



ATKINS

Sandwell MBC Highway Infrastructure Asset Management Strategy 2018

February 2018



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This document has 36 pages including the cover.

Document history

Job number:			Document ref:			
Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
Rev 1.0	Asset Management Strategy	DCR	CSC	AW	AW	07/04/17
Rev 1.2	Amendment	DCR	-	-	-	-
Rev 1.3	Amendment following SMBC comments	EM	CSC	ACW	EM	11/12/17
Rev 1.4	Further SMBC Amendments	KA	GR	RW	RW	19/02/18

Client signoff

Client	Sandwell MBC
Project	Sandwell MBC Highway Infrastructure Asset Management Strategy 2018
Document title	Sandwell MBC Highway Infrastructure Asset Management Strategy 2018
Job no.	
Copy no.	
Document reference	

Table of contents

Chapter	Pages
1. Introduction	4
1.1. Overview	4
1.2. Background	4
1.3. Context and Document Hierarchy	4
1.4. Why Asset Management?	5
2. Highway Infrastructure Asset Management Policy, Strategy and Framework	6
2.1. Highway Infrastructure Asset Management Policy	6
2.2. Highway Infrastructure Asset Management Strategy	6
2.3. Highway Infrastructure Asset Management Framework	7
3. Our Critical Assets	8
4. Highway Network Hierarchy	10
5. Leadership and Commitment	11
6. Asset Inventory and Condition Information	12
7. Managing Asset Data	12
8. Lifecycle Planning	12
9. Works Programming	12
10. Communication and Customers	13
11. Levels of Service	13
12. Asset Valuation	14
13. Risk Management	15
14. Performance Management Framework	15
15. Competencies and Training	16
16. Strategy Review and Update	16
Appendix A. Asset Groups	17
Appendix B. Asset Management Strategies	19

1. Introduction

1.1. Overview

Sandwell Metropolitan Borough Council (SMBC), as the Highway Authority, has a statutory duty to maintain the highway network in a condition to enable the safe passage of the travelling public. The Borough's highway infrastructure comprises many diverse assets; this highway infrastructure asset management strategy describes how the principles of asset management are applied to all highway infrastructure assets that are the responsibility of SMBC to maintain.

1.2. Background

The Department for Transport (DfT) is challenging local authorities to manage their highway assets more effectively to deliver timely treatments and effective use of scarce resources. In December 2014, they announced that £6 billion would be made available for local highway maintenance based on an Incentive Fund Self-Assessment process. The Incentive Fund Self-Assessment process assesses the maturity of an authority in Asset Management.

This strategy forms part of a suite of asset management documents that have been developed in accordance with best practice asset management guidance, it demonstrates Sandwell's commitment to asset management and supports future funding through the DfT Incentive Fund Self-Assessment process.

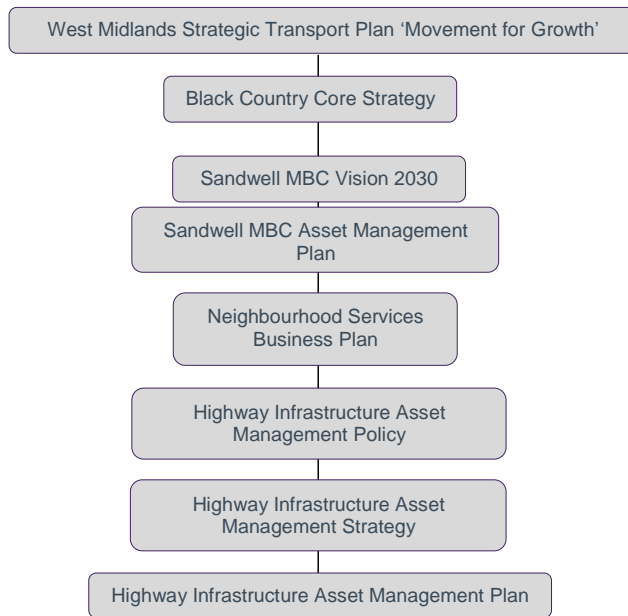
SMBC has a population of around 317,000 and covers an area of approximately 33 square miles (86km²). Its highway infrastructure assets have a total value of around £3.6bn primarily forming 880km of adopted highway network. Sandwell is one of the 7 Constituent Councils that make up the West Midlands Combined Authority (WMCA), working closely with its neighbouring authorities, as well as with businesses, other stakeholders and partners to deliver balanced economic benefits for the region.

SMBC highway infrastructure is managed by Highway Services, a division within the Regeneration & Growth Directorate (previously the Regeneration & Planning Directorate which was renamed from the Regeneration & Economy Directorate). The Directorate forms part of Neighbourhood Services. We recognise the importance of the highway infrastructure and how an effectively maintained and managed network contributes to the achievement of our corporate goals. We also understand that effective asset management is a platform to deliver clarity around standards and levels of service, and to make best use of our available resources.

1.3. Context and Document Hierarchy

It is important that the suite of asset management documents are aligned to meet the corporate objectives set in our corporate policies. The figure below summarises the context within which this strategy has been developed.

Figure 1.1 Document Hierarchy



1.4. Why Asset Management?

Asset Management is defined as:

"A systematic approach to meeting the strategic need for the management and maintenance of highway infrastructure assets through long term planning and optimal allocation of resources in order to manage risk and meet the performance requirements of the authority in the most efficient and sustainable manner"

[Highway Infrastructure Asset Management Guidance – UKRLG/HMEP, May 2013]

This definition puts emphasis on the systematic approach that asset management plays in managing the strategic needs of highway assets within an organisation and highlights the need for optimal allocation of resources and long-term planning.

Application of this method provides value for money, ensures that informed investment decisions can be made, but also manages risk and maintains a highway environment that is safe and secure and accessible for our customers. Asset management applies to all activity involved in the stewardship of our infrastructure assets. This includes:

- strategic planning,
- investment decision making,
- annual activity planning, and
- works programming.

Using this approach, we are able to establish appropriate budget allocations by demonstrating the effects of additional investment and the implications of under investment. An added benefit is that asset management allows us to demonstrate to external stakeholders that activities are being undertaken at the lowest achievable whole-life cost.

2. Highway Infrastructure Asset Management Policy, Strategy and Framework

2.1. Highway Infrastructure Asset Management Policy

The SMBC Highway Infrastructure Asset Management Policy is a high-level document which establishes the Council's commitment to infrastructure asset management and demonstrates how this approach aligns with the high-level objectives set out in the West Midlands Strategic Transport Plan (WMSTP) – Movement for Growth (MfG) and the Directorate's business plan. The Highway Infrastructure Asset Management Policy is a stand-alone document and will be published alongside this Strategy on the Council's website, thus playing a key role in creating the line of sight between our asset interventions and the overall corporate objectives.

2.2. Highway Infrastructure Asset Management Strategy

This document adds detail to the Highway Infrastructure Asset Management Policy and sets out how the Highway Infrastructure Asset Management Policy will be delivered, focusing on what SMBC plans to do to build its asset management capability. Further definition of these activities and interventions on our assets is provided within the Highway Infrastructure Asset Management Plan.

This Highway Infrastructure Asset Management Strategy is informed by the adoption of a Highway Asset Management Framework which establishes the activities and processes that are necessary to develop, document, implement and continually improve highway asset management within SMBC. It is aligned with the Council's corporate objectives and seeks to follow the latest advice, particularly that arising from the Highway Maintenance Efficiency (HMEP) Programme.

Our Highway Infrastructure Asset Management Strategy sets out how we will best manage the highway network taking into consideration customer needs, local priorities, asset condition and best use of available resources. Our strategy ensures that planning for both short and long-term needs are appropriately considered, whilst delivering a minimum whole life cost approach to our highway assets. The strategy relates to all highway maintenance activities funded by revenue and capital streams.

In support of the Regeneration & Economy Business Plan 2015 – 2018, the West Midlands Strategic Transport Plan (WMSTP) and its associated '2026 Delivery Plan for Transport' document, SMBC recognises that an asset management approach to the maintenance of the highway network will support the delivery of the Council's vision.

