Walsall Council

HIGHWAY ASSET MANAGEMENT STRATEGY.

V1.3.3 - Updated April 2023

Module 1 - Foreword.

Councillor Adrian Andrew
Leader & Portfolio Holder, Regeneration.

Walsall's Highway Asset Management Strategy (HAMS) is a key driver for the delivery of efficient and sustainable highway services, it supports a smarter and more flexible working approach that acknowledges the financial constraints impacting upon local government resources. It is a long-term plan which optimises Council resources for the management of Walsall's highways and the Combined Authority's strategic transport infrastructure objectives for the region's roads.

As Deputy Leader & Portfolio Holder for Regeneration, I give my full support to the Highway Asset Management Strategy, which will allow Highways and other supporting services to be sufficiently informed when making the complicated decisions required to maintain some of the Council's highest valued assets, comprising the highway infrastructure.

We all use the highway network in our daily lives, whether it is for travelling to work, school or for leisure, by means of bus, car, cycling or walking.

The purpose of this Highway Asset Management Strategy is to have a live document that will provide detailed information about Walsall's highway assets.

A copy of this Highway Asset Management Strategy can be found on the Council's website.

Portfolio Holder, Regeneration

Councillor Adrian Andrew.

Head of Highways, Transport & Operation

Katie Moreton.

Module 1 – Executive Summary.

Overview - Walsall manages and maintains the highway assets falling within its 845 km network. With responsibility to ensure that highway assets are fit for purpose and able to fulfil their functions in an efficient and sustainable manner. Walsall aims to enable greater opportunities for people, communities & businesses; encourage active, fulfilling, independent lives for residents; focus on effective, efficient & equitable services; provide safe, happy, healthy learning for children; empower communities to feel a connection and belonging with Walsall, to build a strong sense of community.

The highways assets contribution to this is achieved by focusing on what matters most to the people of Walsall in managing the highway asset and recognising the community's greatest needs. Walsall has adopted asset management to ensure the greatest benefit for the whole community. Asset management requires long-term investments to make best use of limited resources and ensure focussed interventions are implemented at the most effective time to ensure a safe and serviceable highway network.

Overall Performance - Walsall manages its network performance through performance indicators, which are aligned to and contribute towards achieving the vision set out in the Transport Strategy, Transport in Walsall 2017-2022. Moreover, performance management demonstrates the effective use of the Council's budgets.

Investment - In 2022/23 Walsall invested approximately £8.7million in maintaining its carriageway & footway related infrastructure assets, from which £3.7million was spent on surface treating roads and footways and £1.3million was spent on reactive repairs including street furniture.

Through lifecycle planning, Walsall determined that carriageway and footway assets carry a backlog of around £52million. Walsall aims to manage the highway network in a steady state by continuing to invest in the right treatments at the right time for the right cost. An average investment of approximately £6million per annum is desirable for achieving this strategy. If the levels of investment are not sustained the asset may decline increasing the amount of backlog. In turn more investment may be required in the future to maintain the asset.

Walsall's asset valuation figures for 2022/23 show that the total value or Gross Replacement Cost (GRC) of Walsall's highway asset is approximately £1.6billion, and the Depreciated Replacement Cost (DRC) or the value of the highway assets in their current state is £1.3billion, resulting in 18% depreciation of around £283million.

Engagement - Walsall engages with a number of key stakeholders to inform its decision processes. This ensures the social and economic benefit of the use of the road network is recognised. Consultations help establish and prioritise annual works programmes based on community's needs by taking into account the stakeholder's most important considerations as well as engineering parameters of condition and serviceability.

Progress - Walsall is committed to continuous improvement in its practices and has developed a programme to enhance its asset management processes, systems and data, and support effective delivery of its desired asset management outcomes.

Module 2 – Contents and References.

Module A - Policy & Objectives. Setting the scene for delivering the right outcomes.

Module B - Context. Setting out the parties, documents & reporting processes involved in managing Walsall's Highway Assets.

Module C - Asset Data. Collecting, storing and managing data.

Module D - Performance Management. Establishing goals for asset management performance that can be delivered.

Module E - Funding & Expenditure. Funding sources and historical expenditure.

Module F - Investment Strategies. Understanding the impact of different investment levels.

Module G - Maintenance Strategies. Determining the most effective strategies for maintenance intervention on a whole life cost basis.

Module H - Forward Works' Planning. Developing the programme of works that will be delivered.

Module I - Communication & Engagement. Opening communication channels to ensue asset management meets the needs of Walsall's people.

Module J - Benchmarking. Comparing how Walsall is performing.

Abbreviations - Common abbreviations used in the Asset Management Plan may include:

- IAM Institute of Asset Management
- CIPFA Chartered Institute of Public Finance and Accountancy
- DCLG Department of Communities and Local Government
- DfT Department for Transport
- GRC Gross Replacement Cost
- DRC Depreciated Replacement Cost
- HAMS Highway Asset Management Strategy
- HIAMG Highway Infrastructure Asset Management Guidance
- HMEP Highway Maintenance Efficiency Programme
- IFRS International Financial Reporting Standards
- NHTS National Highways and Transport Survey
- Section 106 Section 106 of Town & Country Planning Act (1990)
- Section 278 Section 278 of Highway Act (1980)
- UKPMS United Kingdom Pavement Management System
- UKRLG United Kingdom Roads Liaison Group
- Walsall Walsall Council
- WMHIMG West Midlands Highway Infrastructure Managers Group
- WGA Whole of Government Accounts
- TfWM Transport for the West Midlands
- CRSTS City Region Sustainable Transport Settlement

Reference Documents - A list of key reference documents and information used in the Highway Asset Management Strategy. These are cited in the 'Further Information' section of each module.

- Walsall Council Plan (2022 – 2025).
- Transport in Walsall, Walsall's Transport Strategy (2017-2022).
- Highway Maintenance Efficiency Programme / United Kingdom Roads Liaison Group – Maintaining a Vital Asset.
- ISO55000 – Asset Management (2014).
- UKRLG – Highways Infrastructure Asset Management Guidance & Code of Practice.
- United Kingdom Pavement Management System (2013).
- Combined Authority – West Midlands City Regional Transport Strategy (2022).
- Combined Authority – WM2041 (2021).
- The Community Infrastructure Levy & Business Rates (2011/12).
- Walsall's Asset Investment Models & Maintenance Strategies (Various).
- National Highways & Transportation Survey (website).
- Equalities Act, Public Sector Equality Duty (2010).
- National Performance Indicators (Single List).
- Code of Practice on Highways Network Assets (2016).
- Whole of Government Accounts Guidance (HM Treasury).
- Well-Managed Highway Infrastructure: A Code of Practice (2016).

Module A – Policy and Objectives.

What…. Walsall Council is committed to manage and maintain its highway assets to ensure they are fit for purpose and able to fulfil their functions efficiently and sustainably. Walsall reviews these policies regularly to ensure they are appropriate and reflect its statutory duties, best practice and stakeholder requirements.

Why…. Walsall's vision; as stated in the Council Plan is to; pursue an inclusive economy; make a positive difference to the lives of the people of Walsall; provide children with the best start in life and make Walsall a clean, safe, and healthy place to live in – by providing:

- A Resilient Network - Ensuring Walsall's highway is fit for purpose for today and for the future.
- A Vibrant and Healthy Place – Enable walking and cycling and provide an enhanced green estate and sustainable highways.
- A Safe Highway – Ensuring that the public highway is safe for use.
- An Accessible Network – Make the public highway inclusive to all users.

Engaged with the Community – Create a culture of open and engaged communication with our customers. Walsall sets objectives and performance measures to ensure highways contribute to these corporate aims whilst maintaining a prudent long-term management plan.

Who…. Responsibilities for the Policy and Objectives module lie with:

Sign off Policy	Portfolio Holder
Establish Objectives:	Highways Group Manager
Updating and Reporting:	Engineers

How…. For managing its assets Walsall aims to:

- Maintain its assets in a state of good repair.
- Ensure its green estate is looked after.
- Ensure the assets are safe for the public.
- Maintain an inclusive road network.
- Engage with the public and respond effectively to their needs.
- Utilise the asset management principles of life cycle planning and whole life costing to minimise the cost of asset ownership.
- Take a proactive approach to maintenance, favouring effective preventative treatments.
- Utilise quality and up-to-date asset inventory and condition data to inform decisions and seek access to external funding sources to contribute to asset investment.

