

# **HIGHWAY INFRASTRUCTURE ASSET MANAGEMENT**

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Strategy 2020



## Highway Infrastructure Asset Management Strategy 2020

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## 1.0 Introduction

Wirral Council, as highway authority, is the custodian of the borough's highway assets and highway infrastructure forms our largest and most valuable public asset within the Council's control. Its management and maintenance need to be undertaken in an organised, efficient manner to ensure that the network meets the needs and expectations of our stakeholders as much as possible within the constraints we face. The effective management of the diverse and complex assets can only be addressed within a strategic framework that balances the demands placed upon it with the reality of the financial situation. We understand that adoption of asset management principles is the basis to delivering clarity around standards and levels of service, and to make best use of available resources.

The Highway Infrastructure Asset Management Strategy (HIAMS) in 2017 has previously supported Council priorities and key policy documents. Much has been achieved since the initial Highway Asset Management Policy (HAMP) document, enabling the Council to continue to provide safe and efficient highway infrastructure which remain among the highest performing in the country.

The Council has continued to review the approach to the highway asset management framework with the aid of the Highways Maintenance Efficiency Programme (HMEP) guidance and training in addition to the new Code of Practice 'Well-managed Highway Infrastructure' (October 2016) which replaces 'Well-maintained Highways, Management of Highway Structures and Well-lit Highways'.

The HIAM-Strategy sets out how the Council will manage the highway network taking into consideration stakeholders' aspirations, customer expectations, network hierarchy, levels of service, network condition and environmental impact within the available resources. The Strategy will also be used to inform highway maintenance operations, both revenue-based and capital works. The selection of highway maintenance schemes will be driven predominantly by condition and hierarchy data. However, challenge from local members is also vital to ensure that local priorities are incorporated into delivery plans.

The delivery of all services and works detailed within this HIAM-Strategy are subject to annual financial allocations and compliance with any regulatory requirements such as those related to Health and Safety.

## 2.0 Highway Infrastructure Asset Management Framework

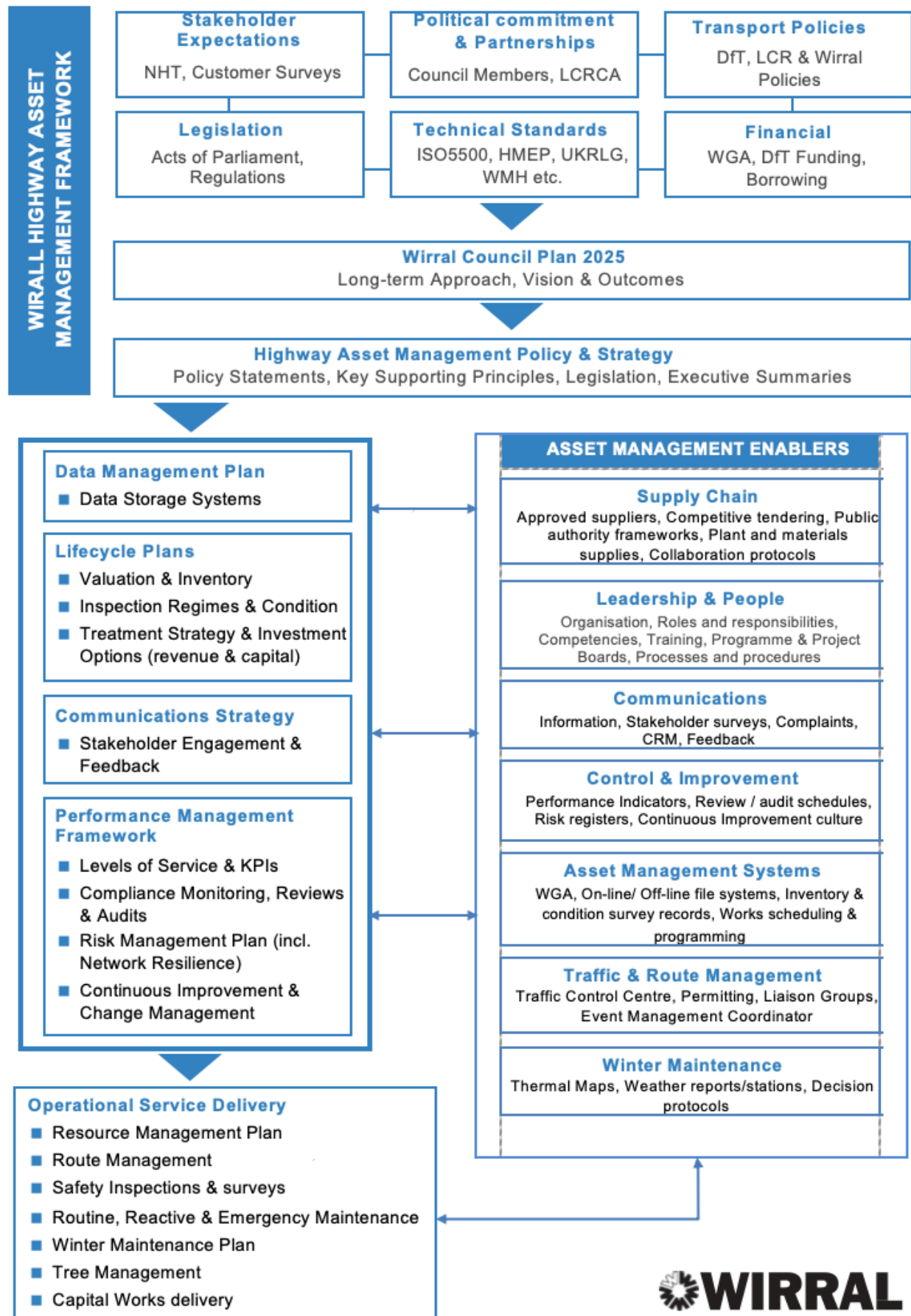
The Council has been applying the principles of a formalised approach to highway asset management for a number of years. The Highway Infrastructure Asset Management Strategy (HIAMS), together with the Highway Infrastructure Asset Management Policy (HIAMP), sit within the wider highway asset management framework and are key strategic documents related to the delivery of the Council's highway services.