A well-maintained highway network can make a significant contribution towards meeting corporate objectives, which can be delivered through setting a series of asset management objectives. SMBC asset management objectives are summarised in the table below, which shows how each contribute towards the objectives of the WMSTP.

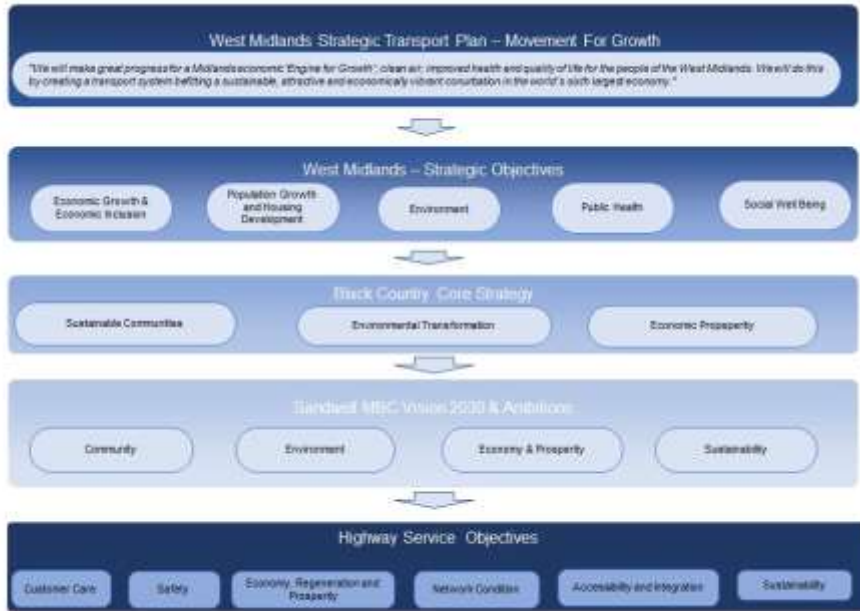


Figure 1.2 Summary of SMBC Highway Asset Management Objectives

2.3. Highway Asset Management Framework

The Highway Infrastructure Asset Management Guidance published by UKRLG sets out a framework which describes all asset management activities and processes that are necessary to develop, document, implement and continually improve asset management practices.

Our Highway Infrastructure Asset Management Strategy is based on this framework, and explains how individual asset groups and components fit in the framework. This Strategy describes how we implement the asset management planning process and refers to tools we currently employ, as well as links to other key documents. The elements of this Strategy will support continual improvement in the management of all our highway assets.

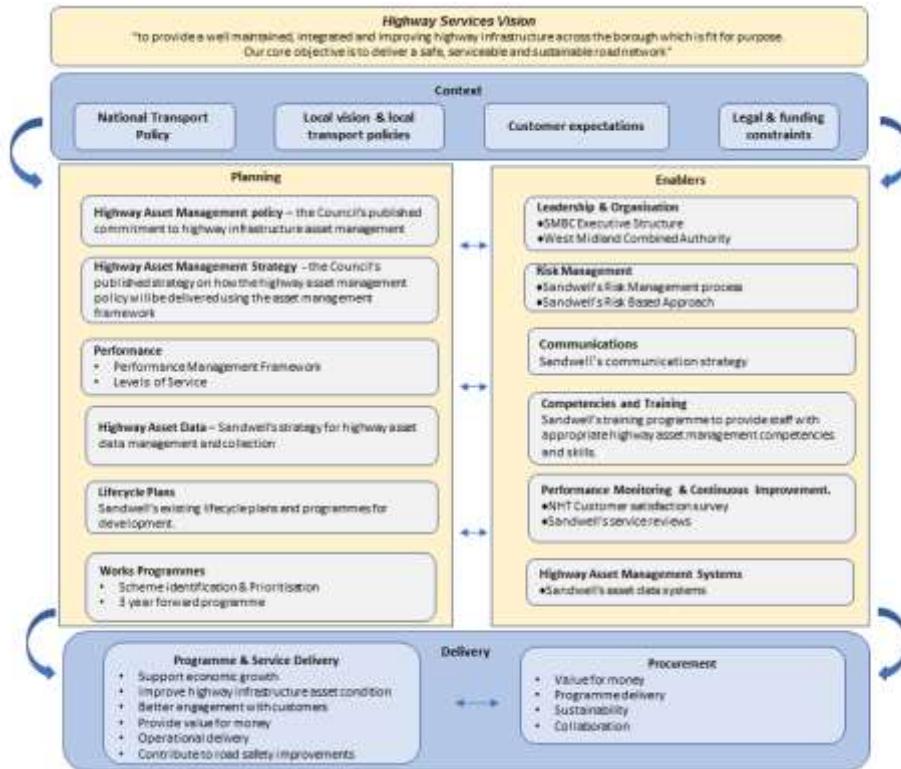


Figure 1.3: Sandwell MBC Highway Asset Management Framework

3. Our Critical Assets

A key function of the asset management process is to understand the spending needs of each asset group against performance, aims and objectives. This strategy advocates a planned and risk based approach to asset management including the identification of critical assets. As part of the asset management framework, and in accordance with other national guidance, SMBC's critical assets have been identified and are briefly described below.

Maintenance Strategies for asset groups will be selected to meet LTP objectives, minimise whole life cost, meet statutory requirements, meet performance targets and manage risk. A number of different options can be utilised depending on the nature of the asset. Detailed strategies are set out in **Appendix B** of this document.

Carriageways

Carriageways are by far the largest of the Council's assets, when constructed from new are normally designed to last approximately 20 years before a replacement is required. The length of our road network is currently 880 km, consisting of Principal A Roads, B Roads, C Roads, Unclassified Roads, and Back Lanes. The network is maintained to keep it in a safe and serviceable condition. To achieve this, regular safety inspections

are undertaken, which identify and prioritise highway defects, along with annual condition surveys which are used to develop our annual maintenance programme. Our long-term asset management approach is to follow the lifecycle plan that has already been developed for this asset, this should help us to both maintain and possibly improve the condition of our roads.

Footways and Cycleways

Footways and cycleways are critical assets in providing access to work, schools and community services as well as to open spaces, recreational areas and residential settlements. The length of our footway network is currently approximately 1400 km, consisting of very busy pedestrian areas, busy shopping areas, routes through local areas to local shopping centres etc., footways through urban areas and rural footways, low usage, short estate roads and cul-de-sacs.

Footways have previously been treated in a similar manner to carriageways, carrying out regular safety inspections, which identify and prioritise highway defects, along with annual Footway Network Survey (FNS) on all footway categories. Our long-term asset management approach is to develop a lifecycle plan for footways and develop our annual maintenance programme.

Structures

Structures are an integral part of the highway network, permitting access and the efficient movement of traffic across natural and other barriers. The Council owns 471 bridges and other highway structures, comprising highway bridges, retaining walls, culverts and subways and an additional 65 highway bridges are owned by Statutory Transport Undertakers such as Network Rail, and The Canal & River Trust. There is a high level of confidence in the records held although gaps are known to exist for retaining walls, where ownership is often unclear. Structures data is managed in the Symology Insight system which provides asset management/valuation/lifecycle facilities. The condition of structures is assessed through both principal and general inspections. Due to the varying structure types, our long-term strategy for managing structures is to develop lifecycle plans for all of our structures based upon the latest inspection data enabling us to forward programme with greater confidence.

Street Lighting

The street lighting stock consists of approximately 29,000 lighting columns across the network. The primary function of public lighting has been its contribution to the creation of a safe borough in which people feel confident to travel around, especially during dusk. However, its perceived role has developed such that lighting is also expected to contribute to reductions in crime, the fear of crime, and to contribute to improvements in the urban environment. To improve the lighting stock, we have updated 10,384 street lights across Sandwell with new low energy LED lanterns. The work will provide savings on the council's electricity bill and will also help us to reduce our carbon emissions.

