



Highways Asset Management Policy & Strategy

Highways, Neighbourhoods Directorate
September 2025

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Highways Asset Management Policy & Strategy

Record of Amendments

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Author: Tony King

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1. FOREWORD

The Our Manchester Strategy sets the councils overarching priorities for the city over the next ten years – priorities chosen by the many thousands of residents who, in 2024, told us about their ambitions for Manchester. In the decade since the original Our Manchester plan was brought to life Manchester has been a city on the rise. More than 100,000 new people call the city home, more than 100,000 new jobs have been created, and Manchester is now one of the most important engines of growth in the UK and Europe.

We recognise the vital role our highways play in connecting people and places. They support thriving, healthy, and safe communities, make better connectivity, and are fundamental to the local economy. One of our key priorities within the Our Manchester Strategy is to ‘have reliable transport that gets you where you want to go, quickly, cheaply, safely and cleanly.’

Manchester’s [highway network](#) includes over 1,340 km of road, 2,600 km of footway and over 250 km of cycleways. Based on the latest valuations, the total highway [asset](#) has a value of over £3 billion, making it one of the council’s most valuable [assets](#). As such, we place a high significance on how we manage and maintain it by implementing the Highways Asset Management Policy & Strategy and associated delivery programmes.

Councillor Tracey Rawlins

Executive Member for Clean Air, Environment and Transport

2. EXECUTIVE SUMMARY

Purpose

This document outlines how Manchester City Council (MCC) will manage and maintain its [highway network](#) to support safe, sustainable, and inclusive transport for all.

Strategic Vision

"To manage, maintain and improve the highway and public spaces network for the current and future needs of our residents."

This vision supports the Our Manchester Strategy and Greater Manchester’s long-term transport goals.

Key Objectives

1. Safety & Serviceability: Maintain a safe network through inspections, repairs, and winter services. Reduce accidents and improve accessibility for all users.
2. Customer Satisfaction: Engage residents and stakeholders through consultation and transparent communication. Improve service delivery and responsiveness.

3. Efficient [Asset Management](#): Use data-driven, cost-effective maintenance strategies. Extend [asset](#) life through preventative treatments.
4. Sustainability & Climate Action: Reduce carbon emissions and promote walking, cycling, and public transport. Incorporate green infrastructure and climate resilience into planning.

What's Covered

- Roads, footways, cycleways, bridges, drainage, and street lighting.
- [Lifecycle planning](#) and prioritisation of works.
- Performance monitoring and benchmarking.
- Risk management and network resilience.
- Governance and decision-making structures.

Our Network at a Glance

- 1,340 km of roads
- 2,600 km of footways
- 250+ km of cycleways
- £3 billion+ [asset](#) value

How We Work

- Align with national best practices (e.g., Well-Managed Highway Infrastructure Code).
- Collaborate with [TfGM](#), [GMCA](#), and other councils.
- Use integrated systems and data to guide decisions.
- Review and update the strategy every 3 years.

Why It Matters

A well-maintained [highway network](#):

- Supports economic growth and regeneration.
- Enhances community wellbeing and safety.
- Reduces long-term costs and environmental impact.
- Builds trust and satisfaction among residents.

3. INTRODUCTION

The [highway network](#) helps to shape the character and quality of the local areas that it serves and makes an important contribution to wider local authority priorities, including regeneration, social inclusion, community safety, education, and health. The city's [highway network](#) is therefore a key enabler of economic prosperity, productivity, and social wellbeing. A well-functioning and well-maintained highway network will help to enable growth by reducing business costs, improving access to markets, enabling competition, improving travel to work, and helping to attract investment.

As a highway authority, MCC has a statutory duty to maintain, operate and improve the [highway network](#) on behalf of all its customers.

Manchester's Highways Asset Management Policy & Strategy sets out how we will use an [asset management](#) approach to make better informed strategic decisions and maintain our [highway network](#) in a sustainable way without compromising the health & safety of our staff or customers. This will help to meet the Our Manchester Strategy priority to create a transport system that works for everyone, connecting people to jobs, schools and leisure activities efficiently and sustainably.



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4. HIGHWAYS ASSET MANAGEMENT POLICY

The Highways Asset Management Policy supports The Our Manchester Strategy, which sets out the council's commitment to improving the lives of the people of Manchester.

The Our Manchester Strategy sets a long-term vision for Manchester's future and describes how we will achieve it. It provides a framework for actions by partners working across Manchester, in public sector organisations, businesses and the voluntary sectors and in our communities. We all have a role to play in making Manchester the best it can be. Fundamental to this is being a council that will listen to our residents and put them at the heart of everything the council does.

The Corporate Plan describes the council's contribution to delivering the Our Manchester Strategy.



Fig 4.1 - GM Transport strategy vision & goals

Maintaining the council's highway [assets](#) to the best possible standard within the available resources is the focus of activity for the council towards achieving our Corporate Plan goals as well as those defined for Greater Manchester (GM) in the **Greater Manchester Transport Strategy 2040** (shown in Fig 4.1)

MCC is committed to the development of good practice, new ideas, and continuous improvement.

Our vision for our highways service is:

“To manage, maintain and improve the highway and public spaces network for the current and future needs of our residents”

This will be achieved by supporting the following 5 key priorities of the Our Manchester Strategy:

- **Our people will have a great education and be able to learn new skills as they grow older, so they can get the best jobs –**

By continuing to specify social value requirements in all our highway projects we are ensuring that we get extra value for Manchester's residents, including training, apprenticeships, and work placements for local people.

- **Make neighbourhoods attractive and well-kept with good facilities, services and green spaces**

–

Our goal is to create welcoming environments – places we can be proud of that encourage wellbeing and community connections. Well maintained roads and footways make neighbourhoods safer and more attractive to residents.

- **Have a growing economy that provides jobs and equal opportunities for everyone –**

Transport plays a vital role in Manchester's economic vitality. Regeneration aspirations will rely on effective transport links to enable employees and visitors to access new homes and workplaces, and for the businesses in and around our city to grow.

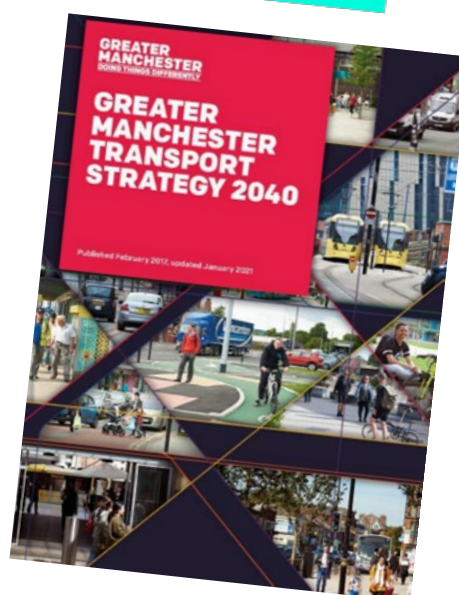
- **Have reliable transport that gets you where you want to go, quickly, cheaply, safely and cleanly –**

An integrated, smart, well maintained transport network will reflect the city's changing shape and the way people move around. We'll have more cycling and walking, with the improved roads and paths and signage needed. The city will be at the centre of first-class networks – locally, regionally, nationally and internationally.

- **Adapt to a changing climate and rapidly reduce carbon emissions**

We want to make it easier for people to walk, cycle, and use public transport. To do this, we'll invest to improve our

roads and paths. We'll also use smart technology to make travel safer, cleaner, and more reliable. This will help cut down pollution, protect the environment, and make our area stronger against climate change.



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5. HIGHWAYS ASSET MANAGEMENT STRATEGY



The Highway Asset Management Strategy (HAMS) sets out a long-term approach to achieving the goals defined in the Highways Asset Management Policy and how the long-term objectives for managing our highway [assets](#) will be met. It provides the framework for delivering our corporate priorities through effective, informed, and consistent decision making.

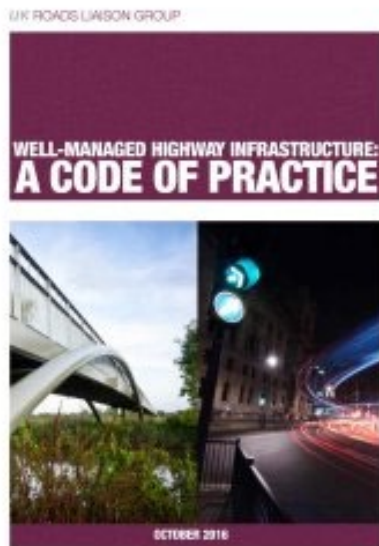
This strategy sets out an approach for the management of all highway [assets](#) including roads, footways, street lighting, drainage, bridges & structures and cycling infrastructure. Street trees are managed by our Grounds Maintenance team and traffic signals are managed & maintained by Transport for Greater Manchester ([TfGM](#)), so these are not included in this strategy.

This strategy has been produced following assessment of customer needs, local priorities, and [asset](#) condition.

Throughout this document the term “Highway” refers to all [assets](#) within the highway boundary which have been officially [adopted](#) by the council. [Assets](#) that have not been [adopted](#), or are located on private streets, are not maintainable at public expense and are not included.

The strategy reflects the principles of ‘Well Managed Highway Infrastructure: A Code of Practice’ ([WMHI](#)) - a guidance document supported, endorsed, and recommended by the Department for Transport ([DfT](#)), which aims to provide the basis for the authority to adopt sound [asset management](#) principles that will consider the whole life of highway [assets](#) allowing for advance planning to secure greater efficiency and value for money.

We will aim to maximise value out of our current resources but also look to identify potential new funding streams, invest through savings, development



opportunities and seek additional resources through competitive funding bids.

The council's approach to maintaining its highway [assets](#) will follow the principles of Reduce, Reuse, Replace in its use and disposal of materials. This will be done by reducing the need to transfer waste material to landfill sites by reusing material where possible and by taking a whole life approach to [asset management](#) which optimizes maintenance requirements. We will look to reduce our carbon footprint, referencing PAS 2080 (carbon management in infrastructure verification) where possible.

If the condition of the [highway network](#) is poor, it will weaken the impact of the money we are spending on cycling and public transport improvements. Well maintained roads and footways encourage, and support increased sustainable transport in line with the council's active travel priorities. Levels of walking and cycling need to continue to increase to improve health and to reduce pressure on the roads and public transport system. Better quality roads

have a positive impact on carbon reduction as cars use less fuel on journeys taken on well-maintained roads.

The HAMS is used to prioritise schemes that are to be implemented within the council's capital maintenance programmes and covers all highway maintenance activities funded by revenue and capital monies.

The HAMS is not based on a specific assumed funding level, and therefore, significant changes will not need to be made if major changes in available budget occur.

5.1 Asset Management principles

The Government recognises that long term savings can be made by employing [asset management](#) techniques. By considering maintenance treatments over the whole lifecycle of the [asset](#) and carrying out longer term planned works rather than short term repairs we can achieve:

- long term reduction in [reactive maintenance](#) costs and more efficient / sustainable use of resources.
- clearer decision making with our planned work.
- improved management of the risks on our critical [assets](#).
- a reduction in third party accident claims, better customer satisfaction and stakeholder involvement.
- improved journey times and reduced delays reducing supporting clean air objectives.
- a better customer and stakeholder awareness of the value of our [assets](#).

- a clearer understanding of future demands and a better managed network.

5.2 Asset Management framework

The Asset Management Framework table below (Figure 5.2.1) encompasses the key documents relating to the council's Highway Services and illustrates the local and national influences and dependencies that are in place to deliver these services. It demonstrates how [asset management](#) links to our broad organisational context and strategic direction of travel, all the way through to frontline delivery of services.

As well as linking in with the City Council's own vision and objectives, the framework also shows the link with the wider objectives of Greater Manchester Combined Authority ([GMCA](#)) via its [TfGM](#) Committee, who define the strategies and policies for transport in GM.

In 2015, the 10 Greater Manchester councils agreed to create a Key Route Network ([KRN](#)) — a group of important roads that help support growth across the region. [TfGM](#) looks after how these roads are managed and how well they perform, overseen by [GMCA](#). Each council still takes care of the roads in its own area.

[TfGM](#) have produced a [KRN](#) Highway Asset Management Strategy, including performance targets, as well as a longer term [KRN](#) Highway Maintenance Plan. Manchester's HAMS aligns with these plans so that a high quality, safe, efficient and reliable [KRN](#) is maintained across the region.

A key element of the Manchester's Asset Management Framework are the operational procedures, policies and guidance, service standards and interventions that reflect the Highway Authority's legal requirements.

Responsibility for planning and delivery of Highway works within MCC sits within the Neighbourhoods Directorate. The structure for governance and decision making relating to highways functions is shown in Appendix A1.0.

Under this structure, highway functions are overseen by the Highways Portfolio Board, which has a wider remit in ensuring that all activities are in line with the council's strategic priorities as well as those of GM.

The council has set up a Highway Asset Management team within Highways to promote and deliver [asset management](#) practices in the delivery of services, develop strategic documents, and embed and promote [asset management](#) practices.

Appropriate training and knowledge sharing with other authorities and national organisations will be maintained to ensure continual good practices are utilised.

The organizational structure and practices will be continually reviewed to ensure the most efficient and cost-effective means of managing our highway [assets](#) is provided and that the organisation responds to changing circumstances.

