

## Appendix 3: Summary of Recommendations

### Well Managed Highway Infrastructure – A Code of Practice

Well-managed Highway Infrastructure

A Code of Practice

## SUMMARY OF 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.

### 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)

### 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)

### 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)

### 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.

### RECOMMENDATION 6 – AN INTEGRATED NETWORK

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

### 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.

### 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.

**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.

**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)

**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)

**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.

**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.

**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)

**RECOMMENDATION 15 – COMPETENCIES AND TRAINING**

The appropriate competencies for all staff should be identified. Training should be provided where necessary for directly employed staff, and contractors should be required to provide evidence of the appropriate competencies of their staff.

**RECOMMENDATION 16 – INSPECTIONS**

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



**RECOMMENDATION 17 – CONDITION SURVEYS**

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

**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.

**RECOMMENDATION 19 – DEFECT REPAIR**

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

**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.

**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.

**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.

**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.

**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.

**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.

**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)

**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)

**RECOMMENDATION 28 – FINANCIAL PLANS**

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

**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)

**RECOMMENDATION 30 – CROSS ASSET PRIORITIES**

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

**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)

**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.

**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.

**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.

**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.

**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.