Replacing aging columns and inefficient non-LED lanterns will bring the following benefits to the Council and users of the local highway network:

- Energy and financial savings.
- Better and safer environment for the public.
- Sustainable environment benefits.
- Reduced maintenance costs.
- Prolonged design life (12.5 years for lanterns, 40 years for columns).

Our long term strategy is to expand the area of the LED replacement programme and work towards developing a street lighting lifecycle plan with the purpose of improving the overall street lighting condition whilst reducing energy costs, carbon consumption and annual maintenance costs.

Traffic Signals

There are approximately 280 traffic and pedestrian crossing signal installations throughout the borough and there is current inventory, which is updated as new traffic signal installations are commissioned. Annual periodic inspections are completed by our term traffic signal maintenance contractor and from this we derive

condition data for traffic signals, pelican, puffin and toucan crossings. It is now the Council's policy to use LED lamps in all new and refurbished installations to reduce maintenance, energy costs and carbon emissions.

Highway Drainage

As a unitary authority, Sandwell's drainage responsibilities include highway drainage, land drainage, and flood risk management, with Severn Trent Water Authority holding responsibility for the maintenance of the majority of the piped systems. The main function of the highway drainage asset is to facilitate the removal of surface water from the highway to outfalls or watercourses, preventing standing water from forming on the carriageway, footway or cycleway, thus allowing vehicles and pedestrians to pass safely. Due to the age and history of highway drainage, asset related data is incomplete. However, this is not a problem unique to Sandwell and efforts have been made to locate and assess the extent of our highway drainage assets with the aim of improving the integrity of our asset condition data.

Owing to budgetary constraints and taking into consideration the cost of drainage surveys, the collection of asset data remains a reactive process, however, cyclic cleansing of gullies and annual drainage repair programmes are carried out in accordance with asset management principles targeted at areas most at risk of flooding.

Highway Trees

The trees of Sandwell are a valuable and essential element of our urban landscape, contributing significantly to the character of the borough. They provide environmental, aesthetic, ecological and landscape benefits all of which enhance quality of life. All trees in the borough are situated on land which is affected by human activities. These activities often encroach onto the living environment of trees and therefore some form of management is required during their life span. Tree management encompasses a range of different activities which:

- Ensure the safety of the public.
- Promote particular growth characteristics.
- Ensure co-existence with surrounding features.
- Resolve conflicts between the tree and its immediate environment.

However, poorly maintained trees have the potential to degrade the environment and harm people and property. Therefore, the safe and appropriate management of trees and woodlands is of concern to the Council and all in the community.

4. Highway Network Hierarchy

The highway network hierarchy is the foundation of a coherent, consistent, and auditable maintenance strategy. The highway network hierarchy is effectively utilised in highway network condition reporting, scheme identification, setting levels of service, inspection regimes, and response times. SMBC currently manages the carriageway and footway assets according to hierarchies based on 2005 Well Maintained Highways Code of Practice and detailed in the tables below. However, the 2016 Well-Managed Highway Infrastructure - A Code of Practice recommends that local authorities adopt a risk based approach to managing their networks which may include a review of their network hierarchies.

Road Hierarchy

Category	Hierarchy Type	Type of Road
1	Motorway	Limited access motorway regulations apply
2	Strategic Routes	Trunk and some Principal 'A' roads between Primary Destinations
3a	Main Distributors	Major Urban Network and Inter Primary Links. Short - medium distance traffic
3b	Secondary Distributor	Classified Road (B and C Class) and unclassified urban bus routes carrying local traffic with frontage access and frequent junctions
4a	Link Road	Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions
4b	Local Access Road	Roads serving limited numbers of properties carrying only access traffic

Footway Hierarchy

Category	Hierarchy Type	Description
1a	Prestige Walking Zones	Very busy areas of towns and cities with high public space and streetscene contribution.
1	Primary Walking Routes	Busy urban shopping and business areas and pedestrian routes
2	Secondary Walking Routes	Medium usage routes through local areas feeding into primary routes, local shopping centres
3	Link Footways	Linking local access footways through urban areas and busy rural footways
4	Local Access Footways	Footways associated with low usage, short estate roads to the main roads and cul-de-sacs.

5. Leadership and Commitment

The asset management approach needs to be fully embedded with continued commitment led by the senior decision makers. Ensuring the support of senior decision makers is key to the effective application of asset management, therefore, having this strategy endorsed by the executive further demonstrates the authority's commitment to highway asset management. It is also important that there is continuous dialogue between the council's leadership and those involved in the delivery of highway maintenance ensuring that effective channels of communication are in place.

With the establishment of the performance management framework, reports will be regularly presented to the authority's senior managers and elected members to ensure compliance and alignment with high level objectives.

6. Asset Inventory and Condition Information

Good quality asset inventory and condition information are essential components of the highway asset management framework. Asset information is collected and maintained to enable SMBC to:

- Monitor and report on the condition of our highway infrastructure assets.
- Develop levels of service, appropriate performance indicators and targets.
- Develop investment models and an understanding of the cost consequences of different maintenance strategies.
- Conduct valuation assessments for our highway infrastructure assets.
- Make well informed, cost effective highway asset management decisions.
- Reduce unplanned, reactive maintenance.

The highway network is inspected and surveyed routinely using a variety of different methods. Asset inventory and condition information is collected and verified through these methods and new assets are identified as part of an ongoing process. To date, there has been a considerable amount of work undertaken to refresh and update our data, however, there are still some gaps in some areas of our asset data. Therefore, where information for our critical assets is not available or incomplete we will endeavour to gather this information as part of our routine activities or by specialist survey.

7. Managing Asset Data

Effective ICT systems are an essential component of asset management. The current systems used to manage our data are Symology 'Insight' Enterprise and Mayrise. These are our main highway asset data management systems. They provide us with robust tools for holding and reporting on highway asset data. The data supports the development of maintenance programmes, lifecycle planning, customer care initiatives and network resilience activities.

8. Lifecycle Planning

Lifecycle planning comprises the approach to the maintenance of an asset from construction to disposal. It is the prediction of future performance of an asset or a group of assets, based on investment scenarios and maintenance strategies. A lifecycle plan describes the long-term strategy for managing an asset with a view to minimising whole life costs while providing the required levels of performance. They are used to identify maintenance cycles and intervention thresholds.

To support this approach, a 'Status & Options Report for Carriageways' was produced in April 2014 for the purpose of informing decision makers about the carriageway asset, its current condition and to provide a basis for making strategic planning decisions for future investment.

We aim to extend this approach across other asset groups as predictive analysis tools become available to support decision making.

9. Works Programming

A fully integrated forward works programme is a frequently used method of demonstrating that the long term needs of the asset have been considered and evaluated. The process itself of preparing a forward works programme is most important because it drives consideration of the evaluation and ranking of alternative improvement projects and maintenance treatments. Such a forward works programme may typically cover a period of 3 years.

Sandwell MBC is adopting the principles of modern asset management to establish long term predictions of the levels of service that the carriageway and a range of budgets are able to provide at a network level. Lifecycle planning is used to predict service standards against different budget allocations for planned maintenance over a 20-year period embracing the 'prevention is better than cure' approach.

This lifecycle planning information is reported to the council's executive decision makers to provide a basis for making strategic financial planning decisions at a borough wide level about future investment in, and performance of, the carriageway asset during the period 2015-21 but also in the longer term.

The certainty of capital funding for the six-year period 2015-21, together with the network level analysis, will enable the development of a forward programme of planned carriageway maintenance interventions by means of a scheme selection and prioritisation process considering treatment intervals across the full 20-year life cycle period. This is work in progress. In the meantime, we operate a rolling 2 year forward programme of planned maintenance works. In other asset areas, a forward works programme is being derived for all routine and renewal maintenance operations for highway structures and for street lighting there is a forward programme of investment.

The value of a long term forward programme is that it offers the opportunity to manage the programme strategically with a view to:

- Coordinate works therefore minimising disruption on the network.
- Maximising the opportunity for collaborative working between works programmes.
- Offering the opportunity to integrate larger and smaller scale works or to integrate with planned third party works on the network (e.g. utilities works).
- Providing collaboration opportunities for smaller scale maintenance works by minimising the number of road closures and reducing traffic management costs.

