



**Worcestershire County Council:**

**Highways Asset Management Funded Information Strategy**

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## 1. Executive Overview

**Worcestershire County Council continues to strive to be in the top Quartile of road condition for all classes of roads in the highway network.**

This document, together with the Highway Infrastructure Asset Management Policy, the Highways Infrastructure Asset Management Plan and the Highways Asset Management Communication Strategy sets out how this target will be achieved in how Worcestershire County Council:

- Identifies outcomes from investment in the highway network to develop the level of service required.
- Measures and understands the performance of its major assets and uses lifecycle optimisation planning principles to model management and funding options to provide value for money.
- Collects information to value each highway asset and determine the risks associated with the assets to support investment decisions and manage risk.
- Implements and asset management and risk approach in service delivery and continuous improvement.
- Uses a complete performance management framework is in place which links performance targets to investment levels and are aligned with financial requirements and funding arrangements over a three-year period in a forward programme.
- Involves its senior decision-makers in providing direction to asset management.
- Informs staff and stakeholders through the Performance Management Framework including regular asset management briefings.
- Implements and monitors communications with lessons learnt, including stakeholder consultation information to help develop levels of service.

The suite of documents, which should be read in conjunction with each other, provide an overview of the asset management methodology and Performance Management Framework that is used to assess road condition, formulate targets for service delivery, monitor service delivery and inform staff and stakeholders to ensure knowledge and alignment with our strategy.

Worcestershire County Council manages its highway assets in line with the County Council's vision and key priorities:

*"We are aiming to become a financially self-sufficient Council, to achieve this aim, we will promote and support businesses in the county, businesses looking to relocate to the county and those businesses we work closely with.*

*We hold four key priorities that will help us shape the future vision for Worcestershire:*

***Open for Business***

*It is an exciting time to be doing business within Worcestershire with major current and future planned improvements in workforce skills, employment, infrastructure and productivity.*

### ***Children and Families***

*With a strong focus on improving outcomes for the children, young people and families of Worcestershire we have been enabled our schools to achieve a 90% good or outstanding rating by Ofsted, with 70% of young people achieving five or more good GCSE's and facilitated an increase in the number of young people moving successfully into employment. However, will strive for continuous improvements in these areas and our providers are key in achieving this.*

### ***The Environment***

*Worcestershire's environment is one of our key features and is crucial to the success of Worcestershire's tourism economy, whilst also providing an attractive place to invest for business. We have a strong commitment to improve our transport network and this will require equal commitment from local innovative companies.*

### ***Health and Well-Being***

*By working with local partners we can ensure that the residents of Worcestershire are healthier, live longer, have better quality of life and remain independent for as long as possible. In order to achieve this, we must ensure that we are working with good quality care providers with a strong focus on outcomes, not just output.”*

This document explains our information strategy for the the collection of information and data about our assets and how it supports the Performance Management Framework. It also explains how information is used to support investment decisions and to manage risk against the value of each asset type using a life cycle planning approach.

## 2. Introduction

As the Highway Authority for Worcestershire, we have a duty under the Highways Act 1980 to maintain the Public Highway Infrastructure within Worcestershire. This comprises the following main assets; lighting stock (55,000 lanterns), drainage, carriageway (4,112 km), roadside footways (2962 km), divorced footways (346 km) and structures (900+).

To ensure it is well managed and maintained, it is essential that the management of the highways network is carried out in a systematic way, which takes a long-term view of the performance and condition of our highway assets, our corporate objectives, maintenance requirements, customer expectations, service risks and funding availability.

Worcestershire County Council's Highways Asset Management Strategy sets out the objectives that Worcestershire County Council aspires to achieve from the management of its highway assets and its Highway Asset Management Policy demonstrates how the highway maintenance service supports the County Council's vision and key priorities.

By employing asset management techniques and principles, we can set long term objectives to manage and maintain our highway assets. This enable us to:

- Adopt a strategic approach over the long term to manage the highway network
- Meet key stakeholders' needs
- Use a systematic approach for service delivery and programmes of work
- Ensure we have an optimised approach to the allocation of resources
- Manage expenditure over the asset lifecycle
- Meet performance and condition requirements in the most efficient way
- Manage Risk effectively

## 3. Approach

By adopting asset management principles and methodologies we can:

- Prioritise works across the county
- Develop and implement long term maintenance works programmes
- Provide levels of service that support service delivery priorities
- Prioritise roads that would benefit from the use of preventative maintenance processes to prolong the life of our carriageway assets
- Where feasible carry out permanent first-time repairs to potholes
- Install energy efficient Street Lighting lanterns as a matter of course when lanterns are replaced

Our aim is to deliver the following service delivery outcomes:

- Invest in and maintain the highway network to ensure it continues to evolve to support the council's priorities in being "Open for business."
- Provide the necessary asset management and performance information to enable effective decision making regarding the level of funding investment required to maintain a resilient highway network.
- Deliver significant energy savings through the use of advanced technology, where practicable.