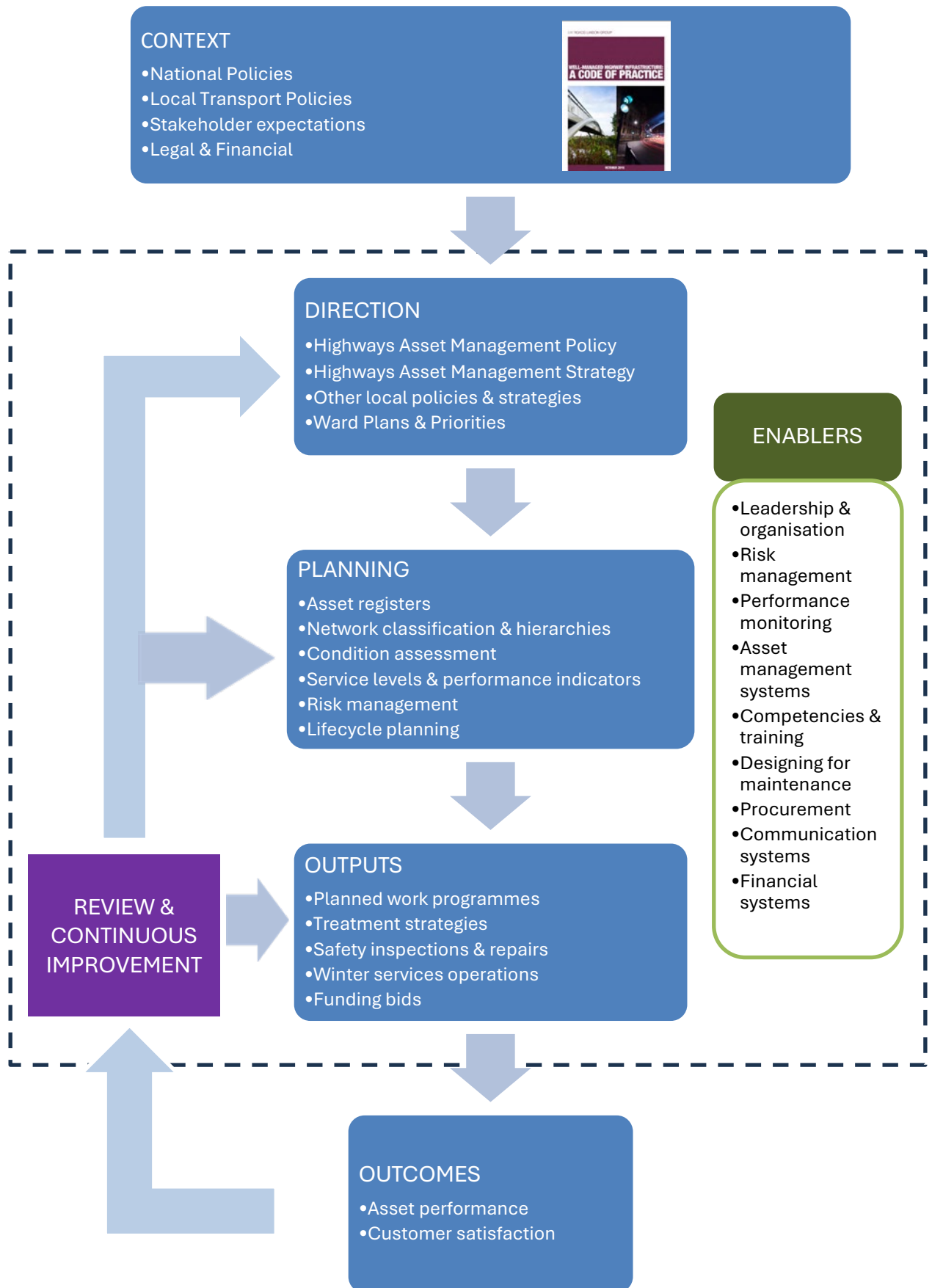


Figure 5.2.1 – Highways Asset Management Framework

5.3 Asset Management objectives

Our HAMS is centred on achieving the following 4 key outcomes:

1. Maintaining a safe & serviceable highway network

Complying with statutory obligations whilst meeting users' needs and operationally helping to deliver the GM Vision Zero Strategy.

Why?

In Manchester, there have been 377 people seriously injured in road traffic collisions on our roads during the 2-year period September 2022 to August 2024 and 14 fatalities.

What will we do:

- Ensure that safety considerations are incorporated into all highway improvement schemes at design stage, including mobility and accessibility needs.
- Support partners to develop road safety initiatives to reduce road traffic accidents.
- Operating an effective programme of safety inspections and managing defects using a risk-based approach as defined in the [WMHI](#) document.
- Keeping water away from the road surface and minimising impacts of surface water by providing and maintaining adequate drainage and applying Sustainable Urban Drainage Systems ([SUDs](#)), where possible.
- Providing and maintaining essential street and footpath lighting in accordance with national standards.

- Providing a comprehensive planned Winter Maintenance service on key sections of the highway to keep it free of frost, ice, and snow, in line with our winter maintenance policy.



- Maintaining the bridges and other structures that form part of the [highway network](#), and strengthening them, if necessary, to cater for modern traffic, or restricting their use by heavy vehicles.

How will we know if we have achieved the outcome?

- Working towards GMs long-term commitment to eliminating road deaths and life-changing injuries by 2040.
- A reduction in the number of highway related claims against the council.

2. Delivering customer satisfaction

Informing, consulting, and engaging with customers, stakeholder, and partners about all aspects of the service.

Why?

Every resident relies on the [highway network](#), often daily. While essential, highway maintenance and

management can be disruptive, making timely and transparent communication is crucial. Engaging with residents and businesses is key to maintaining a safe, efficient, and accessible network.

What will we do:

- Regularly gather and report feedback to ensure our [asset management](#) decisions reflect stakeholder priorities. This includes input from the annual National Highways & Transport ([NHT](#)) customer survey, customer contact data, State of the City reports, and neighbourhood teams.
- Digitise more of our services to improve accessibility and enhance the customer experience.
- Manage the [GMRAPS](#) Permit Scheme for Road and Street Activities to improve coordination of works, enhance communication with utility companies, and minimise disruption for our customers.
- Provide timely notice of any works happening across the network.

How will we know if we have achieved the outcome?

- Our annual customer survey will demonstrate an improvement in satisfaction.
- A reduced number of customer complaints monitored via our [CRM](#) systems.

3. A well-maintained network, utilising cost-effective asset management

Minimising cost over time, improving the condition of the network and,

maximising value to the community, as well as making a positive environmental contribution. Utilising a proactive and [preventative maintenance](#) approach.

Why?

Highways investment over the last few years has enabled a marked improvement in our overall road network condition. Continued adoption of a preventative strategy will help to sustain these improvements.

What will we do:

- Use cost effective planned and [preventative maintenance](#) treatments to maximise the life of our [assets](#) and deliver value for money.
- Ensure procurement of works and services complies with corporate guidelines and encourage the use of sustainable materials and low waste techniques.
- Maintain, review, and update our [asset](#) registers to ensure we hold accurate and up-to-date data and improve our data integrity.

How will we know if we have achieved the outcome?

- Our annual surveys will show a steady-state or improvement in road and footway condition.

4. Reducing the carbon footprint of our projects and encouraging active travel modes

Consideration of whole life carbon costs, appraisal of schemes for environmental impact, nature conservation and biodiversity. Improving infrastructure for walking



and cycling to encourage active travel.

Why?

Reducing the environmental impact of highway works and striving for sustainability is an important focus for the council, in line with the Manchester Zero Carbon Framework 2020-2038 and the Manchester City Council Climate Change Action Plan.

What will we do:

- Prioritise planned maintenance treatments on local roads and footways to encourage walking and cycling.
- Maximise the use of low carbon, warm-lay and recycled materials in our highway schemes; We will explore innovations and opportunities, invest in lasting change, and continually monitor and review the reductions in carbon emissions the service is achieving, including those of our contractors, to identify where improvements can be made.

- Incorporating climate actions that promote the retention and replenishment of nature and biodiversity environments, by setting targets for future highway schemes procurement to maximise opportunities for Biodiversity Net Gain and implementation of green [SUDs](#).
- Carry out risk assessments and develop mitigation measures for the effects of extreme weather on our highway infrastructure [assets](#).

How will we know if we have achieved the outcome?

- Documented increase in the use of low-carbon, warm-lay and recycled materials in our schemes.
- Measured reduction in relative overall scheme carbon emissions.
- Meeting procurement targets set for Biodiversity Net Gain and implementation of green [SUDs](#).

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5.4 Data & information Management

Effective data management and robust information systems are fundamental to the successful implementation of the HAMS. Typical data lifecycle management stages are shown in Fig 5.4.1.

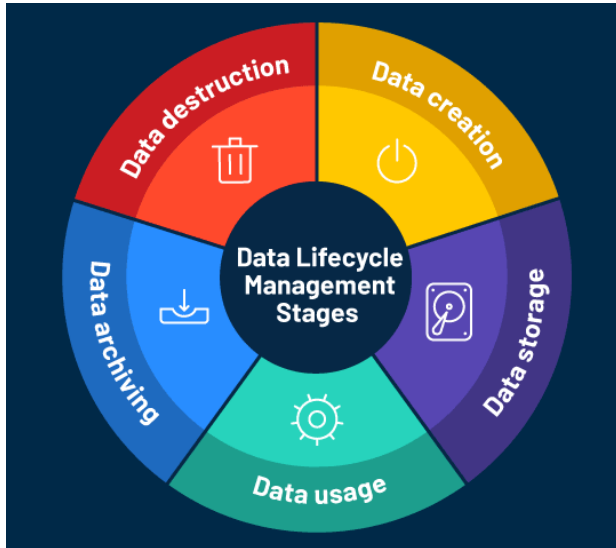


Fig 5.4.1 – Data Lifecycle Management stages

5.4.1 Data Quality Assurance Statement

MCC is committed to maintaining high standards of data quality across all highway [asset management](#) systems. Accurate, timely, and consistent data is essential for informed decision-making, performance monitoring, and compliance with statutory obligations.

Objectives

- Ensure data integrity across all [asset](#) groups.
- Maintain consistency between systems and datasets.
- Support transparency and accountability in [asset management](#).

5.4.2 Data Accuracy Framework

1. Governance & Policy Alignment

All data practices align with the Council's Data Management Policy, Information Governance Strategy, Data Protection Policy, and Records Management Policy.

2. System Integration & Oversight

[Asset](#) data is stored in integrated systems such as Causeway Alloy, Pontis bridge management system, ArcGIS, and Mayrise. Data custodians are assigned for each [asset](#) group to oversee updates and ensure consistency.

3. Data Collection & Validation

Regular condition surveys are conducted for carriageways and footways. Safety inspections and [reactive maintenance](#) reports are used to validate and update [asset](#) status. Bridge inspections follow [ADEPT](#) standards and are logged in Pontis.

4. Update Protocols

Data is updated following:

- Completion of planned or [reactive maintenance](#).
- New [asset](#) creation or removal.
- Scheduled inspections and surveys.

5. Audit & Review

Periodic audits are conducted to verify data accuracy and completeness. Discrepancies are flagged and resolved through cross-team collaboration. Lessons learned from audits inform future data governance improvements.

6. Training & Capacity Building

Staff receive ongoing training in data handling, system use, and governance compliance. Knowledge sharing is

promoted through participation in regional groups (e.g., GM Infrastructure Asset Management Group).

The data is used to make informed decisions in relation to managing our [assets](#) and is also reported to the [DfT](#) as part of the standard data list returns by all authorities.

Appendix A2.0 details the information that is currently captured and held against the major highway [asset](#) groups, including the current frequency of data collection, systems that hold the information and the perceived risk level / value of each dataset.

5.5 Managing risk

Purpose:

The council has adopted a risk-based approach for all aspects of highway infrastructure maintenance to ensure that decisions are guided by the likelihood and impact of asset failure. It supports prioritisation, safety, and efficient resource allocation and is in line with the recommendations detailed in [WMHI](#) code of practice.

Key principles:

The council's risk management approach is an iterative process to enable continuous improvement and is summarised in Fig 5.5.1.

Applications:

Some examples are how this approach is used on an operational basis are:

- Safety inspections: Frequency of inspections is based on [hierarchy](#) and risk.



Fig 5.5.1 – Risk Management Process

- Winter service: Gritting routes prioritised based on traffic and service access.
- Critical assets: Identified using traffic, flooding, and economic impact data.
- Drainage cleansing: Roads banded by risk level.

Benefits:

- Improved safety and service reliability.
- Reduced disruption and claims.
- Better alignment with WMHI Code of Practice.

Lessons learned reviews are carried out following completion of highway projects where relevant to ensure that any issues that may have occurred can be captured and assessed in terms of risk to other highway schemes.

5.6 Network hierarchies

A network [hierarchy](#) based on [asset](#) function is the foundation of a risk-based maintenance strategy. It is crucial in establishing [levels of service](#) and to the statutory network management role for developing co-ordination.

Network hierarchies have been set up to reflect this and to conform with the [WMHI](#)

guidance, which is not dependent on the current road classification system. We have developed a Resilient Network ([RN](#)) to help prioritise funding and target works at critical [assets](#), ensuring that traffic movements in and around Manchester are kept moving, regardless of severe weather or other disruptive events. The revised hierarchies and categorisations, aligning to the code of practice, are shown in Appendix A3.0.

5.7 Lifecycle planning approach



Fig 5.7.1 – Typical lifecycle of an asset

[Lifecycle planning](#) is about looking after our roads, footways, bridges, and other highway [assets](#) from the moment they're built until they're no longer needed. It helps us decide the best time to carry out maintenance, so we get the most value for money.