10. Communication and Customers

In order to determine our levels of service and support informed decision making, it is essential that robust customer engagement is to be undertaken. This means proactive communication with our stakeholders to understand their needs. Corporately we have in place good and varied methods of communicating with our residents and stakeholders. However, to support this further, we are developing a Highway Infrastructure Asset Management Communications Strategy. Implementing this Strategy will provide effective, targeted communication with our highway asset management stakeholders including residents, employers and service delivery partners to raise awareness and understanding of highway asset management, the works programme, funding priorities and long term goals.

In terms of customer satisfaction, we subscribe to the National Highways & Transportation Survey (NHT) which gathers data on customer satisfaction nationwide and gives us an idea of how well our service provision is viewed by the general public. With this information, we can adapt our processes and methods to actively communicate our successes and points for improvement to a wider audience.

11. Levels of Service

As defined by the HIAMG (2013), levels of service (LOS) are broad statements that describe the performance of the highway network using terminology which asset management stakeholders can understand. LOS affect the whole network rather than a single focus on individual assets. In highway asset management terms LOS are the means by which SMBC as a highway authority attempts to meet customer expectations, statutory obligations and corporate aims in delivering highway services. LOS describe the quality of the service provided by the asset for the benefit of the customer and are about reflecting the customers' interests in terms that can be measured and evaluated.

In defining LOS, it is not only important to consider the safety, serviceability and sustainability of the asset but other key factors including:

- Statutory and legal duties
- National, regional and local policy and objectives

- Customer & stakeholder expectations
- Best practice guidelines
- Affordability
- Availability of resources

Our LOS have been derived from the Directorate Business Plan and linked to the high level objectives that reflect the responsibilities of the Highway Service. It is recognised that a developed asset management approach will facilitate better decision making by providing enhanced information. In practical terms this means the identification and assessment of service options which can be used to vary levels of service across asset groups to best allocate available funding to the areas of greatest need.

Our HIAMP explains and provides the detail behind our current LOS.

12. Asset Valuation

The HM Treasury Whole of Government Accounts (WGA) policy has been introduced in recent years. WGA aims to develop a common set of accounting policies across the whole of the public sector. As part of this, councils in the UK are required to provide details about the value of their highway assets.

Gross replacement cost (GRC) is defined as the cost of constructing the asset from new. However, in reality it is rare that highway assets would have to be fully reconstructed. It is therefore more useful to consider the depreciated replacement cost (DRC). This is the value of the asset in its current condition rather than the cost of building it new.

Table 2 sets out SMBC's existing highway asset valuation information.

Asset Group	GRC £	DRC £	Date Last Valued
Adopted carriageways	1,095,031	1,019,337	March 2017
Adopted footways	243,826	205,932	March 2017
Bridges	503,508	344,538	March 2017

13. Risk Management

SMBC has a well established risk management process that overarches all service areas. Neighbourhood Services, of which Highway Services is part, has already identified and prioritised its high level risks and through appropriate mitigation and other control measures aims to reduce assessed risk factors to an acceptable level.

Within the context of highway asset management, risk is one of the key drivers for the decision making process involved in establishing service options. It is therefore important that specific LOS or service options are adopted in the full knowledge of their inherent risks.

The risk management process concentrates on four main issues:

- Risk identification
- Risk analysis

- Managing and controlling risk
- Monitoring, reviewing & reporting risk

Risk Based Approach

The adoption of a risk based approach to highway asset management is recommended by the most recent Code of Practice, Well-Managed Highway Infrastructure (WMHI). By implementing this approach, we will be able to more appropriately target resources and deliver services and projects in a way that ensures SMBC’s overall exposure to risk is minimised.

One of our key risks is our statutory duty, as the highway authority, to maintain all public highways and associated assets within Sandwell, and includes making safe potentially dangerous defects. We must be able to demonstrate that we are doing everything that is reasonably practicable to maintain the public highway. Our current procedure defines how we classify highway safety defects and how we respond to them all based upon risk. Our current safety inspection procedure has been compared with national guidance and best practice and we evaluate risk during highway safety inspections so that safety defect repairs are focussed on the highest priorities in the interest of network safety, improved network resilience and efficient working. Timescales for treating defects have been developed using a risk based approach and are detailed in the Highway Infrastructure Asset Management Plan (HIAMP).

14. Performance Management Framework

Measuring performance is an important requirement of highway infrastructure maintenance. Without a highway asset management framework, it would be difficult to determine how the service is performing over time. In order to measure how we are performing in relation to highway asset management and to target specific areas for future improvement, it is necessary to have in place a performance management framework (PMF).

The purpose of SMBC’s PMF is to provide evidence of how we are achieving delivery priorities through a robust, transparent and repeatable process for recording, monitoring, analysing and reporting performance across a wide range of criteria. It enables us to assess and demonstrate the impact that different investment strategies have on network performance and road user satisfaction.

The structure of the recently developed PMF is shown in the figure below (Fig.1.4), the complete PMF can be found in the HIAMP.

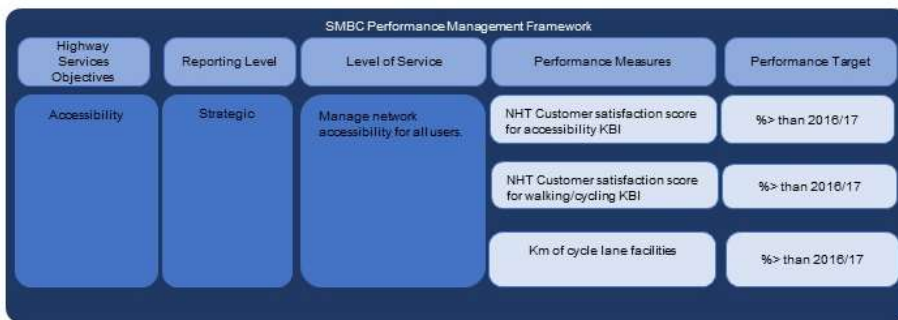


Fig 1.4 Performance Management Framework

15. Competencies and Training

With reductions in highway funding, there has also been a gradual reduction in the levels of staff working in local authorities on highway asset management. It is therefore important that those that are engaged in asset management have the necessary competencies, skills and communication to be able to effectively manage the highway assets. Therefore, going forward our strategy will be to embed teamwork and continually develop competencies for each member of staff engaged in asset management. Following this, develop, fund and implement a training plan and programme so that all staff have the opportunity to gain and use as a minimum the appropriate competencies, thus providing a benefit both to the individual and the authority.

The sources of training available is wide ranging and could include: annual and routine training workshops, in-house training, targeted and tailored support by an asset management specialist, and the HMEP asset management e-Learning toolkit.






16. Strategy Review and Update




Delivery of this strategy is the responsibility of the Head of Service, supported by senior management and the Council's Chief Executive. This strategy will receive a general update annually with a detailed review carried out when required to respond to any changes in corporate direction or best practice guidance.

Appendix A. Asset Groups

Sandwell's highway infrastructure comprises a number of diverse assets. The quantities of key items across the asset base as at 31st March 2017 are set out in Table 1.

