

HIGHWAY ASSET MANAGEMENT STRATEGY

WALSALL COUNCIL

UPDATED APRIL 2022 VERSION 1.3.2



HAMS MODULE 1 - FOREWORD



Councillor Adrian Andrew

Deputy 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 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 the Walsall's highway assets.

A copy of this HAMS can be found on the Council's website.

Portfolio Holder, Regeneration

Councillor Adrian Andrew

Head of Highways & Transport

Katie Moreton

HAMS MODULE 1 - EXECUTIVE SUMMARY

Overview... Walsall manages and maintains the highway assets falling within its 845 km network. With responsibility to ensure the highway assets are fit for purpose and able to fulfil their functions in an efficient and sustainable manner.

Walsall aims to pursue an inclusive economy; make a positive difference to the lives of the people of Walsall; provide children the best start in life and make Walsall a clean, safe and healthy place to live in.

The contribution of highway assets to this overarching strategy for Walsall is managed through a policy supported by specific objectives to ensure focus is kept on what matters most to Walsall in managing the highway asset and the community's needs.

Walsall has adopted asset management practices to ensure the greatest benefit for the whole community is achieved. Asset management best practices require a look into long-term investments to make best use of resources and ensure focussed interventions are implemented at the most effective time to ensure a safe highway, a statutory requirement.

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

Investment... In 2021/22^[1] Walsall invested approximately £8.2m^[1] in maintaining its carriageway & footway related infrastructure assets, from which £4.6m^[1] was spent on surface treating roads and footways and £1.3m^[1] was spent on reactive repairs including street furniture.

Through lifecycle planning, Walsall has determined that the current condition of the carriageway and footway assets create a backlog of around £52.4 million^[2]. 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 investment exceeding £5.85 million^[2] per annum has been identified as allowing for achieving this strategy. If the level of investment is not sustained the asset will decline increasing the

amount of backlog. In turn more investment will be required in the future to maintain the asset.

Walsall's asset valuation figures for 2021/22 show that the total value or Gross Replacement Cost (GRC) of Walsall's highway asset is £1.572 billion^[3], and the Depreciated Replacement Cost (DRC) or the value of the highway assets in their current state is £1.323 billion^[3], resulting in 15.83%^[3] depreciation of £249 million^[3].

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.

^{[1]:} figures provided by Walsall.

^{[2]:} figures obtained from investment modelling.

^{[3]:} figures obtained from WGA.

HAMS MODULE 2 - CONTENTS & REFERENCES

Module A	Policy & Objectives Setting the scene for delivering the right outcomes.	V. 1.3.2	April 2022
Module B	Context Setting out the parties, documents & reporting processes involved in managing Walsall's Highway Assets.	V. 1.3.2	April 2022
Module C	Asset Data Collecting, storing and managing data.	V. 1.3.2	April 2022
Module D	Performance Management Establishing goals for asset management performance that can be delivered.	V. 1.3.2	April 2022
Module E	Funding & Expenditure Funding sources and historical expenditure.	V. 1.3.2	April 2022
Module F	Investment Strategies Understanding the impact of different levels of investment.	V. 1.3.2	April 2022
Module G	Maintenance Strategies Determining the most effective strategies for maintenance intervention on a whole life cost basis.	V. 1.3.2	April 2022
Module H	Forward Works' Planning Developing the programmes of works that will be delivered.	V. 1.3.2	April 2022
Module I	Communication & Engagement Opening communication channels to ensure asset management meets the needs of Walsall's people.	V. 1.3.2	April 2022
Module J	Benchmarking Comparing how Walsall is performing.	V. 1.3.2	April 2022

Module K	Financial Management & Valuation Valuation of highway assets compliant with Whole of Government Accounts and CIPFA Code of Practice.	V. 1.3.2	April 2022
Module L	Improvement Action Plan Plan for implementing asset management and maximising benefit.	V. 1.3.2	April 2022

Abbreviations... A list of abbreviations used in the Highway Asset Management Plan.

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 Highway and Transport Survey		
Section 106	Section 106 of Town and Country Planning Act (1990)		
Section 278	Section 278 of Highways Act (1980)		
UKPMS	United Kingdom Pavement Management System		
UKRLG	United Kingdom Roads Liaison Group		
Walsall	Walsall Council		
WMHIMG	West Midlands Highways Infrastructure Management		
MCA	Group Whole of Government Accounts		
WGA			
TfWM	Transport for 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, with web links where available.