Wirral's Asset Management Framework is presented on the following page and is the core documentation demonstrating the link between policy requirements and operational delivery. The framework shows that this Strategy document, is supported by a cascade of plans which will guide the decision-making processes within Wirral. These are:

- Asset Data Management Plan
- Lifecycle Plans
- Communications Strategy
- Performance Management Framework
- Risk Management Plan
- Resource Management Plan

These Plans and the Operational Services Delivery are facilitated by Asset Management enablers, some of which are provided by central government (e.g. Whole of Government Accounting (WGA)), some corporately by Wirral Council (e.g. Customer Relationship Management (CRM) system), some by the Highways senior management (e.g. Performance Targets) and some externally (e.g. weather reports).

Wirral formally manage performance, i.e. cost, time and quality, of core activities through a series of Programme Boards and Project Boards. The membership and reporting requirements of each board is bespoke and determined by the board chair. Details of these boards relevant to highways are held by the Director of Delivery Services. Any changes fundamental to Policy, Strategy, Plans and Operational Services Delivery will be determined at these boards. A Highway Asset Management Project Board has been established and is chaired by the Interim Director – Highways and Streetscene. The Project Board oversees all aspects of development and implementation of the Highway Infrastructure Asset Management Framework.



### 3.0 Drivers for a Formalised Asset Management Approach

The implementation of a Highway Infrastructure Asset Management Framework is the recognised best practice approach for the management of highways. The production and publication of Highway Infrastructure Asset Management Policy & Strategy and supporting documents continues to be promoted through the following drivers:

#### Political Commitment

The Council, as a corporate body, and individual Council Members will set targets and work standards. To realise these aims in an effective and efficient manner needs a structured approach such as that provided by best practice Asset Management.

#### Legislation

There are a number of legislative requirements that have a direct and mandatory impact on the way highway operations are undertaken as follows:

- **The Highways Act 1980:** This Act sets out the main powers and duties of highway authorities in England and Wales. In particular Section 41 imposes a duty to maintain highways maintainable at public expense, and almost all claims against authorities relating to highway functions arise from the alleged breach of this Section. In contrast Section 58 provides for a defense against action relating to alleged failure to maintain on grounds that the authority has taken such care as in all circumstances was reasonably required to secure that the part of the highway in question was not dangerous for traffic. Under Section 97 it is not mandatory for authorities to install street lighting, but once installed on adopted highways there is a responsibility for maintenance.
- **The Railways and Transport Safety Act 2003:** This Act adds a duty 'to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice'.
- **New Roads and Street Works Act 1991:** This Act sets out the duties of authorities to co-ordinate and regulate works carried out in the highway by any streetworks organisation.
- **Traffic Management Act 2004:** This act places a network management duty on local authorities to keep traffic flowing. It supersedes the New Roads and Street Works Act 1991.
- **Transport Act 2000:** This allows authorities to designate any road as a quiet lane or home zone and introduces a power for authorities to charge Utilities for the occupation of road space.
- **Road Traffic Regulation Act 1988 and Traffic Signs and General Directions 2002:** This Act specifies the requirements for traffic regulation orders and the use of approved signs.
- **Road Traffic Act 1988:** Provides a duty for highway authorities to promote road safety.
- **Flood and Water Management Act (2010):** This involves duties and powers including the duty to coordinate flood risk management across different flood risk agencies.
- **Health & Safety: The Construction (Design & Management) Regulations 2015 (CDM2015)** aims to integrate health and safety with project management.