#### **4. Strategic Framework**

This Information Strategy together with the Highways Infrastructure Asset Management Plan and Policy sits within a wider framework and forms a link between our Corporate Objectives, Directorate Priorities and Operational Plans for highways.

The benefits of using this approach, ensures there is a:

- Clear methodology for linking strategic objectives and priorities with levels of service.
- Clear understanding of the extent and condition of the infrastructure within Worcestershire.
- Better ability to predict the levels of funding required to deliver desired levels of service and the potential impact of funding constraints over defined periods of time.
- Better understanding of risk and how it can be mitigated.
- Consistent approach which assists in managing the expectations and experience of service users.
- Provision for an effective Performance Management Framework (including the provision of efficient systems and processes) to ensure consistent levels of service, delivery and standards.

#### **5. Asset Management using data management and information systems**

Reliable and robust data is required to support the right investment decisions and to ensure that key stakeholder requirements, value for money and efficiency can be delivered.

Worcestershire County Council's asset inventory (or register) is the foundation on which asset management processes are built. Its accuracy and completeness of the inventory and condition data, and the management of associated systems is essential, in order to:

- Assess asset condition and performance of our assets.
- Provide the data required to support the approach to asset management.
- Provide the basis for informed decision-making.

- Provide an effective sound evidence base in our communications with stakeholders.
- Inform the assessment and management of risk.
- Support the management of statutory requirements.
- Support continuous improvement.

The County has an Infrastructure Asset Team responsible for maintaining the inventory, assessing asset condition, co-ordinating the Highway Infrastructure Asset Management Plan and producing various programmes of repairs.

Prior to the WGA requirements, Worcestershire County Council has strived to maintain an accurate and inclusive highways' asset inventory in recognition of its key importance to the County.

The highway asset inventory is held on an Exor database. Any new assets are added to the inventory by the County's Infrastructure Data Manager, for example street furniture, gullies etc. being accurately plotted by the County's 'in house' Course Visual Inspection (CVI) team.

Other assets such as signs are periodically surveyed to account for additions, changes and deletions. Street lighting assets are catered for using the Mayrise database and the County's Structures are logged on an AMX data base.

The Asset Registers are reviewed and updated on an ongoing basis in accordance with formal processes, such as Section 38's for road adoptions and when new infrastructure and stock is added to the network. The inventory may also be updated as a result of information via the following mechanisms:

- Reports through safety inspections and routine and reactive maintenance functions.
- Continued procurement of carriageway and footway treatment surveys of the road and footway network.
- A rolling programme of surveys of the full network which updates the GIS spatial mapping system.
- Principal and General inspections of highway bridges and structures.
- Resurveying, as appropriate, of specific asset groups and by following procedures for change control as a result of scheme implementation or maintenance.
- Updates following completed planned maintenance, reactive maintenance and infrastructure improvement schemes.

In keeping with continuous improvements to improve the quality and coverage of the asset inventories, action plans are identified and implemented on an ongoing basis, as and when appropriate.

To apportion a level of condition to the network the County Council carries out a number of surveys each year:

- SCANNER
- SCRIM
- Course Visual Inspection (CVI)
- Structures G.I.s and P.I.s
- Diving surveys of Bridge piers, quaysides and abutments
- Lighting Column Condition surveys

All the above have dedicated WCC revenue budget allocations and are clearly demonstrable by way of transactions and entries in the WCC financial systems.

Our Geographic Information System (GIS) is an integral database for our general and management and communication between Officers (both internal and external) in relation to key asset management data. This includes, a multi- layer information platform of asset data for tactical and operational use.

## **6. Lifecycle Planning and Whole Life Costs**

Lifecycle planning is a technique which enables us to monitor and anticipate the future condition of assets and to know when we need to repair or replace it. Through detailed knowledge of the size, safety, condition and value of our highways asset, this enables us to take into consideration whole life costs when managing our assets.

Worcestershire County Council's Lifecycle Plan for its highway assets demonstrates how lifecycle planning tools have been developed which enable the development of work programmes to make best use of the available funding in meeting long-term objectives and mitigating the risk of failure by allocating funds to where they will be most beneficial. The lifecycle planning approach to our major asset groups allows us to:

- Identify short, medium and long-term investment for highway infrastructure assets and develop an appropriate maintenance strategy.
- Predict future performance of highway infrastructure assets for different levels of investment and different maintenance strategies.
- Determine the level of investment required to achieve the required performance.
- Determine the performance that will be achieved for available funding and/or future investment.
- Support decision-making, the case for investing in maintenance activities, and demonstrate the impact of different funding scenarios.
- Optimise costs profiled over the lifecycle, whilst maintaining the required performance.