Walsall Corporate Plan – 2021-2022	2021	Walsall Council
Transport in Walsall, Walsall's Transport Strategy 2017-2022	2017	Walsall Council
HMEP/UKRLG – Maintaining a Vital Asset	Various	НМЕР
ISO55000 – Asset Management	2014	ISO
UKRLG – Highways Infrastructure Asset Management Guidance Document & C.O.P	2013	UKRLG
UK Pavement Management System (UKPMS)	2019	UKRLG
Combined Authority - West Midlands City Regional Transport Strategy	2021	TfWM
Combined Authority – WM2041	2021	TfWM
The Community Infrastructure Levy & Business Rates	2011/12	DCLG
Walsall's Asset Investment Models & Maintenance Strategies	2021	Walsall Council
National Highways and Transportation website: www.nhtsurvey.org	2022	NHT
Equalities Act 2010, Public-Sector Equality Duty	2010	Legislation
National Performance Indicators, Single List	2022	DCLG
Code of Practice on Highways Network Assets	2016	CIPFA
Whole of Government Accounts Guidance, HM Treasury	2021	HM Treasury
Well-Managed Highway Infrastructure: A Code of Practice	2016	ADEPT

Acknowledgements...

HAMS MODULE A - POLICY & 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 Walsall's Corporate Plan; aims to pursue an inclusive economy; make a positive difference to the lives of the people of Walsall; provide children the best start in life and make Walsall a clean, safe and healthy place to live in.

The corporate aims relevant to highways management are:

- 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 highway
- 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... The responsibilities for the 'Policy & Objectives' module lie with:

Sign off policy	Portfolio Holder
	Economy, Environment &
	Communities
Establish objectives	Highways Group Manager
Updating &	Engineers
reporting module	

How... 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.

In managing its assets, Walsall aims to:

 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.
- Seek access to external funding sources to contribute to asset investment.
- Support its statutory duties as a highway authority under the Highways Act 1980, the New Roads and Street Works Act 1991, and the Flood and Water Management Act 2010 with sound asset management practices.

Reporting... Reporting of the delivery of the Policy and Objectives is done through performance reports and updates to the HAMS.

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 Corporate Plan – 2021-2022 Transport in Walsall, Walsall's Transport Strategy 2017-2022 HAMS – Cabinet Report April 2019 TfWM – CRSTS 2021

HAMS 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 published in the West Midlands 'City Region Sustainable Transport Settlement' and WM2041 'Actions to meet the climate crisis with inclusivity, prosperity and fairness'.

Carriageways: A typical 1m² pothole costs around £70 to repair, while it costs around £30 - £50/m² to resurface a road for up to 10 to 25 years.

Footways: A typical 1m² footway defect costs around £50 - £100/m² to repair, while it costs around £30 - £80/m² to resurface a footway for up to 80 years.

In addition, drainage, street lighting, UTC and structures 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... The responsibilities for the 'Context' module lie with:

Statutory duty	Head of Service
Overall reporting	Highways Group Manager
Updating & reporting module	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 HMEP, UKRLG, IAM, 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 develop and implement the best aspects of asset management to meet its needs.

Reporting... To ensure investment and outcomes remain effective, the modular HAMS provides a suite of measures to explore and demonstrate success or otherwise. From this, improvement actions can be considered, and discussed with peers at WMHIMG and TfWM.

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.

Table B1 shows the ownership and reporting across the HAMS modules to support long-term implementation, improvement and realisation of the benefits asset management brings.

Success Measures... An evolving asset management approach to managing the highway assets of Walsall will show an improvement, and hence, success 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 will be essential 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 WGA 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 needs to ensure the stated aims remain current and in-line with corporate aims. Should the aims change, this HAMS must be revised to reflect the new aims/targets for performance and outcomes.

Further Information:

HMEP/UKRLG – Maintaining a Vital Asset

ISO55000 - Asset Management

UKRLG – Highways Infrastructure Asset Management Guidance Document

TfWM - CRSTS

Table B1: Ownership and reporting of modules.