#### Local Transport Policy

Wirral's regeneration plans focus on measures necessary to create and support economic growth and social stability. With respect to highways, the plans will require the highways to ensure connectivity and accessibility. All future maintenance activities also need to be coordinated with growth and improvement projects. To achieve this, effective maintenance is required and this is best achieved through a formalised asset management approach.

## Technical Standards

The Department for Transport (DfT) first recommended in 2004 that Highway Asset Management Plans be produced by local authorities and continues to promote asset management practices through the Highway Maintenance Efficiency Programme (HMEP). The Code of Practice Well-Managed Highway Infrastructure (published October 2016) promotes an asset management risk-based strategy for levels of service.

## Financial: Whole of Government Accounts (WGA)

The highway infrastructure in Wirral is a vital asset that contributes to the economic viability and development of the region. Valuations are required for submission to HM Treasury and also provide a basis for lifecycle analysis. The Gross Replacement Cost (GRC) of highway assets is £2.2bn based on Whole of Government Accounting (WGA) principles. This makes highways Wirral's second most valuable asset behind the residents themselves. To maximise the benefit of highways assets, there needs to be a formalised, structured approach such as that provided by best practice Asset Management.

## Financial: Budget constraints, efficiencies & investment prioritisation

Asset management efficiencies, based on LEAN principles, have become more essential to local authorities with the reductions in highway maintenance budgets. The necessity to stretch diminishing funds further and to ensure granted funds are invested effectively on a prioritised, risk basis. With existing resources becoming increasingly difficult to secure and stretch, 'invest to save' principles are used for a number of schemes.

## Financial: DfT Incentive Fund

The DfT Incentive Fund element of local authority highway maintenance grant, established in 2016, is determined based on a self-assessment of asset management aptitude proficiencies. In 2018/19, the DfT set out 22 areas of proficiency. These 22 areas are addressed within this Strategy document and supporting Plans.

## Managing stakeholder expectations

Good asset management, including asset data and analysis, helps to demonstrate maintenance requirements and the constraints of limited budgets to internal and external stakeholders. A list of Wirral's stakeholders is included in the Communications Strategy.

## Best Practice

By looking out for articles, research and other means of exploring good practice, and in analysing actions taken at national, regional and local levels, the Council is committed to learning from best practice outcomes in order to embed a continuous improvement approach.

Conversely, the Council is willing to share its findings with others. The network links the Council has with each of the Liverpool City Region local authorities will look to these relationships as far as maximising the sharing of good practice. The recent Devolution Agreement and the emerging development of the Key Route Network (KRN) across the City Region will further contribute to this process.

Similarly, the Council has network links with Cheshire West and Chester Council sharing actual land boundaries across the highway network. A working relationship with colleagues will be further developed to maximise the sharing of best practice on this cross-boundary part of the network.

## Sustainable Environment

Adopting a best practice Highways Infrastructure Asset Management approach will assist Wirral's vision to be environmentally sustainable, having called a Climate Emergency in 2019. The approach will ensure:

- Procurement of contractors (refer Section 11.3) using Wirral's corporate forms of contract and tender award procedure which encourage Social Value;



- Recycle waste materials and use recycled material, both in the office and on site where practical;
- Encourage environmentally friendly methods of transport, such as bicycle and on-foot, when the demands of a job permit.
- A reduction in hard verges.
- Preservation of highway trees.

## 4.0 Strategic Objectives for Wirral Council Highway Services

The Highway Infrastructure Asset Management Strategy sets out how the Highway Infrastructure Asset Management Policy will be achieved and is one of the key strategic documents relating to Wirral Council's Highway Services. The Highway Infrastructure Asset Management Framework described in Section 2 encompasses these key documents and illustrates the local and national influences and dependencies that are in place to deliver these services. Wirral Council will ensure that good highway asset management processes and procedures are developed and embedded to ensure maintenance of the highway network.

Our Strategic Objectives, derived from and aligned to our Highway Infrastructure Asset Management Policy, are set out below:

### 1. To provide a Safe, Effective and Efficient Highway Network for our road users

By employing good highways management practices that include the planning, coordinating and operational delivery of our Highway Services, we can provide our Council's road users with a safe, efficient and effective highway network that connects our communities and contribute to improving our residents' lives.

