole life costs into consideration when assessing options for maintenance, new and improved highway schemes. The future maintenance costs of such new infrastructure are therefore a prime consideration."

Gap

Generally there is no process to assess the overall maintenance lability of taking over new infrastructure. For all new structures the designed are assess for the maintenance implications and whenever possible long life solutions are adopted. Lincs Lab have been undertaking some research on whole life costings for carriageways.

Recommended Actions

- Develop and document a process that requires designers and maintenance managers to review the whole life costs of new schemes and the funding consequences they will incur.

Priority – Low

Recommendation 14 – Risk Management

"The management of current and future risks associated with assets should be embedded within the approach to asset management. Strategic, tactical and operational risks should be included as should appropriate mitigation measures (HIAMG Recommendation 11)."

Gap

See Recommendation 7.

Recommended Actions

- See Recommendation 7.

Priority – High

Recommendation 15 – Competencies and Training

"The appropriate competency required for asset management should be identified, and training should be provided where necessary (HIAMG Recommendation 10)."

Gap

No gap identified.

Recommended Actions

- N/A.

Recommendation 16 – Inspections

"A risk-based inspection regime, including regular safety inspections, should be developed and implemented for all highway assets."

Gap

See Recommendation 7.

Recommended Actions

- See Recommendation 7.

Priority – High

Recommendation 17 – Condition Surveys

"An asset condition survey regime, based on asset management needs and any statutory reporting requirements, should be developed and implemented."

Gap

No gap identified

Recommended Actions

- N/A.

Recommendation 18 – Management Systems and Claims

"Records should be kept of all activities, particularly safety and other inspections, including the time and nature of any response, and procedures established to ensure efficient management of claims whilst protecting the authority from unjustified or fraudulent claims."

Gap

No gap identified.

Recommended Actions

- N/A.

Recommendation 19 – Defect Repair

"A risk-based defect repair regime should be developed and implemented for all highway assets."

Gap

See Recommendation 7.

Recommended Actions

- See Recommendation 7.

Priority – High

Recommendation 20 – Resilient Network

"Within the highway network hierarchy a 'Resilient Network' should be identified to which priority is given through maintenance and other measures to maintain economic activity and access to key services during extreme weather."

Gap

There is an opportunity for a review in relation to the latest Government Report into the 2015/16 Flooding.

Recommended Actions

- Undertake a review following the latest guidance in the Government Report into the 2015/16 Flooding, which picks up on the need to consider the vulnerability of critical services within the highway infrastructure.

Priority – Low

Recommendation 21 – Climate Change Adaptation

"The effects of extreme weather events on highway infrastructure assets should be risk assessed and ways to mitigate the impacts of the highest risks identified."

Gap

No gap identified.

Recommended Actions

N/A

Recommendation 22 – Drainage Maintenance

"Drainage assets should be maintained in good working order to reduce the threat and scale of flooding. Particular attention should be paid to locations known to be prone to problems, so that drainage systems operate close to their designed efficiency."

Gap

No gap identified.

Recommended Actions

- N/A

Recommendation 23 – Civil Emergencies and Severe Weather Emergencies Plans

"The role and responsibilities of the Highway Authority in responding to civil emergencies should be defined in the authority's Civil Emergency Plan. A Severe Weather Emergencies Plan should also be established in consultation with others, including emergency services, relevant authorities and agencies. It should include operational, resource and contingency plans and procedures to enable timely and effective action by the Highway Authority to mitigate the effects of severe weather on the network and provide the best practicable service in the circumstances."

Gap

There are robust arrangements in place however there may be benefit in expanding the Winter Maintenance Plan to cover all aspects of severe weather and hence be called a Severe Weather Plan.

Recommended Actions

- Produce a Highways Service Severe Weather Plan which includes operational arrangements all severe weather eventualities

Priority – Low

Recommendation 24 – Communications

"Severe Weather and Civil Emergencies Plans should incorporate a communications plan to ensure that information including weather and flood forecasts are received through agreed channels and that information is disseminated to highway users through a range of media."

