Highway Asset Management Strategy 2025

Lewisham Council

Lewisham

Version History

Version	Date	Description	Prepared by
1.0	October 2025	HAMS 2025	Metis

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Abbreviations

BCI	Bridge Condition Index
CCTV	Closed Circuit Television
CIL	Community Infrastructure Levy
DfT	Department for Transport
GLA	Greater London Authority
HAMS	Highway Asset Management Strategy
HMEP	Highway Maintenance Efficiency Programme
ISO	International Organization for Standardization
KPIs	Key Performance Indicator
LIP	Local Implementation Plan
LoTAG	London Technical Advisers Group
TfL	Transport for London
TLRN	Transport for London Road Network

Lewisham

The Borough

Context

The London Borough of Lewisham (Lewisham) is responsible for managing approximately 391 km of highway network and assets, including roads (carriageways), pavements (footways), drainage assets (gullies), street lighting assets, street furniture, highway structures and highway trees. These assets are shown in Figure 1.

Figure 1: Highway Network Assets.

Highways serve as critical arteries for the economy and society, enabling transportation for people and goods, connecting communities, and facilitating trade and investment. They are vital for emergency services, and they allow rapid response to incidents and provide access to essential services like healthcare. Additionally, well-maintained highways contribute to public safety, reduce wear and tear on vehicles, and support economic growth by ensuring efficient and reliable movement of products and services.

As the local highway authority, Lewisham has a statutory duty in line with the Highways Act (1980) to maintain the network in a safe and serviceable condition, minimising risks to users and safeguarding the critical connections that support jobs, businesses, and communities.

Highway Asset Management?

The International Standard for Asset Management (ISO 55000) defines asset management as “coordinated activities of an organization to realize value from assets”. It is a best practice approach to managing public assets, ensuring value for money and long-term sustainability.

To support the implementation of an Asset Management approach, Lewisham has defined its strategic approach to realise value through managing highway assets in Strategies and Activities. This ensures that the Council implements risk-based, effective maintenance strategies that support local priorities and policies, comply with legislation and ensure value for money.

Purpose

Lewisham’s approach to highway asset management is outlined in this Highway Asset Management Strategy. The scope of this document is all roads in Lewisham that are defined as highways and are maintained at public expense under the Highways Act. Roads that are maintained by TfL or private roads are not within this scope.

This strategy will support Lewisham to:

- Comply with legislation, national and regional plans
- Align activities with the direction of Council plans and policies
- Deliver a risk-based, data-driven approach to making sustained long-term decisions for our assets
- Improve the resilience and environmental sustainability of our assets and operations
- Outline our commitment to enhancing our Highway service, to support Lewisham's priorities to be **cleaner and greener, open and safe, and promote health and wellbeing and a strong local economy.**

Borough Details

Lewisham is an inner London Borough located to the south-east of the City of London (Figure 2). It shares boundaries with Southwark to the west, Greenwich to the east and Bromley to the south. The Borough contains a mix of urban and suburban centres: Forest Hill and Sydenham in the south-west, which have a suburban character, alongside Catford, Lewisham and Deptford which serve as the principal urban centres in the centre and north.

Lewisham's highway network is impacted by a number of strategic routes. The A205 South Circular Road provides the primary East-West connection, linking key destinations across south London, while the A20, A21 and A2 provide radial routes connecting Central London and Kent with links to the M25 Orbital motorway. These corridors are essential to both local movement and longer-distance travel, but they are also some of the most congested in the capital. The A205 Eastbound from Norwood Rd ,Croydon to Ravensbourne Rd, Lewisham, is the 6th most congested road in the UK and the 5th most congested in London in 2023, according to INRIX, a global leader in transportation data and analytics. While the strategic road network provides good connectivity, it also creates challenges. High traffic volumes contribute to congestion, poor air quality, and road safety concerns which spill onto local routes and put increased pressure on the local road infrastructure.

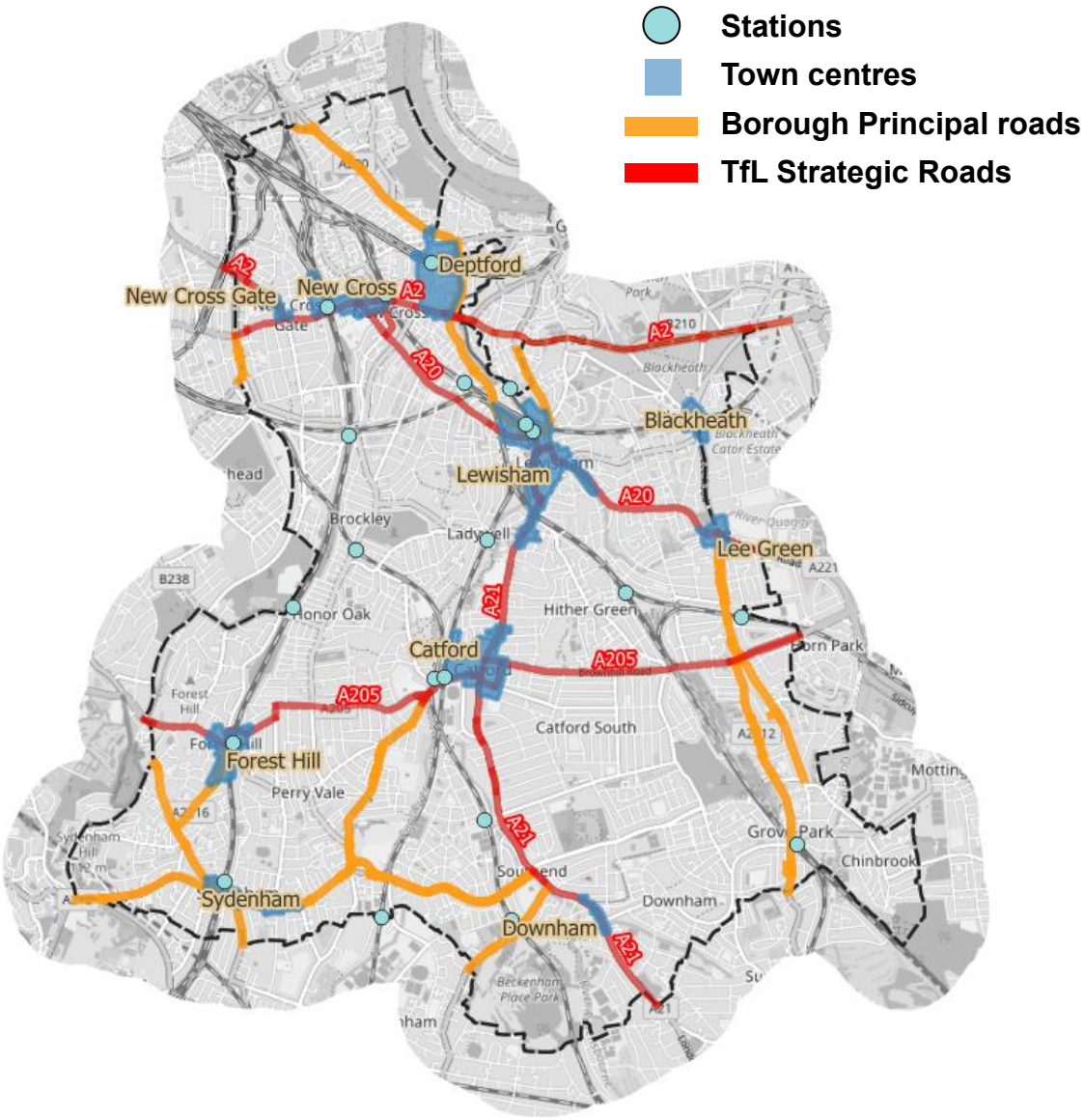

Figure 2: Borough Map with Key Features.