It must be noted that this type of allocation moves away from a more traditional “worst first” approach and targets work programmes at those parts of the infrastructure which present a level of risk requiring intervention and where timely treatment can achieve the most beneficial whole of life cost alongside more effective preventative treatments as necessary. This approach is advocated in the Audit Commission, [Going the Distance Report 2011](#).

Worcestershire County Council uses lifecycle planning to develop investment strategies to deliver an agreed level of performance or, where funding becomes constrained, a prediction of the effect of particular funding scenarios on the levels of service that can be delivered. This approach enables service delivery to be as effective as possible, allowing a cogent allocation of resources providing a balance between focussed asset management and contributing to the objectives and priorities of the Council and allow an assessment to be made of any residual risk.

This lifecycle approach allows Worcestershire County Council to demonstrate what level of investment is required to achieve any performance targets and where this investment is not available, the likely shortfall to aid effective decision-making. As part of its Lifecycle planning approach and methodologies, the Asset Management team have developed a Financial Impact Modelling Tool (FIMT) for carriageways which is used in conjunction with the HMEP Lifecycle Planning Toolkit. The FIMT enables the future condition of any class of road to be predicted given a particular level of funding and helps the council to understand and manage risk in terms of asset deterioration in relation to required funding.

This is a fundamental approach that is used for decision-making in relation to the budget setting cycle, identifying performance targets and monitoring achievement of targets as part of the Performance Management Framework. Using the FIMT, performance targets are aligned to financial requirements over the next 3 years and the necessary funding required has been identified. This process aids decision-making when discussing future funding and investment requirements with Senior County Councillors and Senior WCC managers, as it helps to clarify the risks involved around funding levels and methods of management and repair. The FIMT is being further developed to include a similar approach for footways.

Worcestershire County Council has in place lifecycle plans aimed specifically at major assets, which include carriageways, footways, structures, lighting and traffic signals to demonstrate what investment is required to achieve its performance targets and where this investment is not available, the likely shortfall over a defined period in time.

## **5.1 Structures**

WCC actively manages its structural assets broadly following principles set out in Well Managed Highway Infrastructure; A Code of Practice published by UK Roads Liaison Group.

There are approximately 2000 bridges and culverts, and retaining walls forming part of the highway network, of which approximately 500 are owned by third parties. The total Gross Replacement Cost is estimated to be circa £662m. Routine maintenance of structures is based on a prioritised system of required work with the aim of minimising the risk to public safety and reduce future maintenance costs.

The condition of the structures asset is measured primarily by two factors, BSSCI (Bridge Structural Stock Condition Indicator) and BSCI (Bridge Structure Condition Indicator) and these are derived from bridge inspections. In accordance with the nationally recognised indicators published by ADEPT Worcestershire's BSSCI is within the range denoted as 'good'; the stock having a BSSCI average of 83.7%. This information is stored within a bespoke database (AMX) and can be used to assist in determining lifecycle planning strategies.

All structures are maintained in an appropriate condition. If safety critical components are identified as being deficient after inspections, immediate steps are taken to make them safe. At present, six bridges currently have a structural weight limit on them.

Desired Outcomes: The principal factor for determining the forward strategy is to maintain the asset in an appropriate risk managed condition with safety critical defects actioned.

Additional targets include:

- Completion of the annual programme of routine inspections and timely actioning of maintenance works prioritised according to risk and available budget
- Continuing an ongoing programme of Structural Reviews in accordance with BD101/11
- Continuing a work bank of structural assessments in accordance with BD21/01
- Continuing progress on a work bank of capital investment into structures

Approach: The approach is to undertake inspections on all structures, in accordance with the Code of Practice, so that the respective structures components are checked for deterioration. From these a forward works programme can be developed to meet the asset management policy. A risk-based approach is being used to determine the PI programme, however due to the limitations of the Bridge Maintenance budget, the inspections are prioritised by span, age (including heritage structures) and material type (early reinforced concrete and cast iron). There are likely to be further financial pressures in the future, reducing the availability of funding for the maintenance of the structures stock. The key structures driver is to ensure that the time for intervention of planned maintenance to a structure is determined to deliver the optimum return for that investment. This will be managed by use of the Structures Toolkit and AMX, to determine forward network wide investment need, monitoring the BSSCIs and applying professional engineering judgement."

## 7. Performance Management Framework

Worcestershire County Council recognises the importance that residents place on the condition of the network across the county and we invest in highways improvement and infrastructure projects to ensure the county's highway network continues to evolve to support the council's priorities. The Highways Asset Management Strategy and Policy demonstrates how the highway maintenance service supports the County Council's vision and four key priorities over the short, medium to long term as follows:

- Championing Open for Business
- Supporting Children and Families
- Protecting the Environment
- Promoting Health and Wellbeing

In contributing to the Corporate outcomes, the highway maintenance service is committed and responsive to improving our roads and footways, recognising that they are a high priority for the residents and businesses in Worcestershire. We will strive for top quartile performance in the quality of our roads and footways, understanding their importance in supporting the Open for Business and Health and Well-Being corporate objectives.