Module		Responsible Version Next Review		Reporting		
		Responsible	Version	Next Review	How	When
Α	Policy & Objectives	Highways Group Manager	1.3.2	2023	HAMS modules updates	April
В	Context	Highways Group Manager	1.3.2	2023	Module D – Performance Management Module K – Valuation	August
С	Asset Knowledge	Highways Group Manager	1.3.2	2023	Module D – Performance Management Module I – Stakeholder Engagement Module K – Valuation	August
D	Performance Management	Highways Group Manager	1.3.2	2023	Performance dashboard	April
Е	Funding & Expenditure	Highways Group Manager	1.3.2	2023	Historical Expenditure per asset	April
F	Investment Strategies	Highways Group Manager	1.3.2	2023	Investment Strategies report	June
G	Maintenance Strategies	Highways Group Manager	1.3.2	2023	Investment Strategies & Maintenance Strategies assessed	June
Н	Works Programmes	Highways Group Manager	1.3.2	2023	Forward works' programme	February
I	Communication & Engagement	Highways Group Manager	1.3.2	2023	NHT survey results Module D – Performance Management	April
J	Benchmarking	Highways Group Manager	1.3.2	2023	HAMS modules updates Module D – Performance Management	April
K	Valuation	Highways Group Manager	1.3.2	2023	WGA valuation report	August
L	Improvement Action Plan	Highways Group Manager	1.3.2	2023	Improvement action plan	April

HAMS MODULE C - ASSET KNOWLEDGE

What... Asset knowledge comprises inventory, safety and serviceability data for the highway 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 need.

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- and long-term forward works programmes.
- Analyse and report financial values for WGA.

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 module	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. Table C1 and Table C2 provide an overview of the data collected and the resources used.

Reporting... Walsall uses the asset inventory shown in Table C2 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 in to other HAMS 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 document, HMEP – UKRLG, 2013

UK Pavement Management System (UKPMS)

UK Roads Liaison Group - Codes of Practice

TfWM - CRSTS

Table C1: Walsall's asset inventory.

Asset Group	Asset Type	Qua	ntity	Asset Group	Asset Type	Quantity
Carriageways	Principal Classified Roads (A roads)	98km	984,000m ²	Street Lighting	Columns	25,897
	Non-Principal Classified Roads B roads)	41km	334,000m ²		High Mast Columns	4
	Non-Principal Classified Roads (C roads)	11km	105,000m ²		Wall Mounted Units	124
	Unclassified roads (U roads)	694km	4,300,000m ²		Feeder Pillars	186
	TOTAL	844km	5,723,000m ²		Illuminated Bollards	733
Footways	High Amenity FW's (Category 1A, 1 & 2)	230km	596,000m ²		Externally Illuminated Signs	2,628
	Low Amenity FW's (Category 3, 4)	1,075km	2,264,000m ²		Beacon Poles	159
					Other	454
	TOTAL	1,305km	2,860,000m ²	1	TOTAL	30,185
Highway Structures	Concrete Bridges – Single span	27	3,564m ²	Urban Traffic	Puffin Crossing	108
	Brick Arch Bridge – Single span	8	1,092m ²	Controls	Pelican Crossing	9
	Steel Deck Bridges – Single span	25	3,750m ²		Toucan Crossing	20
	Pedestrian / Cycle Bridge – Single	36	1,440m ²		Wig Wags	3
	span					
	Culvert – Single Cell	58	464m ²		VMS	15
	Concrete Bridges Medium	16	4,896m ²		CCTV	20
	Concrete Bridges Large	3	2,325m ²		Traffic Signals with Pedestrian facilities	60
	Concrete Bridges Extra Large	2	1,920m ²		Traffic Signals without Pedestrian facilities	27
	TOTAL	175	19,451 m ²		TOTAL	262

RAG	Description
	High Confidence in Data
	Medium Confidence in Data
	Low Confidence in Data

Table C2: Walsall's Safety and Serviceability data.