### 2. Providing a High Level of Customer Satisfaction to our Stakeholders

We understand that we manage and maintain the highway assets for the benefit of the residents and businesses of the borough and for those that travel into and through the borough, and that it is these stakeholders that provide the required funding, through central government grant and the Council's own funding sources. We will seek to develop practicable ways to determine the level of service our stakeholders require of the highway assets. Our goal is to improve public satisfaction with its highway service whilst maintaining value for money and continuing to provide a safe highway network, in line with corporate priorities.

We will make sure that the way the highway network is performing is communicated to all stakeholders, using the most appropriate media.

### 3. Optimising the condition of our Highway Network for all road users

Subject to funding limitations, our Highways Team will ensure that our Council will maximise value for money so that our highways condition is 'fit for purpose' and is optimised. Improved asset management skills and practices will ensure greater long-term planning and improved understanding of forecast highway asset condition. This will enable our team to make the optimum intervention at the right time and realise greater value for money for Council rate payers.

The achievement of the above objectives can be measured and assessed through the Performance Management Framework (PMF) which is described in Section 9 of this HIAM Strategy. The strategic Key Performance Indicators (KPIs) developed within the PMF will link directly to the above objectives.

## 5.0 Funding

Asset performance requirements are used to determine the funding requirements. However, in reality the implementation of this strategy may be constrained by available funding. The development and implementation of strategy is therefore an iterative process based on historical and predicted funding for both routine and capital works.

### Routine Works

Routine works are financed by the DfT through the local highways maintenance capital funding. For Wirral Council Highways, this has historically been in the region of £5.5 per annum. A breakdown of historical revenue funding is shown in the Lifecycle Plan for each asset. This level of funding is barely adequate for routine works but it is not anticipated that the value will increase in the foreseeable future.

Specialist IT software and hardware requirements, such as the procurement of the Symology Insight system to assist with streetworks and asset management, is also funded through the DfT Revenue Fund stream. The replacement of non-specialist IT hardware and software is funded by Wirral Council's corporate IT department.

### Capital Works

Various funding streams are available to Wirral Council for capital works as follows:

- DfT Capital Fund allocation for the road network in general with additional funding for works required on the Key Route Network;
- DfT Incentive Fund (based on Asset Management Self Assessments);
- DfT Challenge Fund;
- Environment Agency funding for flood prevention works;
- Council Borrowing (through the Prudential Fund), typically for 'Invest to Save' works;
- Council capital bids for unsupported borrowing; and
- Private funding.

Historical capital funding is detailed within the Lifecycle Plan for each core asset. The strategy for future funding is as detailed below. Further details will be described as required within the Lifecycle Plan for each asset.

Asset Group	Funding Stream
Carriageways	A long term 'Invest to Save' programme is being developed to ensure performance targets are met. It is anticipated that this strategy may involve investment up to £200m over the next 15 years which would include works to footways. Time is needed to develop the justifiable, robust programme for such a strategy and so the funding in 2020 will be a reduced amount of approximately £6m.
Footways, Cycleways and Right-of Way	Where footways and cycleways are integrated with the carriageway, works are planned and funded as part of the carriageway works programme. Works for 'off-road' footways, cycleways and Rights-of-Way are funded through the DfT Revenue fund.
Highway Drainage	It is recognised that there has been underinvestment in the Highway Drainage system. However, there is limited data available on the condition of the highway drainage network to determine the value of future funding requirements. A gap analysis and surveys will therefore be undertaken before establishing a funding strategy and setting any value on funding requirements.

	Where significant flooding events have occurred, since Wirral Council is a Lead Flood Local Authority, bids for funds are made to the Environment Agency. The next 5-year funding cycle started in 2020 and funds of £5.5m for the West Kirby Flood Relief scheme have been allocated to this Project.
Structures	Revenue funds have generally been inadequate to finance a 'steady state' for structures and the backlog of works has increased. Analysis is required to determine a more appropriate value of revenue funding. Where General Inspections and Principal Inspections identify a need for capital works, application for funds for these works will be made on an annual basis.
Street Lighting	There is an ongoing £10m 'Invest to Save' LED replacement programme which is due for completion in 2021. A programme of replacement of cabling in poor condition has also been identified and £100k already allocated along with £750k to replace life-expired illuminated signs and bollards. Replacement of aged columns in poor condition is also needed - bids for capital funds to finance these works will be made.
Traffic Signals	Traffic Signals need technology investment in order to provide the service expected. The cost and source of funding for these investments has not been identified.

It is noted that before Programmes of Work associated with the above funding and investment strategies are fully developed, the needs of each asset group will be compared and funds to each asset group allocated on a risk basis.

## 6.0 Asset Data Management Plan

Understanding our network is crucial to the delivery of strategic asset management and this begins with knowledge of the inventory and condition of the core assets. The “HIAM - Asset Data Management Plan’ sets out the aims and objectives of managing the data, what data is required and how it is stored.