A key function of the asset management process is to understand the impact of financial options and decisions on being able to maintain and improve the condition and performance of the County's Highways Infrastructure to meet our statutory requirements, deliver corporate priorities and attain customer satisfaction. Thus, service performance monitoring is an important and fundamental aspect of our Highways Maintenance Service, together with measurement and trend analysis of highway asset condition as an indicator of performance. The measurements are specific to each asset group and in many cases, it is possible to benchmark performance with other local highway authorities.

Benchmarking is a method of improving performance in a systematic and logical way by measuring and comparing an authority's performance against others, and then using lessons learned from the best to make targeted improvements. Worcestershire County Council is the regional secretariat for the West Midlands Highways Alliance. This is a group of local Highway Authorities in the West Midlands that meet four times a year to discuss ways of improving service delivery and generating efficiencies. A benefit of the West Midlands Highways Alliance is the development and implementation of the Light Peer Review that is offered to its members. This tool has been effectively used to evaluate an authority's critical processes and operations through comparison with best practice organisations performing similar work. The output from the Light Peer review leads to a series of recommendations for improvement.

The Customer Quality Cost (CQC) approach supported through the NHT Efficiency Network, measures an organisation's efficiency by assessing how their current costs compare with their minimum potential costs, assuming their current service quality and customer satisfaction remain constant. Comparisons are made across a number of authorities utilising

bespoke data to aid valid comparison. Worcestershire County Council is a member of the NHT Efficiency Network and CQC; organisations that are driven by a desire to encourage authorities to continuously improve, innovate and achieve greater heights in terms of performance, as well as contributing to good practice in the sector. Worcestershire County Council also takes part in the annual National Highways and Transportation (NHT) survey to assess public satisfaction and benchmark performance with other participating authorities in England with a view to identify lessons learned for continuous improvements.

In order to monitor the impact of the Highway Infrastructure Asset Management Plan and supporting operational plans on the public and stakeholders, a range of measures are reviewed and monitored within the highways service. Examples of these include:

- Road condition and investment level required to achieve the targets using the FIMT;
- Public satisfaction on a range of relevant highway issues as measured through the annual NHT (National Highways and Transport) survey that addresses key themes such as condition of highways, road safety and speed of repair to highway defects;
- Numbers and locations of road accidents and casualties;
- Number and cost of third party claims associated with highway matters;
- Public enquiries reported via our Highways Transport and Control Centre;
- Number of instructed and completed defects and advisories.

We work in an integrated and collaborative partnership with our Highways Maintenance Service Contractor (HMSC), Ringway Infrastructure Services with whom we hold weekly contract review meetings with senior managers. This mechanism ensures we continually review operational service delivery arrangements with the need to deliver a more efficient and cost-effective service.

The Contractors Plan is the required mechanism to programme all works within the Highway Maintenance Service Contract and measure its achieved performance. To drive efficiencies, the contract has a number of efficiency requirements built in to ensure the County benefits from any reductions in costs that are generated by the joint efforts of the Worcestershire Highways team working collaboratively together. There is also an efficiency factor built into the contract which means that if the contract is in "gain", prices are reduced by 50% in the following financial year. These measures are independent of the contractual Key Performance Indicators and are regularly measured by the Contract Management Team meeting. Compliance with these measures awards Contractor extensions to the Contract and not cash sums.

To maximise the potential for joint working to deliver ongoing and wider long-term benefits, including financial and improvements in service delivery, Ringway provide a shared service arrangement for Worcestershire, Wiltshire and South Gloucestershire to benefit from procurement efficiencies. Ringway also share lessons learned from other highway authorities for continuous improvements in efficiencies and service delivery and have

secured ISO 44001 (formally BS11000) for collaborative working with Worcestershire County Council.

As part of the Performance Management Framework and good practice, processes have been developed to capture lessons learned with a view to continual improvement in service delivery and efficiency with demonstrable outcomes in terms of customer, quality and cost. These have been translated into improvements in service delivery and contractual outcomes. New national and regional initiatives and innovations are also reviewed and incorporated into the performance management process where relevant so that any improvements can be captured and reported to identify further service improvements.

The WCC Performance Management Framework is outlined in Appendix A and provides a systematic approach to measuring performance and service delivery at a strategic, tactical and operational level with weekly, monthly, quarterly and annual milestones. This framework leads to the regular reporting of Key Performance Indicators (KPIs) and reports to the Senior Management Team within the Directorate and the reporting of Balanced Score Cards about our performance that are published on the website.