Asset Group	Asset Type	Type of Survey	Network coverage	Frequency	Service Provider	Storage System
Carriageways	Principal Classified Roads (A roads)	SCANNER condition surveys	50%	Annually	Yotta	UKPMS
		Grip Tester	100%	Annually	Yotta	UKPMS
	Non-Principal Classified Roads (B roads)	SCANNER condition surveys	50%	Annually	Yotta	UKPMS
	Non-Principal Classified Roads (C roads)	SCANNER condition surveys	100%	Annually	Yotta	UKPMS
	Unclassified roads (U roads)	Coarse Visual Inspection (CVI) surveys	25%	Annually	Aecom	UKPMS
Footways	High Amenity (Category 1A, 1, 2)	DVI surveys	50%	Annually	Aecom	UKPMS
	Low Amenity (Category 3, 4)	FNS surveys	25%	Annually	Aecom	UKPMS
Highway	All Structures	Principal Inspections	100%	3 Yearly	Jacobs	Asset Management eXpert
Structures	All Structures	General Inspection	100%	6-Yearly	Jacobs	Asset Management eXpert
	All Structures	Special Inspections	-	Ad-hoc	To be arranged	Asset Management eXpert
	Principal Road Network	Load Assessments	-	Ad-hoc	To be arranged	Asset Management eXpert
Drainage	Gullies	Cyclical gully cleansing	100%	Annually	Tarmac Ltd	Kaarbontech
Street	Lighting columns	Structural Inspections	PFI	PFI	Amey Lighting	Mayrise
Lighting		Electrical Inspections	PFI	PFI	Amey Lighting	Mayrise
Street Furniture	All street furniture	Routine safety inspections	100%	Annually (as part of safety inspections)	Walsall	Mayrise
Urban Traffic Controls	All Urban Traffic Control Systems	Electrical Inspections	20%	Annually	W'ton CC (Shared)	Database

HAMS 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 maintenance functions on the ground are aligned to and contribute to achieving the Council's corporate vision.

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

Approving targets	Highways Group Manager
Monitoring performance	Highways Group Manager
Updating & reporting module	Engineers

How... Walsall has adopted performance management supporting ISO 55000 principles and as outlined in the HMEP – UKRLG Highway Infrastructure Asset Management Guidance document (2013).

Relevant high-level drivers were identified from Walsall's Corporate Plan. These have been translated into four highways performance target

statements, which drive all of Walsall's highway maintenance activities, Figure D1.

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, Table D2.

In addition, these performance indicators were further evaluated through NHT Surveys and assessed against service levels criteria evaluated against industry practice and performance in order to group performance into three clear service levels, Good, Fair and Poor. This enables target setting and prioritisation based on sound analysis, Table D2.

Reporting... Walsall uses the following performance dashboards to illustrate the performance management system adopted, Table D2. 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 HAMS module F – Investment Strategies.

Success Measures... Apart from providing a direct link to the Council's corporate vision, performance management will help Walsall demonstrate the effective use of its budgets. This will also demonstrate any shortfalls in funding and where this needs to be targeted to ensure the transport network is fit for purpose and with an acceptable level of risk.

Further Information:

Highway Infrastructure Asset Management Guidance document, HMEP – UKRLG, 2013

ISO 55000 – Asset Management

TfWM - CRSTS

Figure D1: Asset performance indicators setting.



Table D2: Walsall's performance dashboard - Technical

able D2: Walsall's performance dashboard - Technical								
Comitos Lovel	Description(s) O= Better		Levels of Risk			Performar	nce (on previous year).	
Service Level	Rei	⊃= Same U = Worse	Low Medium High		High	Trend	Current	Target
	1.1	% of A Roads carriageway <u>not</u> in poor condition [RCI 130-01]	>95%	≥80%	<80%)	98%	95%
	1.2	% of B/C Roads carriageways not in poor condition [RCI 130- 02]	>95%	≥80%	<80%)	99%	95%
1. Ensure Resilience	1.3	% of U Roads carriageways <u>not</u> in poor condition [BVPI 224b]	>95%	≥80%	<80%	U	77%	95%
on the Network	1.4	% of high amenity footways <u>not</u> in poor condition [BVPI 187]	>95%	≥80%	<80%	U	54%	95%
	1.5	% of low amenity footways <u>not</u> in poor condition [FNS HI]	>95%	≥80%	<80%	0	84%	95%
	1.6	% of gullies cleansed annually	>85%	≥78%	<78%	U	68%	85%
	2.1	% of public highway network (CW area) annually treated through planned maintenance	>3%	≥2%	<2%	U	3.1%	2%
2.Vibrant & Healthy Public Realm	2.2	% of public highway network (FW area) annually treated through planned maintenance	>3%	≥2%	<2%	U	0.4%	2%
	2.3	Level of customer satisfaction with condition of highways [NHT KBI 23]	>50%	≥30%	<30%	U	38%	50%
Sustainable, Safe & Serviceable Network	3.1	% of public highway liability claims repudiation	>90%	≥80%	<80%	0	96%	90%