An overview of the Highway Infrastructure Asset Data and desired outcomes is provided in Appendix A attached to this HIAM-Strategy.

Roads form networks which are critical to the functioning of the regional and local transport systems and may attract funding additional to the normal DfT streams. There are 3 such networks in Wirral, namely:

- Major Route Network (MRN)
- Key Route Network (KRN)
- Resilient Network

These networks are described in the ‘**HIAM – Asset Data Management Plan**’.

## 7.0 Lifecycle Planning & Programmes of Works

### 7.1 Lifecycle Planning

The development of lifecycle methodology will ultimately enable Wirral to better manage highway maintenance activities in order to deliver sustainable, effective and efficient services and maintenance works. This involves understanding asset value, asset condition and deterioration rates and the required Level of Service.

Lifecycle Plans have been developed which detail asset inventory, condition, WGA valuation, historical investment (both revenue and capital), asset performance requirements, treatment strategy and investment / programme-of-works options for each of the core assets managed and maintained by Wirral Council, these being:

- Carriageways (incorporating Footways/Cycleways/Rights-of-Way and Highway Drainage)
- Highway Structures (excluding Coastal Defense Structures)
- Coastal Defence Structures
- Street Lighting
- Traffic Signals

Monitoring the condition of the assets is a crucial element of asset management in order to demonstrate the levels of service being delivered, to identify trends in improvement or deterioration, to identify priorities for focusing available resources, to monitor the effect of treatment strategies and to provide the base data required for lifecycle monitoring. The details of the surveys undertaken and planned on the key assets is described within the respective Lifecycle Plans.

Essential to this process is a need to understand the influence of budget decisions on customer satisfaction and delivery of corporate priorities. Furthermore, the impact that investing on one asset may have on the overall performance of other assets, as well as the whole asset is examined. This approach allows for the available budgets to be split at a strategic level.

The current condition of the network reflects the good level of preventative treatment and renewals undertaken over the last ten to twenty years. However, to maximise the serviceable life of assets and therefore reduce the frequency of asset renewals, we need to explore different treatment strategies to some of those previously applied.

Initially, the Council will use Lifecycle Planning Toolkits, such as those developed by HMEP) for each of 5 asset categories detailed above. Each analysis will support treatment strategies and performance targets and decisions regarding the distribution of budgets. They will not be used to identify specific schemes or programmes of work but will act as tools for testing and managing investment scenarios relation to the funding levels detailed in this HIAM Strategy.

### 7.2 Programmes of Work

Programmes for capital maintenance are developed based on the principles described in the Lifecycle Plans for each asset group. Schemes identified on the Liverpool City Region (LCR) Key Route Network will be prioritised based on criteria established by the LCR.

## 8.0 Communications Strategy

The Council, as highway authority, is the custodian of the borough's highway assets. In adopting an asset management approach, we will ensure that the network meets the needs and expectations of our stakeholders as much as possible within the constraints we face. It is, therefore, fundamental that we listen to and communicate with all stakeholders on a regular basis using the most appropriate media.

The communications objectives for Wirral Highways are:

- Communicate Wirral's policy and strategic plans for the road network through a number of accessible channels
- Have operational communication channels in place to keep road users up to date on upcoming and live impacts to the network
- Consult with stakeholders on changes to the road network
- Welcome road user feedback through a number of channels, respond to concerns and use road user experiences to help inform service provision

The Communication Strategy identifies the key stakeholders, details how we engage with these stakeholders and how we use feedback.

## 9.0 Performance Management Framework

### 9.1 Performance Management

Performance will be monitored against this HIAM-Strategy to ascertain where progress is being made and to identify areas that need greater focus. A formal review will be undertaken every 3/5 years, in-line with the review of the Wirral Council Plan, to ensure that highway assets are managed in the most effective and efficient manner. However, if there are significant changes in national policy or guidance that affects management of the highway, the review will be brought forward.

These reviews and subsequent development of our highway asset management approach will allow us to seek ways of working more efficiently.

Defining Level of Service and Key Performance Indicators provide a way of measuring the standard of service that is provided. They provide a direct link to the Council's corporate aims and objectives, plus other Council strategy documents. At a minimum level, they also satisfy the Council's statutory duties. They should also take account of the management and mitigation of risk both to the service user and the Council.

When setting Levels of Service and associated targets, it is also important to consider local views and therefore, the findings from the local residents' annual survey plus the National Highways and Transportation Survey (NHT) will be considered.

The Levels of Service and Performance Indicators adopted by Wirral and the review, monitoring and audit of these is described in the '**Performance Management Framework**'.