Road Classification Lane Length

Asset Type	Definition	Quantity (2016/17 data)
<p>Carriageway</p> 	<p>Part of the road constructed for use by vehicular traffic. Includes turning lanes, bus lanes, crawler lanes and acceleration/ deceleration lanes, traffic calming features, high friction surfacing, central reserves.</p>	<p>Principal Roads 127.1 km B Roads 36.9 km C Roads 54.5 km U/C Roads 649.5 km Back Lanes 14.0 km</p> <p>Total Network Length 882km</p>
<p>Footways & Cycle Facilities</p> 	<p>Footway, Footpaths, & Cycleways,</p>	<p>Total of 1415 km</p>
<p>Structures</p> 	<p>Bridges, sign gantries, culverts, embankments, retaining walls, highway structures.</p> <p>Vehicle restraint systems</p>	<p>Road Bridge: 143 Retaining Wall: 250 Footbridge: 32 Culvert: 33 Subway: 11 Other Structures: 2 Vehicle restraint systems: Yet to be fully quantified</p>
<p>Street Lighting</p> 	<p>Lighting columns, lamps, cabling, ducts, feeder pillars, seasonal illuminations, subway lighting. Illuminated signs, illuminated bollards</p>	<p>28,661 street lighting columns, 2,789 lit traffic signs and beacons and 225 lit traffic bollards.</p>
<p>Traffic Technology Equipment</p> 	<p>Cabinets, detector loops, weather stations, signalised junctions and pedestrian crossings, UTC systems, above ground detection equipment, cabling, ductwork, variable message signs, vehicle activated signs and other electronic signs</p>	<p>Signalised junctions: 106 Pedestrian crossings: 172 Weather stations: 2 Variable message signs: 4</p>

Asset Type	Definition	Quantity (2016/17 data)
		Vehicle Activated Signs: 73 Electronic signs: 74
Highway Trees 	Trees are to be found planted within footways and roadside verges.	This asset has yet to be fully quantified, however the Council's Urban Forestry Unit holds an incomplete inventory which is proposed to be developed as part of a service review
Drainage 	Gullies & linear drainage channels (road and footway), highway drains (including pipework, manholes & outfalls), land drainage ditches and watercourses, roadside ditches, swales, etc.	Approx. 35,000 highway gullies.
Street Furniture, Fences & Barriers 	Pedestrian barriers (including pedestrian guardrail) and boundary fencing (if maintained by SMBC). Bollards, cycle stands, litter bins, benches/seats, public art, fountains, etc.	This asset is not fully quantified

Appendix B. Asset Management Strategies

This section summarises the existing highway infrastructure assets, its current condition, where data is available and a summary of the asset management strategy to be adopted for each asset type in the future.

Asset Group: Carriageways

Asset Management information	Current Position
Asset Data	<p>Inventory –</p> <ul style="list-style-type: none"> • Currently hold a full carriageway inventory, length, width, surface type (rigid/flexible only). High confidence of quality and sufficiency of data • 880km of carriageway network approx. 95% urban. • The National Street Gazetteer (NSG) and Symology's Insight Enterprise Pavement Management System (PMS) holds network inventory data. <p>Data collection</p> <ul style="list-style-type: none"> • Full inventory survey was completed in 2010. <p>Data management systems</p> <ul style="list-style-type: none"> • Symology's Insight Enterprise Pavement Management System • National Street Gazetteer
Asset Condition	<p>Assessment types;</p> <ul style="list-style-type: none"> • Roads - SCANNER (used only on A, B & C roads) • Roads - Full DVI survey in 2010 • Roads - CVI on unclassified roads (25% per year) • Roads - SCRIM (100% up to 2013) and none since. <p>Data Management Systems</p> <ul style="list-style-type: none"> • Symology Insight Enterprise Pavement Management System
Lifecycle Planning	<ul style="list-style-type: none"> • Lifecycle Plan for carriageways has been developed using HMEP toolkit. • Lifecycle Plan used to inform members (Status & Options report) of future funding and condition is linked to funding.
Customer Service	<p>Communication</p> <ul style="list-style-type: none"> • SMBC uses forms of social media to keep customers informed, for example; surface dressing, winter maintenance. <p>Customer Surveys</p> <ul style="list-style-type: none"> • 'SIMALTO' – Customer choice survey based upon funding scenarios • National Highways and Transport (NHT) Public Satisfaction Survey - SMBC sign up to this survey annually, the results are used to inform future strategy. <p>SMBC Website</p> <p>SMBC has a web portal for all customer enquiries, these are managed through Mayrise. Customers receive an email response. Insight Enterprise is used to arrange Category 1 defect repairs reported via customer enquiries.</p> <p>SMBC Contact Centre</p>

Asset Management information	Current Position																																												
	<p>Customers can make enquiries by calling the contact centre and these are logged on the web portal.</p> <p>SMBC Contractors Our current road surfacing contractor notifies customers/residents of planned works.</p>																																												
Forward Programme	<p>SMBC currently operates a rolling 2 year forward programme of planned maintenance works. In addition to this there is a 6 year surfacing programme generated from the Challenge Fund as an additional funding stream with outcome to deliver an improved network.</p>																																												
Benchmarking	<p>Regional Groups</p> <ul style="list-style-type: none"> • West Midlands Highways Alliance • Midlands Highway Alliance • Midlands Service Improvement Group • Joint West Midlands Combined Authorities 																																												
Performance	<p>For roads SMBC currently monitor performance through the following indicators:</p> <ul style="list-style-type: none"> • Single Data Set Ref 130-01 - The Percentage of principal roads where maintenance should be considered. • Single Data Set Ref 130-02 – The Percentage of non-principal classified roads where maintenance should be considered. • Former BVPI 224b - Percentage of unclassified roads where maintenance should be considered <div data-bbox="437 1189 991 1507" style="text-align: center;"> <table border="1"> <caption>Road Condition Data (Estimated from Chart)</caption> <thead> <tr> <th>Year</th> <th>Condition of Principal Roads (%)</th> <th>Condition of Non Principal Classified Roads (%)</th> <th>Condition of Unclassified Roads (%)</th> </tr> </thead> <tbody> <tr><td>2007/8</td><td>4.5</td><td>4.5</td><td>10.5</td></tr> <tr><td>2008/9</td><td>4.5</td><td>4.5</td><td>7.5</td></tr> <tr><td>2009/10</td><td>4.0</td><td>4.0</td><td>7.0</td></tr> <tr><td>2010/11</td><td>4.5</td><td>4.5</td><td>8.5</td></tr> <tr><td>2011/12</td><td>6.5</td><td>6.5</td><td>15.5</td></tr> <tr><td>2012/13</td><td>6.5</td><td>10.5</td><td>14.5</td></tr> <tr><td>2013/14</td><td>6.5</td><td>8.5</td><td>17.5</td></tr> <tr><td>2014/15</td><td>8.5</td><td>8.5</td><td>17.5</td></tr> <tr><td>2015/16</td><td>8.5</td><td>8.5</td><td>14.5</td></tr> <tr><td>2016/17</td><td>4.5</td><td>4.5</td><td>14.5</td></tr> </tbody> </table> </div> <p>However a performance management framework is being developed which will include carriageway performance measures.</p>	Year	Condition of Principal Roads (%)	Condition of Non Principal Classified Roads (%)	Condition of Unclassified Roads (%)	2007/8	4.5	4.5	10.5	2008/9	4.5	4.5	7.5	2009/10	4.0	4.0	7.0	2010/11	4.5	4.5	8.5	2011/12	6.5	6.5	15.5	2012/13	6.5	10.5	14.5	2013/14	6.5	8.5	17.5	2014/15	8.5	8.5	17.5	2015/16	8.5	8.5	14.5	2016/17	4.5	4.5	14.5
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Asset Management information	Current Position
Efficiencies and innovation	<p>We are actively using low energy asphalts for our general highway works, and are now using a more sustainable material for pothole repairs.</p> <p>A Lean review of the highway service was carried out to gain efficiencies in our processes and procedures.</p> <p>Customer portal is used to manage enquiries</p> <p>SMBC's website informs highway works.</p> <p>We have implemented an automated gritting solution to ensure that there is no 'double' salting of any section as the gritter completes its route. This provides both financial and environmental benefits.</p> <p>Combined Authority benefits from shared improvements, common standards, consistency of delivery.</p>
Desired goal/state/position	To support the council's vision and goals and improve customer satisfaction within the limits of the available budgets. Maintain the carriageway condition with minimum whole life cost.
Proposed Asset Strategy	<ul style="list-style-type: none"> • Review the carriageway hierarchy (risk based approach) • Use lifecycle planning to develop a long term investment strategy and allow the most efficient use of funding available. • Develop a 3/5 year works programme • Undertake condition and treatment surveys in the financial year prior to the works being implemented on the network. This allows for efficient planning and delivery and appropriate treatments. • Use a preventative approach to maintenance, investing the available budget to treat roads that are not currently in need of full structural renewal to extend the 'whole life' by arresting/delaying deterioration by suitable intervention methods such as resurfacing and surface treatments