	Description(s) O= Better		Levels of Risk		Performance (on previous year).			
Service Level	Ref	⊃= Same ∪ = Worse	Low	Medium	High	Trend	Current	Target
	3.2a	% of 1 hr defects completed within the response time	>95%	≥90%	<90%	O	99%	95%
	3.2b	% of 24 hr defects completed within the response time	>95%	≥90%	<90%	U	95%	95%
	3.2c	% of 5 day defects completed within the response time	>95%	≥90%	<90%	U	97%	95%
	3.2d	% of 28 day defects completed within the response time	>95%	≥90%	<90%	U	95%	95%
	3.2e	% of 6 month defects completed within the response time	>95%	≥90%	<90%	>	99%	95%
	3.3	% of safety inspection completed on time	>95%	≥90%	<90%	>	100%	95%
	3.4	% of carriageway condition surveys completed on time	>95%	≥90%	<90%	\$	99%	95%
	3.5	% of footway condition surveys completed on time	>95%	≥90%	<90%	0	99%	95%
	3.6	Level of customer satisfaction with local road safety schemes [NHT KBI 20]	>50%	≥30%	<30%	U	52%	50%
4. Network Accessibility &	4.1	% of CW/FW planned roadworks notification letters delivered on time	>95%	≥90%	<90%	•	100%	90%

Comittee Level	Pof	Description(s) ∩ = Better	Levels of Risk			Performance (on previous year).		
Service Level	rvice Level Ref		Low	Medium	High	Trend	Current	Target
Stakeholder Engagement	4.2	Level of customer satisfaction with ease of network access (all) - [NHT KBI 03]	>50%	≥30%	<30%	U	75%	50%
	4.3	Level of customer satisfaction with ease of network access (disabilities) - [NHT KBI 04]	>50%	≥30%	<30%	0	71%	50
	4.4	Level of customer satisfaction with ease of network access (no car) - [NHT KBI 05]	>50%	≥30%	<30%	U	73%	50%
	4.5	Level of customer satisfaction with traffic levels & congestion [NHT KBI 17]	>50%	≥30%	<30%	U	41%	50%
	4.6	Level of customer satisfaction with the management of roadworks [NHT KBI 18]	>50%	≥30%	<30%	U	48%	50%
	4.7	Level of customer satisfaction with street lighting [NHT KBI 25]	>50%	≥30%	<30%	U	64%	70%
	4.8	Level of customer satisfaction with highway maintenance service [NHT KBI 24]	>50%	≥30%	<30%	U	43%	50%

HAMS MODULE E - FUNDING & 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, therefore, 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 need	Highways Group Manager
Developing income opportunity	Highways Group Manager
Monitoring expenditure	Team Leaders
Updating & reporting module	Engineers

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

- Capital allocations from the Local Transport Plan (now CRSTS) and 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. Historical expenditure figures can be seen in Figure E1. This provides an overview of total budget available to Walsall in the past, along with how the budget is allocated between asset groups.

Table E2 sets out estimates of Walsall's current funding requirements. These estimates have been 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 the highway assets.

Hence, Walsall's aim is 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 HAMS module G – Investment Strategies, are imperative to building a good business case for ascertaining additional funding.

Further Information:			
The Community Infrastructure Levy			
Business Rates			
TfWM CRSTS			

^{[1]:} information provided by Walsall.

^{[2]:} figures obtained from lifecycle investment modelling.