Lewisham is served by 42 TfL bus routes, providing extensive connections across south-east London and into central London. Active travel is supported by a network of signed cycle routes and riverside paths, including National Cycle Route 21 along the Waterlink Way. Public transport accessibility is strongest in the north of the borough, particularly around New Cross, Deptford and Lewisham, which benefit from frequent services on the Docklands Light Railway (DLR), National Rail and London Overground. However, provision is more limited in parts of the far north and south-east, where some areas are located over 1.5km from the nearest station and are served only by National Rail services.

Lewisham's local road network plays a vital role in linking strategic corridors such as the A205, A20, A2 and A21 with neighbourhoods, bus routes, and town centres, ensuring both long-distance and local journeys are well connected. These roads enable the efficient movement of people, goods, and services, acting as the first and last link in most journeys, whether by car, bus, bike, or on foot. They are also essential for access to schools, hospitals, and local businesses, helping to sustain the borough's economy and community life. Maintaining and

managing this network effectively is important to reduce congestion, improve safety, support sustainable travel, and ensure seamless integration with London's wider transport system.

Challenges

London's increasing population has had a noticeable impact on Lewisham, resulting in extensive development and regeneration within the borough with future developments planned in the north of borough including Convoys Wharf. Lewisham has been undergoing this transformation whilst addressing demand on its highway network through enhancements and planned improvements. One of the key issues to be tackled is the uneven offer of public transport across the area. Despite the high density of rail stations and bus routes, northern and southern areas of the borough had been lacking suitable infrastructure that would make movement of its residents reliable with public transport. Limited connectivity between North and South as well as absence of orbital connections across the south areas have been evident.

Enhancing highway infrastructure management will contribute to addressing these gaps. A consistent highway asset management approach will ensure the capability of highways to support orbital public bus routes. This will help relieve congested central routes and also enhance other solutions regarding pedestrians and the cycle network.

Asset Management Framework

The Asset Management Framework outlines the structured approach utilised by Lewisham to efficiently and systematically manage its assets. It outlines the policies in place to support the appropriate management of the highway network in a cost-effective safe and sustainable manner.

With this framework, Lewisham are able to identify a clear link between the high-level drivers of the Council as set out in the Transport Strategy objectives and the strategic direction set out for highway asset management. This enables a top-down approach for implementing asset management at strategic, tactical and operational levels is set out. These drivers include relevant legislation, policies, guidance documents and Lewisham's strategies and plans for the highway network.

The asset management framework is governed by five groups:

- **Legislation:** It sets out the statutory duties Lewisham must legally adhere to when undertaking highway management and maintenance.
- **National & Regional Policy:** It consists of the policies set at national and regional levels to inform Lewisham's Strategies and Plans, meeting its local context and needs.
- **Guidance documents:** This is the guidance setting out best practice methods to support consistent, effective, and informed decision-making for Highway Asset Management.
- **Council Strategies & Plans:** The key priorities for future development across Lewisham are outlined.
- **Highway Asset Management:** Lewisham's Asset Management approach for the highway network is established in this document, and its alignment with official documents regarding this approach.

Figure 3: Asset Management Framework

Strategies and Activities

Lewisham is committed to maintaining and managing the highway network efficiently and sustainably, ensuring the network is fit for purpose. Lewisham's approach to managing transport is set out in the **Transport Strategy & Local Implementation Plan (2019) (LIP),** which is a statutory document that was developed in alignment with the Mayor's Transport Strategy (MTS) under the Greater London Authority Act 1999 (GLA).

The LIP's overarching aim is to increase the proportion of travel in London to be made on foot, by cycle or using public transport by 2041. The main objectives are based on three goals:

Figure 4: LIP Objectives

It is Lewisham's priority to design streets that encourage walking, cycling and using public transport; by relying less on cars, this will positively impact health by reducing emissions and promoting active travel. This is in alignment with TfL's Healthy Streets for London approach, which provides a framework for putting people and their health at the centre of how London's street network is designed, managed and used.

To support Lewisham achieve these overarching objectives within highway maintenance a series of Highway Asset Management outcomes have been developed. This can be seen in Figure 5, where specific activities outlining the approach to highways maintenance have been identified, acknowledging the role highway infrastructure represents in the Borough of Lewisham.