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Asset Group: Footways

Asset Management information	Current Position
Asset Data	<p>Inventory</p> <ul style="list-style-type: none"> • Currently hold a full footway inventory, length, width, surface type (rigid/flexible only) • High confidence of quality and sufficiency of data. • The National Street Gazetteer (NSG) and the Symology Insight Pavement Management System (PMS) holds network inventory. <p>Cycleways</p> <ul style="list-style-type: none"> • A full inventory of dedicated cycleways is not present; however information is available where a cycleway is combined with footway or carriageway. • Many cycleways run along canal towpaths and are not regarded as public highway. <p>Public Rights of Way (PROW)</p>

Asset Management information	Current Position
	<p>This asset is managed by the Public Rights of Way (PROW) Team, Transportation Planning however, those PROW that are on the definitive plan are public highway. Some, but not all, PROWs in Sandwell are maintained by the council.</p> <p>Collection methods Initial inventory collection for UKPMS and WGA requirements.</p> <p>Data management systems</p> <ul style="list-style-type: none"> • Symology Insight Enterprise Pavement Management System • National Street Gazetteer
Asset Condition	<p>Footways</p> <ul style="list-style-type: none"> • Footway Network Survey (FNS) (All footway categories) carried out annually and used for scheme support. • General condition data captured during Safety Inspections
Lifecycle Planning	<p>SMBC has not yet developed a Lifecycle Plan for footways as historical maintenance treatment records are not available.</p>
Customer Service	<p>Communication</p> <ul style="list-style-type: none"> • SMBC uses forms of social media to keep customers informed of footway works, for example; Tweets about the surface dressing programme. <p>Customer Surveys</p> <ul style="list-style-type: none"> • 'SIMALTO' – Customer choice survey based upon funding scenarios <p>National Highways and Transport (NHT) Public Satisfaction Survey</p> <ul style="list-style-type: none"> • SMBC sign up to this survey annually, the results are used to inform future strategy. <p>SMBC Website</p> <ul style="list-style-type: none"> • SMBC have a web portal for all customer enquiries, these are managed through Mayrise. Customers receive an email response. Insight Enterprise is used to arrange Category 1 defect repairs reported via customer enquiries. <p>SMBC Contact Centre</p> <p>Customers can make enquiries by calling the contact centre and these are logged on the web portal.</p> <p>SMBC Contractors</p> <p>The current footway surfacing contractor notifies customers/residents of planned works.</p>
Forward Programme	<p>The annual programme is developed using the prioritisation tool with the addition of priority locations such as schools etc.</p>
Benchmarking	<p>Regional Groups</p> <ul style="list-style-type: none"> • West Midlands Highways Alliance • Midlands Highway Alliance • Midlands Service Improvement Group • Joint West Midlands Combined Authorities
Performance	<p>SMBC does not currently report on footway condition.</p>

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Asset Management information	Current Position
Efficiencies and innovation	Use of fibrous materials for footway works provides durability and sustainability.
Desired goal/state/position	To meet the aspirations of corporate walking and cycling strategies.
Proposed Asset Strategy	<p>Short term</p> <ul style="list-style-type: none"> • Review and confirm inventory for completeness and accuracy • Define overall condition across the network hierarchy (condition surveys, safety inspections, customer observations etc.) • Develop annual programme of works within the defined budget (risk based approach) • Measure condition of 25% of the network annually <p>Action Plan</p> <ul style="list-style-type: none"> • Review the footway hierarchy (risk based approach) • Develop lifecycle plan for footways • Develop programme of treatment to attain desired state (based on lifecycle plan) • Identify the budget needed to deliver the desired programme • Review /amend programme to match available budget • Introduce a performance measure for footways

Asset Group: Highway Bridges & Structures

Asset Management information	Current Position
<p>Asset Data</p>	<p>Information on the inventory of highways structures are held in the computerised Bridge Management System (BMS) supplied by Symology Ltd.</p> <p>The Council maintain 471 bridges and other highway structures such as highway bridges, retaining walls, culverts and subways. An additional 65 highway bridges are owned by Statutory Transport Undertakers such as Network Rail, DfT and The Canal & River Trust.</p> <p>There is a high level of confidence in the structures records held although gaps are known to exist for retaining walls, where ownership is often unclear. Whenever ownership of a retaining wall is queried or inspections or ad hoc reports suggest maintenance is required, ownership of the wall is investigated and details added to the BMS. An exercise to identify locations where retaining walls exist has been completed and the long process of establishing ownership is underway.</p> <p>Vehicle Restraint Systems (VRS)</p>
<p>Asset Condition</p>	<p>The condition of the structures asset is measured primarily by two factors, BSSCI (Bridge Structural Stock Condition Indicator) and BSCI crit (Bridge Structure Condition Indicator critical) which are derived from principal inspections (PI) and general inspections (GI). The inspections record the extent and severity of any defects and makes recommendations on how improvement should be considered.</p> <p><u>Routine Surveillance</u> comprises notification of obvious defects observed during the routine safety inspections of the highways – In addition all highways staff are encouraged to be vigilant in travelling around the borough and to report any defects observed.</p> <p><u>General Inspections</u> comprise a visual inspection of all parts of the structure and adjacent elements e.g. earthworks without the need for special access or traffic management arrangements. The frequency is every 2 years except where a structure is identified as sub-standard then 2 years reduced to 6 months</p> <p><u>Principal Inspections</u> comprise of a close examination, within touching distance, of all accessible parts of a structure and adjacent elements utilising special access, traffic management and CCTV where necessary. The frequency is every 6 years as a norm although this may be extended up to 12 years where risk is reduced</p> <p><u>Special Inspections</u> concentrate on a particular part of a structure in specific circumstances or following certain events: - 1, 3, 6 and 12 monthly or as requested.</p> <p>All structures that failed the 40 tonne weight limit assessments have been strengthened or replaced. Therefore there are no weight limited structures within the borough that are in the ownership of the Council</p> <p>Flood damage – A visual inspection is carried out on those known structures that could be affected by '-scouring' as a result of severe weather events.</p>

Asset Management information	Current Position
Lifecycle Planning	A highway structures lifecycle plan is to be developed.
Customer Service	<p>Communication</p> <ul style="list-style-type: none"> SMBC keeps customers informed of major works on structures which will impact road users. Advance publication of works on the SMBC website, local media outlets, and social media. <p>National Highways and Transport (NHT) Public Satisfaction Survey</p> <ul style="list-style-type: none"> SMBC sign up to this survey annually, the results are used to inform future strategy. <p>SMBC Website</p> <ul style="list-style-type: none"> SMBC have a web portal for all customer enquiries. Customers receive an email response. <p>SMBC Contact Centre</p> <p>Customers can make enquiries by calling the contact centre and these are logged on the web portal.</p>
Forward Programme	The forward programme is generated from the bridge inspections however, the number of schemes is governed by the availability of annual funding. The current programme covers a 3 year period.
Benchmarking	<p>Sharing best practice through the following regional groups:</p> <ul style="list-style-type: none"> West Midlands Highways Alliance Midlands Service Improvement Group Joint West Midlands Combined Authority
Budgets	The prioritisation process and subsequent ranking of major structural repairs or complete replacement will not be able to be funded from the typical maintenance budgets, consideration should, in these circumstances, be made for supplementary investment through bidding or borrowing opportunities.
Performance	<p>The performance of the structures asset is measured primarily by two factors, BSSCI (Bridge Structural Stock Condition Indicator) and BSCI crit (Bridge Structure Condition Indicator critical) which are derived from principal inspections (PI) and general inspections (GI).</p> <p>A performance management framework is being developed which will include bridge condition performance measures.</p>
Efficiencies and innovation	<ul style="list-style-type: none"> Carbon fibre plate bonding Cathodic protection monitoring
Desired goal/state/position	The principal factor for determining the forward strategy is to maintain the asset in a condition 'fit for purpose and safe for use'. The target is to maintain and where possible improve the level of the BSSCI