Reporting…. Reporting of the delivery of the Policy and Objectives is done through performance reports and updates to the Highway Asset Management Strategy.

Success Measures…. The Adoption of stated aims, through Council 'buy-in' in other local documents will define success. Moreover, improvement in performance outcomes shall also demonstrate success.

Further Information:
Walsall Council Pan (2022-2025).
Transport in Walsall, Walsall's Transport Strategy 2017 – 2022.
Transport for West Midlands – City Region Sustainable Transport Settlement.

Module B – Context.

What…. Asset management is a best practice approach endorsed by the Government. Maintaining valuable assets essential for the economic and social health of Walsall Council requires pragmatic and focused investment to ensure the greatest benefit for the whole community is achieved.

Long-term investment is required to make best use of resources and ensure the right interventions are implemented at the most effective time, through capital investment or reactive maintenance to ensure a safe highway, a statutory requirement.

Why…. Spending public money must demonstrate value and be aligned to the needs of businesses and residential communities. Ensuring the right facilities have the right level of accessibility and are maintained to safe standards to meet the duties of the Highways Act (1980), will serve to make Walsall a safe and accessible place open for business and a great place to live.

With a long-term investment programme, Walsall can plan maintenance works better and seek economies of scale, maximising the life of treatments by reducing their whole life cost. The approach supports the Combined Authority's regional transport visions and investment programmes as set out in the West Midlands 'City Regional Sustainable Transport Settlement' and WM2041 Actions to meet the climate crisis with inclusivity, prosperity and fairness'.

Carriageways: A typical $1m^2$ pothole costs on average around £70 to repair, while it costs around £45/m^2 to resurface a road for up to 10 to 25 years.

Footways: A typical $1m^2$ footway defect costs on average around £50 - £100/m^2 to repair, while it costs on average around £30 - £80/m^2 to resurface a footway for up to 80 years.

In addition, drainage, street lighting, Urban Traffic Control and structures infrastructure are also essential assets within the highway and are maintained according to need.

Therefore, the move to capital investment is essential to reduce risk, reduce the cost of reactive maintenance, and minimise disruption to road users.

Who…. Responsibilities for the 'Context' module lie with:

Statutory Duty:	Head of Service
Overall Reporting:	Highway Group Manager
Updating and Reporting:	Engineers

How…. Walsall works with other local authorities through the West Midlands Highways Infrastructure Management Group (WMHIMG). Through this Group Walsall works to develop a regional understanding and approach to asset management, which can be made bespoke to meet the particular needs of Walsall.

The Group reviews guidance and tools developed by the Department for Transport's Highway Maintenance Efficiency Programme, United Kingdom Roads Liaison Group, Institute of Asset Management, as well as ISO55000 principles, a global standard for asset management.

From the guidance and tools available, the group assesses how best to implement asset management, and then, Walsall decides how it will introduce, develop, and implement the best aspects of asset management to meet its needs.

Reporting…. To ensure investment and outcomes remain effective, the modular Highway Asset Management Strategy provides a suite of measures to explore and demonstrate success or otherwise. From this, improvement actions can be considered, and discussed with peers at West Midlands Highway Infrastructure Management Group and Transport for West Midlands.

An annual performance report is produced to draw together progress, performance and investment impact. The report is produced to reflect the latest asset value and asset performance as per Module D – Performance Management and Module K – Valuation.

Success Measures…. An evolving asset management approach to managing the highway assets of Walsall will show progress in maintaining the Councils highway network efficiently. This approach will be aligned with prudent investment strategies delivering demonstrable benefits to the community, through performance improvement targets and maximising the benefit of capital investment and revenue expenditure.

To deliver success, the following activities are desirable for the efficacy and demonstrable benefit of asset management:

- Periodic Asset Management Maturity Assessments and associated reporting to ensure progress towards the stated objectives.
- Asset Valuation for Whole of Government Accounts to promote effective monitoring of asset values.
- Updating expenditure figures to assess the expenditure against investment strategies.
- Updating the performance measures and assessing progress against targets.

This review process strives to ensure the stated aims remain current and in-line with corporate aims. Should the aims change, this Highway Asset Management Strategy should adapt to reflect the new aims/targets for performance and outcomes.

Further Information:
Highway Maintenance Efficiency Partnership/United Kingdom Roads Liaison Group - Maintaining a Vital Asset.
ISO55000 – Asset Management Principles.
United Kingdom Roads Liaison Group – Highways Infrastructure Asset Management Guidance.
Transport for West Midlands – City Region Sustainable Transport Settlement.

Ownership and reporting across the Highway Asset Management Strategy modules to support long-term implementation, improvement and realisation of the benefits asset management brings, is managed as follows:

Module A – Policy & Objectives: Highways Group Manager.
Next Review April 2024.

Module B – Context: Highways Group Manager.
Next Review April 2024, Includes Module D Performance Management, Module K Valuation.

Module C – Asset Knowledge: Highways Group Manager.
Next Review April 2024, includes Module D Performance Management; Module I Stakeholder Engagement; Module K Valuation.

Module D Performance Management: Highways Group Manager.
Next Review April 2024, includes Performance Dashboard.

Module E – Funding & Expenditure: Highways Group Manager.
Next Review April 2024, includes Historical Expenditure.

Module F – Investment Strategies: Highways Group Manager.
Next Review April 2024, includes Investment Strategies.

Module G – Maintenance Strategies: Highways Group Manager.
Next Review April 2024, includes Maintenance and Investment Strategies.

Module H – Works Programmes: Highways Group Manager.
Next Review April 2024, includes Forward Works' Programmes.

Module I – Communications & Engagement: Highway Group Manager.
Next Review April 2024, includes Module D Performance Management.

Module J – Benchmarking: Highways Group Manager.
Next Review April 2024, includes Module D Performance Management.

Module K – Valuation: Highways Group Manager.
Next Review April 2024, includes Whole of Government Accounts.

Module L – Improvement Action Plan: Highways Group Manager.
Next Review April 2024.

Module C – Asset Knowledge.

What…. Asset knowledge comprises inventory, safety and serviceability data for the highway network assets Walsall is responsible for. Collection and maintenance of asset data is required to assist managers in assessment, analysis and reporting of performance, progress and future needs.

Why…. Asset data is required to enable Walsall to undertake the following processes:

- Monitor and report on the condition of the highway network.
- Assess the expected lives of individual assets or asset components.
- Evaluate performance indicators.
- Model future maintenance options.
- Identify future investment strategies.
- Investigate and manage risk.
- Develop short/long-term forward works programmes.

Analyse and report financial values for Whole of Government Accounts.

These processes enable Walsall to make informed and cost-effective decisions.

Who…. The responsibilities for the 'Asset Knowledge' module lie with:

Data Collection:	Highways Group Manager
Data Management:	Highways Group Manager
Updating & Reporting:	Engineers

How…. Data is an expensive commodity to collect, store and keep up to date. It is essential to ensure data collected and held can be trusted and remains current to support performance reporting and decision-making.

Walsall adopts a pragmatic approach to the collection of data to ensure the same data can be used for multiple tasks and that the level of sophistication meets the needs of the authority.

Reporting…. Walsall uses the asset inventory to quantify the extent of its highway assets. This data is then used to feed into other HAMS Modules to report on asset performance, including:

Module D – Performance Management

Module I – Stakeholder Engagement

Module K – Valuation

Success Measures…. Apart from feeding into other Highway Asset Management Strategy modules, asset knowledge will help Walsall to support statutory requirements. Moreover, this will greatly help in making effective and informed decisions.

Further Information:
Highway Infrastructure Asset Management Guidance documents.
United Kingdom Pavement Management System.
United Kingdom Roads Liaison Group – Codes of Practice.
Transport for West Midlands – City Region Sustainable Transport Settlement.

Walsall's Asset Inventories include:

Carriageways.
Classified Principal A Roads: Approx 98km, 990,000m^2.
Classified Non-Principal B Roads: Approx 41km, 331,000m^2.
Classified Non-Principal C Roads: Approx 11km, 105,000m^2.
Unclassified 'U' Roads: Approx 694km, 4,300,000m^2.

Footways.
High Amenity: Approx 229km, 593.000m^2.
Low Amenity: Approx 1,083km, 2,284.000m^2.