## **8. Risk Management**

The identification of risk and its management is an important consideration of highway asset management, in particular, to those assets that are critical to the functioning of the network and more importantly, the resilient network. The resilient network in Worcestershire is made up of key routes in the County that are considered essential for economic activity and vital services. We treat these roads as a priority in the event of any severe weather or other emergency incidents and focus our resources on keeping them available for use.

From an asset management perspective, risk management involves an assessment of comparative risks to assist both options appraisal and options selection, by considering a number of factors:

- The risks associated in providing different levels of service.
- The risks associated with variation of funding levels.
- The comparative risk of distributing varying funding levels between different asset groups

This approach to risk management takes into consideration the condition of assets and the potential for 'spend to save' investment based on business risk. Thus, a better understanding of asset deterioration and failure rates, provide an evidence base to support risk-based decision making and the lifecycle planning process.

The four key stages of risk management are shown below in Figure 1:

1. Identifying and quantifying risk.
2. Assessing the nature of risk and its effect on the asset.
3. Managing and controlling risk by mitigating or eradicating it.
4. Reviewing, monitoring and reporting risk

**Figure 1: stages of risk management**



The risk management process is part of Worcestershire County council’s integrated framework for corporate plans, capital strategies, business processes, financial and performance monitoring reports and the budget setting process.

### 7.1 Types of risk

Risk is defined as a threat, an event or action that can adversely affect the organisation’s ability to achieve its required objectives or successfully execute its strategies. Risk occurs in a variety of ways, but the most typical categories and examples that need to be considered within the asset management framework include:

Type of Risk	Examples
Political	<ul style="list-style-type: none"> <li>• New political arrangements and direction</li> <li>• Political priorities that may change</li> <li>• Member support / approval</li> <li>• electorate dissatisfaction</li> </ul>

	<ul style="list-style-type: none"> <li>• Impact of election changes.</li> </ul>
Economic	<ul style="list-style-type: none"> <li>• Cost of living</li> <li>• Changes in interest rates and/or</li> <li>• Inflation</li> <li>• Demographic indicators</li> <li>• Government funding levels</li> </ul>
Social	<ul style="list-style-type: none"> <li>• Resourcing and recruitment levels from available workforce</li> <li>• Ageing population posing increasing pressures on budgets</li> <li>• Health statistics posing increasing pressures on budgets</li> </ul>
Technological	<ul style="list-style-type: none"> <li>• New IT innovations versus legacy systems</li> <li>• IT infrastructure</li> <li>• Security standards and security of data</li> <li>• Using new or existing technology</li> <li>• Lack of, or failure of, technology</li> <li>• Disaster recovery and back up</li> <li>• Breach of security</li> <li>• Staff and client knowledge, skills and ability</li> <li>• E-Gov. agenda</li> <li>• Data Protection</li> </ul>
Legislative and Legal	<ul style="list-style-type: none"> <li>• Government policy and grant funding</li> <li>• Current Legislation such as Highways Act, Race Equality and</li> <li>• Diversity, Disability Discrimination, Human Rights, Employment Law, TUPE, Health &amp; Safety</li> <li>• internal policies and regulations, conditions etc</li> <li>• Freedom of Information</li> <li>• Potential for legal challenges and litigation</li> </ul>
Financial	<ul style="list-style-type: none"> <li>• Budget overspends, level of council tax, level of reserves,</li> <li>• inadequate insurance cover</li> <li>• Budgetary pressures, loss of/reduction in income, cost of living, interest rates, inflation etc</li> <li>• Financial management arrangements, investment decisions</li> <li>• Affordability models and financial checks</li> <li>• External funding issues incl. loss of (or reduction in) funding</li> </ul>
People, Systems and Processes	<ul style="list-style-type: none"> <li>• Emergency preparedness / Business continuity</li> </ul>

	<ul style="list-style-type: none"> <li>• System / procedure weaknesses that could lead to errors or fraud.</li> <li>• Staff restructure, key personalities, internal capacity, lack of management support.</li> <li>• Loss of key staff, recruitment and retention issues</li> <li>• Lack of succession planning</li> <li>• Internal management arrangements and protocols, poor</li> <li>• communication</li> <li>• Capacity issues – insufficient training issues, availability, sickness absence etc</li> <li>• Partnership agreements /arrangements / relationships</li> <li>• Project management processes</li> <li>• Project failure – failure to deliver on time, to budget or specification</li> <li>• Change programmes, new ways of working, new policies/procedures</li> <li>• Sabotage/hacking/fraud</li> </ul>
Force Majeure or 'acts of god'	<ul style="list-style-type: none"> <li>• Climate Change</li> <li>• Acts of terrorism</li> <li>• Severe weather events such as flooding, heat, snow and ice</li> <li>• Fire</li> <li>• Earthquake</li> <li>• Sabotage</li> <li>• Epidemics</li> <li>• Industrial strike action</li> <li>• Civil unrest or War</li> </ul>

Risks are most frequently identified through a combination of existing monitoring mechanisms, historical data, institutional knowledge, works records, or the application of service related engineering standards, specifications and relevant Codes of Practice. Force Majeure or 'acts of god' are mitigated with associated Corporate Business Continuity plans, the Highways Emergency and Resilient Network Plan and other risk assessments such as those in connection with climate change.