Gap

No gap identified.

Recommended Actions

- N/A

Recommendation 25 – Learning from Events

"Severe Weather and Civil Emergencies Plans should be regularly rehearsed and refined as necessary. The effectiveness of the Plans should be reviewed after actual events and the learning used to develop them as necessary."

Gap

No gap identified.

Recommended Actions

- N/A

Recommendation 26 – Performance Management Framework

"A performance management framework should be developed that is clear and accessible to stakeholders as appropriate and supports the asset management strategy (HIAMG Recommendation 4)."

Gap

No gap identified.

Recommended Actions

- N/A.

Recommendation 27 – Performance Monitoring

"The performance of the Asset Management Framework should be monitored and reported. It should be reviewed regularly by senior decision makers and when appropriate, improvement actions should be taken (HIAMG Recommendation 13)."

Gap

No gap identified.

Recommended Actions

- N/A

Recommendation 28 – Financial Plans

"Financial plans should be prepared for all highway maintenance activities covering short, medium and long term time horizons."

Gap

No gap identified.

Recommended Actions

- N/A

Recommendation 29 – Lifecycle Plans

"Lifecycle planning principles should be used to review the level of funding, support investment decisions and substantiate the need for appropriate and sustainable long term investment. (HIAMG Recommendation 6)."

Gap

No gap identified.

Recommended Actions

- N/A.

Recommendation 30 – Cross Asset Priorities

"In developing priorities and programmes, consideration should be given to prioritising across asset groups as well as within them."

Gap

Not currently undertaken further advice required on how to approach this.

Recommended Actions

- Develop a methodically to prioritise investment decision across all highway infrastructure asset.

Priority – Low

Recommendation 31 – Works Programming

"A prioritised forward works programme for a rolling period of three to five years should be developed and updated regularly (HIAMG Recommendation 7)."

Gap

No gap identified.

Recommended Actions

N/A

Recommendation 32 – Carbon

"The impact of highway infrastructure maintenance activities in terms of whole life carbon costs should be taken into account when determining appropriate interventions, materials and treatments."

Gap

Currently no process in place other than information provided by the term maintenance contractor Kier. Further advice required on how to approach this. The move to install LED lighting is supporting carbon reduction

Recommended Actions

- Develop a comprehensive approach into measuring the carbon impact across the whole highway maintenance service is required and this should be ultimately documented in a section of the Highways Asset Management Plan.

Priority – Low

Recommendation 33 – Consistency with Character

"Determination of materials, products and treatments for the highway network should take into account the character of the area as well as factoring in whole life costing and sustainability. The materials, products and treatments used for highway maintenance should meet requirements for effectiveness and durability."

Gap

No gap identified.

Recommended Actions

N/A.

Recommendation 34 – Heritage Assets

"Authorities should identify a schedule of listed structures, ancient monuments and other relevant assets and work with relevant organisations to ensure that maintenance reflects planning requirements."

Gap

No gap identified.

Recommended Actions

N/A

Recommendation 35 – Environmental Impact, Nature Conservation and Biodiversity

"Materials, products and treatments for highway infrastructure maintenance should be appraised for environmental impact and for wider issues of sustainability. Highway verges, trees and landscaped areas should be managed with regard to their nature conservation value and biodiversity principles as well as whole-life costing, highway safety and serviceability."

Gap

Lots of examples of environmental good practice - Protected verges, SSSIs, Listed trees Appropriate weed spraying. Tree inventory and management policy in place.

Recommended Actions

- Conduct an environmental assessment of the maintenance activities that are currently being operated and review the potential to utilise more environmental practices. This should be then documented in a section of the Highways Asset Management Plan.

Priority – Low

Recommendation 36 – Minimising Clutter

"Opportunities to simplify signs and other street furniture and to remove redundant items should be taken into account when planning highway infrastructure maintenance activities."

Gap

No formal decluttering policy. This is currently only undertaken on an opportunistic basis.

Recommended Actions

- Develop a decluttering policy that provides a mechanism to systematically tackle sign clutter.

Priority – Low

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