### 9.2 Risk Management Plan

At a very basic level, the asset management approach can be considered as an exercise in managing risk. Risk is perceived through a variety of different perspectives ranging from the broad strategic and corporate risks, such as the loss of the asset, to a significant change in the corporate budget, to those risks that may affect discrete processes or assets, such as the risk that an individual defect might present to stakeholders.

Risk is present throughout asset management because of the extensive choices, often made without full understanding of the asset, how it will perform and the consequences of failure, combined with a variety of uncertain external factors influencing the performance of the network, including weather, changes in budget provision and political direction plus the demand from other service areas.

It is not possible to eliminate all risk from asset management. This means that while some mitigation is possible, the usual approach will be to understand the degree of risk and its possible consequences and then balance this against the cost of reducing or eliminating the risk and the benefits of accommodating the risk.

More specific risks associated with the maintenance of highway assets will be assessed against an understanding of the strategic importance of the asset or assets concerned. Fundamental to this will be the development of our local road hierarchy and our Resilient Network, both of which will reflect strategic significance. Risks will be rated by considering the likelihood of the risk occurring, against the severity of its consequences but then further factored by the strategic significance of the asset. The Department for Transport 'Transport Resilience Review' recommended that highway authorities develop a Resilient Network in order to maintain economic activity and access to key services during severe weather events. The new Code extends the function of the Resilient Network to cover all disruptive events, not just severe weather.



The details of Wirral Council's Highways approach to risk and the Resilient Network are described in the '**Risk Management Plan**' which, at the time of publication of this HIAM-Strategy is under development.

### 9.3 Continuous Improvement and Change Management

As detailed in Section 2, Wirral formally manage performance through a series of Programme Boards and Project Boards, including a Highways Asset Management Project Board. Any changes fundamental to Policy, Strategy, Plans and Operational Services Delivery will be determined at these boards.

The strategic reviews, KPI, compliance monitoring and audit results shall be monitored to enable the Council to assess if the methods and materials in use, either in planning or execution are working effectively to deliver in the expected outcome. If this is not the case, the strategy or method may need to be revised and updated and provide the mechanism for continual improvement of Wirral's highways maintenance and management services. The scope of each of the reviews is detailed in the Highways '**Performance Management Framework**'.

Performance reviews consider results, factors contributing to performance, and options for when performance requirements have not been met. Reviews can be carried out at regular intervals, but it would be usual for them to be carried out on an annual basis.

Reviews should focus on the performance requirements that have been developed to support the asset management strategy and measure the progress in delivering the Asset Management Framework. They can also consider more operational requirements. Lessons learnt and improvement actions should be captured for all aspects of the process, especially where performance is below that expected.

The opportunity to compare approaches to delivery and to benchmark performance exists through Wirral Council's liaison with the other Councils and groups of Councils. In particular, Wirral Council are working towards closer relations with Cheshire West and Chester (CW&C), with whom Wirral Council share a boarder, and through Wirral Councils membership of the Liverpool City Region Combined Authority (LCRCA). Involvement in LCRCA is manifested in a number of specialist groups including the Key Route Network group, the Asset Management group and a number of other technical groups. Many of the approaches to service delivery have been improved through the LCRCA such as the development of the Performance Management KPIs.

From the reviews, it is likely that improvements may be identified. These improvements may be formally documented in an improvement plan. It should detail the expected outcomes of the improvement plan, the specific actions to be taken, the owner, the resources needed to deliver them and timescales. Improvement actions should be prioritised and placed into timeframes that are realistic and affordable. In prioritising the actions, a balance between risks, costs, strategic priorities, levels of service and expected benefits should be achieved. This will ensure that focus is maintained on the outcome of the improvement and the ultimate benefit it may provide to the authority and stakeholders.

Proposed improvements should be based and introduced on LEAN strategy which aims to remove waste and improve value by identifying and reviewing the detailed workflow.

Procedures for Continuous Improvement and Change Management in Highways follow the same procedures provided by corporate arm of Wirral Council.

## 10.0 Delivery of Operational Services

There are many services and activities required to deliver the outputs detailed within this HIAM-Strategy. Within the period covered by this plan, principal activities include:

### 10.1 Routine, Emergency & Winter Maintenance Activities

Routine, Emergency & Winter maintenance activities are funded through the Council's own revenue budget. The principal routine activities include:

- Winter maintenance (gritting)
- Pothole repairs (Cat 1 repairs under the Emergency Response Programme plus any additional funds awarded from time to time by the DfT)
- Footway, cycleway and Rights-of-Way repairs
- Road marking renewals
- Street Furniture repairs
- Street Lighting lamp replacement
- Traffic Signal repairs
- Minor repairs to structures
- Street cleaning
- Gully emptying
- Tree management

It should be noted that some street-scene activities such as maintenance of soft landscaping are not undertaken by Wirral Highways.