Highway Structures.
Concrete Bridges: 47
Brick Arch Bridges: 8
Steel Deck Bridges: 25
Pedestrian/Cycle Bridges: 36

Street Lighting.
Columns: 26,053
Wall Mounted Lights: 124
Feeder Pillars: 186
Illuminated Bollards: 733
Externally Illuminated Signs: 2,628
Beacon Poles: 157

Urban Traffic Control.
Puffin Crossings: 108
Pelican Crossings: 9
Toucan Crossings: 20
Wig Wags: 3
Variable Message Signs: 15
CCTV Installations: 20
Traffic Signals with Pedestrian Facilities: 60
Traffic Signals without Pedestrian Facilities: 27

*Asset Inventory confidence levels for asset groupings range from medium to high.

Walsall's Asset Condition Data/Systems includes:

Carriageways.
Classified Principal A Roads: Inspected by SCANNER machine surveys, 50% of network annually, data stored in United Kingdom Pavement Management System.

Grip Tester skidding surveys: 100% of Classified 'A' Road network annually, data stored in United Kingdom Pavement Management System.

Classified Non-Principal B Roads: Inspected by SCANNER machine surveys, 50% of network annually, data stored in United Kingdom Pavement Management System.

Classified Non-Principal C Roads: Inspected by SCANNER machine surveys, 100% of network annually, data stored in United Kingdom Pavement Management System.

Unclassified Roads: Inspected by Coarse Visual Inspection (CVI), 25% of network annually, data stored in United Kingdom Pavement Management System.

Footways: High Amenity, Inspected by Detailed Visual Inspection Surveys (DVI) 50% of network annually, data stored in United Kingdom Pavement Management System.

Footways: Low Amenity: Inspected by Footway Network Survey (FNS), 25% of network annually, data stored in United Kingdom Pavement Management System.

Structures.
All Structures: Subjected to Principal Inspections across a 3-year cycle, data is stored in Asset Management eXpert;

General Inspections: Undertaken across a 6-year cycle, data is stored in Asset Management eXpert;
Special Inspections: Undertaken ad-hoc as required, data is stored in Asset Management eXpert.

Principal Road Network – Load Assessments: Inspections undertaken ad-hoc as required, data is stored in Asset Management eXpert.

Gullies.
Cyclical gulley cleansing, undertaken 95% annually with data stored on Kaarbontech system.

Street Lighting.
All Structural Inspections: Inspected under Private Finance Initiative contract arrangements.
All Electrical Inspections: Inspected under Private Finance Initiative contract arrangements.

Street Furniture.
All Street Furniture: Inspected in accordance with safety inspections, data stored in Alloy system.

Urban Traffic Control.
All Electrical Inspections: Inspected over a 5-year cycle, data stored within database.

Module D – Performance Management.

What…. Performance management is the process by which Walsall communicates its objectives for the highway assets and monitors performance.

Why…. Walsall has adopted this approach to ensure highway asset management functions on the ground are aligned with and contribute to achieving the Council's visions.

Who…. The responsibilities for the 'Performance Management' module lie with:

Approving Targets:	Highways Group Manager.
Monitoring Performance:	Highways Group Manager.
Updating & Reporting:	Engineers.

How…. Walsall has adopted performance management supporting ISO55000 principles and those outlined in the Highway Maintenance Efficiency Programme – United Kingdom Roads Liaison Group Highway Infrastructure Asset Management Guidance document (2013).

Relevant high-level drivers are derived from Walsall's Council Plan. These have been translated into four highways performance target statements, which drive all of Walsall's highway maintenance activities.

Asset specific performance target statements have also been developed to identify the key objectives for each of the main highway asset groups. The performance target statements are supported by a suite of performance indicators, which have been selected to enable performance monitoring and target setting against the objectives.

In addition, these performance indicators are benchmarked through National Highways & Transportation Surveys and assessed against service criteria and industry best practice in order to group performance into three clear service levels, Good, Fair and Poor. This enables target setting and prioritisation based on sound analysis.

Reporting…. Walsall uses robust performance dashboards to illustrate the performance management system adopted. They consider significant assets under the Council's remit, outlining for each, multiple performance indicators, their current condition, and their short- and long-term targets mapped to levels of service categories.

This process ensures Walsall focuses its effort and investment into the areas that positively impact the high-level drivers and represent the highest level of risk to the Council. The cost of attaining target Performance Indicators is discussed in Highway Asset Management Strategy Module F – Investment Strategies.

Further Information:
Highway Infrastructure Asset Management Guidance document (2013).
ISO55000 – Asset Management Principles.

Transport for West Midlands – City Region Sustainable Transport Settlement.

Asset Performance Indicators Setting.

High Level Drivers:

- Pursue inclusive economic growth.
- Make a positive difference to the lives of Walsall people.
- Children are safe from harm, happy and learning well with self-belief, aspiration and support to be their best.
- Safe, resilient and prospering communities.

Highway Performance Target Statements:

- Ensure resilience on the network.
- Vibrant and healthy public realm.
- Sustain a safe and serviceable network.
- Provide an accessible network.
- Open engagement and communication.

Service Performance Target statements:

- Ensure the condition of all highway assets are in good state.
- Encourage cycling, provide a better environment for passengers.
- Minimise disruption caused by road works and enhance accessibility for vulnerable users.
- Ensure all stakeholders can have a means by which they can inform and influence asset management.

Asset Performance Indicators:

- Measurable metrics.
- Current and target.
- Consistent and meaningful.
- As per performance dashboard.

Walsall's Performance dashboard considers a broad range of service objectives, including:

Network Resilience:

Carriageways.

- Percentage of 'A Road' carriageways not in poor condition:
  Target 95%, Actual 98%, Trend stable.

- Percentage of 'B/C Road' carriageways not in poor condition:
  Target 95%, Actual 99%, Trend stable.

- Percentage of 'U Road' carriageways not in poor condition:
  Target 95%, Actual 75%, Trend decline.

Footways.

- High Amenity footways not in poor condition:
  Target 95%, Actual 52%, Trend decline.

- Low Amenity footways not in poor condition:
  Target 95%, Actual 72%, Trend decline.

Gullies.

- Percentage of gullies operational post cleanse:
  Target 85%, Actual 86%, Trend improving.

Vibrant & Healthy Public Realm:

Road Infrastructure.

- Percentage of carriageway network treated through planned maintenance annually: Target 2%, Actual 3%, Trend improving.

- Percentage of footway network treated through planned maintenance annually:
  Target 2%, Actual 1%, Trend stable.

- Level of customer satisfaction with condition of highways:
  Target 50%, Actual 37%, Trend decline.

Sustainable, Safe & Serviceable Network:

- Percentage of public highway liability claims repudiation:
  Target 90%, Actual 79%, Trend stable.

- Percentage of 1hr defects completed within response time:
  Target 95%, Actual 100%, Trend improving.

- Percentage of 24hr defects completed within response time:
  Target 95%, Actual 99%, Trend improving.

- Percentage of 5-day defects completed within response time:
  Target 95%, Actual 99%, Trend improving.

- Percentage of 28-day defects completed within response time:
  Target 95%, Actual 95%, Trend stable.

- Percentage of 6-month defects completed within response time:
  Target 95%, Actual 100%, Trend improving.

- Percentage of highway safety inspections completed on time:
  Target 95%, Actual 100%, Trend stable.

- Percentage of carriageway condition surveys completed on time:
  Target 95%, Actual 99%, Trend stable.

- Percentage of footway condition surveys completed on time:
  Target 95%, Actual 100%, Trend improving.

- Level of customer satisfaction with local roads:
  Target 50%, Actual 51%, Trend decline.

Network Accessibility & Customer Engagement:

- Percentage of Carriageway/Footway planned roadworks notification letters sent out on time:
  Target 90%, Actual100%, Trend stable.

- Level of customer satisfaction with ease of networks access (all):
  Target 50%, Actual 70%, Trend decline.

- Level of customer satisfaction with ease of networks access (disabilities):
  Target 50%, Actual 64%, Trend decline.

- Level of customer satisfaction with ease of network access (no car):
  Target 50%, Actual 68%, Trend decline.

- Level of customer satisfaction with traffic levels and congestion:
  Target 50%, Actual 42%, Trend improving.

- Level of customer satisfaction with the management of road works:
  Target 50%, Actual 47%, Trend decline.