We face a constant challenge between fixing problems affecting residents today and focussing on stopping future problems. That's why it's important to develop an approach that balances early life preventative treatments with permanent repair solutions, and end of life replacements. Preventative maintenance helps to prolong the service

life of highway assets and improve their overall condition. Whilst it may appear that we are spending money on roads that do not need treatments, this approach is the most cost-effective use of the budget. This is the roads equivalent of painting wooden window frames regularly, rather than waiting for them to rot and need expensive replacement.

We use national tools to model how much funding we need to keep [assets](#) in good condition. We compare different funding scenarios to see what impact they'll have. This helps us plan smarter and make the case for investment. Life-cycle models are not used to identify specific schemes or programmes of work, rather they are tools for testing and managing our treatment strategies and to provide evidence to support and make the case for the allocation of budgets.

Lifecycle plans capture all information relating to the asset inventory, its condition and performance. They identify both the short-term routine maintenance needs and long-term capital costs and enable annual spend profiles per asset to be produced. They also enable long-term predictions about deterioration and maintenance needs to be forecast as well as measurement of the carbon footprint of different maintenance activities.

The [lifecycle plans](#) for our main [asset](#) groups are shown in Appendix A4.0.

5.8 Works programmes & prioritisation

Each year, we decide how much money to spend on different parts of the road network. Once that's set, we plan the work using a clear and careful process to make sure:

- Money is spent where it helps the most.
- Roads stay in good condition for longer.
- We keep long-term costs down.

For [assets](#) (like roads or footways) where we have good condition data, we use prioritisation tools to decide how to spend the money, see how different plans affect road performance and help choose which services to target.

The development of programmes also includes local knowledge from our neighbourhood teams and local members, which is fed into the prioritisation process. This local knowledge is a valuable part of building intelligence on the condition, character and usage of the network.

The prioritisation criteria for identifying work programmes for each [asset](#) group is detailed in the [Strategy for main asset groups](#) section.

The forward programme of work is split into an annual works programme and a forward plan of work.

- The annual works programme is defined for the next financial year. Schemes in this list will be fully developed and a schedule for delivery can be accurately defined based on the actual funding available.
- The forward plan of work is generally defined for Years 2, 3 and beyond. Initially this wider programme will be formed of early ideas for future work. These plans are updated over time until they're ready to become part of the annual programme.

5.9 Performance management framework

Performance measures are how we track whether our highways service is doing a good job. They include things like road condition, customer satisfaction, and how quickly we fix problems.

It shows whether we're meeting our goals. It helps us improve services and make better decisions. It keeps us accountable to residents and stakeholders.

We collect data regularly (e.g., surveys, inspections). We compare our performance with other councils. We use dashboards to share results with decision-makers.

Appendix A5.0 details the performance measures currently collected, along with their frequency, the level of service that they relate to and the defined performance targets.

5.9.1 Benchmarking

To provide context for performance data and customer feedback, the council actively participates in several regional and national benchmarking and improvement groups, including:

- The [NHT's CQC](#) Efficiency Network – where customer / quality / cost methodology is used to monitor service efficiency and produce a series of performance parameters, benchmarked against other local authorities.
- The [NHT's Performance Management Framework \(PMF\)](#) – Enables a [hierarchy](#) of measurement that highlights strengths and weaknesses and good and bad performance as well as a

means of measuring improvement and targeting corrective action which can be benchmarked.

- The GM Infrastructure Asset Management Group – comprising staff from the 10 GM districts, which collates highways [asset](#) information, as well as sharing knowledge and good practice.
- The Local Council Roads Innovation Group ([LCRIG](#)) – comprising staff from various highway authorities nationally, which benchmarks highway [asset](#) performance figures and shares innovation and knowledge across the sector.

Participation in these forums enables the authority to directly compare our performance with other authorities against regional and national trends.

New national and regional initiatives and innovations will be reviewed and incorporated into the performance management process where relevant so that any improvements can be captured and reported.

5.10 Communication & engagement

The principal purpose of [asset management](#) is to ensure that our network meets the needs and expectations of our stakeholders. To ensure we keep our stakeholders at the heart of all we do we communicate with

them on a regular basis and seek feedback at many opportunities.

The council's Communication Strategy sets out how we communicate with our residents and stakeholders. The underlying principle of all communications in the council, for all audiences, is that there must be two-way communications with meaningful opportunities for the audiences to respond and the council to listen. Communications should be accessible for all, reflecting the diverse needs and preferences of our audiences.

5.10.1 Consultation

To obtain customer feedback on our highway service, we participate in the [NHT](#) Public Satisfaction Survey which covers all aspects of Highways and Transport service delivery. Details of the results of the surveys are available at www.nhtsurvey.org

We have participated in this [NHT](#) survey since 2017, and this enables us to understand the views and preferences of a sample of residents and to compare these against other similar councils. The survey, undertaken by Ipsos MORI, is based on a random sample of residents and is designed to represent a spread of customers' views of the service across the city.

We produce an internal report and action plan based on the results of the survey so

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This is just the start.
See what else we're doing:
www.manchester.gov.uk/highways



that our policies and procedures reflect this customer feedback.

Our Highways service includes a Consultation and Engagement Lead role, who oversees the consultation phase of major projects, working closely with central Communications and Neighbourhoods teams. For each major project a specific communication strategy is developed which includes background information including why the project has been developed and the issues that are being addressed.

For our planned maintenance works, Neighbourhood teams are consulted on the proposed programmes at an early stage to check that they include as many local priorities as possible and do not clash with any other known development works. Resident's views that have come from 'Our Manchester' Highways weeks are also considered. Feedback from local members is subsequently sought on the draft programmes, following which the lists of schemes are finalised.

Once we have agreed start dates for the works, relevant key stakeholders are informed, and the status and duration of works is updated on the GM roadworks website www.gmroadworks.co.uk

5.10.2 Communication

We recognise the importance of two-way communication with staff, elected members, senior officers and stakeholders to ensure that our HAMS is properly informed and that stakeholders understand our intentions and priorities.

The aims of our communications include:

- Informing the public about physical road works, operational highways

issues (including defect repairs, winter service etc.) and value-for-money highways and transport activities in a timely manner.

- Communicating proposed changes to highways [asset management](#) in Manchester, encourage public engagement through our communications and raise awareness about changes if these are made.
- Encouraging people to make the best use of reporting channels – e.g. 'self-serve' via our website, if possible, thus reducing the number of highways related enquiries to the Customer Service Centre and via Members.
- Improving the level of trust and confidence in the service decisions made.
- Ensuring the public is aware of funding bids awarded to the council to help maintain and enhance the local [highway network](#).

The council has access to a wide range of communication channels, such as:

- Council website
- Corporate social media accounts – The council has a substantial social media presence, which is used for all key comms to residents, information on the services we provide, winter gritting updates, as well as amplifying content from partner channels where appropriate.
- Community Facebook groups – for targeting messages to specific groups when needed eg. Cycling groups.
- Press releases.
- Ward engagement meetings and drop-in events.



- Members highways dashboard – quarterly online report highlighting work completed, ongoing and planned in each ward area.
- Letter drops to residents and businesses within specified radius of a scheme.

We do all of this so we can successfully reach/target and engage the identified audiences for our campaigns, projects and service updates.

5.11 Sustainability & Climate Change

In recent years, several extreme weather events have had a significant impact on transport infrastructure in the UK. It is accepted that these events are becoming

more frequent, and this is likely due to climate change.

According to Met Office UK Climate Projections (UKCP18), Fig 5.11.1 highlights the likely impact of climate change on Greater Manchester.

Greater Manchester is actively addressing climate change through its ambitious Five-Year Environment Plan (launched December 2024), with the overarching goal of becoming carbon neutral by 2038. The council is also working on its next climate change action plan for 2025 to 2030 which will look to embed climate change adaptation.

Our longer-term approach to highway [asset management](#) needs to consider what effect climate change may have on investment priorities and lifecycle costs of our highway [assets](#). Actions we will take include the following:

- Deploying preventative treatment strategies, where viable, to delay [deterioration](#) in the [asset](#).
- Using recycled materials or the use of low temperature asphalt to minimise carbon emissions.
- Pro-actively explore innovation initiatives in the highways sector that reduce environmental impact.

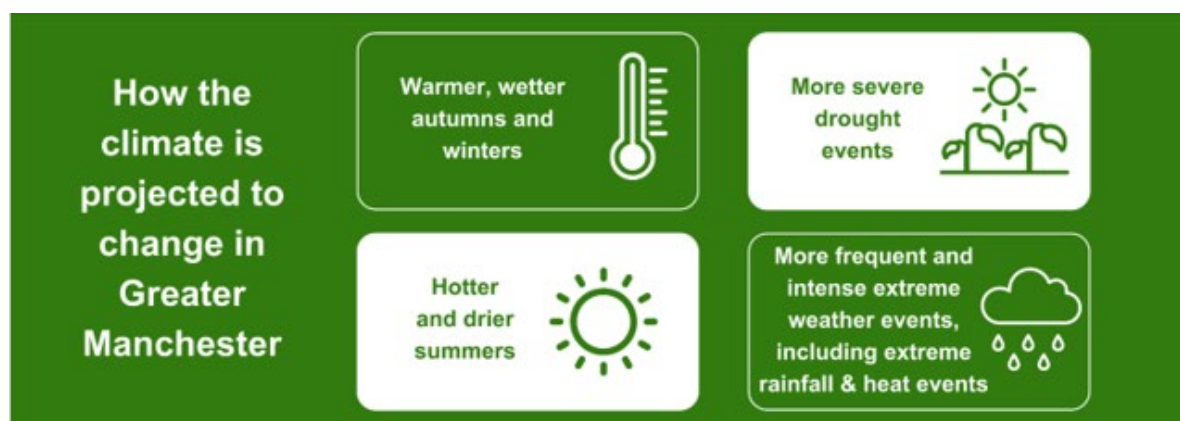


Fig 5.11.1 - How climate is projected to change in GM

- Collaborating with the supply chain to improve air quality and reduce carbon footprint.
- Prioritising investment in maintenance of our drainage infrastructure to help mitigate the impact of increased rainfall.
- Promoting the preservation and restoration of nature and biodiversity. This includes setting procurement targets for future highway schemes to maximise Biodiversity Net Gain and incorporating green [SUDs](#).
- Using intelligence and data to improve our ability in planning for and responding to seasonal and adverse weather events.
- Carrying out risk assessments and developing mitigation measures for the effects of extreme weather on our highway infrastructure [assets](#).

5.12 Innovation & Continuous Improvement

Delivering this HAMS requires innovation, which is essential to addressing key stakeholders' aspirations, as well as sustainability objectives. Innovation will not just address the challenges but will also provide opportunities to achieve the objectives of the HAMS by using new approaches and technologies, such as advanced digital platforms and Artificial Intelligence (AI).

MCC is committed to the development of good practice, innovation and continuous improvement from lessons learned at National, Regional and local levels. Officers regularly contribute to and attend

seminars, conferences and training sessions held by:

- [DfT](#)
- Chartered Institute of Public Finance and Accountancy ([CIPFA](#))
- UK Roads Leadership Group ([UKRLG](#))
- Road Surface Treatments Association ([RSTA](#))
- UK Roads Board
- Association of Directors of Environment, Economy, Planning & Transport ([ADEPT](#))

Furthermore, Manchester is committed to the sharing of knowledge and experiences in implementing [asset management](#) with other Highway Authorities.

We're part of the GM Highways Group, which includes all 10 Greater Manchester councils. We also work with the ([LCRIG](#)) Northwest group, currently including councils from Lancashire, Blackpool, Cumberland, Westmorland & Furness, Blackburn with Darwen, Cheshire West & Chester, Liverpool, Halton — and us.

These groups meet regularly to share good practice, discuss new initiatives, and benchmark performance.

Continuous improvement is a key contribution to ensuring that the Highway Service is cost effective, environmentally sustainable, delivers the service objectives, and meets the expectations of its customers. By using new tools and smart ideas, we can keep improving how we work.

As a practical example of how we have applied this, we have deployed thermal in-situ road repair (TIR) initiatives to our [reactive maintenance](#) procedures.

Zero waste and minimal imported material, coupled with reduced plant and labour requirements, mean that a typical TIR emits around 83% less carbon than a traditional bituminous material repair approach. The process is also quicker, cleaner, quieter, and generally occupies a smaller working area. It also eliminates joints by seamlessly merging the repair with the surrounding surfacing, which enhances network resilience by reducing the risk of future failure.



5.13 Designing for maintenance

Although much maintenance activity is undertaken on existing highway construction, new highway schemes form an increasing proportion of the network over time. The future maintenance costs of such new infrastructure are therefore a prime consideration.

Highway improvements and major maintenance works are typically funded through capital budgets, while ongoing maintenance is often covered by revenue funding. As a result, the overall financial impact of a scheme may be greater than initially anticipated.

Designing for maintenance considers these revenue implications over the lifespan of the scheme and incorporates this into decision-making processes

during the design of new highway schemes.

The application of this principle helps identify design solutions that:

- Promote lower whole-life costs.
- Use sustainable materials / products.
- Limit network disruption for residents.
- Increase safety for maintenance contractors.

Manchester uses a standardised approach to design, that facilitates the integration of maintenance considerations during the design phase:

- Wherever possible, our design engineers specify our highway construction Standard Details for materials to be used in new designs. This approach reduces the risk of adopting features that have non-standard requirements for cleaning, repair or replacement.
- For developer related highway schemes such as under section 278 or section 38 agreements, we have a standard palette of materials which are specified to ensure a consistent approach is achieved in terms of appearance, installation and ongoing maintenance costs.