Following the identification of potential risks, an assessment of the likelihood of impact is carried out. Consistency of approach is essential to give a balanced view of the risk involved when making choices about levels of service and service options. Worcestershire County Council maintains a Corporate Risk Register that identifies risks with options to mitigate them. The Risk Register is reviewed annually by senior managers. This links to the Economy



and Infrastructure Directorate Risk Register that includes the critical highway infrastructure assets with options to mitigate the identified risks associated with them.

In addition, all Worcestershire County Council Contracts have associated Contract Risk Registers that are reviewed as part of the contract meeting protocol. These Risk Registers and reviews include our highways asset inventory.

## **7.2 Assessment and prioritisation of risk on the highway network**

The safety of the highway network and its critical structures and assets is managed under a risk-based regime where the frequency and type of safety inspection is determined by the asset type. It is important that reasonable care is taken, based on proper assessment of risk, to ensure that appropriate maintenance steps are taken, while at the same time ensuring that public money is used efficiently. Routine and scheduled highways safety inspections are carried out to identify safety issues on the network, any necessary reactive remedial work is based upon the likelihood and impact that an identified defect may have. Any defects detected through routine inspections are repaired according to risk-based protocols aimed at making individual assets safe or improving their serviceability. While the inspections themselves are routine, the repairs are sometimes of a reactive nature, meaning that they occur in response to an unpredictable trigger and are not pre scheduled. The evaluation of each defect is based upon the risk they pose. Defects are then categorised and prioritised for repair according to appropriate guidance as contained in the Well Managed Highway Infrastructure Code of Practice. The risk-based approach that is adopted is documented in the Highways Inspection Manual, the Highways Maintenance Policy and Highway Maintenance Plan. “Lessons learnt” around risks are recorded in the event of any emergency or severe weather event as a procedure in our Highways Emergency and Network Resilient Plan.

Worcestershire County Council assesses the condition of its asset groups through three principle routes:

- Safety inspections to identify and remedy defects.
- Condition surveys to identify deficiencies in the condition of the highway’s asset at a network level, including its long-term performance and serviceability.
- Performance and valuation analysis to ensure we meet statutory performance measurement and asset valuation (which used to be part of the annual WGA returns).

Maintenance works to the County's Highways assets are procured using term NEC based Contracts. Footways, drainage, structures and carriageway assets services are carried out by our Highway Maintenance Service Contractor, Ringway Infrastructure Services. Streetlighting and illuminated signs are maintained by Prysmian and traffic signals are maintained by Telent.

The management of these Contracts and associated works are largely carried out by an 'in house' client team, with assistance in some specialist areas such as Structures given by Jacobs via the term Professional Services Contract (NEC T.S.C.) that is also available to all Authorities in the Midlands Highways Alliance Plus which Worcestershire County Council is a member of. Worcestershire County Council holds an extensive highway asset inventory with associated condition and valuation data based on surveys and inspections. This information provides the Gross Replacement Cost and also provides for an overall assessment of risk and ensuring we are able to review and manage those risks accordingly. The asset inventory summary is outlined in our Highways Asset Management Strategy.

Our process of assessing risks associated with the management of highway assets, including a regular assessment of risks, communication of those risks and their management allowing Worcestershire County Council to identify the issues that could potentially affect the delivery of the required performance, including managing stakeholder expectations. Management of risk also allows us to identify required levels of funding against a level of risk that is deemed acceptable for the network, with the ability to identify options to mitigate risks which are unacceptable.

## 9. Customer Feedback

Customer feedback is important in order for us to shape our policies, improve our service delivery, contribute to our vibrant economy and enhance the environment. To help customers provide feedback, we have a full range of facilities for the public to provide feedback and report defects. This includes facilities for customers to register their feedback on highway-related issues by writing to us, telephone, online via our website, Facebook, Twitter and mobile applications.

We also listen to customer feedback and evaluate our service delivery through a number of regular surveys to monitor public perception indicators relating to issues such as facilities in the local area, satisfaction with public services, information and community safety. These include our own [ViewPoint survey](#), the national Bus Passenger Survey and the annual National Highways and Transportation (NHT) Survey to canvass feedback from residents in Worcestershire. The NHT survey also allows us to benchmark our performance with other authorities to help drive service improvements.

Members of the public can also provide feedback about issues within their locality to their local Councillor via council meetings, letters, email, telephone calls or surgeries. Surgeries provide an opportunity for any ward resident to go and talk their councillor face to face and these take place on a regular basis.