### 10.2 Network Preventative Maintenance Capital Works

Programmes for capital maintenance are developed based on the Lifecycle Plans for each asset group – refer Section 7.

The Council has not currently given a forward commitment for any specific capital works, with the exception of the replacement of Street Lighting luminaires with LEDs by 2021. Funds for capital works are generally allocated on an annual basis based on need and the Council's overall budget limits,

### 10.3 Major Network Improvements

There are no major highway network improvements currently planned within Wirral although outline business cases are being developed for a number of economic regeneration and housing improvements project, for which new adoptable highways will be required. The adoption and implementation of the Local Plan may impact on this position.

### 10.4 Maintenance Management

Highway Maintenance Management is undertaken in order to ensure that the above activities are undertaken efficiently and effectively based on an informed, risk-based strategy and in accordance with cost, time and quality requirements. Highway Maintenance Management activities include:

- Network Management
- Event and Route Management
- Development Control
- Urban Traffic Control
- Safety Inspections
- Inventory and condition inspections and surveys
- Works supervision and inspections
- Customer liaison, information and feedback
- Continuous Improvement assessment and Change Management
- Winter maintenance management
- Environmental management, including flood management

- Capital Works Forward Programme Development
- Scheme Development Design
- Scheme Project Management
- Financial Management
- Performance Management
- Data and system management
- Procurement management
- Business Support

## 10.5 Sustainability

In accordance with the HIAM Policy, all services and works will be delivered to minimise environmental impact and promote social value. Details of how these principles will be applied will be described in the Highways **'Resource Management Plan'** which, at the time of publication of this HIAM-Strategy, is under development.

## 10.6 Processes and Procedures for Operational Services

The processes and procedures governing the activities listed in Section 10.4 above are detailed in a prioritised cascade of documentation as follows:

- Wirral Corporate Procedures
- Highway Infrastructure Asset Management Strategy and associated Plans
- Highway Operations Procedures

Where appropriate, the services managed and provided by Wirral Council Highways, use processes and procedures established by the corporate arm of Wirral Council. These include issues such as HR Management, Continuous Improvement & Change Management, Procurement, etc. These are too numerous to list here and advise on the corporate procedures is provided by the Senior Highways Development Manager.

There are also a number of procedures specific to Highways, as indicated in the Highways Infrastructure Asset Management Framework. In addition to the strategic procedures detailed in Section 2 of this HIAM-Strategy, there are a large number of procedures governing the delivery of highway services and operations, such as those related to gritting operations and safety and serviceability inspections. A register of current procedures is held by Senior Highways Manager.

## 11.0 Resource Requirements

### 11.1 Resource Reviews

Highway Management and Maintenance requirements are identified in an annual review of activities. Senior managers within Wirral Highways will map its available resources to its planned activities to determine any gaps. The gap analysis will be used as an input to determine options for resourcing the activities. This applies across all asset management activities, could be extensive and will require prioritisation and programme planning of many projects to close these gaps.

The in-house team is regularly reviewed and may therefore be changed from time to time.

In determining options for resourcing the activities, consideration is given to both internal and external resources. For human resources, options available will be affected by corporate policy and strategic plans on human resources, contracting-out or outsourcing and existing contractual arrangements. For non-human resources, availability of resources should include consideration of procurement options (e.g. lease, hire, purchase or otherwise acquire). Both human and other resourcing needs can be influenced by the nature and duration of the activities (e.g. one-off versus on-going).

Any tools, facilities or equipment that are required for highway activities should be defined and managed as assets, at a level of detail appropriate to their function and purpose.

### 11.2 Asset Management Competencies

Highways will determine the competences required for all asset management roles and responsibilities, and the awareness, knowledge, understanding, skills and experience needed to fulfil them. The Liverpool City Region Combined Authority has agreed that highway authorities will adopt the UKRLG Competency protocol for the assessment of asset management skills. The organisation should map its current competences to its required competences to determine any gaps. This gap analysis will be used to develop asset management competency improvement and training plans and enable incorporation of specific asset management competences into the organisational competency framework.

All persons assigned roles and accountabilities within the organisation that can have an impact on the asset management system will have those roles and accountabilities communicated to them, be provided with the training, education, development and other support needed to perform their roles, and be able to demonstrate the competences required. If a decision is made to outsource any aspect of the asset management activities, external resource providers must demonstrate competency against the required activities. These competencies and a programme of training to fill any gap identified within those competencies, for in-house staff and external providers, is being developed.