High quality or relatively expensive materials may provide appropriate treatments in terms of their contribution to wider regeneration objectives, for example in improving the quality of public space and streetscape. In these cases, we would specify appropriate commuted sums for any higher than usual future maintenance costs from the developers where possible.

It is essential to update the [asset](#) inventory following the completion of new schemes to accurately record [asset](#) additions / removals and schedule future maintenance appropriately. We have developed a project handover process between the project team and the asset management team which captures these [asset](#) changes.

6. Strategy for main asset groups

As part of the asset management framework, and in accordance with other national guidance, the highway [asset](#) has been divided into [asset](#) groups. Each group is then broken down into components and activities.

The highway infrastructure [assets](#) in Manchester have been valued in accordance with Whole of Government Accounting ([WGA](#)) principles. The Gross Replacement Cost (GRC) represents the cost of replacing the existing [asset](#) with a new modern equivalent. The Depreciated Replacement Cost (DRC) represents the GRC less the value of the deductions for physical [deterioration](#). This approach delivers key benefits for highway asset management, as the valuation is comparable to the valuation of other council assets, so offers insight into the sort of investment required to maintain the [asset](#).

Understanding the condition of the council's highway [assets](#) is essential for effective management and future planning, including identifying investment needs to maintain or improve performance.

The key to lifecycle investment and good highway [asset management](#) is knowing

and understanding what treatments to apply at the right time that maximises the life of the [asset](#) at a minimum cost.

Reactive works are generally identified following a safety inspection by a highways inspector who categorises the defect in accordance with the requirements of the council's Highway Safety Inspection Policy. Upon categorisation of a defect the report is fed into the repair regime and prioritised in accordance with the severity of the defect. Repairs are delivered to the network using an appropriate method for the character and usage of the network, as defined in the policy.

We will continue to explore new technologies and materials for maintaining highway [assets](#), particularly the use of recycled materials (existing surfacing materials and remanufactured / enhanced surfacing products). We will also explore the inclusion of infrastructure that supports more environmentally sustainable transport while delivering maintenance schemes (e.g. electric charging points).

The strategy for each main highway's [asset](#) group is detailed below, but when any planned maintenance work is being carried out, our aim will be, particularly for strategically important places such as district centres, to improve the maintenance of the streetscape in a cohesive way.

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6.1 Carriageways

Carriageways (roads) are by far the largest of the council's [assets](#) and account for an estimated 65% of the total highways' asset value. Maintaining their condition and preserving their value is vital to the success of the council's maintenance strategy.

The [asset](#)

As Highway Authority, we maintain the following lengths of carriageway by road class:

A roads	167 km
B roads	42 km
C roads	114 km
Unclassified roads	1,020 km
TOTAL	1,343 km

Valuation:

GRC (£000's):	£2,121,057
DRC (£000's):	£2,069,660

Performance

The condition of carriageways is measured on an annual basis using condition surveys in accordance with PAS 2161: Road condition monitoring data – Specification (2024). The surveys identify different types of defects present on the carriageway and define a condition score between 1 (damage free) to 5 (structural failure).

The internal council highways investment funding, provided since 2018, has succeeded in significantly improving the condition of our roads. The graph below shows the percentage of our roads at grade 4 or grade 5 (poor / very poor) condition since 2016.

Manchester Carriageway Condition Data
% Grade 4 & 5



In 2017, 25% of all our roads were in poor or very poor condition, but there has been steady improvement to about 12% in 2024.

Desired outcome

To deliver a sustainable improvement in overall condition.

Asset strategy

- [Lifecycle Planning](#) is used to establish a baseline funding requirement for the network. As a result, investment shall be targeted where the money will return greatest benefits.
- Priority Investment: a preventative strategy is preferred as this will deliver the best value for money. Preventative treatments, such as surface dressing



and micro asphalt surfacing, target roads that are not currently in need of full structural renewal and will extend the [assets](#) whole life by arresting/delaying [deterioration](#). A programme of preventative treatments will form part of this strategy and is prioritised in delivery plans.

- Reconstruction and resurfacing programmes are formulated using a prioritisation method which is primarily based on those roads in the worst condition in terms of survey rating and number of identified defects, as well as other considerations, including requests, skid resistance values, accidents and if a cycle or bus route.
- Maintenance works may also be programmed to coordinate with other capital projects being carried out in Manchester, which will be cost effective in terms of delivery and add additional value to the project.
- Investment in large patching will continue which is much more cost effective than individual pothole repairs.
- Investment in drainage maintenance and improvements will continue where appropriate.
- We will aim to achieve a decrease in quantities of minor defects (potholes and similar) in the longer term.
- Ongoing review of reactive repair standards will form part of this strategy. The review will examine investigation and intervention levels and will determine how more cost-effective ways of delivering an acceptable standard of repair to safety defects and other minor defects can be achieved.

- De-cluttering will be considered for all aspects of highway [asset management](#).

6.2 Footways & cycleways

Footways and cycleways offer safe, convenient access for essential journeys, including travel to work, shops, schools, and leisure activities. Footways and cycleways are key [assets](#) in the council’s Active Travel agenda, supporting healthier lifestyles and low-carbon transport choices.

The [asset](#)

As Highway Authority, we maintain the following lengths of footway (by [hierarchy](#)) and cycleway (by route type):

Footways:	
Class 1 and 1a	82 km
Class 2	119 km
Class 3	350 km
Class 4	1,781 km
TOTAL	2,332 km

Cycleways:	
On-road routes	169 km
Traffic free routes	94 km
TOTAL	263 km

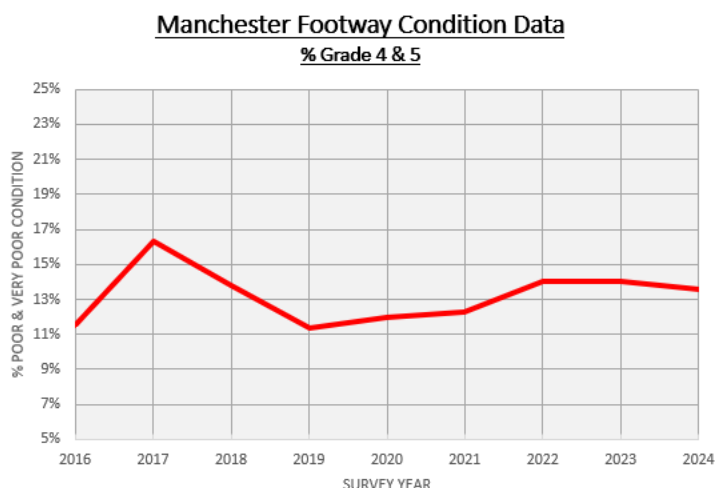
Valuation:	
GRC (£000’s):	£541,887
DRC (£000’s):	£470,499

Performance

The condition of footways and on-road cycleways is also measured on an annual basis using condition surveys in accordance with PAS 2161: Road condition monitoring data – Specification (2024). The surveys identify different types of defects present and define a condition

score between 1 (damage free) to 5 (structural failure).

Since 2017, the overall condition of our footway network has been sustained. The graph below shows the percentage of our footways at grade 4 or grade 5 (poor / very poor) condition since 2016.



Desired outcome

To deliver a sustainable improvement in the condition of footways & cycleways with higher use and address the worst condition other routes to help maintain a safe network; Also, to promote increased usage of these [assets](#) to support health and wellbeing of communities and increased levels of walking and cycling across the city to support the visitor economy and reduce our carbon footprint.

Asset strategy

- [Lifecycle Planning](#) is carried out to establish a baseline funding requirement for the network.
- [Preventative approach](#) - A large proportion of Manchester's footways are bituminous. To keep them in good condition and save money, we use preventative treatments like micro asphalt surfacing. Where funding

allows, a programme of preventative treatment will be incorporated in delivery plans.

- Footway programmes are formulated using a prioritisation method primarily based on those footways in the worst condition in terms of survey rating and number of identified defects, as well as other considerations, including requests and proximity to other identified highway schemes.
- Where carriageway works have been identified, adjacent footways may also be included, based on condition and funding availability.
- Other than in conservation areas or other special circumstances, when maintenance works are required, our policy is to replace flagged footways with bituminous materials. As well as being more cost effective, this will help to reduce future maintenance problems.
- Most of our cycleways are on-road and their maintenance is governed by the carriageway regime. When formulating our resurfacing programmes, roads containing cycleways are prioritised as part of the selection process.



6.3 Highway structures (bridges)

Highway bridges and structures are fundamental to transport infrastructure because they form essential links in the [highway network](#), without which the network would fail.

Maintaining these structures is a significant challenge especially with the threat of ever-increasing river levels due to climate change.

The council's Bridge Asset Management Strategy (separate document) sets out our detailed approach to managing these [assets](#).



Victoria Avenue bridge (River Irk)

The [asset](#)

As Highway Authority, we maintain the following structures by type:

Bridge	125
Culvert	105
Footbridge	33
Retaining Wall	64
Sign/Signal Gantry	13
Subway	17
Tunnel	3
Special (canopies etc.)	4
TOTAL	364

Valuation:

[GRC](#) (£000's): £773,120

[DRC](#) (£000's): £608,201

Performance

Highway bridges and structures typically have long service lives; however, those service lives do come to an end and whilst it is possible to continue for some time to manage them with short-term repairs, all will eventually require some form of major maintenance involving either [preventative](#) measures or partial or full replacement.

We use different types of inspections to check how well our bridges and structures are doing. These inspections follow a national format created by [ADEPT](#).

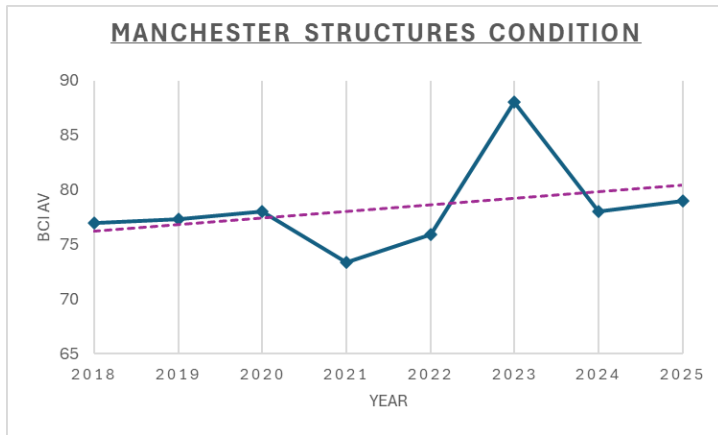
For bridges, we use a score called the Bridge Condition Indicator ([BCI](#)) to show how healthy the bridge is. There are two scores:

- BCI Critical – shows the condition of the parts that carry loads (like traffic).
- BCI Average – shows the overall condition of all parts of the bridge.

These scores help us decide what needs fixing and when.

The [BCI](#) scores for bridges have been tracked over time to set out the long-term performance of this part of the highway structure [asset](#) group. Both BCI Average and BCI Critical are defined on a scale of 100 (best possible condition) to 0 (worst possible condition).

The graph below shows the overall BCI Average values for council owned bridges since 2018, with a trendline plotted.



Across the years the data shows that our bridge stock is in Good / Fair condition, and this is being maintained at a steady state.

Desired outcome

To keep all highway structures safe while also making steady progress on strengthening the ones that need it, based on the condition of each structure and its location and importance.

Asset strategy

The council will continue to meet its statutory duties as the owner of highway structures via a regime of inspections and management of abnormal loads and bridge use. Funding allocations to allow repair of damage to structures requiring immediate attention (e.g. vehicle strikes to keep the [asset](#) safe) will be maintained.

Bridges and structures information is currently held in our bridge management system (Pontis), used by all the GM districts, which allows us to carry out inventory data collection & analysis, determine optimal whole life treatments, predict needs and performance measures, and develop capital work programmes.

Work programme priorities are given to the following:

- structures with structural defects which have a direct impact on their load-carrying capacity.
- structures with safety-related defects.
- structures with defects which, if not remedied, are likely to lead to more serious problems, for example failed waterproofing systems which will permit water ingress into decks, leading to corrosion of steel reinforcement and potential alkali silica reaction.

Available funding is allocated to each of the above work-types on an annual basis to suit the importance or criticality of the works identified. This strategy is intended to deliver the identified [levels of service](#).

Precedence is given to highway bridges on the [KRN](#) and [RN](#), which carry the highest volumes of traffic and are key in ensuring network connectivity.

6.4 Drainage & flood defence

Highway drainage is a critical [asset](#) for ensuring user safety during adverse weather, maintaining network continuity during rainfall, supporting recovery from extreme events, and preserving the structural integrity of the highway.

Upper-tier local authorities such as MCC are designated as Lead Local Flood Authorities (LLFAs) and are responsible for leading on local flood risk management. The council has produced a Local Flood Risk Management Strategy (LFRMS), published in 2014, which sets out the key issues and a long-term plan for Manchester to manage local flood risk, reduce its severity, and improve water quality and biodiversity.

The asset

We maintain the following drainage infrastructure:

Gullies 120,147

Linear drainage features:

Aco drains 708

Kerb drains 534

Slot drains 39

Pipes (excluding
gully connections) 402

Other 11

TOTAL 121,841

Valuation: Included in the carriageway [asset](#).

In addition to the above we also manage other drainage [assets](#) including Filter Drains, Grips, Swales and Soakaways.