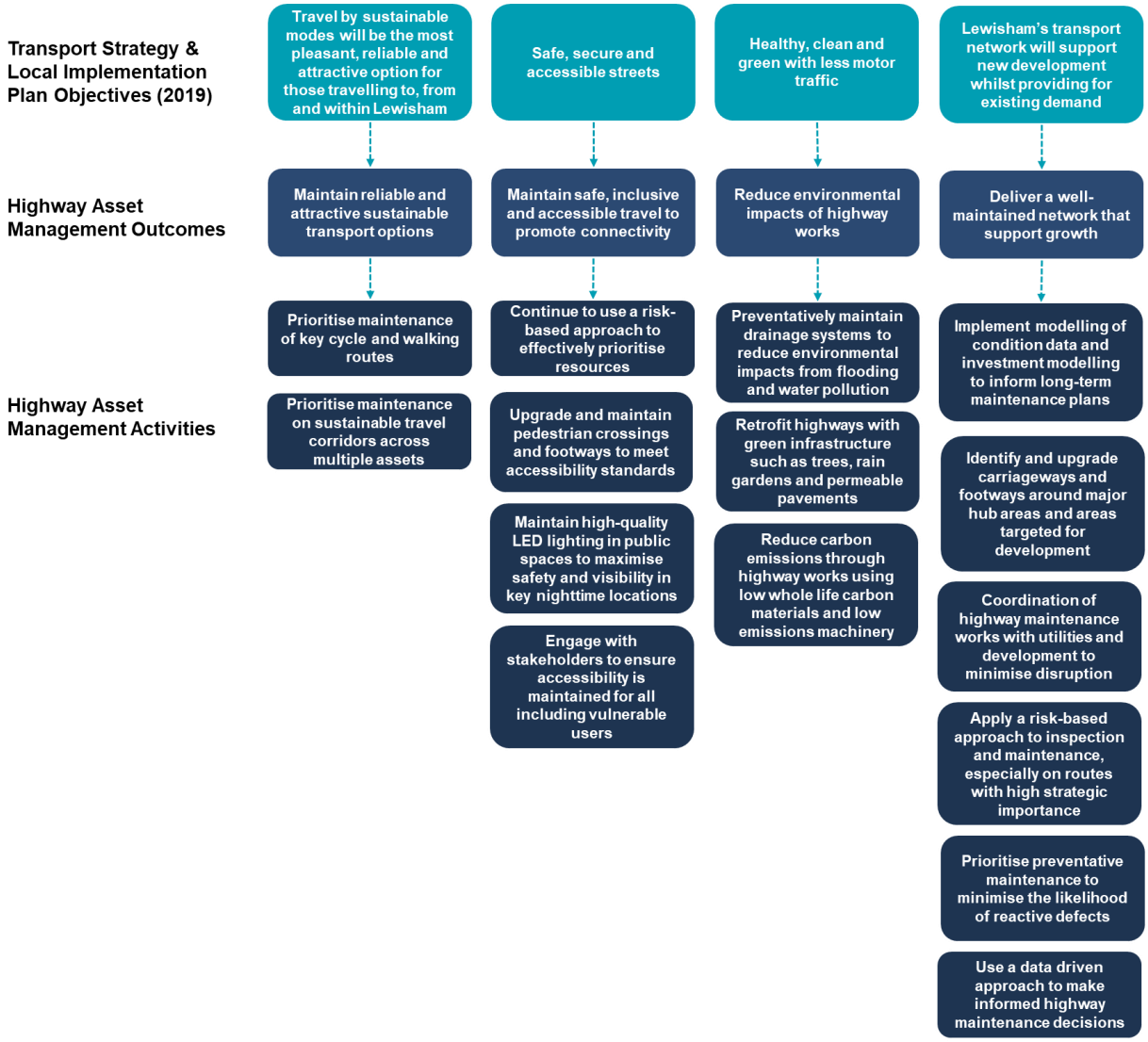

Figure 5: Highway Asset Management Strategies and Key Activities

Performance Management

Lewisham has adopted performance management aligned with ISO 55000, Asset Management Systems, and as outlined in HMEP – UK RLG Highway Infrastructure Asset Management Guidance (2013).

Lewisham use Key Performance Indicators (KPIs) to monitor and measure the level of service across the highway assets, investigate the accuracy of their priorities and track their progress. Table 1 shows the KPIs that Lewisham monitor and report on an annual basis. Lewisham also tract contractual KPI's to ensure quality of work remains at the required standards.

These KPIs are in place to ensure the highway asset management strategy delivers impactful outcomes and are directly aligned to the strategic outcomes of the service. Each outcome has been linked to specific KPIs that provide a structured means of measuring success against the original objective. Regular monitoring and reviewing the KPIs enables Lewisham to assess the effectiveness of maintenance and investment strategies, by driving continuous improvement and ensuring accountability.

Performance data also enables Lewisham to report with transparency to external bodies such as the Department for Transport (DfT) to align with nation reporting requirements.

Table 1: Key Performance Indicators

Outcome 1: Maintain reliable and attractive sustainable transport options	Measure	2024/ 25	2025/ 26	2026/ 27	2027/ 28
Cycleways in 'good condition'	%	100			
Footways in 'good condition'	%	28.13			
Objective 2: Maintain safe, inclusive and accessible travel to promote connectivity					
Reactive defects per km (carriageways)	no.	3.18			
Reactive defects per km (footways)	no.	3.85			
Ratio of reactive to preventative spend (% capital)	%	17			
Objective 3: Reduce environmental impacts of highway works					
Number of Highway trees	no.	10,783			
Area of SuDS	m²	2000			
Carbon from highway maintenance activities	TCO2e	1,752			
Average yearly street light energy consumption	kWh	4,197,205			
Gullies operating efficiently (cleaned / blocked)	%	97.87			
Objective 4: Deliver a well-maintained network that support growth					
Principal Classified Roads in 'good condition'	%	44.31			
Non-Principal Classified and 'good condition'	%	45.98			
Unclassified Roads in 'good condition'	%	44.51			
BCI (Bridge condition index)	BCI	79.24			
Number of claims (CW)	no.	23			
Percentage of repudiated closed cases (CW)	%	56.52			
Number of claims (FW)	no.	32			
Percentage of repudiated closed cases (FW)	%	65.63			

Service Delivery

As part of the ongoing effort of delivering cost-effective maintenance of highway assets in the borough, Lewisham supports service delivery by using either in-house capability or the use of external contractors and consultants to carry out maintenance work.

Lewisham complies with all relevant legislation including the Procurement Act 2023, to promote fair competition and best practice. Performance is monitored for every contractor through KPIs to assure that value is delivered for residents, businesses and communities. The Council liaises with contractors and service providers to improve outcomes.

The service delivery provider is FM Conway with a 10-year contract from 2022 to 2032.

Table 2: Service Providers

Provider		Services
Highway Authorities		
Lewisham Council	**Highways**	Highway management, supervision and coordination
Transport for London		Responsible for public transport, traffic signals and maintenance of Transport for London Road Network (TLRN)
Professional Service Providers		
Various		Design and asset management activities outsourced to specialist consultants
Term Service Maintenance Contract		
FM Conway		Highway Capital Works Contract
		Highway Maintenance and Inspection Works
		Gully Inspections and Cleansing
Various		Bridges and Structures Inspections and Maintenance
M Group		Street Lighting Inspection and Maintenance
		Street Lighting Replacement Programme

Stakeholder Engagement

Stakeholder engagement is the structured process of engaging with key asset users or parties directly affected by decisions – particularly the public, the local community, service providers, and regulatory bodies. Its purpose in the highway asset management context is to inform the decision-making processes regarding highway infrastructure network in a transparent and structured method, aligned with community needs and interests and legal obligations.

Stakeholders Groups

The stakeholders consist of individuals, groups and organisations that have direct or indirect interest in the highway network. They can be split into two groups, internal and external.

Figure 6 outlines Lewisham's key stakeholders.

Internal Stakeholders

External Stakeholders

Figure 6: Stakeholder Groups

Internal Stakeholder Communication?

Engagement with internal stakeholders helps to ensure effective collaboration between council departments. The Highways Team liaises with the other key teams within the council through regular meetings to notify future works and gather information on any utility works. Amendments to the programme of future works are made accordingly to prevent unnecessary damage to the network for any newly resurfaced roads or pavements due to utility works.

External Stakeholder Communication

Engaging these stakeholders ensures that public needs are considered, and priorities are given to strategies such as safety, accessibility and transparency. Lewisham employs various ways of engaging with stakeholders, and in certain cases, tailored actions have been implemented, tied to specific initiatives. In general, the methods outlined below in Figure 7 are utilised to communicate with external stakeholders:

Figure 7: Stakeholders' Methods of Communication.

Data-Enabled Decision-Making

Asset Knowledge

Good asset knowledge enables Lewisham to make efficient asset management decisions, through understanding the size and performance of its highway network assets. Asset knowledge is collected through visual inspections, surveys, and post-works updates, as well as local knowledge. Lewisham utilise new and emerging technologies where appropriate to aid in the collecting of key asset data including AI based condition surveys on carriageways and the use of CCTV to collect information on subsurface drainage assets.