Asset Management information	Current Position
Proposed Asset Strategy	<p>The approach is to continue to undertake the GI and PI programme on all structures, so that the respective structures' components are checked for deterioration in line with the Code of Practice, and from these a forward works programme can be developed to meet the AM policy.</p> <p>There are likely to be further financial pressures in the future, reducing the availability of funding for the maintenance of the structures stock. The key structures driver is to ensure that the time for intervention of planned maintenance to a structure is determined to deliver the optimum return for that investment.</p> <p>This will be managed by use of the Structures Toolkit to determine forward network wide investment need, monitoring the BSSCIs and applying professional engineering judgement.</p> <p>A VRS survey is planned to be commissioned to develop inventory.</p>

Asset Group: Street Lighting

Asset Management information	Current Position
Asset Data	<p>Validation of the extent of the illuminated highway infrastructure inventory was carried out in 2013/14 and a further inventory collection took place in 2014/15 to address known omissions.</p> <p>Any new installations of illuminated highway infrastructure are captured and entered into the asset management system – Mayrise.</p> <p>Information on the illuminated equipment inventory is currently held on a specialised electronic asset management system - Mayrise.</p>
Asset Condition	<p>During the inventory data collection refresh in 2013/14, every item of recorded illuminated highway infrastructure was visited to undertake a visual inspection. Based on visual inspection, identified structural defects requiring prompt attention were recorded and prioritised for repair in 2014/15</p> <p>The following inspection regime applies:</p> <p>At each maintenance or repair visit a visual inspection of the following components is completed;</p> <p>Electrical equipment and wiring</p> <ul style="list-style-type: none"> • Visual condition survey of the street lighting column • The condition of lighting columns protective systems • The visual structural condition of each lighting column <p>A defect sheet is produced only where a defect is identified.</p> <ul style="list-style-type: none"> • Electrical testing carried out every 6 years • Structural visual inspection every 6 years • Structural testing of steel columns every 5 years unless identified as a higher risk
Lifecycle Planning	<p>Going forward, develop a lifecycle planning process to determine a programme of works required to maintain the street lighting stock.</p>

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Asset Management information	Current Position
Customer Service	<p>Communication</p> <ul style="list-style-type: none"> SMBC keeps customers informed of major street lighting works which will impact road users. Advance publication of works on the SMBC website, local media outlets and social media. <p>National Highways and Transport (NHT) Public Satisfaction Survey</p> <ul style="list-style-type: none"> SMBC sign up to this survey annually, the results are used to inform future strategy. <p>SMBC Website</p> <ul style="list-style-type: none"> SMBC have a web portal for all customer enquiries, these are managed through Mayrise. Customers receive an email response. <p>SMBC Contact Centre</p> <p>Customers can make enquiries by calling the contact centre and these are logged on the web portal.</p>
Forward Programme	<p>Electrical inspection and testing to BS 7671 is required to be carried out on a 6 year programme and an inspection certificate issued.</p> <p>A pilot electrical inspection of around 500 street lighting columns was carried out by the service provider in 2013/14. Based on this pilot 5,000 street lighting columns and powered installations were subsequently inspected in 2014/15 and in each year thereafter, which is the Sandwell 6 year inspection programme.</p>
Benchmarking	<p>Sharing best practice through the following regional groups:</p> <ul style="list-style-type: none"> West Midlands Highways Alliance Midlands Highway Alliance Midlands Service Improvement Group Joint West Midlands Combined Authorities
Performance	<p>To ensure that the current maintenance programme is delivered in an efficient and effective way the following management performance indicators have been agreed and performance measured:</p> <ul style="list-style-type: none"> Average time to repair lamps (Local authority works) Average time to repair lamps (District Network Operator works) Percentage of street lamps not working as planned Percentage of street lamps restored to working condition within 5 calendar days (unless the fault is found to be with the electricity supply) Repair dangerous defects within two hours (missing doors, exposed electrics etc.). <p>However a performance management framework is being developed which will include the above performance measures.</p>
Efficiencies and innovation	<p>In 2011 SMBC started implementation of a street lighting energy efficiency programme to:</p> <ul style="list-style-type: none"> Deliver an immediate reduction in electrical energy costs; Contribute to revenue budget reduction targets; Reduce exposure to future energy price inflation; and Reduce exposure to carbon reduction commitment charges (CRC).

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Asset Management information	Current Position
	<p>To date 10,384 energy efficient LED lanterns have been retro-fitted to existing street lighting columns largely in residential streets.</p> <p>The total annual energy saving in a full year is £300,000.</p> <p>Over a 25 year period at current energy prices a saving of £7.5m would be achieved.</p> <p>Advances in LED technology have resulted in the development of LED lanterns that can be used on traffic routes. These roads currently use lanterns with the highest consumption wattages and therefore if changed to LED offer the greatest energy savings (typically 60%). In order to maximise savings there is a shift in the focus of the programme from residential streets to traffic routes.</p> <p>Replacement of existing lamps with LED lanterns will reduce the council's carbon emissions (CO2) by 850 tonnes per year.</p> <p>Included in the above savings, the implementation of trimming and dimming the lanterns by 60% between midnight and 5 am has contributed £40,000 to the total annual energy savings.</p>
Desired goal/state/position	<p>To contribute to a safe road network for all road users through the provision of high quality street lighting.</p> <p>To supplement the night time environment and to contribute to the reduction of night time accidents.</p> <p>To provide high quality lighting that will help reduce crime and disorder, anti-social behaviour and contribute towards the perception of a safe and secure night time environment.</p> <p>To maximise energy efficiency and sustainability.</p> <p>To achieve high standards of performance, efficiency and customer care in service delivery</p>
Proposed Asset Strategy	<p>The principles of Codes of Practice will continue to be adopted.</p> <p>Planned improvement of the lighting column stock to reduce average age</p> <p>Continue to undertake routine inspection and maintenance of the street lighting assets.</p> <p>Programme to replace columns of certain materials, like concrete and cast iron with steel columns, to maintain the structural integrity of columns.</p> <p>Continue to maintain its energy efficiency measures of using LED lights as standard improvement, maintenance and replacement specification for street lighting lanterns.</p>

Asset Group: Traffic Signals & ITS equipment

Asset Management information	Current Position
Asset Data	<p>Inventory A full inventory of this asset is held in a local database and is updated as new infrastructure is added to the network.</p> <p>Data collection Full inventory survey was completed in 2010.</p> <p>Data management systems</p> <ul style="list-style-type: none"> • Mayrise • TRAMMS
Asset Condition	<p>Annual inspection of equipment is carried out by the asset contractor with defects managed through the TRAMMS fault management system.</p> <p>Streetscene Inspectors provide an overview of condition as part of their routine safety inspections.</p>
Lifecycle Planning	<p>At present SMBC do not have a lifecycle plan for traffic signal equipment. This may be a future development opportunity.</p>
Customer Service	<p>Communication</p> <ul style="list-style-type: none"> • SMBC keeps customers informed of major traffic signal works which will impact road users. Advance publication of works on the SMBC website, local media outlets and social media. <p>SMBC Website</p> <ul style="list-style-type: none"> • SMBC have a web portal for all customer enquiries. Customers receive an email response. <p>SMBC Contact Centre</p> <p>Customers can make enquiries by calling the contact centre and these are logged on the web portal.</p>
Forward Programme	<p>A forward programme (up to 3yrs) is not currently in place</p>
Benchmarking	<p>Sharing best practice through the following regional groups:</p> <ul style="list-style-type: none"> • West Midlands Highways Alliance • Midlands Highway Alliance • Midlands Service Improvement Group • Joint West Midlands Combined Authorities
Performance	<p>The performance of the traffic signal equipment will be managed through the maintenance contract with contract performance targets reflected in the asset management performance management framework.</p>
Efficiencies and innovation	<p>Sandwell traffic signal equipment on various strategic routes is included within the West Midlands 'wireless mesh' system</p> <p>Procurement savings of £140,745 per annum – Collaboration in the procurement of the Black Country maintenance contract.</p>