Performance

Since 2018, our investment programme has allowed us to implement a risk-based cyclical cleansing programme and collect data on the condition and levels of silt in our gullies. The initial cleansing data showed that around 50% of our gullies had silt levels at 75% or more, which

highlighted the insufficient previous maintenance regime.

Figure 6.4.1 shows the status of our gullies (running or not) as of August 2025.

We do not have any data on the status of our linear drainage infrastructure at present.

Desired outcome

To deliver a risk-based approach to cyclical cleansing operations, reduce the number of emergency callouts and make the network more resilient to flooding.

Asset strategy

There are three main strands to managing our drainage [assets](#):

1. [Reactive maintenance](#) – In response to reports of blocked gullies / flooding events. We currently clean our linear drainage systems and gullies located in back alleys on a reactive basis.
2. Routine maintenance – A risk-based cyclical gully cleansing programme has been developed, with all roads split into 1 of 4 bandings, based on the number

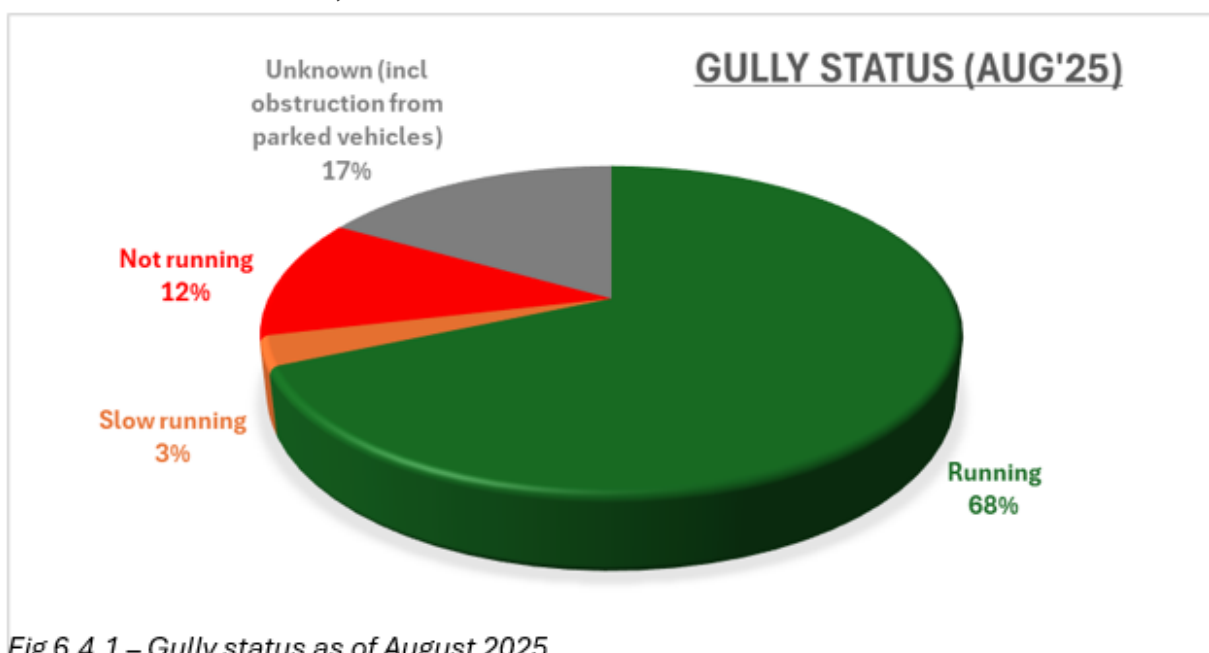


Fig 6.4.1 – Gully status as of August 2025

of gullies on the road with a particular risk score:

- priority 1 (Red)
- priority 2 (Amber)
- priority 3 (Green)
- priority 4 (Blue)

The frequency of cleansing for each banding is based on the budgets available, prioritising the high-risk 'Red' routes. The 'Blue' rated roads are currently only cleansed on a reactive basis.

Where our records show that parked cars consistently block access to gullies, these areas will not be included as part of the scheduled works - Instead 'Community Clean' days will be programmed, working closely with our neighbourhood and parking enforcement teams to maximize the chances of gaining access to these gullies.

3. Capital drainage improvement - We also have a separate capital funding stream which is used for drainage improvement / repair works, such as clearing blocked pipework and gully pot replacements. These works are programmed in accordance with the prioritisation section above. This approach ensures that the highest risk locations are resolved on the network

first, improving safety and network resilience.

Gullies on roads identified for planned maintenance works are cleaned prior to works commencing and after works are completed. Any further drainage problems identified in the initial cleaning will be incorporated into the planned maintenance works.

When other highway capital schemes are being implemented and existing drainage problems are found, these will be repaired where possible as part of the scheme.

Where possible, we will look to implement [SUDs](#) schemes on new developments, which mimic natural drainage processes to reduce the effect on the quality and quantity of run-off from schemes and provide amenity and biodiversity benefits.

6.5 Street lighting

The council's Street Lighting management and maintenance are delivered through an existing 25-year PFI contract with Amey which extends to June 2029. The PFI and subsequent LED variation has enabled investment in what was historically a failing [asset](#) to ensure that the lighting of the city plays its part in helping to increase safety for all road users and helps with the perception of safety of our neighbourhoods. This [asset](#) group is particularly important to facilitate modal shift to active travel options. The lighting of all aspects of the highway contribute to the security of users while travelling on foot or by cycle and improve the attractiveness of public transport facilities.



The [asset](#)

The street lighting [asset](#) is made up of a range of different types that we maintain, including the following:

Streetlights	54,350
Illuminated signs	4,158
Bollards	2,608
Feeder pillars	1,096
Beacon poles	431
Other lighting	390

Valuation:

GRC (£000's):	£149,477
DRC (£000's):	£71,486

Performance

An LED streetlighting retrofit programme began in September 2017 and was completed in 2021. The deployment of LEDs has reduced the number of fault reports by over 50%, with an average of over 99.8% of streetlights working throughout the year in 2024/25. It has delivered an energy cost saving of some £4m a year and made a significant contribution to the MCC Climate Change Action Plan 2025-2030.

The LED lighting system includes a central management system that allows for remote control and monitoring, enabling possible future integration of sensors for services like air quality monitoring and traffic management.

From 30 March 2025 the central management system has enabled a risk assessed city-wide dimming regime to be applied. This has enabled further annual energy savings of about £700k, and a further reduction of CO2 emissions of 600 tonnes per annum.

A dedicated team from the council monitors Amey's performance against

contractual performance service standards, ensuring the quality and reliability of the street lighting service.



Desired outcome

To continue with the routine inspection and maintenance programmes to keep street lighting in a serviceable condition and to maintain in accordance with best practice.

Work to manage the contractual hand back of the street lighting asset under the PFI contract and define the strategy and delivery model for the future street lighting service following the expiry of the existing PFI contract.

Asset strategy

Amey performs planned maintenance in accordance with the PFI specification, including regular cleaning, lamp replacement, and inspections. Where Amey fails to achieve the required outcomes, performance standards deductions are applied.

The condition of columns is managed through the regular inspection and testing regime, with columns which require intervention scheduled for replacement. As all columns are less than 30 years old, the number of such replacement is

limited. More columns are replaced because of road collisions or other incidents.

6.6 Traffic signals

All traffic signal control equipment in GM is owned by [GMCA](#) and are managed and maintained by Urban Traffic Control (UTC) section of [TfGM](#). We work with [TfGM](#) to ensure that this equipment is maintained and operated to aid flow of traffic and improve road safety.

7. Capital improvement and road safety schemes

The HAMS supports the need to focus on improving road safety and encouraging growth through delivering appropriate capital improvement schemes. Whilst the HAMS does not directly cover these activities, it is intended to facilitate a joined-up approach to the delivery of improvement and maintenance schemes. There is also an on-going requirement to understand the future maintenance implications of new capital schemes.

Where maintenance works are programmed in strategically important areas, such as District Centres, we will aim to coordinate these with other public

realm works being carried out to ensure that the result is a cohesive upgrade of the area.

The HAMS and resultant long term delivery plans will allow a more coordinated approach to the provision of Capital Improvement and highway maintenance schemes. This will ensure that maximum value is achieved from various capital and revenue investments through the lifecycle of new and existing [assets](#).

8. Critical assets

Some elements of the [highway network](#) are more vulnerable than others and some routes are more relied upon than others. A risk-based approach is an essential element of [asset management](#) in establishing priorities, [levels of service](#) and coordination of activities.

Manchester's critical highway [assets](#) are those defined where failure would result in significant impact on the local, and potentially the regional economy. These Mephi503 [assets](#) are included on the [RN](#), defined using a risk-based approach, using factors such as traffic volumes, risk of flooding, past incident reports, bus routes, major businesses, proximity to schools etc. and liaising with neighbouring authorities, emergency services and existing emergency procedures. Appropriate contingency planning for a failure event has been determined, and relevant protocols established should failure occur, incorporating lessons learned. These processes are documented in our Resilient Network Plan.



These critical [assets](#) also tie-in with the Winter Services gritting strategy, identified Community Network ([CN](#)) and the wider network identified by [TfGM](#) as part of their managed strategy for the [KRN](#) in GM.

9. Sudden [asset](#) failures

Whilst the Strategy advocates a planned and risk-based approach to [asset management](#), there may be exceptional circumstances in which a particular [asset](#) fails rapidly - beyond prediction. In this event, planned activities will be reprioritised (using the principles contained within this strategy) across all [asset](#) groups to facilitate the inclusion of additional schemes within the programme.

10. Planning considerations

The council understands the importance that growth and re-development has on the future of the local area and economy. However, there is a need to ensure that any new development / change of use promoted through the planning process fully consider the impact on the existing [highway network](#) and its future maintenance.

Highway maintenance works carried out by other bodies, for example utility companies and developers, will continue to be monitored by our street works team to ensure that appropriate materials and good practices are utilised, and the [GMRAPS](#) permitting system to check that work programmes coordinate with ours.

11. Policy & Strategy Review

The Policy & Strategy will be continuously reviewed and will be updated when appropriate. It will be fully reviewed at least every three years, to allow informed decisions to be made to accommodate any changes in funding and priorities within the longer-term forecasts.

The strategy is independent of variations in funding levels and therefore, significant changes will not need to be made due to fluctuations in available budgets.

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12. Glossary & abbreviations

ADEPT: Association of Directors of Environment, Economy, Planning and Transport. This group is instrumental in informing national policy and developments in service delivery.

Adopted Highway: Public roads and footways maintained by the council (the Highway Authority) in accordance with the Highways Act 1980.

Asset: In the context of this document an asset is an integral feature of the highway infrastructure, such as carriageways, structures and lighting.

Asset Life-Cycle Planning: This involves calculating how much spend is required on our highway assets to maintain their condition over their lifetime, based on different maintenance strategies.

Asset Management: A strategic approach that identifies the optimal allocation of resources for the management, operation, preservation and enhancement of the highway infrastructure to meet the needs of current and future customers.

BCI: Bridge Condition Index – a nationally developed methodology for defining the condition of bridges.

CIPFA: Chartered Institute of Public Finance and Accountancy.

CN: Community Network - developed to ensure that local people are connected directly, or indirectly through transport hubs, to locations where there are concentrations of jobs and education facilities.

CQC: Customer / Quality / Cost benchmarking network – run by the [NHT](#) to help local councils enhance the cost-

efficiency, service quality, and environmental sustainability of highway maintenance.

CRM: Customer Relationship Manager – a system used to manage and analyse customer interactions and data throughout the customer lifecycle.

Deterioration: The physical wear and tear on the [asset](#); damage due to time, weather, etc that can be observed and measured through condition surveys.

DfT: Department for Transport - The central government department that oversees transport systems in England. They provide policy, guidance, and funding to local authorities to maintain the local road network.

DRC: Depreciated Replacement Cost – This is the current value of the [asset](#), it includes allowance for the accumulated depreciation and impairment.

GIS: Geographic Information System – Mapping software used to process, analyse and display data relating to the [asset](#).

GMCA: Greater Manchester Combined Authority - regional body formed by the ten local councils of GM, led by an elected Mayor.

GMRAPs: Greater Manchester Road Activities Permit Scheme – set up to improve coordination of roadworks and reduce disruption across Greater Manchester.

GRC: Gross Replacement Cost - The investment that would be required to replace the [asset](#) with as new.

Hierarchy: Division of the [highway network](#) into a series of levels to consider expected use, resilience, economic

support, and social factors such as access to education or healthcare.

Highway Network: Collective term for [adopted](#) public roads, footpaths and their associated [assets](#).

HMEP: The Highways Maintenance Efficiency Programme – a former [DfT](#) backed initiative to improve the efficiency and condition of local roads in the UK.

KRN: Key Route Network – a strategically important subset of GM’s Road network, managed by [TfGM](#), that serves as the backbone for economic activity and public transport.

LCRIG: Local Council Roads Innovation Group – Set up to foster collaboration, drive innovation, and facilitate the sharing of best practices in the local road network.

Levels of Service: The standards applied to the maintenance of highway [assets](#).

NHT: National Highways & Transport Network – organisation that conducts a standardized public satisfaction survey to measure and compare public views on highway and transport services provided by local authorities.

PMF: Performance Management Framework - an asset-based system run by the [NHT](#) for local authorities, enabling them to benchmark their performance against other network members.

Preventative Maintenance: Application of relatively inexpensive maintenance treatments at the most appropriate time to protect and extend the life of [assets](#).