The types of information collected and stored for Lewisham's assets include:

- **Geospatial location**
- **Physical attributes**
  - **Age**
  - **Dimensions**
  - **Materials**
- **Priority and risk factors**
  - (see ***Network Hierarchy***)
- **Condition, performance, inspection and testing results**
- **Maintenance history**
  - **Planned**
  - **Routine**
  - **Reactive**
- **Borough specific information**
  - **Heritage status etc.**

The Asset Knowledge is used by the Highway Officers to support their data-driven decision-making on the following key areas:

- **Asset performance Analysis and Reporting** – including condition surveys
- **Monitoring progress against Policy Objectives** – aligned with the *Performance Management Framework*
- **Investment planning** – Current and future investment modelling to support cost-effective decision-making (see *Funding & Investment* and *Maintenance Strategies*)

Table 3 sets out the highway asset inventory and asset management system data is held and managed within. To ensure that data is managed to be accurate, up-to-date and complete. Highway officers, inspectors and term maintenance contractors are responsible for collecting data on highway assets and updating the asset inventory as and when things change.

Table 3: Highway Asset Inventory

Asset Group	Asset Type	Quantity	System
Carriageways	Principal (A)	**19 km**	
	Non-Principal (BCU)	**373.5 km**	
Footways	A Roads	**33.7 km**	
	BCU Roads	**743.5 km**	
	Footpaths	**12.0 km**	
Cycleways	Segregated cycleways	**2.4 km**	
Highway Structures	Highway Bridges	**36 No.**	
	Pedestrian/ Cycle Bridges	**22 No.**	
	Culverts	**5 No.**	
	Pedestrian Subway/ Underpass	**1 No.**	
	Retaining Wall <3m	**32 No.**	
	Retaining Wall <3m	**13 No.**	
	Special Structures	**9 No.**	
Street Lighting	Columns	**17,253 No.**	
	Wall lights	**43 No.**	
	Central island beacons	**19 No.**	
	Pedestrian crossings	**134 No.**	
	Surface-mounted lights/Spotlights	**2 No.**	
	Illuminated signs	**2,220 No.**	
Street Furniture	Non-illuminated signs and bollards	**22,900 No.**	
Drainage	Gullies	**15,868 No.**	
Trees	Highway Trees	**10,783 No.**	
Land	Urban	**5,140,000 m^2**	

Network Hierarchy

The Network Hierarchy sets out the relative risk across the borough's public highways and forms a fundamental part of Lewisham's highway asset management approach, including the prioritisation of maintenance programmes and inspections.

Lewisham has defined a risk-based, evidence-based Network Hierarchy, aligning with the Code of Practice and LoTAG Guidance by assessing functionality and usage of every street in the borough. The ruleset is provided in Table 4 with risk features ranked from 1 to 5 with 1 signifying highest risk.

Table 4: Network Hierarchy Ruleset

Risk Feature	CW	FW
Traffic		
A Roads (+10,000 AADF)	2	5
A Roads (5,000 to 10,000 AADF)	3	
A Roads (2,000 to 5,000 AADF)	4	
Transport		
Rail | DLR (10+ million/year)	5	2
Rail | DLR (5 to 10 million/year)	5	3
Rail | DLR (<5 million/year)	5	4
Cycleways	2	
Bus Route (30+ buses/hour)	2	
Bus Route (15 to 29 buses/hour)	3	
Bus Route (<15 buses/hour)	4	

Risk Feature	CW	FW
Essential Services		
Hospitals	2	
Schools & Education		
1,000+ pupils	2	
500 to 999 pupils	3	
<500 pupils	4	
Activity Areas		
Town Centres	2	
Care Homes & GPs	4	
Strategic Industrial	4	5
Other Features		
Event Venues	3	
Care Homes & GPs	4	
Places of Worship	4	

Figure 8 shows the hierarchy as applied to the Lewisham network. To ensure that the Network Hierarchy remains aligned with local context and changes to the network, Lewisham regularly review the Network Hierarchy internally to ensure new developments or adopted highway assets are accounted for. Safety inspections are undertaken with a risk-based approach as per the Safety Inspection Policy and Network Hierarchy, with every section of public highway inspected on a monthly, quarterly, six monthly or annual basis.

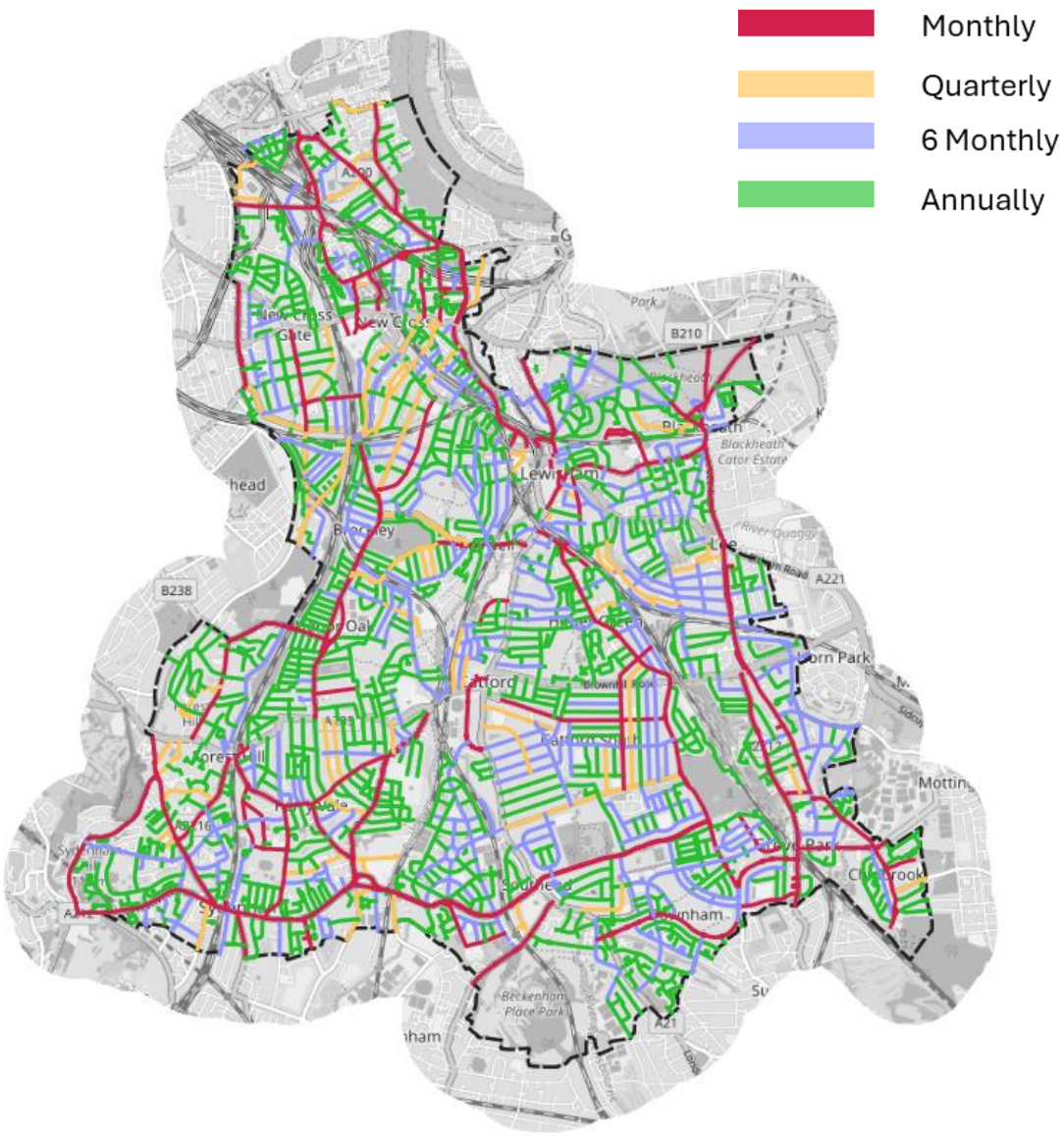

Figure 8: Network Hierarchy classifications across the borough.