- Level of customer satisfaction with street lighting:
  Target 70%, Actual 67%, Trend improving.

- Level of customer satisfaction with highway maintenance services:
  Target 50%, Actual 47%, Trend improving.

Module E – Funding and Expenditure.

What…. Funding is the financial support Walsall uses to maintain its highway assets. This module looks at historical expenditure and forecasts long-term financial requirements. Walsall's policy is to ensure that the asset base is preserved or improved without imposing any undue financial legacy for future generations.

Why…. Walsall needs to stay abreast of developments in funding and revenue opportunities and, with changes in government funding, to be able to raise revenue locally. The highways team needs to ensure the best case is put forward for funding from funds available through Community Infrastructure Levy, Section 278, Section 106 and business rates as these provide income to the authority.

Who…. The responsibilities for the 'Funding & Expenditure' module lie with:

Defining budget needs: Highways Group Manager
Developing income opportunity: Highways Group Manager
Monitoring expenditure: Team Leaders
Updating & Reporting: Engineers

How…. The following funding streams have been available for Walsall over recent years:

- Capital allocations from the Local Transport Plan and the West Midlands City Region Sustainable Transport Settlement.
- Revenue allocations from local council tax, business rates, central government revenue support, community infrastructure levy and other grants.
- Department for Transport Winter Damage Fund and Pothole Fund
- Local Highways Maintenance Challenge Fund.
- Local Sustainable Transport Fund.
- Walsall is partnered with Amey through a Private Finance Initiative to upgrade and maintain street lighting assets (over a 26-year period, which started in 2002).
- Funding from Prudential Borrowing.

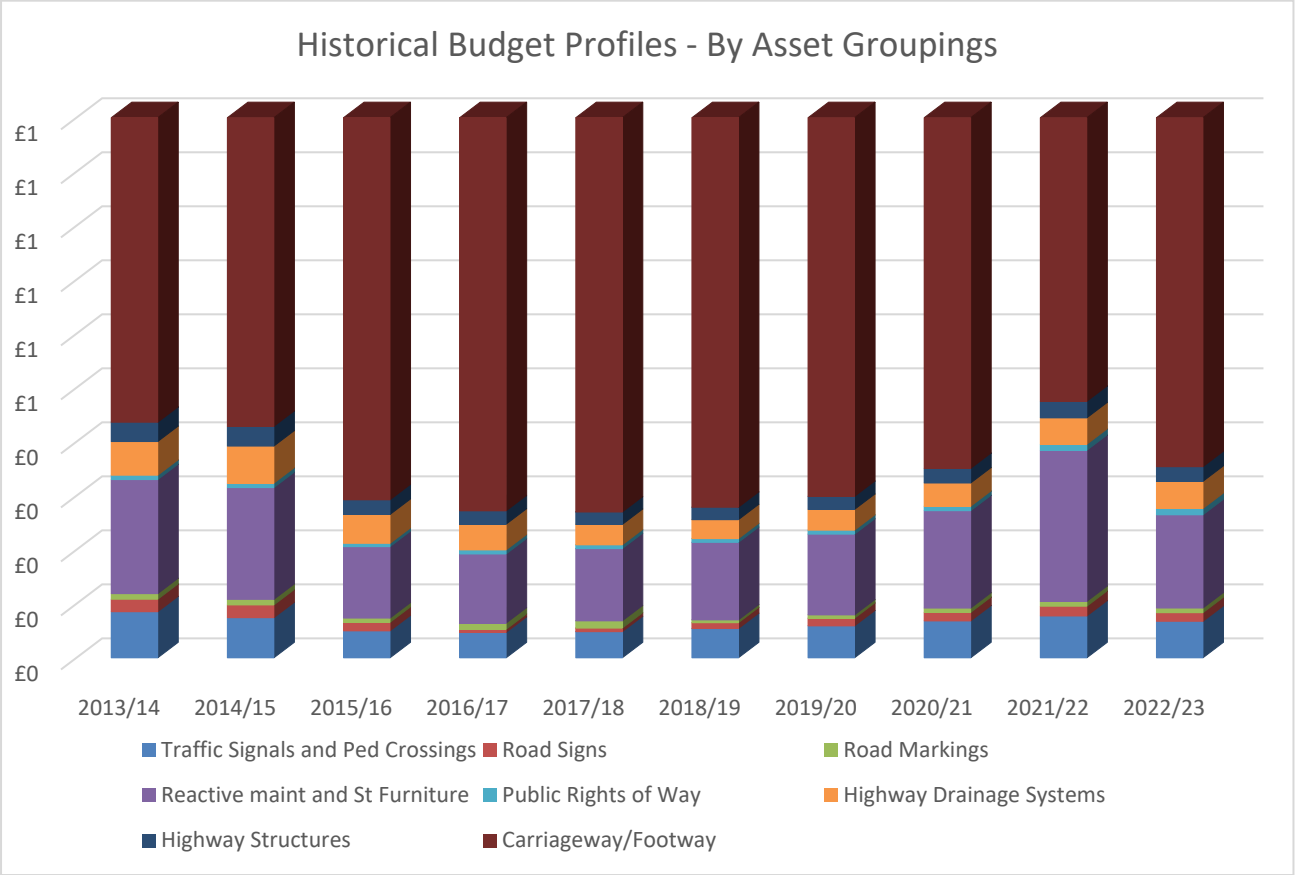
Lifecycle planning is used as a key tool to determine funding needs and to anticipate the impact of funding levels on asset condition and service level provision.

Reporting…. Expenditure is monitored on an annual basis. This provides an overview of the total budget available to Walsall over time, along with how the budget is allocated between asset groups.
Engineers can estimate Walsall's current funding requirements. These estimates are calculated using whole life costing methods, to estimate the average funding required annually to maintain the asset in a steady state.

Success Measures…. Maximising income from third parties will be essential for the long-term improvement and steady state maintenance of highway assets. Hence, Walsall's aim to maximise external funding to complement its capital works by continuously increasing the income from third parties to fund its investments. The lifecycle planning methods outlined in Highway Asset Management Strategy Module G – Investment Strategies, are imperative to building a good business case for ascertaining additional funding.

Further information:
The Community infrastructure Levy.
Historical Budget Allocations across Asset Groups.
Business Rates.
Transport for West Midlands – City Region Sustainable Transport Strategy.

Budget Allocations across key Asset Family Groupings:



Estimated funding requirements for key asset groups have been analysed within Walsall's asset management planning processes and estimated asset renewal steady state capital funding requirements have been identified:

Carriageway Infrastructure Assets: Approximately £5 million per annum.

Footway Infrastructure Assets: Approximately £0.85 million per annum.

UTC Infrastructure Assets: Approximately £0.345 million per annum.

Annual asset infrastructure renewal capital investment required to maintain steady state for core asset groups is estimated to be in the region of:

£6,195.000.

Module F – Investment Strategies.

What…. Investment in the highway assets is essential to improve the condition, maintain steady-state or even just to control the rate of deterioration.

To determine the best level of investment to drive long-term capital savings and meet the desired outcomes, a series of strategies can be explored to understand the impact of different budget scenarios, including the impact of investing in different parts of the network.

Lifecycle planning is the process used to determine backlog and steady-state funding requirements. It provides analysis of differing possible budget scenarios to suggest what the short- and long-term impacts may be.

Why…. Understanding how the asset condition will be affected by differing budget scenarios helps determine the level of investment required to meet desired levels of performance. Robust understanding of the impact of different levels of investment supports decision making and can help set appropriate budget levels.

Who…. The responsibilities for the 'Investment Strategies' module lie with:

Determining strategies: Highways Group Manager.
Evaluating strategies: Highways Group Manager.
Updating & Reporting: Engineers.

How…. Walsall reviews the investment needs of assets using condition data and performance measures (Module D – Performance Management).

This information informs lifecycle planning models to determine backlogs and the impact of investment scenarios, ensuring the investment is driving capital savings, striving towards the stated performance outcomes and is providing a network fit for purpose.

Reporting…. Lifecycle planning reporting is delivered through update reports as and when investment scenarios are undertaken.

For the purposes of the Highway Asset Management Strategy the investment strategy will evolve in line with the determined budgets, amended to reflect budget fluctuations.