Reactive Maintenance: This refers to routine maintenance work that is carried out in response to problems arising on the highway that could endanger the safety of

users. Eg. Pothole repairs, response to flooding events.

RN: Resilient Network – defines key routes within Manchester necessary to maintain essential services, economic activity, and public access.

RSTA: The Road Surface Treatments Association – A UK body that engages with government and key clients to influence standards, develop best practices, and provide technical expertise and training.

SUDs: Sustainable Urban Drainage Systems - a range of methods for managing surface water that mimic natural drainage processes to control flooding.

TfGM: Transport for Greater Manchester - the local government body responsible for delivering GM’s transport strategy and commitments.

TIR: Thermal in-situ road repair - technique that uses infrared heating to soften existing asphalt around a defect, allowing it to be mixed with a small amount of new asphalt to complete the repair.

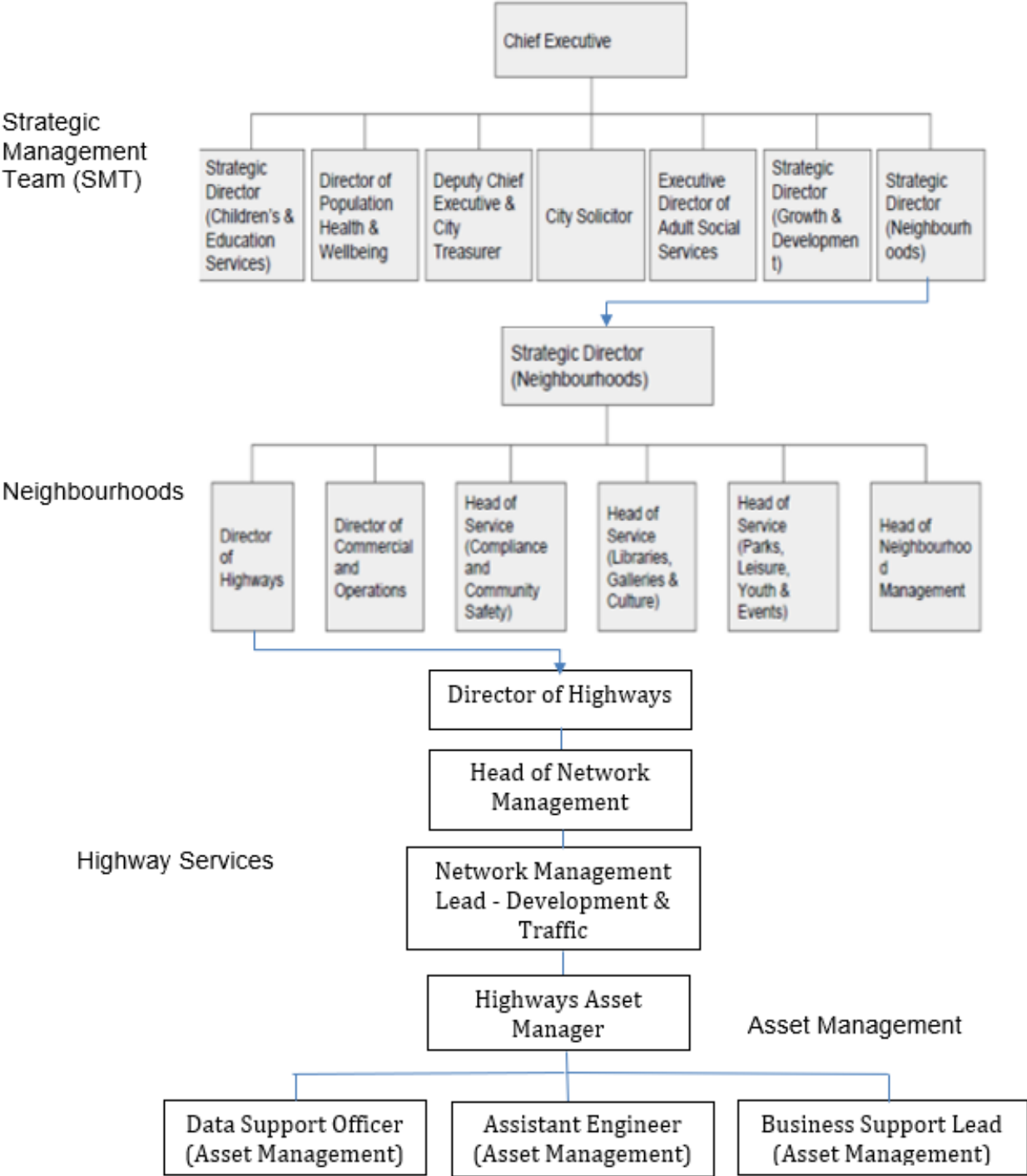
UKRLG: UK Roads Leadership Group - a group that focuses on roads infrastructure, engineering, and operations.

WGA: Whole of Government Accounts - the UK's consolidated annual financial report for the entire public sector.

WMHI: Well-managed Highway Infrastructure code of practice - a UK Code of Practice that introduced a risk-based approach to highway maintenance in 2016.

Appendix A1.0

Structure for governance and decision making



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Appendix A2.0

Asset Data Inventory Registers

MCC holds several data sets which are available for use throughout the service and updated on an ad-hoc basis by the data custodian. These data sets are used for reporting both internally and externally and for day to day and for proving information daily to assist officers undertake the roles within the authority. The data for our main highway [asset](#) groups is specified below.

Asset Data Set	Data Custodian	Description	Used for	Risk/ Value	Frequency of data collection	System	Updates
Local Street Gazetteer (LSG)	LSG Custodian	Defines Manchester's Street network to National Standards and adoption status etc.	Used within Permit Schemes and Street Works	High	Ongoing	ArcGIS	Updated and maintained by the council's LSG team
UKPMS Network	LSG Custodian	Defined Highway network sections inventory used as base layer for condition surveys, reports etc.	Highway inspections / defect repair and identifying maintenance schemes.	High	Ongoing	Causeway Alloy	Updated regularly from LSG data to consider new adoptions, closures etc.
ESRI ArcGIS	Council ICT	Geospatial databases are used to record asset and project information, and store GIS data in a central location for easy access and management.	Manipulating and editing spatial data	High	Ongoing	ArcGIS Pro	Software updates issued by the council's ICT service
Carriageway Condition	Highway Asset Manager	Condition data from video surveys (50% of network annually), Scanner & skid resistance survey data etc.	Performance reports, lifecycle planning , maintenance scheme prioritisation, WGA accounts.	High	Annual	Assetstream (Gaist) / ARCMAP GIS / Causeway Horizons	Updated by Gaist following processing of video data. Horizons used to define planned maintenance schemes.
Footway Condition	Highway Asset Manager	Condition data from Gaist video surveys (50% of network annually)	Performance reports, lifecycle planning , maintenance scheme prioritisation, WGA accounts.	High	Annual	Assetstream (Gaist) / ARCMAP GIS / Causeway Horizons	Updated by Gaist following processing of video data. Horizons used to define planned maintenance schemes.
Highways Defects	Highway Inspection team	Safety defects as collected on a routine basis in accordance with a cyclic programme of	Performance reports, lifecycle planning , maintenance scheme	High	Daily	Causeway Alloy	Updated and maintained by Highway Inspection staff.

		inspections. Used to generate Key Performance Indicators	prioritisation, defence against highway claims				
Bridges and Structures	Bridges asset team	Location and details of bridges, footbridges and culvert structures. Defines those maintainable at public expense.	Performance reports, inspections, work programmes and maintenance, WGA accounts.	High	Ongoing	Pontis	Updated as new structures built / Condition updated through Cyclical maintenance. Pontis administered by TfGM .
Street Lighting	AMEY Lighting team	Locations of lighting columns illuminated signs/bollards.	Performance reports, cyclical inspections, work programmes, maintenance, energy returns, WGA accounts	High	Ongoing	Mayrise	Street Lighting infrastructure is managed and maintained by AMEY as part of an existing PFI Contract, due to expire in 2029.
Drainage systems	Highways Asset Manager	Location of gullies and linear drainage systems on adopted highway. Current status, silt levels, maintenance history.	Performance reports, cyclical inspections, work programmes, maintenance	Medium	Ongoing	Causeway Alloy	Updates following cyclical maintenance reports
Customer Relationship Manager (CRM)	CRM team	CRM software records and tracks customer queries, reports and responses	Performance reports, feedback trends	High	Ongoing	Verint CRM system	Maintained by internal ICT team.
Performance Management framework	PMO / PRI team	Performance dashboards and data held on MS Teams site	Performance monitoring, information sharing	High	Ongoing	MS Teams	Updated as required by highways staff / administered by PMO / PRI team
Traffic / Parking regulations	Traffic team	GIS based system recording TRO's, speed restrictions and other legal orders.	Definitive record of parking restrictions, traffic orders etc.	High	Ongoing	Parkmap	Updated following new schemes / legal orders
Winter Maintenance	Winter maintenance team	Priority and other defined gritting routes and management systems.	Fulfilling statutory Winter maintenance obligations, performance reports.	High	Ongoing	Vaisala	Routes updated when required
Greater Manchester Road Activities	GMRAPS team	Street works permitting scheme used across Greater Manchester	Coordinating works on the highway network , performance reporting	Medium	Ongoing	Symology / Street Manager	Updated by GMRAPS team

Permit Scheme (GMRAPS)							
Flood Risk Management	Flood risk management team	Locations to aid in identification of Risk and Maintenance	Fulfilling statutory obligations as leading flood risk authority, performance reports.	High	Ongoing	ArcGIS	Action plan maintained and updated by flood risk team

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Appendix A3.0

Network hierarchies

A3.1 Introduction

To support a clearer strategic approach and to conform to the [WMHI](#), the council has reviewed its road network hierarchies to ensure that they reflect stakeholder expectations, levels of use and strategic importance. We use these revised hierarchies to direct resources, to define our inspection frequencies, to support an assessment of risk, to reflect network condition, to prioritize our treatments and to develop a risk-based approach to managing our highway [assets](#).

The revised hierarchies and categorisations, aligning to the latest code of practice, are shown in Table A3.1. This highlights the complexity of local road network classification, which is driven by different and varying legislation and purposes.

Table A3.1 – Asset management hierarchies			
Network Family	Hierarchy / Classification	Key factors	How it is used
Resilience	Resilient Network (RN)	High level strategic purpose. Links to key service locations. Links to critical power distribution sites / water treatment works or telecommunication hubs. Links to key transport hubs. Links to key locations of economic value. Roads with high risk of flooding.	To ensure the network is resilient to severe weather and other major disruptive events. To support the management of risk. To determine which parts of the network will have investment priorities.
	Winter Service Network & Minimum Winter Network	Traffic volume. Links to key service locations. Links to key transport and business hubs.	To determine the extent and priority of precautionary winter gritting across the highway network .
Network Management	Key Route Network (KRN)	Traffic volume. Strategic purpose.	Inform strategic funding decisions. Key for supporting growth.
	Community Network (CN)	Core areas. Access to education hubs. Access to health hubs. Bus & cycle routes.	Prioritize maintenance funding.
	Traffic sensitive streets	The New Roads and Street works Act (1991)	Used to help determine road space

		designates criteria that can be used for defining a street as 'traffic-sensitive'.	occupation as part of GMRAPS permit scheme.
	Maintenance hierarchy	Traffic volumes / pedestrian usage. Cycleways. Links to key retail / business hubs. Access to education hubs. Access to health hubs. Condition data.	Used to define inspection and defect repair regimes.
Asset management	Existing roads network classification	Unchanged (based on the strategic level of the links destination).	For reporting and comparing condition data through national performance indicators.
	Skid Network	Classified M, A and B roads together with other sections of road which generally carry A road volumes of traffic	Annual SCRIM testing is carried out each year to determine skid deficient sites and prioritize treatments.
	New Road & Street Works Act Reinstatement categories (NRSWA)	The road category based on the expected traffic to be carried in the next 20 years expressed in Millions Standard Axle (MSA).	To inform street permitting and reinstatement regime for utility companies etc.

A3.2 Resilient Network

Establishing network hierarchies is also in keeping with the recommendations within the [DfT](#) Transport Resilience Review published July 2014, which identified a need for local authorities to identify and develop a Resilient Network ([RN](#)) for their [highway network](#), which would be prioritized for repair and maintenance in extreme weather.

The guidance is clear that any council's [RN](#) should align with their neighbouring authority and a GM wide [RN](#) has been collated to ensure this connectivity. [RN](#) plans for all 10 GM districts were completed and collated by the GM asset management group in 2018 and a map produced.

Discussions were held with each local authority with several amendments made to achieve synergy between all 10 district networks. The proposed GM [RN](#) was then presented at the Resilience Development Group (RDG) meeting in October 2018. This covered consultation with all the GM authorities and the responder services including those outlined below:

- Police.
- Fire Service.
- NHS Resilience Manager.
- Ambulance Service.

- Environment Agency.
- Public Transport Operators.
- Utility Providers.
- [TfGM](#).

Risks were assessed referencing the GM Community Risk Register, which has been produced to identify the key emergency risks that could occur within GM and to guide agencies and the public in preparing for such eventualities.

The GM [RN](#) was endorsed by the GM Resilience Forum, a partnership of agencies from across the Greater Manchester Sub-Region with responsibility for coordinating and overseeing emergency planning. It aligns with the GM Generic Response Plan as well as the wider resilience strategy for GM's Key Route Network.

Periodic review of the [RN](#) is carried out in response to relevant changes in the network, and our asset registers updated accordingly.