Figure E1: Historical Budget Allocations across Asset Groups [1]

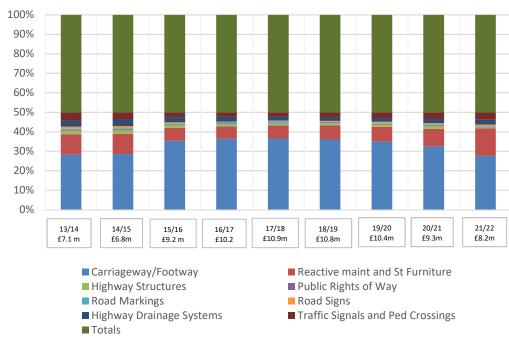


Figure E2: Estimated Funding Requirements [Key Assets] [2]

Estimated 'asset renewal' steady state capital					
funding requirements for:	£/year				
Carriageways	£5,000,000				
Footways	£850,000				
UTC with Civils	£345,000				
Annual asset renewal capital investment required to					
maintain steady state for key asset groups	£6,195,000				

^{[1]:} information provided by Walsall.

^{[2]:} figures obtained from lifecycle investment modelling.

HAMS 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. Figure F1 presents an overview of the lifecycle planning method used by Walsall.

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 module	Engineers

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

This information, then, feeds into the lifecycle planning model to determine the current backlog and the impact of the determined 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 HAMS 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.

<u>Summary Information</u> – estimated through lifecycle planning work.

Backlog (£ millions) ^[1]	
Carriageways	£25m
Footways	£27.4m
Street Lighting	PFI
UTC	£3.2m
Total	£ 55.6m

Steady-State Funding Need (£ millions)[1]				
Carriageways	£5.0m			
Footways	£0.85m			
Street Lighting	PFI			
UTC	£0.345m			
Total	£ 6.195m			

A more detailed breakdown for carriageway, footway and structures assets is provided below.

Further In	formation	1:		
Walsall's	Asset	Investment	Models	&
Maintenan	ce Strateg	jies		
TfWM CRS	STS			

Figure F1: Lifecycle Planning Method - Modelling Asset Deterioration and Maintenance

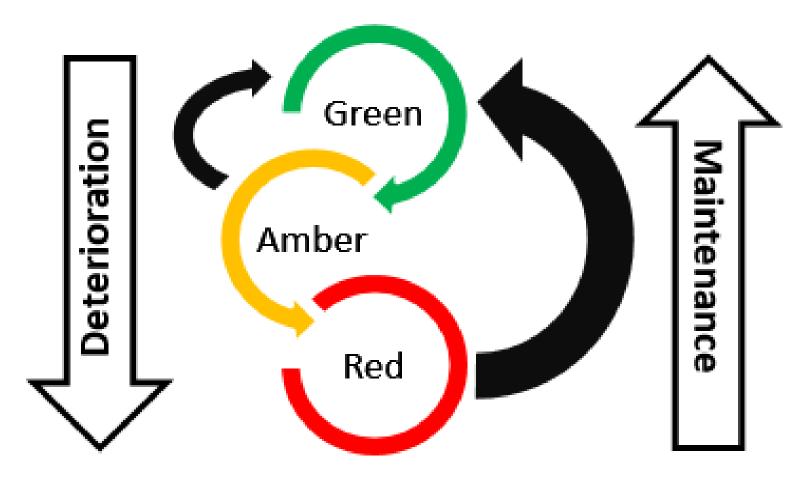


Figure F1 provides an overview of the principles upon which the lifecycle planning model is based. Each unit of the asset is classified using a traffic light system, according to its condition. How it is classified is dependent upon the particular asset in question. For carriageways, for example, the 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.

<u>Carriageways</u> <u>Information</u>^[1] – calculated through lifecycle planning work.

Backlog (£ millions)						
A Roads	B&C Roads	U Roads				
£ 0.36	£ 0.07	£ 24.8 ¹				
Total - £ 25.2million						
Backlog (km)						
6.8 km	1.9 km	276.5 km				
Total – 285km						

Steady-State Funding Need (£ millions/year)					
A Roads	B&C Roads	U Roads			
0.55	0.25	4.2			
Total	£ 5.	.0m			

Optimum Budget Allocation under Investment Scenarios (£ millions)				
Options	Α	B&C	U	
Expected (£3.8m annually)	0.27	0.11	3.4	
Budget cut (£2.85m annually)	0.2	0.09	2.5	
Budget increase (£4.75m annually)	0.71	0.24	3.8	

Note – Red cells indicate not meeting steady state, green cells indicate meeting steady state

Note that the current maintenance strategy and budget allocation was used for steady-state funding need while the improved maintenance strategy for optimum budget allocation was adapted.