Worcestershire County Council has a duty to consult as part of its Best Value Duty pursuant to the Local Government Act 1999. For major infrastructure and improvement schemes of work such as the development of the Local Transport Plan, flood alleviation works, Public Realm

schemes and other major initiatives and projects around the county, we embrace a number of methods to obtain feedback on proposals from the public and stakeholders. A dedicated section for [major infrastructure and improvement schemes](#) is on our website and this facility provides information, updates and progress about consultations, proposals and completed schemes.

#### **a. Public Enquiry Management System (PEMS)**

All new issues (including those logged directly online) migrate into our Public Enquiry Management System (PEMS). The customer receives an automatic acknowledgement (if they have added their email address) and a unique reference number is allocated to the logged issue. All reported enquiries are prioritised based on the information provided and are investigated within 28 working days or more quickly if the matter is deemed as an emergency. The customer is notified (provided they have supplied an email address) when the issue has been resolved, or they will receive a comprehensive response to their enquiry, where the issue is more complex. If customers report an issue by telephone (01905 765765), they may ask to speak to an advisor about it at the Highways and Transport Control Centre.

All PEMS are received real time and are prioritised by the Highways and Transport Control Centre (unless it is a street lighting issue when it is automatically sent directly to the Street Lighting team). They are then directed to the specialist team or officer within the Highways Service for review, and action is taken where appropriate to address the issue. Where the issue requires an immediate response then this is telephoned through to the team/officer for immediate action.

If there is a safety critical issue such as a fuel spillage or accident or an issue that represents a hazard on the highway, then the Emergency Services will telephone the Control Centre directly. The Control Centre will ascertain what is required so that we can ensure that we have all the necessary equipment to address the issue. We operate a one-hour response on urgent issues.

If a logged PEM is a safety critical issue such a fallen tree across a road or another hazard such as a flooded property, then it is highlighted to the Highways Maintenance team as a high priority to be reviewed and prioritised with an appropriate response time. All other PEMS are reviewed and prioritised accordingly by the Highways Maintenance team or other relevant teams within Worcestershire County Council.

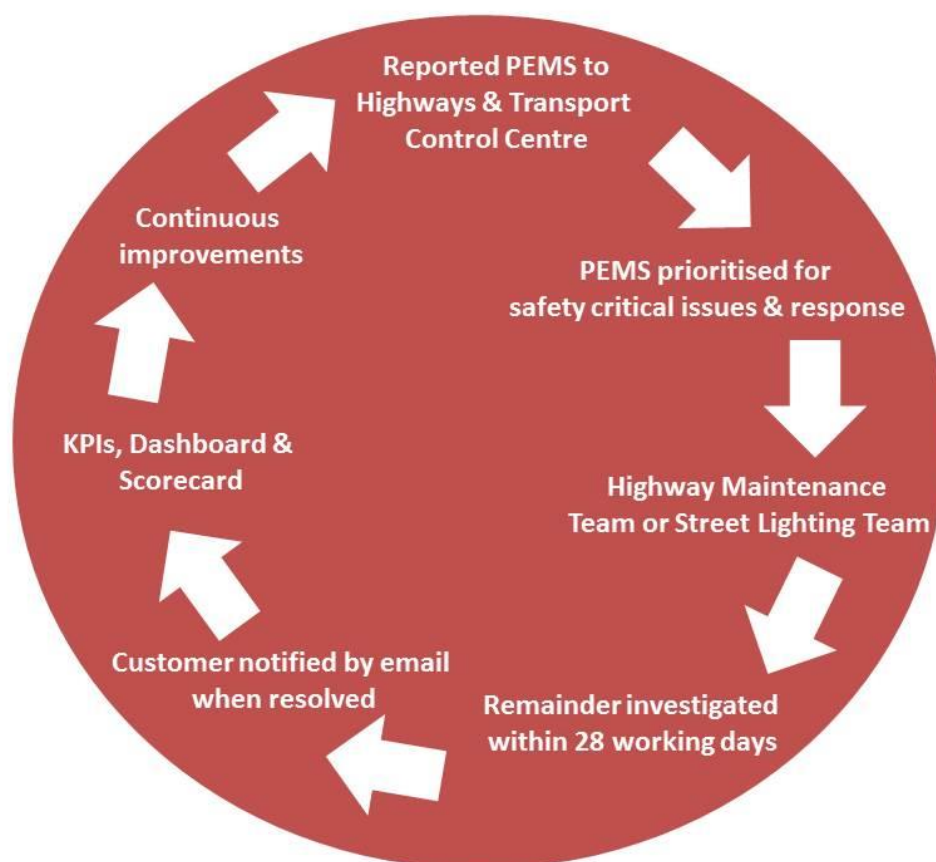
When preparing our annual programme of works, we take into consideration customer feedback and reported issues from PEMS, taking action to resolve any defects where reasonably practicable.