A3.3 Community Network

Prioritizing our limited funding, particularly for maintenance is a continuing challenge. There is a risk that those who are most articulate get the greatest amount of funds. This is a key risk to us as a city as our limited funds need to be targeted where they will have the most impact on our objectives and where we can achieve the highest rate of return for our investment.

As previously stated, across GM, a [KRN](#) has been developed on behalf of [GMCA](#) which comprises strategic routes across the region. In conjunction with the [KRN](#), we have developed a Community Network ([CN](#)) within Manchester. This targets our 'Liveability' priority and has been developed to ensure that local people are connected directly, or indirectly through transport hubs, to locations where there are concentrations of jobs and education facilities.

This [CN](#) encompasses Manchester's [RN](#) (see above), and was developed using the following criteria:

- Core Areas – key roads within:
 - City Centre
 - District Centre areas
 - Strategic Employment site areas
- Education – access roads within:
 - 100m of schools or colleges
- Health – roads within:
 - 200m of Hospitals
 - 100m of Health Centres
- Travel:
- Resilient Network
- Bus Routes

- Cycle Routes (on road)

The [CN](#) developed using these criteria comprises a total road length of approximately 470 km, making up about 34% of the total road network.

Periodic review of the [CN](#) will be carried out in response to relevant changes in the network, and our asset registers updated accordingly.

A3.4 Maintenance Hierarchy

A 'Greater Manchester Highway Safety Inspection Framework' document was produced in 2018 which details the high-level processes used by all 10 GM highway authorities in terms of network [hierarchy](#), investigatory levels, frequency of inspection and response times to repair.

The 'default' inspection frequencies defined in the GM Framework for each designated carriageway and footway maintenance [hierarchy](#) are shown in Table A3.4a and A3.4b below. Included is Manchester's more detailed criteria description used to assign these categories.

Table A3.4a - Carriageway & cycleway maintenance hierarchy in GM framework:			
Inspection Frequency	Category	Designation	Criteria description
Monthly	2	Strategic Route	Principal 'A' roads with dual carriageway sections, urban motorways;
Monthly	3a	Main Distributor	Mainly 'A' roads linking urban centres to the Strategic routes;
Monthly	3b	Secondary Distributor	Other classified roads ("B" and "C" roads) and major unclassified urban bus routes with several pedestrian crossing facilities;
3 monthly	4a	Link Road	Unclassified roads linking main & distributor roads, including urban bus routes not included in Cat 3b;
12 monthly	4b	Local Access Road	Unclassified residential or loop roads serving limited number of properties;
As for roads	A	Carriageway cycleway	On road cycleway;

As for footway / annually	B	Cycle Track, Shared cycleway / footway	Routes for cyclists not contiguous with carriageways or footways or a shared cycle/pedestrian route;
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Table A3.4b – Footway maintenance hierarchy in GM framework:			
Inspection Frequency	Category	Designation	Criteria description
Monthly	1	Primary Footway	Busy urban shopping and business area footways and major pedestrian routes – Usually part of priority (1 & 2) footway gritting network;
3 monthly	2	Secondary Footway	Medium usage footways feeding into primary routes, local shopping centres;
6 monthly	3	Link Footway	Footways linking local access footways through urban areas.
12 monthly	4	Local Access Footway	Usually, unclassified road footways with low usage, estate footways and cul-de-sacs;
12 monthly	5	Public rights of way	Field footpaths and bridleways

Final safety inspection frequencies were determined following assessment against other defined risk factors for each network section.

Regular reviews are undertaken to reflect network changes identified by inspectors, planning or other sources. Examples include new housing developments, schools, road closures etc., which may affect the section [hierarchy](#) and/or inspection frequency. This will be undertaken on a regular basis, at least every 5 years, as detailed in the GM framework document. Periodic changes may be made to the [hierarchy](#) and/or inspection frequency based on any required network changes.

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Appendix A4.0

Lifecycle plans

A4.1 Introduction

For [Lifecycle planning](#) principles, see Section 5.7: Lifecycle Planning Approach.

The following lifecycle plans are presented for each of the main [asset](#) groups. Where possible, the models used have been adopted from national best practice such as those provided by the Highways Maintenance Efficiency Programme ([HMEP](#)).

A4.2 Carriageways & footways

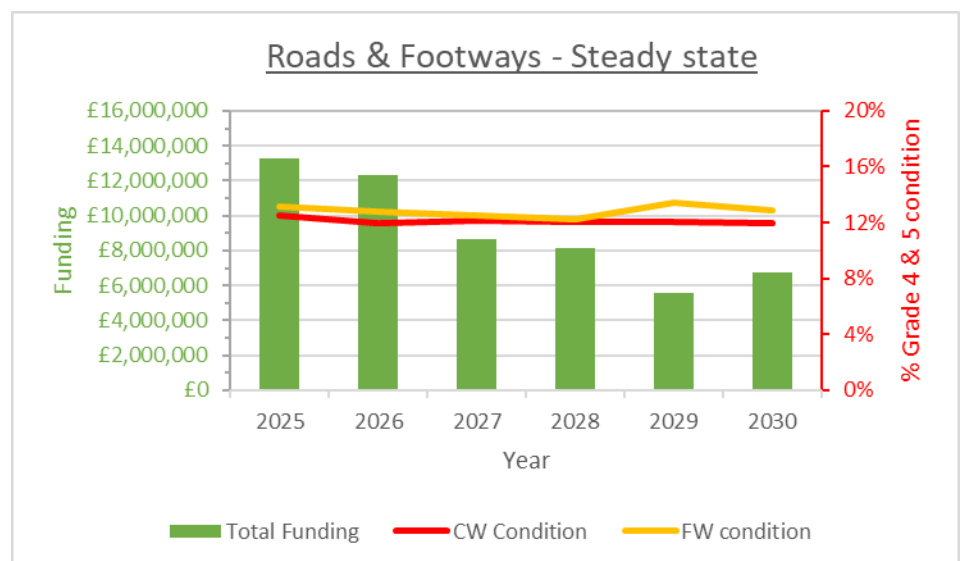
We use the Highway Maintenance Appraisal (HMAT) and Highway Maintenance Economic Assessment (HMEA) toolkits, developed by the UK Roads Liaison Group (UKLRG), to determine the required long-term investment needed to effectively maintain our road & footway network. This approach was successfully used to secure our £100m Highway Investment Programme (2017-2022) and is continually used to develop further funding options appraisals, highlighting the benefits of providing continued highway investment.

The model provides information on [levels of service](#) that can be achieved with a range of budget constraints and treatment strategies. By inputting our local costs for different maintenance treatments along with their expected [deterioration](#) rates, we can determine the optimum annual spend on each treatment and where these should be targeted.

We analyse several different funding scenarios, including:

- No investment
- Investment to maintain steady state condition
- Investment scenarios to improve overall network condition

To maintain a steady state condition (2024) of our [highway network](#), modelling shows that planned maintenance spend of about £8m on roads and about £2.5m on footways each year (averaged out over a 5-year period) would be required. The percentage of grade 4 & 5 (poor) condition roads and footways would be held at about 12%.



Carriageway & footway [lifecycle planning](#) is refreshed each year, following the receipt of the condition survey results. Evidence from lifecycle modelling is used to demonstrate how funding and/or performance requirements are achieved by implementation of our maintenance strategies with the objective of minimising expenditure, while providing the required performance over a specified period.

A4.3 Bridges & structures

To carry out [lifecycle planning](#) for structures a robust inspection regime is required. The Inspection regime records the condition of bridges at element level for all components of a bridge e.g. main beams; bearings; piers; parapets etc. Currently each element is scored on severity and extent of any defect recorded in accordance with national standards.

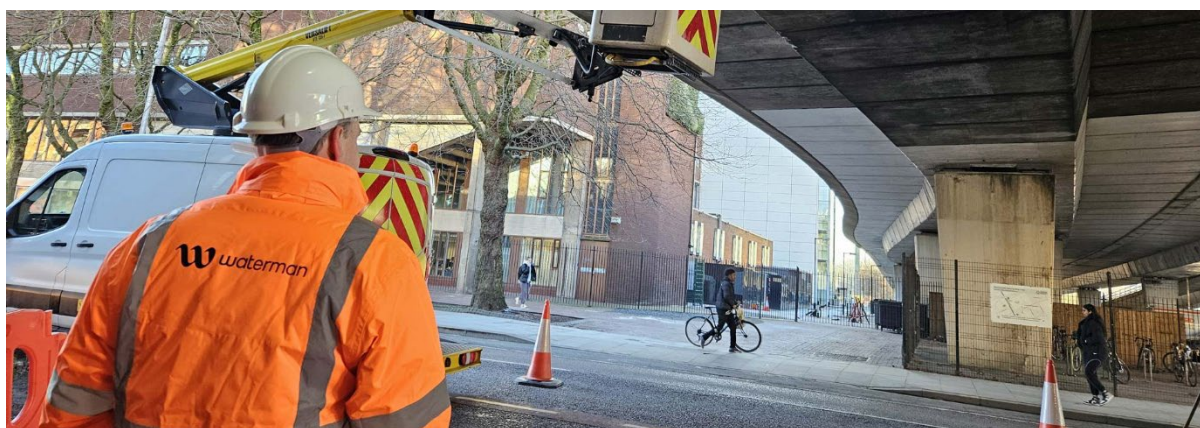
When considering whole life costs, account needs to be taken of the direct and indirect costs associated with the [asset](#) group, including works, design and supervision, inspection and assessment. With highway bridges, which have a long life but are very expensive to replace at the end of that life, it is essential to plan [preventative maintenance](#) works in a timely manner, since delays will increase the whole-life cost of the structure.

GM authorities currently use Assetplan's Pontis bridge management system, which allows storage of the condition data of each structure at element level as well as managing key asset holder functions such as financial planning, prioritisation of needs, [life cycle planning](#) and asset valuation.

Pontis has been amended to incorporate a risk ranking tool which follows the format set out in Appendix A of CS 450 – 'Inspection of highway structures'

Inspection data has been used to populate the risk ranking tool and current work programmes are determined using the data, with priority is given to the following:

- structures with structural defects which have a direct impact on their load-carrying capacity.
- structures with safety-related defects.
- structures with defects which, if not remedied, are likely to lead to more serious problems, for example failed waterproofing systems which will permit salt laden water ingress into decks, leading to corrosion of steel reinforcement and potential alkali silica reaction.



Available funding is allocated to each of the above work-types on an annual basis to suit the importance or criticality of the works identified. This strategy is intended to deliver the identified [levels of service](#).

Precedence is given to highway bridges on the [KRN](#) and [RN](#), which carry the highest volumes of traffic and are key in ensuring network connectivity.

In many instances the existing age of bridge elements is unknown. The Structures Asset Valuation and Investment Tool (SAVI) was developed for the UK Bridges Board through [DfT/UKRLG](#) research funding to support local authorities and asset owners with the management of their structure stock. It enables short-term and long-term [asset management](#) planning to produce programmes of work.

Utilising the SAVI toolkit at structure level together with the powerful scenario analysis SQL tool within the Pontis system will provide Manchester with comprehensive [life cycle planning](#) capability for our structures [assets](#). Delivery of this approach will support the implementation of the recommendations in the [WMHI](#) Code of Practice.

A4.4 Drainage assets

The increasing frequency of major storms across the UK underscores the impacts of the climate crisis and highlights the increasing importance of infrastructure resilience. GM was impacted by severe bouts of flooding on New Year's Day 2025 and more than 1,000 people were forced to evacuate in the Didsbury and Harpurhey areas of Manchester due to exceptionally heavy rain.

As well as the cyclical cleansing programme developed using a risk-based approach to utilise available revenue budgets, we have also collated a list of the required capital drainage repairs, along with the average cost of works based on the average of the framework contractors. The indicative backlog of these works is estimated to be about £7m.

As there is a pressing need for further investment in capital repairs to prevent degradation of our drainage [assets](#), we have used [lifecycle planning](#) to prioritize this need along with other capital investment requirements across the capital programme.