<u>Footways Information</u>^[1] – calculated through lifecycle planning work.

Backlog (£ millions)				
1A, 1 & 2	3 & 4			
£ 3.2 ²	£ 24.2 ³			
Total - £ 28.6million				
Backlog (km)				
64 km	660.1km			
Total – 724.1km				

Steady-State Funding Need (£ millions/year)		
1A, 1 & 2 3 & 4		
0.14	0.71	
Total	£ 0.85m	

Optimum Budget Allocation under Investment Scenarios (£ millions)				
Options	1A, 1 & 2	3 & 4		
Expected (£0.6m annually)	0.1	0.5		
Enhanced budget (£0.85m annually)	0.14	0.71		

Note – Red cells indicate not meeting steady state, green cells indicate meeting steady state.

 $^{^{\}rm 1}$ The current percentage of U roads in red condition is 23%, it would cost £27.5m to reduce the red condition to 5%.

 $^{^2\,\}text{The}$ current percentage of high amenity footways in red condition is 46%, it would cost £12.2m to reduce this to 5%

³ The current percentage of low amenity footways in red condition is 16%, it would cost £12.5m to reduce the red condition to 5%.

HAMS 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, its current condition and 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 microasphalt, 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 UTC assets are being future-proofed by introducing ducting.

Figure G1 provides illustrative examples of outputs from a lifecycle planning exercise, comparing the difference in carriageway condition over the next ten years under two alternative maintenance strategies.

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 & Maintenance Strategies

0.00%

2019

2020

2021

2022

2023

2024

■ Green Amber Red

Figure G1: Illustrative example of maintenance strategy testing during lifecycle planning



2025

2026

2027

2028

2029

deep resurfacing and £1.7m on

micro asphalt or similar shallow

treatment

¹ Note on Green/Amber/Red condition classification: Green roads are defined as those that currently require no treatment, amber roads are those that would benefit from 'thin' (preventative) treatments, and red roads are those that would benefit from deep (structural treatment). Data relates to 10yr Lifecycle Planning Projections.

HAMS MODULE H - FORWARD WORKS PROGRAMME

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 work 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 understanding 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 module	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 shown in Figure H1 and H2.

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 HAMS module A – Policy & Objectives and deliver the performance targets set in module D – Performance Management.

Further Information:

Highway Infrastructure Asset Management Guidance document, HMEP – UK RLG, UKPMS

ISO 55000 - Asset Management

TfWM - CRSTS

Figure H1: The works programme development process for carriageways.

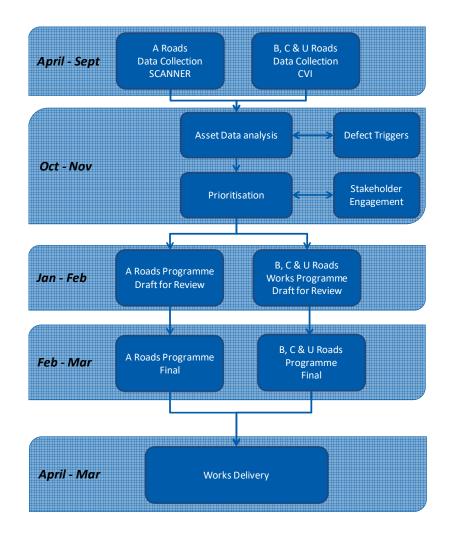
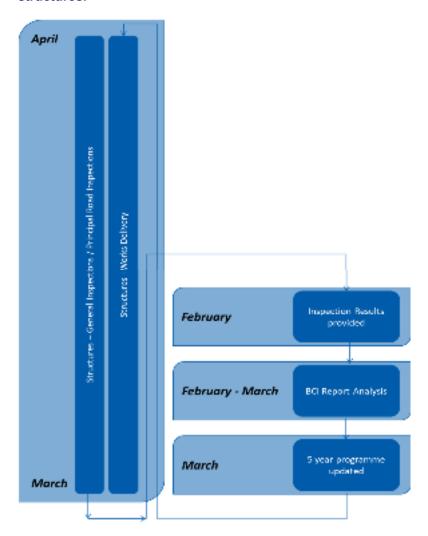


Figure H2: The works programme development process for highway structures.