## **b. Customer Service**

Worcestershire County Council prides itself in customer excellence through continuous improvements and its approach of setting Key Performance Indicators and subsequent monitoring and reporting via a comprehensive quarterly Dashboard Report and Balanced Scorecard. As part of this approach, Worcestershire County Council uses a Customer Relationship Management (CRM) system called Rocket that is visible to the Highways and Transport Control Centre team and key officers to take action where appropriate to any issues or trends that are highlighted. This allows Worcestershire County Council to be more proactive and responsive to issues such as diverting resources to where they are needed in the County or highlighting the issue to teams within the Council.

Restricted layers to the CRM system can also be accessed by Members to allow them to view reported issues in their Division. The diagram overleaf illustrates the customer service cycle as shown in the diagram overleaf:

Figure 2 – Customer Service



## 10. Decision Making Process and Works Programmes

Our approach to effective Asset Management provides for a detailed decision-making process under the Scheme of Delegation which takes into consideration;

- Asset condition
- Safety
- Whole life costs
- Stakeholder Interest
- Supporting Corporate Objectives
- Co-ordination and resources
- Customer feedback and satisfaction via public consultations, PEMS, NHT and ViewPoint survey

By the use of robust evidence-based decision making processes, Worcestershire County Council is able to optimise assets by the appropriate prioritisation of work within the available funding.

One element of the prioritisation process is the potential for schemes to be clustered and coordinated across asset groups, for example; resurfacing a road in conjunction with a road safety scheme. Such alignment of schemes within the works programmes is key to optimising available funding and resources across our service delivery.

Our Highway maintenance practices take account of statutory duties and the management and mitigation of risk both to the service user and the authority. Forward Works Programmes are developed and shared with Local Members as part of a fortnightly and three month rolling programme that is refined annually. These programmes outline the schemes that will be completed where and when, subject to the caveats of weather events.

## **11. Communicating the Strategy**

Worcestershire County Council recognises that good customer engagement is having good quality information that is publicly available on its website with information about its performance, as well as key details of programmes of work and more detailed information about longer-term and major projects. To communicate our strategy, Worcestershire County Council has a Highways Infrastructure Asset Management Communications Strategy in support of our Transport Asset Management Plan (TAMP), both of which are published on our website. The Communications Strategy is reviewed annually, and lessons learned, and action plan is produced to help drive further service improvements.

## **12. Review Process**

This strategy will be reviewed annually taking into consideration corporate priorities, Government legislation, funding and lessons learnt.

## **13. Related documents**

We have a dedicated section on our website to keep the public informed about [travel and roads](#). The website features a section about how we manage the highway network which includes many of [our published operational plans and policies](#), in addition to:

- [Local Transport Plan v4](#)

# Highways Performance Management Framework

## Worcestershire CC Corporate Plan: key themes:

- Championing 'Open For Business'
- Supporting Children and Families
- Protecting The Environment
- Promoting Health and Well-Being

Local Transport Plan v4 (LTP4)

E&I Directorate Business Plan  
Transport Asset Management Plan (TAMP)  
Highways Asset Management Policy & Strategy

lighting assets  
carriageways  
footways  
Public Rights of Way  
waymarked trails and circular walks  
drainage gullies  
bridges/structures

4 x WCC Highways Balanced Score Card KPIs for highways

Strive to be in the upper Quartile of condition of A, B, C & U Roads.

Footways requiring treatment  
Reduced to 25% by 2020

Highways Asset Management Lifecycle Plan

Asset Condition surveys and financial modelling for treatments & Annual Programme of Works

Highways Maintenance Service Contract Key Performance Indicators (KPIs) x 12

Weekly Contract Management Team review meetings  
Weekly Area Response Team (ART) defect meetings  
Monthly asset meetings  
Forward programme of works

## Sharing Best Practice and Collaboration

Members of MHA Plus and HMEP to share best practice and collaborate with external parties such as Highways England, Environment Agency and with District/Borough and Parish/Town Councils for joined-up service delivery

## Governance Mechanism

LTP is reviewed regularly.

TAMP – regularly reviewed and updated.

Corporate Strategy Planning process

Business Plan - Annual review by Directorate Leadership Team (linking to the Corporate Plan and providing for the broader framework.)

Quarterly Cabinet Member with Responsibility (CMR) and Directorate review meetings

Strategic Quarterly Review (SQR) mechanism in place.

Performance Management Framework Group – quarterly meetings.

Weekly Contract Management Team (CMT) meetings by senior managers to review Targets & Contractors Plan

Regular Member Led Scrutiny Panels and Process and meetings with Cabinet Member with responsibility for highways

PEMs (Public Enquiries) monitored

Annual NHT Public Satisfaction survey

Divisional Member and CMR Member feedback

Capital funded works

Revenue funded works for defects