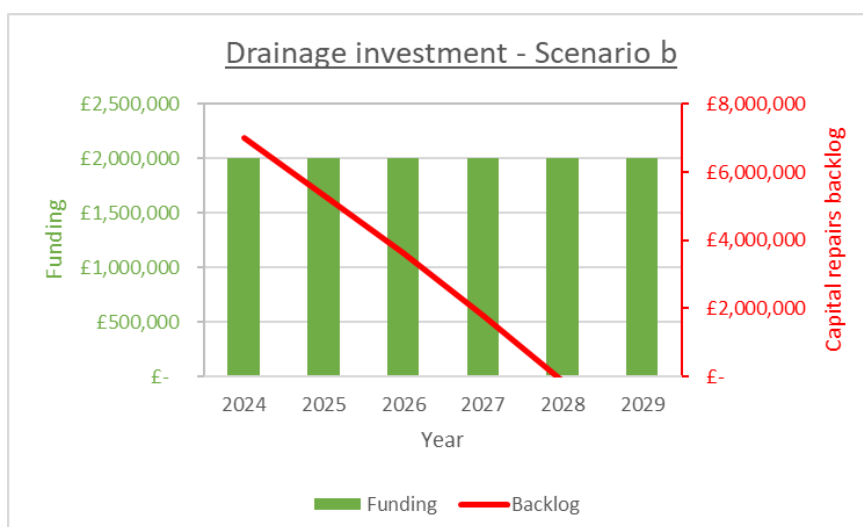
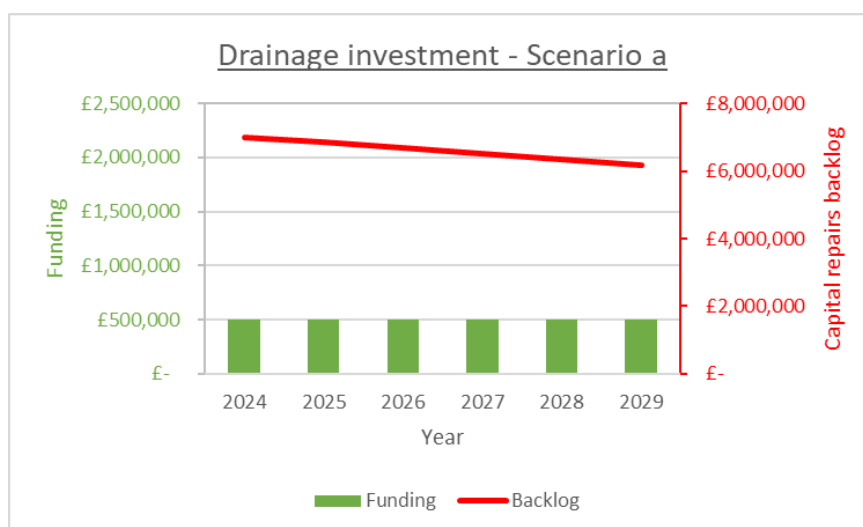
Various capital funding scenarios have been modelled in terms of their impact on the current backlog of required repairs as well as factoring in an estimated 5% annual [deterioration](#) rate. This figure is based on historical data and is an estimate of how much the backlog of required repairs will increase year on year due to any failures.

- a/ Investment of £0.5m per year of capital funding over 5 years (£2.5m in total) would allow the completion of required drainage improvements on key routes only ([KRN](#) and [CN](#)). It is estimated that these will comprise about a third of our drainage network (40,000 gullies). This option would keep key routes drained and less likely to flood. However, it would mean that the remaining gullies would be subject to reactive work, and funding would only be able to keep the current backlog of capital works at a steady state.

- b/ Investment of £2m per year of capital funding over the next five-year period (£10m in total) is needed to allow the completion of all current backlog improvements and address an estimated 5% annual [deterioration](#) rate over the investment period. This investment would prioritise the identified key routes but address all our drainage network. Once the backlog has been completed, we would just need to carry out cyclical cleansing using revenue budgets to maintain our drainage network in a good condition, plus any emergency work.

Once the backlog of gully improvements is completed, this funding would also enable us to fully survey the linear drainage features, gullies in back alleys and uncharted culverts. Remaining funding would be used to deliver prioritised works towards the end of the investment period and based on funding available at this time.

The graphs below show the funding and corresponding drainage improvements backlog for these 2 options over time.



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Appendix A5.0

Performance measures

To ensure that the correct decisions are being made to achieve the objectives set out in this strategy, there needs to be a measure of both the outcomes that are important to the public as well as the engineering objectives that are trying to be achieved. Public outcome measures should reflect the real experiences of highway users. Tracking these outcomes helps ensure services meet the needs of Manchester's businesses and communities.

Monitoring effective measures of performance can aid and improve decision making at both a strategic and operational level and provide the link between corporate vision, HAMS, [levels of service](#) and maintenance operations. These principles are outlined in figure A5.1, taken from the [UKRLG Highway Infrastructure Asset Management Guidance Document](#).

A performance dashboard for highways has been developed which allows updates to the performance measures to be stored in a central location and updated as required. Performance dashboard reports are made available to senior decision makers at the frequencies defined below.

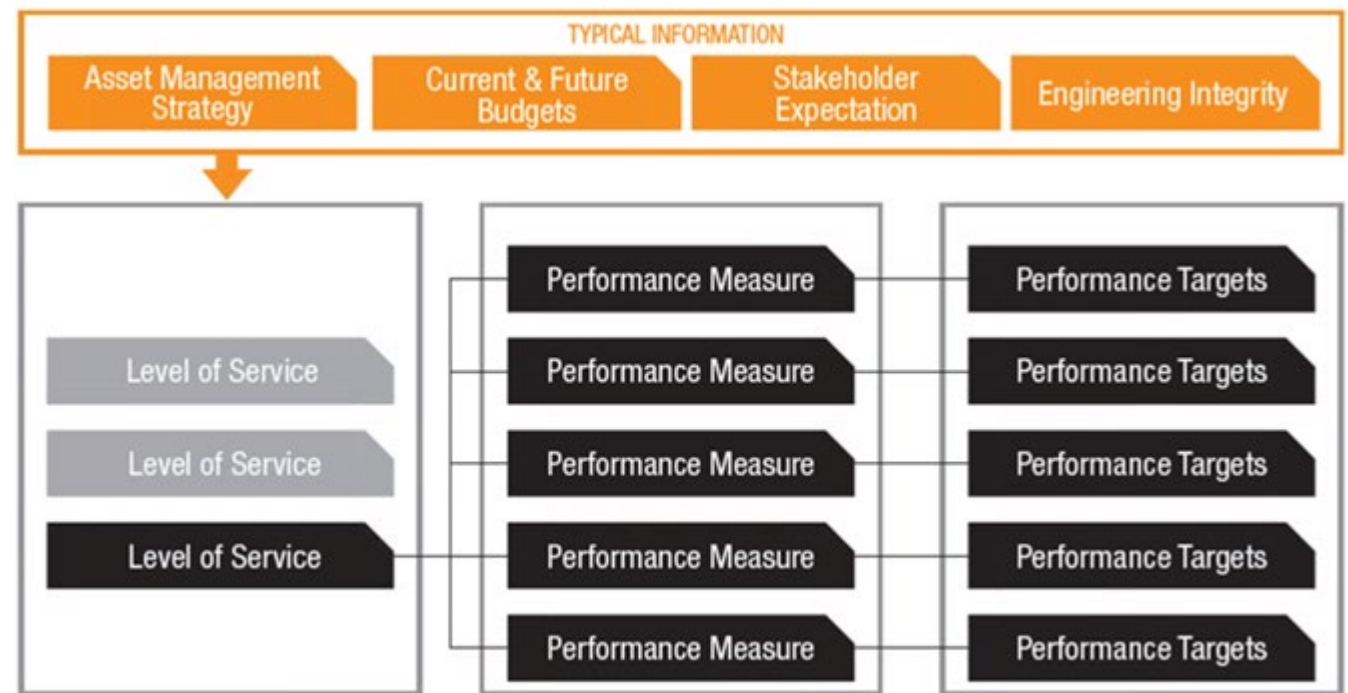


Fig A5.1 – Performance monitoring framework

Performance reviews may not be limited to the measures detailed, but will also look at any benchmarking parameters, together with any other operational efficiency measures such as the effect upon the service of implementing:

- Changes to the operational service delivery.
- Recommendations suggested by transformational / service reviews.

- Collaborative working arrangements.
- Changes in procurement arrangements.

The review process will assess any strengths and weaknesses identified, and action plans will be developed as required. Any lessons learned will be documented and used to refine policies, strategies and plans as appropriate.

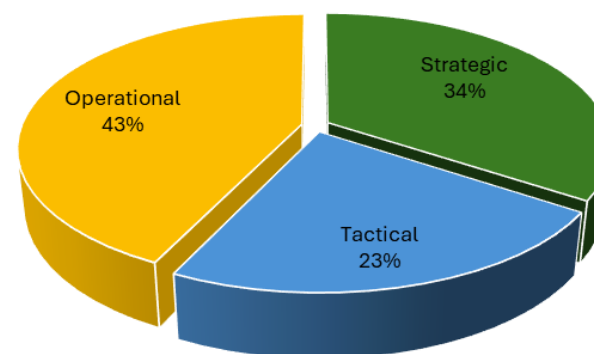
Performance reviews will be considered when formulating funding allocations and will be used to support future investment decisions.

The highway performance measures that we collect have been categorised into a level of service, dependent on the type and classified under three theme headings:

- Strategic – Primary purpose to report on performance to others. Report on annual performance to external stakeholders, e.g. Performance Indicators. They provide a snapshot of the overall performance but do not generally assist with the day-to-day management of the [asset](#).
- Tactical – Primary purpose to assist in resource allocation decision making. Provide on-going management information to the highway authority, e.g. random auditing of the on-going condition assessment of the [asset](#).
- Operational – Primary purpose to provide information to improve the efficiency of service delivery. Provide operational information to service deliverers, principally focussed on measures associated with the delivery of the works.

Figure A5.2 shows the distribution of each of these themes across all measures.

Fig A5.2 - Performance Measures Distribution



The table below shows all our performance measures.

Level of Service	Ref.	Measure	Measurement Criteria	Service Level	Strategic / Tactical / Operational	Team responsible	Report frequency
Accessibility	1.1	Public Satisfaction with ease of access	NHT survey results	>National average	Strategic	Highway asset	Annually
	1.2	% of flooding incidents that result in road closure	From CRM reports / customer data	Downward trend	Strategic	Highway asset	Annually
	1.3	Public Satisfaction with direction signposts for pedestrians	NHT survey results	>National average	Strategic	Highway asset	Annually
	1.4	Public Satisfaction with drop kerb crossing points	NHT survey results	>National average	Strategic	Highway asset	Annually
Serviceability	2.1	% of total road network in red condition	% of carriageways (by area) at grade 4/5 from condition survey information	<20%	Tactical	Highway asset	Annually
	2.2	% of A road network in red condition	% of A roads (by area) at grade 4/5 from condition survey information	<10%	Operational	Highway asset	Annually
	2.3	% of B & C road network in red condition	% of B & C roads (by area) at grade 4/5 from condition survey information	<15%	Operational	Highway asset	Annually

2.4	% of U road network in red condition	% of U roads (by area) at grade 4/5 from condition survey information	<25%	Operational	Highway asset	Annually
2.5	% of footway network in red condition	% of footways (by area) at grade 4/5 from condition survey information	<15%	Tactical	Highway asset	Annually
2.6	% of highway gullies not working as planned	% of gullies found to be blocked – from Causeway Alloy system.	Downward trend	Operational	Highway asset	Annually
2.7	Public Satisfaction with condition of highways	NHT survey results	>National average	Strategic	Highway asset	Annually
2.8	Public Satisfaction with keeping drains clear and working	NHT survey results	>National average	Strategic	Highway asset	Annually
2.9	Public Satisfaction with street lighting	NHT survey results	>National average	Strategic	Highway asset	Annually
2.10	% of all carriageway defects repaired on time	NHT PMF data	>National average	Operational	Reactive Maintenance & Inspections	Quarterly
2.11	Defects per Kilometre	NHT PMF data	<National average	Operational	Reactive Maintenance & Inspections	Quarterly
2.12	No. of enquiries per Kilometre	Number of all highways related enquiries received (CRM system)	Downward trend	Tactical	Contact Centre	Quarterly

	2.13	% of bridges general inspections (GI's) completed on time	NHT PMF data. From bridge management system	>National average	Tactical	Highway asset	Annually
	2.14	% of bridge stock in very good condition	NHT PMF data. From bridge management system	>National average	Operational	Highway asset	Annually
	2.15	% of bridge stock in good condition	NHT PMF data. From bridge management system	>National average	Operational	Highway asset	Annually
	2.16	% of bridge stock in very poor condition	NHT PMF data. From bridge management system	<National average	Operational	Highway asset	Annually
	2.17	% of bridge stock in poor condition	NHT PMF data. From bridge management system	<National average	Operational	Highway asset	Annually
Sustainability	3.1	% of carriageway network treated (planned maintenance)	NHT PMF data. Area of completed schemes as % of total (planned maintenance)	>National average	Operational	Planned maintenance	Annually
	3.2	% of footway network treated	NHT PMF data. Area of completed schemes as % of total (planned maintenance)	>National average	Operational	Planned maintenance	Annually
	3.3	% of gullies emptied in the year	NHT PMF data. Cyclical gully cleansing regime	>National average	Operational	Drainage	Annually
Safety	4.1	Carriageway KSIs per 1,000 km of network	Number of annual KSIs collected by GM Police / network length	Downward trend	Tactical	Citywide team	Quarterly
	4.2	% of the road network at or below IL for skid resistance	NHT PMF data. Annual SCRIM surveys	<National average	Strategic	Highways asset	Annually

	4.3	% of safety inspections carried out on time	Percentage of Highway Safety Inspections completed on time	>70%	Operational	Reactive Maintenance & Inspections	Quarterly
	4.4	Public Satisfaction with speed of repair to damaged roads & pavements	NHT survey results	>National average	Tactical	Highway asset	Annually
	4.5	% of Winter gritting runs completed on time	NHT PMF data. Percentage of Winter gritting runs completed on time	>National average	Operational	Winter Services	Annually
	4.6	Public Satisfaction with cold weather gritting	NHT survey results	>National average	Tactical	Highway asset	Annually
	4.7	Public Satisfaction with speed of repair to street lighting	NHT survey results	>National average	Tactical	Highway asset	Annually
Financial	5.1	% of carriageway claims repudiated	NHT PMF data. % of carriageway claims repudiated	>National average	Strategic	Claims	Annually
	5.2	No. of carriageway claims per km	NHT PMF data. Total number of claims / network length	<National average	Strategic	Claims	Annually
	5.3	% CQC rating	From NHT CQC analysis	>National average	Strategic	Highways asset	Annually
	5.4	CQC normalized cost £/km	From NHT CQC analysis	<National average	Strategic	Highways asset	Annually

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