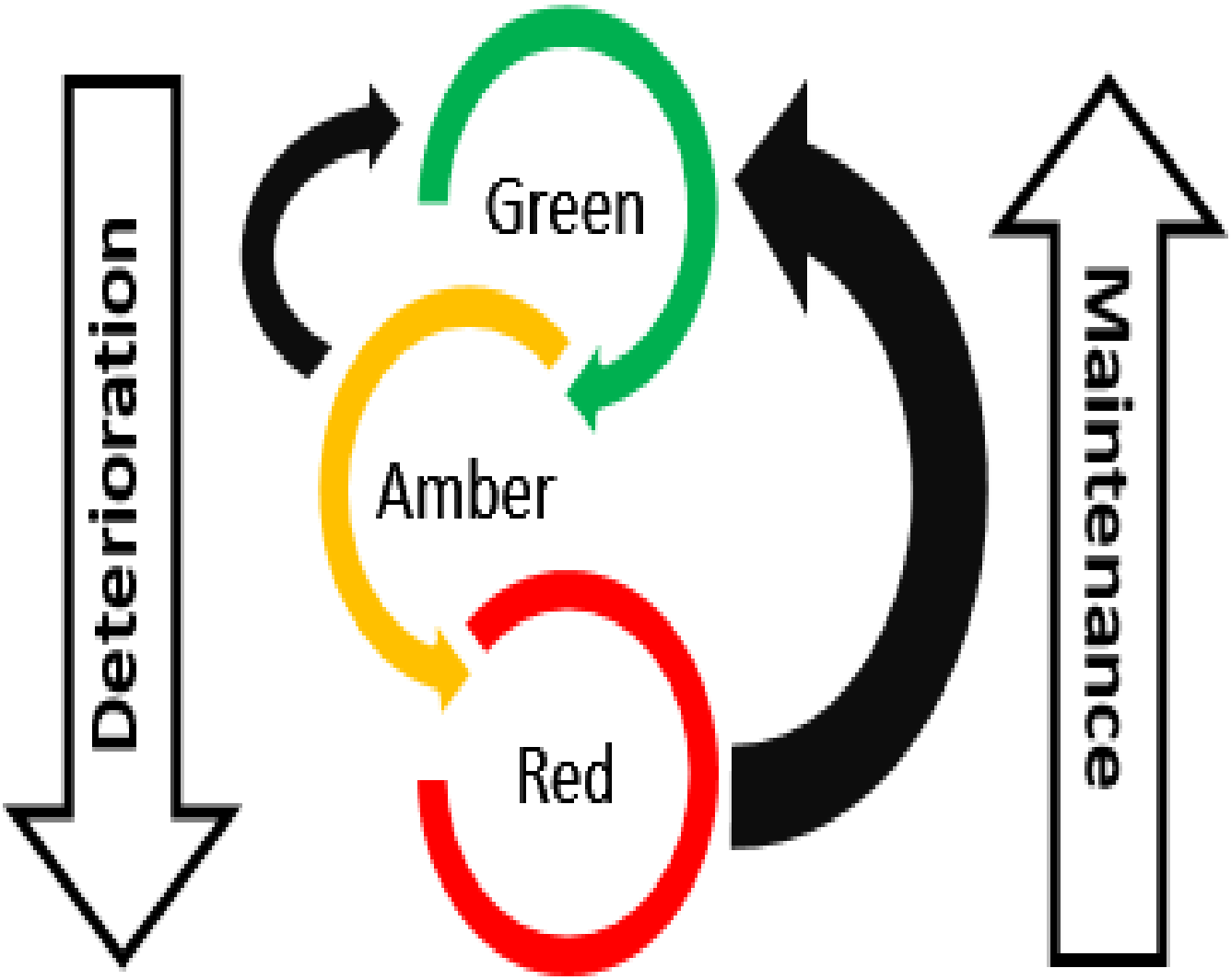
Success Measures…. To deliver the performance targets as stated in Module D - Performance Management.

Summary information estimated from 10yr lifecycle planning work identifies:

- Carriageway backlog £25million, steady state £5million.
- Footway backlog £27.4million, steady state £0.85million.
- Urban Traffic Control backlog £3.4million, steady state £0.345million.

Further Information:
Walsall's Asset Investment Models & Maintenance Strategies.
Transport for West Midlands – City Region Sustainable Transport Settlement.

Lifecycle Planning Modelling methodologies aim to predict asset deterioration levels and required maintenance intervention strategies using the following schematic:



This overview illustrates the principles upon which Walsall's lifecycle planning model is based. Each unit of the asset is classified using a traffic light system, according to its condition. How it is classified is dependent upon the particular asset in question. For carriageways, for example, the asset is classified according to the results of road condition surveys, which are regularly conducted.

An asset will deteriorate from green → amber → red over time, whilst maintenance works will improve the condition of a road from either red → green, or amber → green, depending on the treatment undertaken.

Carriageway Information as calculated through 10-year investment modelling identifies:

Financial Backlog:
A Roads Backlog: £0.36million
B & C Roads Backlog: £0.27million
U Roads Backlog: £24.8million
Total Carriageway Assets Backlog: Approximately £25million.

Physical Backlog:
A Roads Backlog: 6.8km
B & C Roads Backlog: 1.9km
U Roads Backlog: 276,5km
Total Carriageway Assets Backlog: Approximately 285km.

Steady State Funding Need:
A Roads: £0.55million/year
B/C Roads: £0.25million/year
U Roads: £4.2million/year
Total Carriageway Steady State Funding Need: Approximately £5million.

Footway Information as calculated through 10-year investment modelling identifies:

Financial Backlog:
High Amenity Footways: £3.2million.
Low Amenity Footways: £24.2million.
Total Footway Asset Backlog: £28.6million.

Physical Backlog:
High Amenity Footways: 64km.
Low Amenity Footways: 660.1km.
Total Footway Asset Backlog: 724.1km.

Steady State Funding Need:
High Amenity Footways: £0.14million.
Low Amenity Footways: £0.71million.
Total Footway Steady State Funding Need: Approximately £0.85million.

Note: 10-year lifecycle modelling was carried out by asset management consultants prior to the Covid 19 national health pandemic and the rapid period of economic inflationary pressure that the UK experienced during 2022 and 2023.

Module G – Maintenance Strategies.

What…. Walsall must decide how funds available for highway asset maintenance are best spent. This involves allocating budget across many different asset types and selecting the most appropriate maintenance activities and treatments for those asset types. These vary depending upon the type of asset in question, the materials it is made of, and its current condition along with many other factors. A maintenance strategy is an approach to managing homogenous asset groups with consistent treatments. The treatments are decided upon by identifying the most efficient means of meeting the required performance targets, based on whole life cost analysis and lifecycle planning.

Why…. To create a suite of treatment options to facilitate decision making for efficient use of available funds. Benefits include:

- Time saved in going through the treatment selection process for individual assets.
- A consistent aesthetic and performance across the Borough.
- Ease of comparing new treatment options on the market.
- A better understanding of how treatments behave over time.

Who…. The responsibilities for the 'Maintenance Strategies' module lie with:
Defining strategies: Highways Group Manager.
Whole life costing: Highways Group Manager.
Updating & Reporting: Engineers.

How…. Walsall uses lifecycle planning methods to inform maintenance strategy. A range of maintenance strategy options are modelled and the impact on asset condition is assessed. Following this, maintenance strategies are developed that aim to make the best use of available funds and optimise asset condition over the medium and long term.

This approach lends itself to ensuring different strategies for different asset types provide a 'right for asset' approach to long-term maintenance. As an example, Walsall use an array of treatments on carriageways to deliver best whole life cost including but not limited to micro-asphalt, chip lock, surface dressing and a variety of bituminous inlays. On the other hand, it is not viable for Walsall to use cheaper strengthening methods like bituminous overlays due to the urban nature of the highway network.