Funding & Investment

Investment in public highways in Lewisham is critical to ensuring the network is safe, efficient, and maintained at appropriate standards. As the demands on local infrastructure continue to grow, it is vital that funding strategies are aligned with long-term performance goals. To support this, Lewisham Council has undertaken a detailed analysis of various investment scenarios, evaluating the effects of different funding levels and maintenance approaches.

Funding Sources

Lewisham utilise capital and revenue funding to deliver maintenance across the network.

- **Capital expenditure** is used to improve or increase the public highway network – this includes maintenance to extend the life of assets, replacement of existing assets or construction of new assets. It is funded from borrowing, developer contributions (Community Infrastructure Levy- CIL) and grants.
- **Revenue funding** is used for day-to-day operational costs to keep the network functional, including reactive maintenance and routine activities (such as grass cutting and routine street lighting testing). It is funded from local taxes, fees and government grants.

This funding is primarily obtained through Council capital and revenue streams, but this is further supplemented from external sources, specifically an annual fund from the Department for Transport (DfT) and needs based funding obtained through Trasport for London (TfL).

Figure 9 outlines Lewisham's spend over the past 6 years; this shows an increase in funding from 2022/23 to 2024/25.

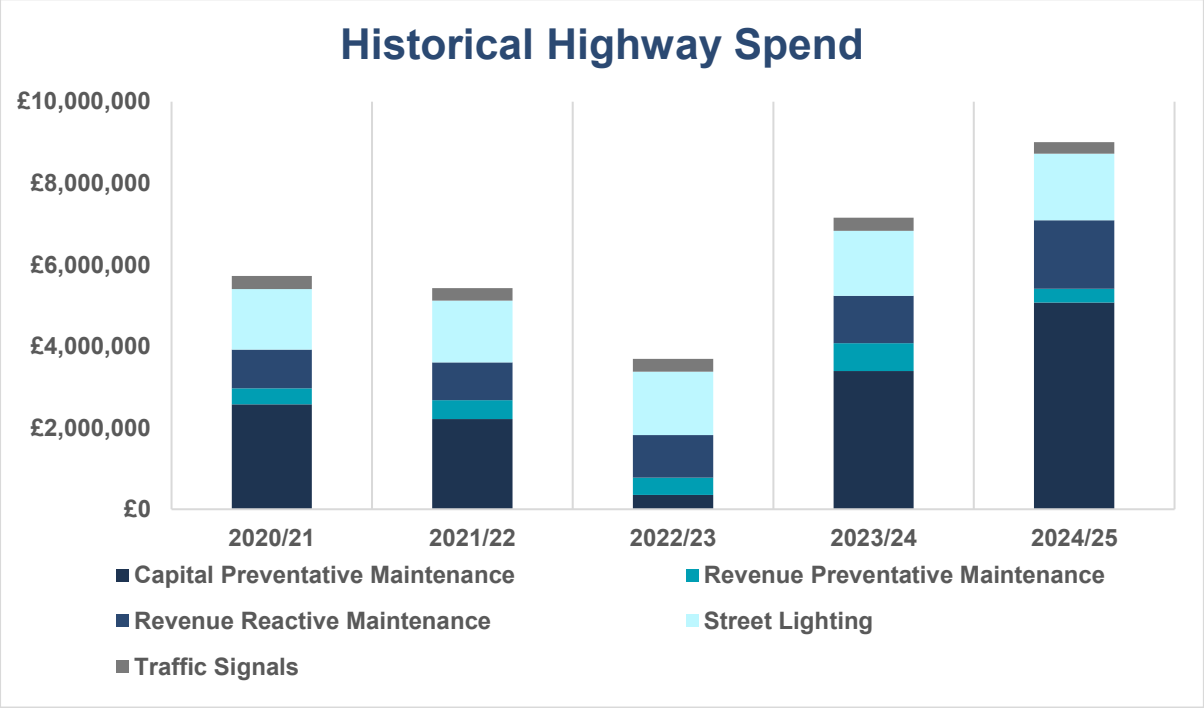

Figure 9: Lewisham Highway Funding Sources

Investment Strategy

Lifecycle planning is a method to forecast future asset condition given the rate of uplift and deterioration as shown in **Error! Reference source not found.**10. It represents the method in which Lewisham forecasts asset condition and backlog with differing funding requirements to inform investment decisions. Lifecycle planning allows Lewisham's Highway Officers to:

- Identify required funding to maintain asset condition at targeted levels.
- Identify maintenance strategies which offer the best value over an asset's whole life

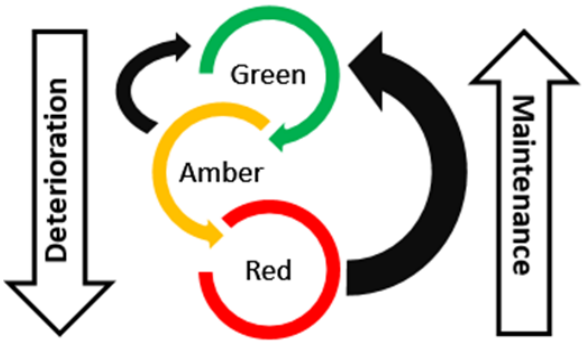

Figure 10: Lifecycle planning and deterioration

Lewisham conducts two investment analysis scenarios to understand required funding levels to meet performance targets. In addition to reviewing the investment scenarios, analysis is carried out by assessing how funding needs and performance vary depending on the level and type of use, and relative importance of each part of the network. The investment scenarios are:

Existing Funding	Continue at current funding levels and treatment rates.
Steady State	Minimum funding required to maintain current condition.
Backlog	Funding required to treat all assets in a 'red' condition.

Table 5 provides the annual funding need for each corresponding investment scenario listed above. At present, Lewisham is targeting a 'Steady State' strategy, preventing deterioration and maintaining the highway network in the condition it is today.

Lewisham will continuously review and update the investment need for its carriageway and footway assets periodically. This allows Lewisham to monitor progress against the long-term 'Steady State' condition target for highway assets and inform the need for business cases for additional funding.

Table 5: Investment strategies and required annual funding (£m/yr) updated in 2024

Asset Group	Backlog	Current Funding	Steady State Requirement
Carriageways	TBC	TBC	TBC
Footways	TBC	TBC	TBC

Maintenance Strategies

Effective maintenance strategies are critical for preventing the deterioration of highway assets and addressing defects efficiently. These strategies ensure that available resources are allocated where they deliver the greatest value. This section outlines Lewisham's approach to maintenance and investment, supporting the aim of continuously delivering a well-maintained network.