### 11.3 Procurement Options

Where the need to outsource has been identified, there are a range of options available to the Council for procurement of construction or consultancy services. These include:

- One-off construction / design contracts for single schemes
- Construction / design contracts for a package of schemes
- Construction frameworks in place within Wirral or other UK public authorities
- Defined project works for management and engineering consultancies
- Staff outsourcing arrangement with agencies and consulting engineers

A Highways Resource Plan giving clear and coherent details of the full range of options and the constraints related to procurement, including compliance with local government regulations, and alignment with the Highway Asset Management Policy and Strategy are being developed in a separate document.

The outsourced services, both current and planned, and the supply chain partners will be listed in the Highway '**Resource Management Plan**', which, at the time of publication of this HIAM-Strategy, is under development.

## Highway Infrastructure Asset Management Strategy

### Appendix A – Overview of Highway Assets

Asset Description	Quantity (1)	Condition and Investment Strategy (1)	Investment Outcome
<b>Carriageways</b>	Total: 1,190 Km <ul style="list-style-type: none"> <li>Principal Roads (A): 101 km</li> <li>Non-Principal Roads (B): 67 km</li> <li>Non-Principal Roads (C): 54km</li> <li>Unclassified Roads: 967 km</li> </ul>	The condition of highways is above the national average and generally is good to fair condition. Routine maintenance will focus on safety and pothole repairs. Planned maintenance may be based on optimising the life of the whole network rather than repairing roads in the worse condition. The roads to be treated will be identified based on HMEP analysis, a bespoke prioritisation process and the available funding.	Carriageway condition, as measured by the Single Data Sets NI 130.01 and NI130.02, does not deteriorate compared to condition in 2019.
<b>Footways, Cycleways &amp; Rights-of Way</b>	Length of footway, cycleway & Rights-of-Way assets are not recorded.	No structural surveys are currently carried out on footways, cycleways and rights-of-way. These assets will be treated as an outcome of the Safety Inspection or within capital works as an integrated asset of the adjacent carriageway.	Expenditure on Call-Out, Priority 1 and Priority 2 works does not rise above 2019 value
<b>Highway Drainage</b>	Approximate numbers and lengths: <ul style="list-style-type: none"> <li>Gullies: 60,000 No</li> <li>Manholes: 400 No</li> <li>Culverts: 80 km</li> </ul>	Records of highway drainage assets are very limited. No surveys are currently carried out and any treatment is reactive to flooding events. Highway drainage assets may be treated if required as an integrated asset of the adjacent carriageway. A detailed review of highway drainage is required. Treatment will also be influenced by Wirral Council's position as the Lead Local Flood Authority.	Number of significant flooding events does not increase compared to 2019.
<b>Highway Structures</b>	120 highway structures	All structures are subject to General and Principal Inspections and the condition of Highway Structures, as measured by the BClave, is above	Structures condition, as measured by BClave, does not deteriorate compare to

		the national average and generally good to fair condition. Works will focus on safety based reactive maintenance and planned maintenance will be based on the output from GIs and Pls.	condition in 2019.
<b>Coastal Defense Structures</b>	30km (approximately) of Coastal Defense Structure	All structures are subject to General and Principal Inspections and condition, as measured by the BClave, is above the national average and generally good to fair condition. Works will focus on safety based reactive maintenance and planned maintenance will be based on the output from GIs and Pls.	Structures condition does not deteriorate compare to condition in 2019.
<b>Street Lighting</b>	<ul style="list-style-type: none"> <li>• 37,329 No Lighting Columns</li> <li>• 6,271 No. illuminated signs / bollards / mains feeder pillars</li> </ul>	Street lighting was inspected in accordance with TR22 together with Non-Destructive Testing (NDT) for steel columns. There is a funded programme to replace the existing high-intensity discharge luminaires with LED. Other works such as replacement of columns and cabling will be based on condition as required. A further detailed review of street lighting will be required to ensure the asset is maintained in a serviceable condition.	Condition of Street Lighting, as measured by GN22 does not deteriorate compare to condition in 2019. LED Replacement programme is complete by 2021.
<b>Traffic Signals</b>	<ul style="list-style-type: none"> <li>• 303 No. Traffic Signals</li> <li>• 39 No. Variable Message Signs</li> <li>• 150 No. Vehicle Activated Signs</li> <li>• Vehicle Activated Signs (VAS)</li> <li>• 55 No. Closed Circuit Television (CCTV) sites</li> </ul>	There are no specific records of condition other than age. Treatment is reactive although a programme of investment based on technology upgrade has been proposed.	Expenditure on fault repair works does not rise above 2019 value.

**NOTES:**

The information above is correct as of January 2020. Information within this overview may be therefore be subject to change. An up-to-date overview is retained by Wirral's Senior Highway Development Manager and can be obtained from that officer on request.