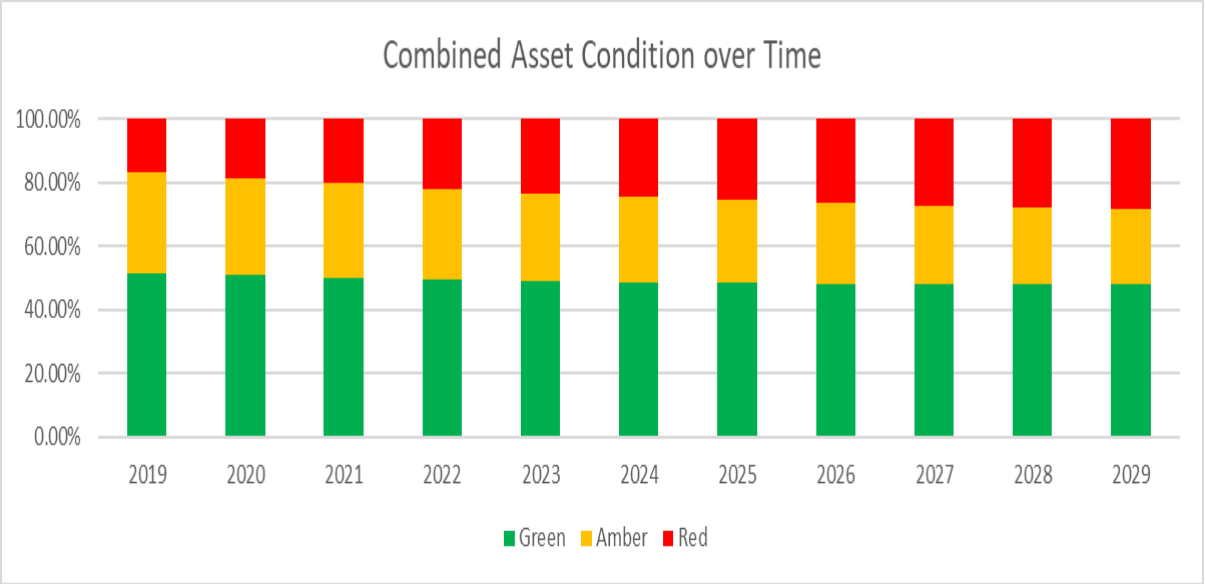
For its footway assets Walsall has introduced the use of micro asphalts to lengthen the serviceable life of the asset and Urban Traffic Control assets are being future proofed by introducing ducting.

Reporting…. Maintenance strategies are reviewed periodically, or when new treatment options come on the market. They are reported through lifecycle planning reports and business cases as an integral element of Module G - Investment Strategies.

Success Measures…. To be able to demonstrate an on-going reduction in the whole life cost of asset maintenance, through the use of the most efficient maintenance strategy for the particular asset group.

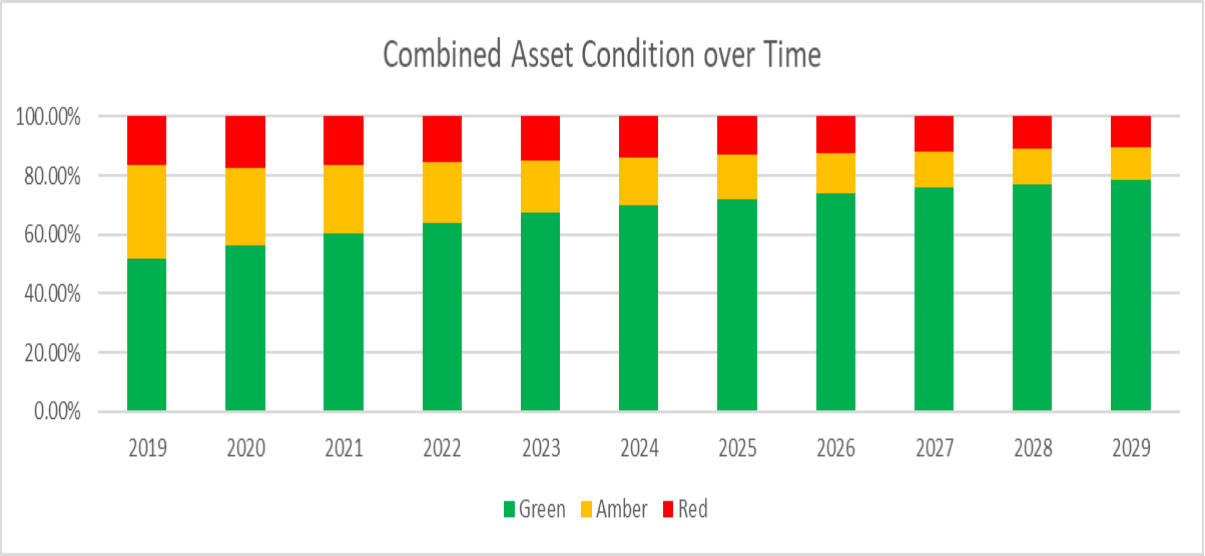
Further Information:
Walsall's Asset Investment Models and Maintenance Strategies.

Schematic examples of typical maintenance strategy testing during lifecycle planning, include:



Total budget of £3.8m annually allocated as follows:

A Roads: £0.29.m on 150mm deep resurfacing.
B/C Roads: £0.11m on 150mm deep resurfacing.
U Roads: £3.4m on 100mm deep resurfacing.



Total budget of £3.8m annually allocated as follows:

A Roads: £0.18m on 150mm deep resurfacing and £0.08m on shallow treatment.
B/C Roads: £0.08m on 150mm deep resurfacing and £0.4m on shallow treatment.
U Roads: £1.7m on 100mm deep resurfacing and £1.7m on micro asphalt or similar shallow treatment.

Module H – Forward Works Planning.

What…. The works programme is one of the key outputs of asset management. It sets out the plan for future maintenance activities, after prioritisation of all candidate schemes and optimisation to maximise outcomes. The works programme should reflect Walsall's asset management strategy and be designed to ensure performance targets are met.

Why…. Developing a programme of works gives greater transparency of the work to be delivered. For the residents and businesses, there is an understanding of the volume and location of work that will be delivered, and when their street will be invested in. For works delivery teams, it provides greater certainty of future orders to better resource and deliver works efficiently.

Furthermore, looking at a longer-term investment in highway assets ensures the focus is kept on long-term benefits derived from the investment, and facilitates better understanding of what can be done with the investment provided.

Who…. The responsibilities for the 'Works Programme' module lie with:
Approving individual works programmes: Group Managers.
Updating & Reporting: Engineers.

How…. Walsall continually reviews, and updates investment priorities based on engineering need, condition and social benefit. To achieve this, asset condition data is collected and analysed to provide a prioritised list of work required within an asset group. Individual asset managers determine the forward works programme for their asset group based on lifecycle planning principles. Managers select schemes according to the strategy that was found to give the best economic return on investment and then develop a bid for funding according to short-term needs. Cross-asset prioritisation occurs formally and informally. Senior decision makers allocate funding across asset groups according to the strength of the funding bids they have received. Walsall has refined its forward works programming, employing more rigorous cross-asset optimisation processes.

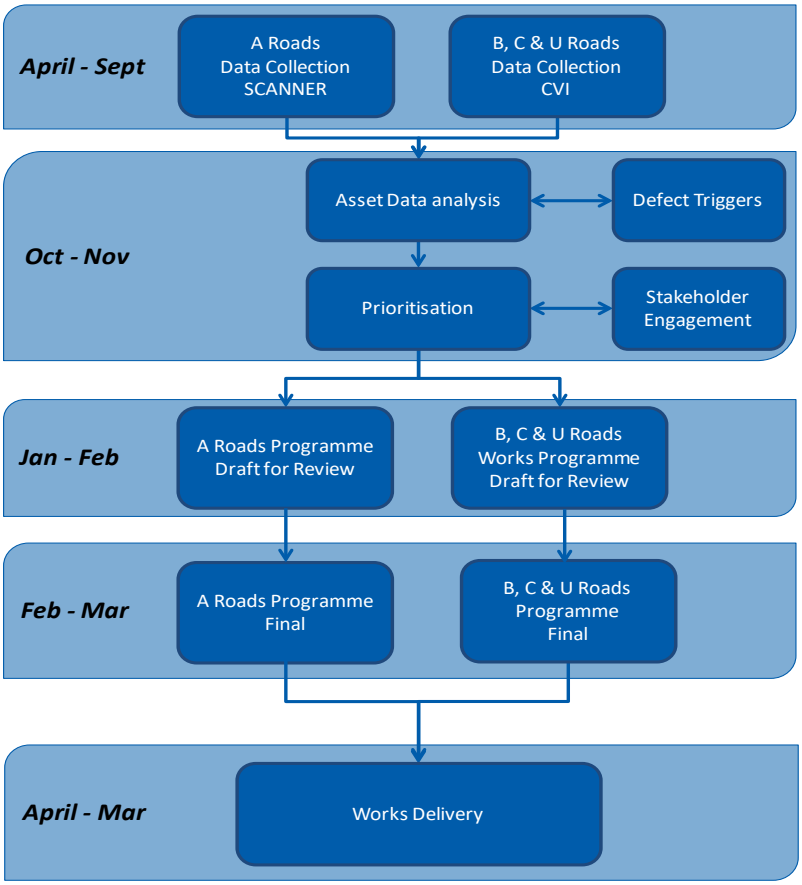
For further information of Walsall's investment and maintenance strategy see Module F - Investment Strategies and Module G - Maintenance Strategies. The processes for developing the programmes for the above-mentioned highway assets are illustrated in the schematics which follow.