Maintenance Activities

Lewisham incorporates the following maintenance activities in its plans:

Planned: Planned works to extend an asset's life or to renew or replace the asset.

Reactive: Unplanned works to tackle safety issues and emergencies identified via safety inspections or reports

Routine: Regular, scheduled work to maintain assets in a safe, serviceable state

The types of maintenance activities utilised and delivered in Lewisham's highway service are detailed in Table 6.

Table 6: Planned, Reactive and Routine Maintenance Activities

Planned Maintenance	
Carriageway Resurfacing	**Highways**
Footway Repaving & Reconstruction	
Reactive Maintenance	
Safety Defect Repairs	**Highways**
Gully Blockages	
Street Lighting Faults	
Winter Gritting	
Routine Maintenance	
Highway Safety Inspection Regime	**Highways**
Gully Cleansing Regime	
Street Lighting Inspections	
Structural Inspections	
Tree and Plant Inspection	**Green Scene**

To deliver the maintenance activities above Lewisham take a risk-based approach for each asset type. Figure 11 sets out how maintenance activities are utilised to deliver a well-maintained network.

Carriageways Footways & Cycleways	**Maintenace works are identified through condition surveys (planned) and highway inspections (reactive/planned)**
	Asset data, asset condition & historical perfomance are utlised to develop planned programmes of work
	Safety defects are rectified through reactive repairs, these are individually assessed and repaired according to risk level
	Non-Safety defects are added to planned programmes of works
Highways Structures	**Routine inspections are used to identify maintenace works**
	General and principle instections identify maintenace works which are either rectified reactively (safety defects) or added to planned programmes of works
	Routine works to extend the life of assets are conducted (e.g. painting of metal works and waterproofing)
Highway Drainage	**Maintenace works are identified during routine cleansing works**
	Routine cleansing is conducted on drainage assets to ensure functionility with frequencies based on asset prioirty
	Issues identified (e.g. blockages, civil repairs) during cyclical drainage cleansing works are either rectified reactively (safety defects) or added to planned programmes of works
Street Lighting	**Routine inspections are used to identify maintenace works**
	Structural and electrical instections and night scouting programmes are used to identify maintenace works which are either rectified reactively (safety defects) or added to planned programmes of works
	Lighting levels (dimming) and durations (trimming) are determined based on risk, taking into account footfall, night time ecconomy and crime
Highway Trees	**Maintenance works are identified through highway inspections & arbororist assessments**
	Safety defects are rectified through reactive repairs, these are individually assessed and repaired according to risk level
	Non-Safety defects are added to planned programmes of works
Street Furniture	**Maintenance works are identified through highway inspections**
	Safety defects are rectified through reactive repairs, these are individually assessed and repaired according to risk level
	Non-Safety defects are added to planned programmes of works

Figure 11: Asset based maintenance approaches

Works Prioritisation

Lewisham uses a data-driven approach to create an annual forward works programme for maintenance of its highway assets. This provides transparency of works and accountability on behalf of the Council for effective planning of highway maintenance works. The programme is communicated to residents and businesses via the council website and relevant social media. Asset-specific risk-based priority factors are used to rank assets that require investment. They are:

- Asset Condition
- Network Hierarchy
- Historic trends in reactive defects and claims
- Local community and business benefits
- Local knowledge and engineering judgement

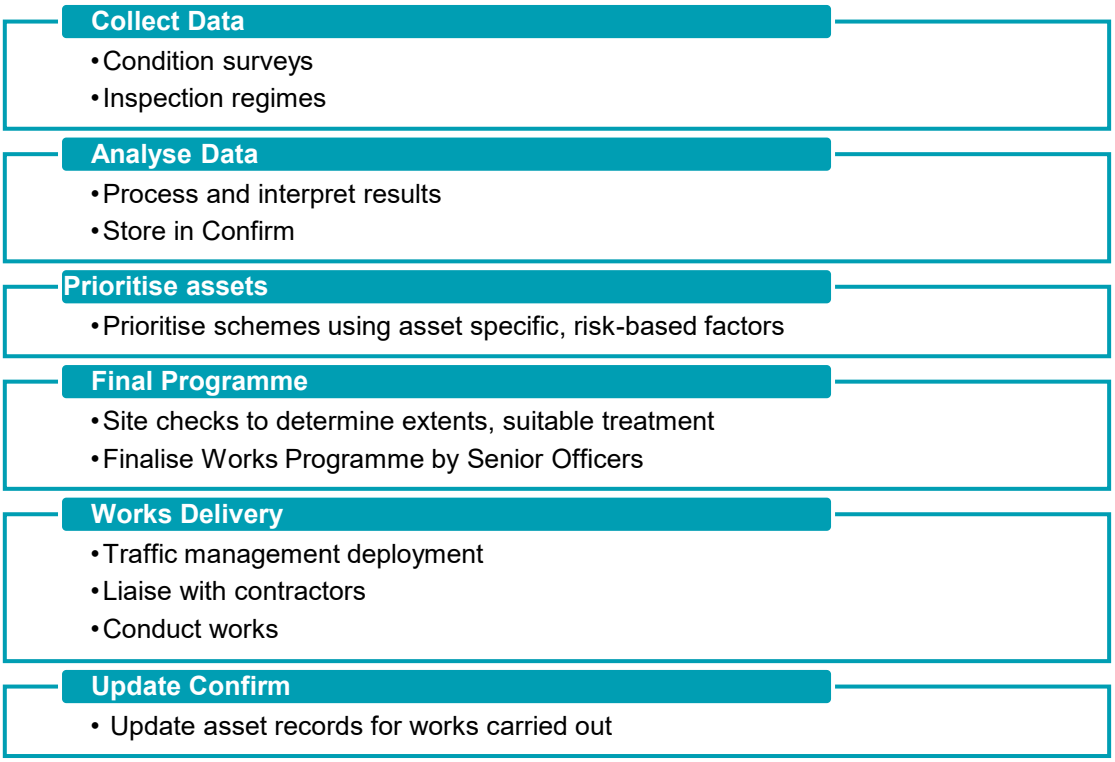

Figure 12: Works Programming Process

Designing For Maintenance

Designing for maintenance considers the early decisions on how new public realm projects or existing highway assets will be maintained, factoring in the risks and costs associated throughout all of their lifecycle. It promotes a whole-life value approach for the asset's life, the whole-life environmental impact of treatments used and supports the highway network's resilience. This section sets out Lewisham's commitment and approach to designing for maintenance.

Designing for maintenance requires collaboration, alignment and support from internal and external stakeholders. To ensure that highway officers, traffic and public designers are effectively communicating their vision for the highway network, Lewisham is developing a Street Design Guide. This details the standards and specifications for street and public realm design and acts as a central reference point for all involved.

It supports designing for maintenance by considering the following:

- Provision of a material palette for the highway network and street furniture to promote consistent design and ensure a reliable supply of materials and stocks
- Ensuring asset materials are suitable for their intended use, easing maintenance, cleansing and repair
- Encouraging minimising street furniture clutter, reducing maintenance needs, avoiding waste and considering the whole product lifecycle.

