

Well-Managed Highway Infrastructure – A Code of Practice

Specific Recommendation form CoP	Progress
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.	Action Plan in place to progress the specific recommendations and ensure the operational highway asset management policies and procedures will be introduced or amended to reflect the new CoP.
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)	An Asset Management Framework exists. Processes need to be formalised across revised and new policies and procedures being developed.
Recommendation 3 – Asset Management Policy and Strategy An asset management policy and 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)	An Asset Management Policy and Strategy exists and is published on the DBC website. Review required to reflect new policies and procedures under development.
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)	Information is currently communicated through reports to Council and Cabinet, Performance Management Framework, COE, COB, management team meetings, team meetings and one to ones. Information is also supplied via the Council's web pages. Specific consultation is undertaken on individual Projects. This is kept under review and update. No further action required.
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.	Hierarchies and cross border arrangements have already been developed with the Tees Valley authorities and will be incorporated in to updated policies and plans.
Recommendation 6 – An Integrated Network The highway network should be considered as an integrated set of assets when developing highway infrastructure maintenance policies.	The existing highway network has been maintained by an integrated team since 2012 with overlapping assets, budgets and team members working across different asset groups. No further action required
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.	A risk based approach has been adopted for all of the highway assets with systems in place to record safety and condition surveys which help to set priorities and develop programmes of work for each area of highway infrastructure. Formal method statements are to be developed for each of the main asset types and included within their respective policy documents.
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.	Processes and systems are in place to record and manage information such as safety inspections, bridge condition inspections, scanner, cvi, and scrim. Systems can provide statutory information, condition and public information for publication on the Council's website such as potholes. This is kept under review and update. No further action required
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.	Detailed inventories of most of the highway assets are available on the Symology Insight system. Assets are updated when new assets are acquired or disposed of, such as various assets on new housing estates. Where there are gaps in the highway asset data, programmes are put in place to acquire the relevant missing information. Process plans for updating information are required.
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)	Data is managed by carrying out checks on site and reviewing existing data. Processes are in place to update data when schemes are carried out or new infrastructure is created as part of residential developments or improvements. Formalised processes are to be included within their respective policy documents.
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)	Well established asset management software in place and available for use across the Authority. Training required to raise awareness of the available resource to enable teams to manage their assets effectively.

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.	Existing hierarchies are taken from the 2005 COP. WMHI calls for a risk based approach in developing hierarchies. A new set of hierarchies has been developed with the Tees Valley Authorities. The new hierarchies need to be applied to the network taking in to account local economic and social factors.
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.	Whole life costs is considered as part of the design process and included within design process mapping. No further action required
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)	Formal risk management processes to be recorded and included in the relevant procedures and plans.
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.	Competencies are identified for all staff but this does not usually include formal qualifications. Training records are kept for all team members and records updated.
Recommendation 16 – Inspections A risk-based inspection regime, including regular safety inspections, should be developed and implemented for all highway assets.	The existing safety manual to be updated after the new hierarchies have been determined. There are existing risk based inspections carried out for structures and street lighting. A revised manual is being produced.
Recommendation 17 – Condition Surveys An asset condition survey regime, based on asset management needs and any statutory reporting requirements, should be developed and implemented.	Condition data has been collected for carriageways since 2005 and footways since 2011 and initially used for statutory reporting. Systems are also in place for Bridge and Street Lighting assets. Condition data collection regime to be recorded for each of the main assets including methods of collection and possible funding requirements. This should be recorded within each of the specific policy documents.
Recommendation 18 – Management System 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.	Records already maintained within Symology Insight including inspection regimes, order dates, response times etc. Systems and processes should be included within the Highways Safety Inspection Manual so that they are formally recorded and endorsed.
Recommendation 19 – Defect Repair A risk-based defect repair regime should be developed and implemented for all highway assets.	Defects are currently repaired as indicated in the Highways Safety Inspection Manual. Document does not contain a risk matrix. Information on street lighting and structures assets to be recorded in their own policy documents.
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.	Resilient Network has been produced based on the two main extreme weather events i.e. winter conditions and flooding. Consultation with adjoining authorities and Local Resilience Forum complete. This is kept under review and update. No further action required
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.	The two main weather events are taken in to account in the Resilient Network. (Flooding and Snow/Ice). This is kept under review and update. No further action required
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.	Work is ongoing to identify and improve the drainage asset records. A gap analysis of information required and a programme of investigation works to fill the gaps has been carried out, taking a risk based approach when identifying priorities.
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.	The Council has various Civil Contingency Plans in place to cover Severe Weather Emergencies. Cross departmental exercises are carried out to test their effectiveness and reinforce links between different areas of the Council. The Durham County Council and Darlington Civil Contingency unit maintain the documents and arrange for regular training. This is kept under review and update. No further action required

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.	Processes are in place but need reviewing and incorporating into the Communications Strategy.
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.	The Council has various Civil Contingency Plans in place to cover Severe Weather Emergencies as indicated above (R23). Winter events will either be discussed at the time or during the end of season review meeting. No further action required
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)	A Performance Management Framework is already in place and includes performance indicators for many of the highway assets. This information has been used to secure capital budgets for deteriorating assets. No further action required
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)	A Performance Management Framework is already in place and includes performance indicators for many of the highway assets. This information has been used to secure capital budgets for deteriorating assets. Framework is in place and monitored to identify areas requiring improvement. No further action required
Recommendation 28 – Financial Plans Financial plans should be prepared for all highway maintenance activities covering short, medium and long term time horizons.	Programmes of work for the various assets include estimated costs which can identify shortfalls in budget and provide financial planning for future years. This is kept under review and update. No further action required
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)	Limited use of life cycle planning at present. It is mainly focussed on material choices and not for substantiating long term budgets and decisions. Work required on the asset management system to identify deterioration curves for different processes and available budgets.
Recommendation 30 – Cross Asset Priorities In developing priorities and programmes, consideration should be given to prioritising across asset groups as well as within them.	All of the major assets are managed by the Asset Management Team which enables better planning of works where more than one asset requires maintenance. This can also reduce costs and overall disruption to the public. No further action required
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)	A minimum of five year works programme have been developed for carriageway and structures and other programmes are being developed.
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.	Street lighting lanterns have been converted to LED units and lighting to signage is removed where it is not required. Savings of 2000 tonnes of carbon per annum. Warm lay materials are being trialled. This is kept under review and update. No further action required
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.	The design process for improvement and maintenance schemes is in place. This is kept under review and update. No further action required
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.	Heritage Assets are recorded on the asset management system against the asset attributes. This enables identification through an attribute search. This is kept under review and update. No further action required
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.	The design process for improvement and maintenance schemes is in place and covers these issues. This is kept under review and update. No further action required
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.	Existing signage and street furniture is reviewed as part of the design process for improvement and maintenance schemes. This is kept under review and update. No further action required