Reporting…. Walsall produces a prioritised schedule of works through condition related service measures. Carriageways and footways needing maintenance are assigned a score which determines their priority ranking. This ranking underlies the schedule of works up to the available budget. The draft forward works programme is then, presented to the Council for their final approval and endorsement.

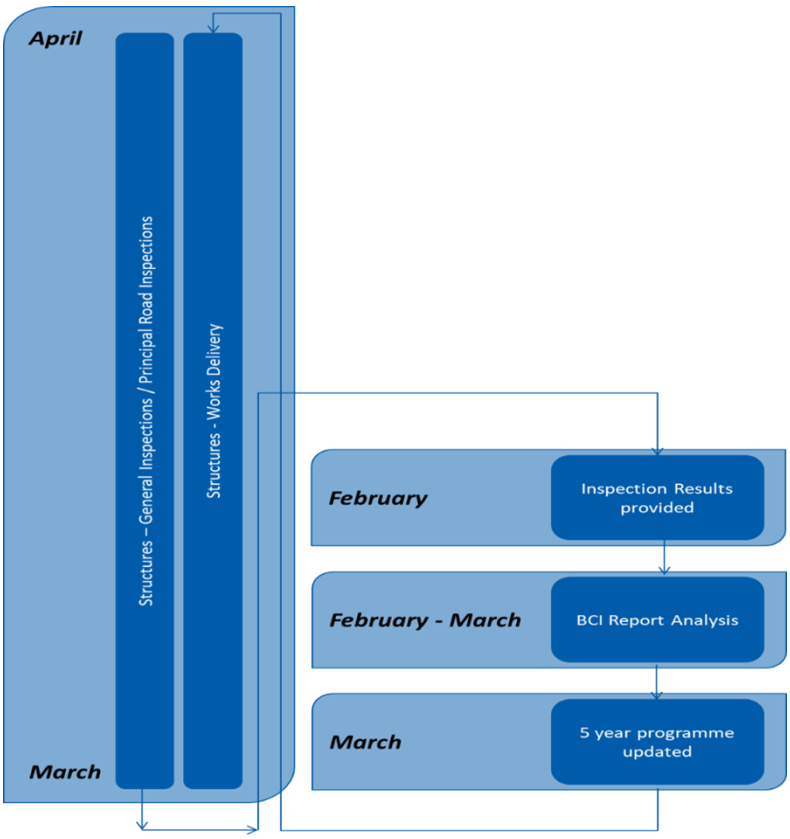
Success Measures…. The delivery of Walsall's works programme is the tangible outcome of the entire asset management planning process. The programming and delivery of works align with the asset management objectives discussed in Highway Asset Management Strategy Module A – Policy & Objectives and deliver the performance targets set in Module D – Performance Management.

Further Information:
Highway Infrastructure Asset Management Guidance documents.
ISO5500 Asset Management Principles.
Transport for West Midlands – City Region Sustainable Transport Settlement.

Works programme development for carriageways operates in accordance with the following schematic:



Works programme development for Structures assets operate in accordance with the following schematic:



Module I – Communication and Engagement.

What…. Stakeholder engagement is the process of involving those with an interest in how highway assets are maintained in management decision-making processes.

Stakeholders include both those who have an ability to influence management decisions and those who are affected by the decisions taken. Walsall's stakeholders include highway users (pedestrians, cyclists and drivers) and those dependent upon highway users (for example local businesses, who may be reliant upon the highway to receive deliveries or to ensure staff and customers can reach their premises, and vulnerable groups, who may be reliant on support services reaching them via the highway). While stakeholders can and should influence asset management decision-making processes, safety concerns remain Walsall's number one priority. It is vital that the asset is maintained in a manner which provides a safe network, to fulfil the authority's statutory duty.

Why…. Engaging with stakeholders is beneficial to ensure that end-user needs are well understood, and a wide range of stakeholders have the opportunity to inform asset management decision-making processes. It is necessary to ensure the costs and benefits of highway asset management are shared equitably and investment activity can be focused where it is needed most. Local community empowerment through choice in service delivery is not easily achieved, but in accordance with the spirit expressed within the local government white paper, 'Strong and Prosperous Communities', increased emphasis on local decision-making has become more important. This is particularly true in the light of funding cuts implemented over past years.

Who…. The responsibilities for the 'Stakeholder Engagement' module lie with:
Leading Stakeholder Engagement: Highways Group Manager.
Updating & Reporting: Engineers.

Community groups previously engaged have included mobility & disability forums, resident & residents' groups, cycling groups and business communities.

How…. Walsall embraced a citizen-centric approach to service delivery through its 'Putting the Citizen First' project. The project adopted both Call Centre Association and Community Portal Principles. The Council provides online interfaces for customer and stakeholder enquiries and offers a direct forum through which comments, compliments, and complaints can be made regarding staff or performance in the delivery and management of services.

Information is provided to stakeholders through a variety of channels including the internet, press releases and media articles, & a range of leaflets, strategy, and policy documents. These are made available online and in print at public buildings, by letter, and are delivered in person to households or business affected by various programmes of works. Walsall's annual works programmes and key policy documents are published online each year, and stakeholders are given the opportunity to make comments on all versions.

Communities are pro-actively engaged via the Council's website, which aims to provide the latest information across a dynamic range of highway services. In addition, Walsall participates in the National Highways and Transport (NHT) public satisfaction survey. The survey examines a range of issues that cover different aspects of road and transport services across the Borough, results are available on-line.

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Reporting…. The results published on the National Highways & Transportation website provides a framework through which Walsall reports changes to its public satisfaction and investment needs, key measures are subsequently built into the performance dashboard of the Highway Asset Management Strategy, Module D.

Success Measures…. A number of Walsall's performance measures assess success in achieving Walsall's objective of, 'Open engagement and communication channels. These include:

- % of advanced roadworks notification letter drops completed ahead of site works on-time
- Level of customer satisfaction with condition of roads & footways
- Ease of network accessibility, including non-car driver and disabilities mobility related issues.

Further Information:
National Highways & Transportation Surveys.
Equalities Act 2010, Public Sector Equality Duty.
Transport for West Midlands – City Region Sustainable Transport Settlement.

Yorks Bridge Case Study Example.
Walsall Council consulted on detailed proposals for the upgrade of York's Bridge which spans across the canal at Norton Rd (Pelsall) using a combination of web portal, social media, postal communications and community roadshows. Options ranged from strengthening the existing weak bridge through to new construction, whilst trying to maintain historical character & minimising land take.

The consultation embraced: scheme layouts, sectional & photomontage proposals; common-land impact & deregistration measures; parking, wildlife, & ecological impact assessments and mitigation measures. The consultation was a critical platform to balance opposing community aspirations & objections surrounding: the needs for upgrading the structure; the consequences for the old structure; towpath access rights; costs; traffic impacts; construction methods & project timescales.

Consultation responses were subjected to in-depth analysis prior to formal planning applications being submitted.

Town Centre Transport Package Case Study Example.
The large capital Town Centre Transport Package project involved a highly coordinated approach to customer engagement at key stages during its delivery. Prior to works commencing extensive public meetings were held, backed up with advertising campaigns that included local newspapers, information boards and comprehensive web portal scheme related data provision.

During construction, several stakeholder forums and focus groups were harnessed to disseminate information to both the public and commercial businesses. This was all supported with letter drops, leaflets and advertising campaigns, with important traffic management bulletins being aired on local radio and disseminated through various social media forums.

Module J – Benchmarking.

What…. Benchmarking is the process of systematically assessing how Walsall is performing in comparison to other similar authorities. It aims to identify best practice in asset management, so that Walsall can improve its own performance.