Lewisham will ensure maintenance strategies and investment plans promote whole-life value, as detailed in Funding & Investment and Maintenance Strategies. Whole life carbon considerations will also be considered as part of designing for maintenance, as detailed in Environmental Sustainability to support Lewisham's aim to become a Net Zero borough by 2030. Key stakeholders, such as maintenance contractors, are to be involved during key design stages to highlight any issues that would hinder future maintenance requirements.

Climate Action and Resilience

Environmental Sustainability

Climate change presents a range of challenges to Lewisham's urban highway network, from increased risk of surface water flooding to the impact of extreme temperatures on road surfaces. In response, the Council has committed to becoming carbon net-zero by 2030 and is taking decisive action to support more sustainable transport and climate-resilient infrastructure.

To reduce the environmental impact of its operations, Lewisham will view sustainable design, greener materials and carbon output as key factors in decision-making. More than 25% of the borough's carbon emissions come from transport, including vehicles travelling in or through the borough. Within the action plan, one of the key policies is to move to a decarbonised transport network through encouraging modal shift and managing parking.

Climate Adaptation

Adapting to climate risks, particularly from surface water flooding, is a key focus. The Council maintains a proactive drainage management programme, cleaning around 14,000 roadside gullies each year. The cleaning schedule is informed by silt level data to prioritise high-risk areas, reducing the risk of localised flooding and road damage during heavy rainfall.

Green infrastructure also plays a critical role in climate adaptation. Lewisham has now delivered over 50 rain gardens across the borough. These landscaped features absorb rainwater runoff from roads, roofs, and pavements—easing pressure on the drainage system while filtering out pollutants and enhancing local biodiversity. Rain gardens also contribute to urban cooling and provide habitat for pollinators and birds.

Carbon Management

Highway maintenance decisions will consider the PAS 2080 carbon reduction hierarchy as the overarching principle for minimising emissions from highway activities for all elements of the service (but with a focus on the biggest emitters):

- Avoid: Employ a risk-based approach to focus maintenance efforts on where most needed or impact is greatest, reducing unnecessary emissions.
- Switch: Adopt lower-carbon materials, methods and technologies to reduce embodied carbon over the whole-life of an asset and at all stages.
- Improve: Identify improvements in highway maintenance and management processes to reduce embodied carbon in all activities.

The Council is also incorporating low-carbon practices into highway maintenance and resurfacing. New road surfacing materials are designed to be manufactured and applied at lower temperatures, cutting fuel use and emissions. Many of these materials are made with a higher proportion of recycled content and can be laid in thicker, single layers, reducing the need for multiple applications. This not only shortens construction times and minimises disruption but significantly reduces emissions from construction vehicles

In 2016 the Council implemented a streetlighting 'dimming and trimming' that varied the intensity of lights and made changes to timings to start lighting later and end earlier16. The changes delivered an estimated 25% reduction in the energy consumption of the borough's streetlights.

A review and update of the existing procurement and social value policies to strengthen the value placed on life-cycle assessment, support the circular economy and reduce carbon emissions across our supply chain is also taking place. Contractors will be required to publicly report their corporate carbon emissions and including CO_2e emissions relating to the good and services we procure as performance metrics in contracts. Also, the scope for Council Information Technology contracts will be assessed in order adopt the highest standards of efficiency and environmental performance including whole lifecycle costs.

By aligning with PAS 2080 Lewisham aim to reduce emissions from the highway service to work towards the target of becoming a net zero borough by 2030.

Air Quality

Through the Sustainable Streets programme, the Council is pursuing an ambitious strategy to reduce the availability of unrestricted car parking and expand infrastructure for walking, cycling, and other forms of active travel. This approach aims to reduce the volume of car journeys in the borough and encourage long-term behavioural change towards more sustainable modes of transport.

To better understand and respond to air pollution, Lewisham has also secured funding from the Department for Environment, Food and Rural Affairs (Defra) to expand its air quality monitoring network. This data is vital to shaping targeted interventions that improve air quality and safeguard public health.

Highway maintenance works are supporting these goals through the phase out of hydrocarbon vehicles and minimising the usage of materials where possible that add harm air particulates into the atmosphere.

Street Design Guide Action Plan

The Lewisham Street Design Guide, has set out the following actions which Lewisham highways align to:

- Use of certified materials and products that meet latest certification standards for social and environmental sustainability.
- Reuse and repurpose of products and materials through re-setting of existing granite kerbs, rather than introducing new, or using recycled products.
- Product lifecycle and the circular economy are considered, including the sourcing of raw materials, transport, productions, construction, use, maintenance, repair and disposal.
- Explore and test new innovative materials and technologies that could help minimise negative environmental and social impacts.

Network Resilience, Weather and Emergencies

Lewisham's network resilience plans define the processes in place to mitigate risks to service and prepare the highway network for adverse weather and other events. To ensure network resilience, Lewisham manage resources and prioritise interventions according to risks. The following section outlines the processes in place to manage the highway network in times of extreme weather and other emergencies which could also include relevant political incidents and natural disasters.

Extreme Weather and Resilience Network

Lewisham declared a climate emergency in 2019 and has put various measures in place to reduce its impact on the environment. However, more frequent extreme weather events are expected. Extreme weather is defined by the DfT as intense and prolonged rainfall, strong winds (exceeding operation limits) and heatwaves. In such events, Lewisham is committed to maintaining access to local transport and services to minimise any resultant social and economic disruption.

Lewisham has defined a risk-based Resilience Network, a group of strategic roads which should be kept open to maintain economic activity and access to key services. Lewisham ensures resilience by prioritising maintenance and emergency response measures for certain routes, enabling this way a quick recovery to full functionality. This network is defined in the Winter Service Plan.

Flooding

Lewisham as the Lead Local Flood Authority (LLFA) for the borough leads the coordination of flood risk management in Lewisham coordinating with stakeholders including (e.g. Thames Water and Environment Agency). To support it this The Flood Planning team have developed a Local Flood Risk Management Strategy (LFRMS) (2022-2027) building the evidence base that underpins the understanding of flood risk, working in collaboration Lewisham maintain all drainage systems to ensure highways are drained of surface water.

The LFRMS sets out objectives to:

- Improve understanding of flood risk.
- Develop an evidence base for action.
- Reduce flood risk through actions like influencing development and improving drainage.
- Integrate sustainable drainage systems (SuDS) into new developments.

Alongside the objectives the LFRMS also sets out:

- Critical drainage catchments where future development including highway works must address flood risk.
- Acknowledges climate change as a driver for increased flooding and this should be incorporated into planning.

- New development works including highway works are increasingly required to incorporate Sustainable Drainage Systems (SuDS) from the initial design stage, considering factors like quantity, quality, amenity, and biodiversity.

As part of the highway asset management function, a risk-based gully cleansing regime has been developed to deliver a targeted approach to ensuring a functioning drainage network. This is further supported by SuDS features such as rain gardens to reduce the impact of surface water on the hard drainage network.

Emergency Planning

The Emergency Planning Team is responsible for preparing the Council's response to major incidents and emergencies. The team also advises businesses on business continuity management, a key element of emergency planning. Lewisham's role in an emergency is set out in detail on the website here and also sets out Lewisham's statutory duties under the Civil Contingencies Act 2004.