Asset Management information	Current Position
	<p>Established remote monitoring of sites that will provide increased reactivity to faults and to provide engineers with the facility to remotely carry out fault diagnostics.</p> <p>To reduce maintenance, energy costs and carbon emissions it is now the Council's policy to use LED lamps in all new and refurbished installations. Currently, approximately 45% of all installations have been converted</p>
Desired goal/state/position	<p>To establish the CCTV coverage on the Key Route Network</p> <p>To have the entire Sandwell network on wireless mesh (part of the Black Country Control Centre)</p>
Proposed Asset Strategy	<p>The recommendations of Management of Electronic Traffic Equipment Code of Practice will continue to be adopted.</p> <p>Develop a lifecycle planning process to determine a cyclic programme for replacement.</p> <p>Continued use of energy and cost saving technologies within the traffic signals assets.</p> <p>Proposed schemes such as to replace old-style halogen traffic signal heads with LED type and to install extra low voltage (ELV) traffic signal installations that will form part of the future forward works programme.</p>

Asset Group: Highway Drainage

Asset Management information	Current Position
Overall Position	<p>The highway drainage inventory for this asset is limited, however there is good inventory for highway gullies which are presently cleansed on an annual basis.</p> <p>There is currently no planned capital programme for highway drainage, only reactive maintenance when necessary.</p> <p>SMBC is a Lead Local Flood Authority (LLFA) and therefore has associated responsibilities. Further information about these responsibilities can be found on our website under.</p> <p>https://www.sandwell.gov.uk/downloads/file/23288/black_country_lfrms_strategic_environmental_assessment</p>
Proposed Asset Strategy	<p>The occurrence of flooding from highway drainage is presently extremely low so a risk based approach to the collection of highway drainage asset data will continue to be used.</p> <p>During scheme development, Sustainable Drainage Systems (SuDS) will be considered and implemented if a viable solution can be achieved.</p>

Asset Group: Street Furniture (pedestrian guardrail, benches, features, decorative bollards etc.)

Asset Management information	Current Position
Overall Position	<p>The inventory for this asset group is very limited and there is not a process in place to collect any asset information</p> <p>These assets are maintained on a reactive basis resulting from safety inspections, routine inspections, customer reports, and accident damage.</p> <p>Pedestrian guardrail assets would benefit from a complete asset inventory and condition assessment. There are no specific capital or revenue budgets for this asset, works are carried out on a reactive basis.</p> <p>Street furniture would benefit from a complete asset inventory and condition assessment.</p> <p>All street furniture ownership details are not currently known however as a unitary authority SMBC is generally responsible for most street furniture on the highway.</p> <p>There are no specific capital or revenue budgets for this asset, works are carried out on a reactive basis.</p>
Proposed Asset Strategy	<p>All items on street should be fully justified and earn their place – wherever an item of street furniture or signage is unnecessary and can be removed, it will be.</p> <ul style="list-style-type: none"> • Benches and Street Seats Seats or benches will only be located at points of known demand. Ownership and maintenance responsibilities will be agreed and recorded • Bollards Will only be located appropriate to its role i.e. in a location to protect the public, to protect high risk buildings and the entrance to alleyways etc. Where decorative bollards are installed ownership and maintenance responsibilities will be agreed and recorded • Pedestrian Guardrails Action Plan: <ul style="list-style-type: none"> • Assess level of inventory for pedestrian guardrail using existing knowledge base (Highway inspectors, customer reports, contractor information, Mayrise system) • Develop policies/procedures for installation /removal, inspection, investigatory level, and maintenance. • Assess assets against policies/procedures and develop an action plan for desired position. • Develop a costed programme to deliver the actions from the assessment process.

Asset Group: Non illuminated signs

Asset Management information	Current Position
Overall Position	<p>The inventory for these asset groups is very limited and there is not a process in place to collect asset information.</p> <p>These assets are maintained on a reactive basis resulting from routine inspections, customer reports and accident damage.</p> <p>Non-illuminated signs and bollards would benefit from a complete asset inventory and condition assessment.</p> <p>There are no specific capital or revenue budgets for this asset, works are carried out on a reactive basis.</p>
Proposed Asset Strategy	<p>Establish an inventory of non-illuminated signs on a hierarchy/priority basis e.g. locally important route signing, large advance directional signs, event signing etc.</p> <p>Inventory collection methods</p> <ul style="list-style-type: none"> • One off network survey (automated data capture system) • Inventory collected alongside routine sign maintenance operations • Inventory collected alongside routine highway inspections? <p>Use existing survey information to support the sign inventory e.g. SCANNER survey provides a forward facing video which could be used to identify signs.</p> <p>New signs to be added to the inventory as part of the design process.</p> <p>Replacement of damaged signs to be added to the inventory as part of the works ordering process.</p> <p>Establish an inspection regime for key routes /signs Inspection to assess:</p> <ul style="list-style-type: none"> • Accident damage • Condition of sign face • Obscured visibility • Condition of post & fixings <p>Record inspection information on the Symology Insight Enterprise Pavement Management System.</p>

Asset Group: Highway Trees

Asset Management information	Current Position
Overall Position	<p>Highway Trees - These are the trees planted in footways or verges along the Borough's streets. They help to filter traffic pollution and improve the overall appearance of the street scene. Highway trees are the responsibility of the Council and deserve special attention, as they are one of the most prominent elements of the street scene.</p> <p>There are approximately 10,000 highway trees in the borough</p>

Asset Management information	Current Position
	<p>Most of the tree lined streets have trees which are either nearing maturity or have outgrown their location and as such there is a need to plan ahead for their eventual removal and replacement. This needs to be linked to a full inventory and condition survey of the borough's highway trees being implemented.</p> <p>Within the planning process for the removal of older trees or trees in inappropriate location, consideration needs to be given to which species of tree are best suited for the site, linked to the understanding of a rise in the last 10 years or more of insurance claims in which trees are implicated.</p>
<p>Proposed Asset Strategy</p>	<p>Highway trees deserve special attention, as they are one of the most prominent features within the landscape.</p> <p>Regular inspection of highway trees is essential to maintain a landscape environment of safe healthy trees therefore fulfilling our statutory obligations.</p> <p>Establish tree locations, sizes and species to assess their basic condition.</p> <p>Carry out a general visual inspection of highway trees as part of the highway safety inspections. Issues or defects that are considered dangerous will be managed by the authority's Urban Forestry Unit.</p> <p>Maintenance and management of highway trees to be in accordance with the <i>Sandwell Urban Forestry Tree Strategy</i>.</p> <p><u>Additional Information</u></p> <p>Tree Protection Tree Preservation Orders (TPOs) can be placed on trees by the local authority to protect them for public enjoyment.</p> <p>Resident Requests The Council will NOT carry out an inspection on a highway tree outside the normal planned inspection regime UNLESS the tree is considered dangerous or potentially dangerous to the health and safety of an individual or is causing damage to property.</p> <p>Potentially dangerous trees</p> <ul style="list-style-type: none"> • Tree is snapped or blown over • Tree is rocking – roots are damaged • Tree uprooted but held up by another tree or building • Large branch has broken off or is hanging off the tree • Major deadwood is present where if it were to fall could cause injury to people. • Tree is obstructing a public highway or public right of way and no clear sight line is available at traffic junctions, road signs etc. <p>Overhanging branches The Council will not enter private property to prune overhanging branches from Council owned trees, but property owners are able to responsibly cut back to their boundary. Under English common law there is a general right to cut overhanging branches back to your property boundary (subject to legal restrictions being overcome first such as Tree Preservation Orders or Conservation Areas).</p>

Asset Management information	Current Position
	If a tree is protected by a Tree Preservation Order (TPO) or is within a conservation area then that Common Law right is removed and an application will need to be submitted to the Council to carry out any works.



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