For the purposes of this Highway Asset Management Strategy, Walsall determines its own performance targets, and establishes strategies and investment needs to achieve the appropriate asset performance. Walsall's approach ensures it delivers what is best for its community.

Why…. Benchmarking identifies good practice and enables Walsall to challenge the way it operates and delivers services. Walsall uses benchmarking to test its approach to managing highway assets. It looks at high performing authorities and routinely engages with neighbouring authorities to see how they operate differently.

Where other authorities are outperforming Walsall, it is sometimes possible to analyse why they are doing better and to use this understanding to improve Walsall's own processes. Benchmarking provides checks and balances to judge whether levels of investment are delivering the desired and expected outcomes.

Who…. The responsibilities for the 'Benchmarking' module lie with:
Updating & Reporting: Engineers.

How…. Walsall uses a variety of benchmarking documents and forums, including:

- United Kingdom Roads Liaison Group Codes of Practice.
- National Performance Indicators.
- National Highways & Transportation Public Satisfaction Survey.
- West Midlands Regional Meetings.

Reporting…. The delivery of the various elements of benchmarking are ongoing throughout the year. As such it is not intended to provide detailed reporting. Instead, they promote better ways of working which can be reflected in annual Highway Asset Management Strategy module updates.

To this end, such observations or major changes in performance compared to others will be noted in Walsall's Performance Management Framework in module D.

Success Measures…. Success will be measured by ensuring Walsall continues to deliver highway assets that meet the needs of the community in a cost-effective and efficient manner, subject to the varying contractual arrangements set in place and limitations against the financial resources available.

Further Information:
National Performance Indicators, Single Data List.
United Kingdom Road Liaison Group Codes of Practice.

Module K – Financial Management and Valuation.

What…. Asset valuation quantifies the financial value of all the highway assets that Walsall owns. The value of Walsall highway assets is around £2.7 Billion including £1.1 Billion land value, making this the most valuable asset in the Council's portfolio.

Why…. Walsall calculates asset valuation primarily for Whole of Government Accounts (WGA) reporting purposes. As the information used for financial reporting is compiled according to national accounting principles and controls, it is a reliable source of high-quality data that is also useful for asset management. The valuation process is also used internally for the following purposes:

- To provide an indication of trends in the condition of assets in monetary terms.
- To calculate the annual depreciation of the assets, which represents the annual consumption of service benefits and provides a measure of what on average needs to be spent year-on-year to maintain the assets in a steady-state.
- To produce transparent information for stakeholders, on the authority's management of its highway assets.

Who…. The responsibilities for the 'Asset Valuation' module lie with:
Statutory Duty: Head of Highways & Transportation.
Overall Reporting: Highways Group Manager.
Updating & Reporting: Engineers.

How…. Walsall has adopted asset valuation methods in line with the Chartered Institute of Public Finance and Accountancy's, 'Code of Practice on Highways Network Assets' (the Code, 2016) and associated guidance notes. The methods used follow established accounting principles of reliability, comparability and reflects good engineering practice to support the best investment choices for maintenance and renewal.

The value of Walsall's highways assets is calculated on a Depreciated Replacement Cost basis in line with the Code. This is the current cost of replacing an asset with its modern equivalent, the Gross Replacement Cost, less deductions for all physical deterioration and impairment. The difference between the Gross Replacement Cost and Depreciated Replacement Cost represents the cost of restoring the asset from its present condition to 'as new'.

It should be noted that the availability and reliability of data for each asset category determines the accuracy of the valuation process. See module C, 'Asset Knowledge' for further information on data management.

Reporting…. Walsall presents the valuation process, the calculations, and assumptions annually in a valuation report shared with HM Treasury.

Success Measures…. Beyond Whole of Government Accounts requirements, Walsall utilises valuation to track the condition of highway assets. Knowing the change in value year-on-year helps Walsall to better understand how effective the planned maintenance regimes are. With this knowledge, Walsall are better placed to present cost estimates for different levels of service, and to better understand the impact of those service levels on the end user. This, in turn, helps build a robust business case to access funding to ensure the highway network is fit for purpose and maintained as efficiently as possible.

Further Information:
Code of Practice on Highway Network Assets.
Whole of Government Accounts Guidance, HM Treasury.

Walsall's Asset Valuation Reporting Procedures to HM Treasury includes:

Carriageways:	
Gross Replacement Cost:	£1,039,507
Impairment:	£162,972
Depreciated Replacement Cost:	£865,537
Footways:	
Gross Replacement Cost:	£272,362
Impairment:	£23,882
Depreciated Replacement Cost:	£248,540
Highway Structures:	
Gross Replacement Cost:	£160,533
Impairment:	£36,850
Depreciated Replacement Cost:	£123,683
Traffic Management:	
Gross Replacement Cost:	£57,421
Impairment:	£26,448
Depreciated Replacement Cost:	£20,973
Street Furniture:	
Gross Replacement Cost:	£27,793
Impairment:	£10,230
Depreciated Replacement Cost:	£15,563

Gross Replacement Cost - All Asset Groupings:	£1,582,971
Depreciated Replacement Cost – All Asset Groupings:	£1,288,375
Impairment – All Asset Groupings:	£273,598
Impairment Percentage – All Asset Groupings:	17%

**All Fig's Rounded to the nearest £'000.*

Module L – Improvement Action Plan.

What…. Walsall's improvement plan formally documents significant gaps identified between current and desired asset management processes. It sets out an action plan to fill those significant gaps along with resources required, the anticipated outcome and benefits to be realised. The improvement plan is a central element of Walsall's continuous improvement programme. It seeks to enhance performance in pursuit of the Borough's desired asset management outcomes.

Why…. Improvement leads to the provision of a better service, reduction of risk exposure and/or increased efficiency and financial savings. The need to implement improvements is particularly great in the historic context of austerity measures and budget constraints.

Who…. The responsibilities for the 'Implementation & Improvement Plan' module lie with:
Implement Asst Management: Highways Group Manager.
Maturity Assessment: Highways Group Manager.
Identify & Deliver Improvement Actions: Highways Group Manager.
Updating & Reporting: Highways Group Manager.

How…. Walsall undertakes continuous improvement according to ISO 55000 principles and as outlined in the Highway Maintenance Efficiency Partnership – United Kingdom Roads Liaison Group Highway Infrastructure Asset Management Guidance (HIAMG) document (2013).

Gap analyses are carried out periodically, through Asset Management Maturity Assessments. These identify strengths and/or areas where the Council needs to execute improvement actions in both the short-term and long-term.

All relevant staff are encouraged to identify potential process improvements on a continuous basis and through efficiency monitoring processes. Ideas are logged and prioritised according to their potential impact on risk, cost and quality of service provision.

Reporting…. Walsall will utilise the guidance published by the Institute of Asset Management in July 2015; "The self-assessment methodology" and will set up improvement measures against sections of this Highway Asset Management Strategy with specific improvement actions.

Success Measures…. At the time an innovation is proposed, a metric to measure its success following implementation is identified along with a timeline for realisation. A follow up review is conduced to assess the effectiveness and impact of the innovation.

Further Information:
Highway Infrastructure Asset Management guidance documents.
ISO55000 – Asset Management Principles.

Walsall Council Highway Asset Management Improvement Actions include:

Modules A to L.

Improvement Issue:
Asset management is a pre-requisite for DfT grant funding. Continued investment to secure the skills & expertise required to consolidate processes & maximise grant allocations remains a priority.

Improvement Actions:
Walsall has a small asset management team, sustained consultancy engagement & collaboration with West-Midlands regional partners is necessary to ensure improvements are maintained.

Module C.

Improvement Issue:
Consolidate links with Transport for West Midlands through the development of a central data repository and the management of the Key Route Network.

Improvement Actions:
Implement regional action to collaborate around data collection and analysis, including the Key Route Network.

Module D.

Improvement Issue:
Small gaps remain in data for bridge management, due to limited resources available to Walsall's structures team.

Improvement Actions:
Continue over the longer term to develop a structured programme of bridge inspections to refresh data in the Asset Management Expert system.

Module G.

Improvement Issue:
Cross boundary/regional collaboration for resilience planning and safety inspections remains on-going to mitigate risks.

Improvement Actions:
Implement regional collaboration being developed, including links with Transport for West Midlands.