In response to all special events and emergencies, Lewisham collaborates closely with emergency services and other relevant bodies to agree upon an effective approach to allocating resources where they are most required. Responses for highway emergency events, are tailored depending on the scale and impact of the event. As the highway authority when needed Lewisham will provide highway closures and diversion routes to ensure the free movement of people and returning the network back to normal as quickly as possible.

Improvement Action Plan

Asset Management Maturity

An Asset Management Maturity Assessment (AMMA) has been conducted to document the current approach to asset management in Lewisham and identify opportunities for improvement to meet best practice and internal targets. Continuous improvement of Lewisham highways asset management approach is in line with ISO 55000 (Asset Management) and the Code, and so this AMMA has been used to form an Improvement Action Plan.

Improvement Action Plan

The Improvement Action Plan for the asset management service is detailed in Table 7. It identifies opportunities for improvements in Lewisham's approach to highway asset management and details a list of prioritised actions for strategic, tactical, operational and financial improvements with accompanying timescales.

Table 7: Improvement action Plan

No.	Section	Action	Description	Priority
1	Asset Management Framework	Review and Update Asset Management Framework	Ensure the Asset Management Framework is updated to align with Lewisham's key priorities and external drivers.	Priority 1
2	Asset Management Framework	Set a fixed time basis for reviewing HAMS and Highway Policy	Ensure the HAMS and the Highway Policy are reviewed on a fixed time basis (i.e., every 3 years) to ensure alignment and up-to-date information in the documents.	Priority 3
3	Asset Management Framework	Link risk-based activities in HAMS	In the newly developed HAMS, link together relevant risk-based activities (prioritised works programmes, levels of service, inspection regimes, response times, resilient network).	Priority 1
4	Asset Management Framework	Set frequency to review the AM Framework and make HAMS readily available	Make HAMS readily available for the stakeholders and the public and set a frequency with which the AM framework performance will be reviewed by senior decision makers.	Priority 1
5	Asset Management Framework	Outline a highway-specific stakeholder plan	Outline a highway-specific stakeholder plan and ensure the section in HAMS is updated.	Priority 1
6	Asset Management Framework	Document how all assets are an integrated set	Include the Asset Inventory in the HAMS and identify and document how all the assets collectively form an integrated set of highway assets for highway maintenance.	Priority 2
7	Asset Management Framework	Benchmark and align the Highway Policy with neighbouring documents	Benchmark the developed Highway Infrastructure Policy with neighbouring documents and align.	Priority 3
8	Asset Management Framework	Document staff competencies and training requirements	Formally document staff competencies engaged in highway maintenance and develop a training requirements summary	Priority 2
9	Asset Knowledge	Develop a process for new asset adoption	Capture the formal process of adopting a new asset e.g. adopted road, as a flowchart, and how this information would be managed and by whom.	Priority 1

No.	Section	Action	Description	Priority
10	Asset Knowledge	Develop Information Management Framework	Develop an Information Management Manual outlining asset data stored in systems, update protocols, and responsibilities for data accuracy and validity.	Priority 3
11	Asset Knowledge	Formalise the process of claims management	Formalise the process of managing claims with the Insurance Teams (response times, staff roles and responsibilities).	Priority 1
12	Maintenance and Planning	Align the resilient network with the current risk-based approach and network hierarchy	Update the resilient network to align with the current risk-based approach and network hierarchy.	Priority 2
13	Maintenance and Planning	Create a hierarchy for other assets, and formalise the process of updating the existing Network Hierarchy for highways	Formalise the process to update the Network Hierarchy and create a hierarchy for other asset maintenance, like gullies.	Priority 1
14	Maintenance and Planning	Align with PAS2161	Align with PAS2161 in the next carriageway condition survey taking place.	Priority 2
15	Maintenance and Planning	Map high-risk flood areas and plan for flood mitigation	Coordinate with the Flood Management team to map high-risk flood areas and plan for flood mitigation.	Priority 2
16	Maintenance and Planning	Develop Maintenance Management Plan	Develop a Maintenance Management Plan for Lewisham's operational plans on maintaining carriageways, footways, structures, lighting and drainage, setting out a maintenance treatment matrix.	Priority 1
17	Maintenance and Planning	Capture inventory of all critical infrastructure	Capture in an inventory all critical infrastructure, the risks, and the maintenance strategy. Plan to install resilient infrastructure.	Priority 1
18	Funding, Investment & Planning	Review lifecycle plans at a preset frequency	Review lifecycle plans at a preset frequency (three years) and set out whole-life costing estimates of each treatment.	Priority 3
19	Funding, Investment & Planning	Develop a dashboard for monitoring spend & trends	Develop a dashboard for monitoring spend & trends.	Priority 2
20	Funding, Investment & Planning	Develop a pipeline map	Develop a pipeline map to visualise current and future schemes across the highways, traffic and third parties across Lewisham, considering drivers who consider prioritisation across different assets.	Priority 1
21	Risk & Performance Management	Develop a team risk register	Develop a team risk register and align it to a Council-level risk management strategy for organisational risks.	Priority 2
22	Risk & Performance Management	Create a dashboard for reporting and real-time monitoring of metrics	Create a dashboard for reporting and real-time monitoring of metrics and regularly audit and assess the performance data.	Priority 2

No.	Section	Action	Description	Priority
23	Risk & Performance Management	Provide a performance monitoring dashboard to stakeholders	Provide access to the performance monitoring dashboard to stakeholders and engage staff in lessons learnt after key projects to implement a performance improvement plan.	Priority 2
24	Network Considerations	Carry out risk assessment and identify specific mitigation actions for reducing risks of changing weather	Consider risks related to the impacts of the changing weather on highway assets by carrying out a risk assessment and identifying specific mitigation actions. Develop a Severe Weather Emergency Plan with the help of modelling impacts with GIS and asset condition data.	Priority 2
25	Network Considerations	Investigate potential threats of Civil Emergency	Investigate potential threats that could initiate a Civil Emergency and develop a tailored plan with defined roles and responsibilities. Rehearse the Plans and review their effectiveness regularly. Define escalation protocols for critical situations.	Priority 2
26	Network Considerations	Calculate and take into account embodied carbon in treatments and develop a carbon baseline	Calculate and consider embodied carbon in treatments. Develop a carbon baseline across highway asset management service and develop a carbon management strategy for highways, including considering a carbon performance factor in procurement and tender evaluations.	Priority 2
27	Network Considerations	Develop a materials and treatments policy prioritising material durability	Develop a materials and treatments policy that prioritises material durability (area-dependent), defines sustainability credentials, and utilises locally sourced or recycled materials.	Priority 2
28	Network Considerations	Carry out Environmental Impact Assessments (EIAs) for large schemes	Carry out Environmental Impact Assessments (EIAs) for large schemes and set procurement requirements.	Priority 3
29	Network Considerations	Map heritage assets on GIS	Map all heritage assets on GIS and review and ensure their maintenance aligns with conservation regulations.	Priority 3
30	Network Considerations	Conduct an audit of highway signage and street furniture	Conduct an audit of all highway signage and street furniture and identify redundant items.	Priority 3