HAMS Module I – Communication & 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	Highways Group
Engagement	Manager
Updating & reporting module	Engineers

Community groups previously engaged include:

- Mobility forums
- Disability forums
- Business communities
- Residents & resident groups
- Cycle groups
- · Others as required

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's, 'Tell Us' system provides an online interface for customer and stakeholder enquiries and offers a direct forum through which 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 and 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 engaged through a neighbourhood management approach, which aims to improve communication mechanisms throughout the Borough. Six area partnerships, each with a dedicated neighbourhood manager, implement the neighbourhood model at the local level.

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. The results of the NHT survey are available online, see the link provided in further information.

Reporting... The results published on the NHT survey website is the tool by which Walsall reports changes to its public satisfaction and investment needs, these are subsequently built into the performance dashboard of the HAMS, 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 and Transportation website: www.nhtsurvey.org

Equalities Act 2010, Public-Sector Equality Duty

TfWM - CRSTS

Case Study 1: York's Bridge

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.

Case Study 2: Town Centre Transport Package

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.

HAMS 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 HAMS, 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 other authorities are doing better and to use this understanding to Walsall's improve 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 module

Engineers

How... Walsall uses a variety of benchmarking documents and forums as follows:

- UKRLG Codes of Practice.
- National Performance Indicators.
- NHT Public Satisfaction Survey.

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 HAMS 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.

The COVID-19 Pandemic required the implementation of many forms of revised safe working practices for many engineering activities and service levels. Such measures serve to impair long term reporting capabilities, so benchmarking trend analysis has needed to evolve more regionally over the short to medium term.

Further Information:

National Performance Indicators, Single Data List

UKRLG Codes of Practice

NHT Public Satisfaction Survey

HAMS MODULE K - FINANCIAL MANAGEMENT & VALUATION

What... Asset valuation quantifies the financial value of all the highway assets that Walsall owns. The value of Walsall highway assets is £2,720.11 million including £1,147.69 million 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) annual reporting purposes. As the information used for financial reporting is compiled according to robust accounting principles and rigorous 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 the annual change in condition of the 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 module	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 method used follows 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 (DRC) basis in line with the Code. This is the current cost of replacing an asset with its modern equivalent, the Gross Replacement Cost (GRC), less deductions for all physical deterioration and impairment. The difference between the GRC and DRC 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 an audited valuation report. Table K1 shows the latest available Walsall's highway asset valuation figures.

Success Measures... Beyond WGA requirements, Walsall utilises valuation to track the condition of highway assets. Knowing the change in value year-on-year helps Walsall 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 Highways Network Assets (2016)

Whole of Government Accounts Guidance, HM Treasury

Table K1: Walsall's asset valuation report.

Accest Circum	GRC	DRC	Depre	Depreciation	
Asset Group	(£'000)	(£'000)	(£'000)	Impairment %	
Carriageways	£1,040,695	£907,699	£132,996	12%	
Footways	£269,520	£245,030	£24,490	9%	
Highway Structures	£160,533	£123,683	£36,850	23%	
Street Lighting	£52,843	£21,056	£31,787	60%	
Traffic Management	£24,338	£13,733	£10,605	44%	
Street Furniture	£24,487	£15,178	£9,309	38%	
Gross Replacement Cost (GRC)		£1,57	2,418		
Depreciated Replacement Cost (DRC	C)		£1,32	3,251	
Depreciation	1	16%		£249,166	

HAMS 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 Asset	Highways Group
Management	Manager
Maturity Assessment	Highways Group
_	Manager
Identify & deliver	Highways Group
improvement actions	Manager
Updating & reporting module	Engineers
Hibuule	

How... Walsall undertakes continuous improvement according to ISO 55000 principles and as outlined in the HMEP – UKRLG Highway Infrastructure Asset Management Guidance (HIAMG) document (2013).

Gap analyses are carried out periodically, through Asset Management Maturity Assessments. These analyses identify strengths and 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 HAMS and will populate Table L1 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 document, HMEP – UKRLG, 2013

ISO 55000 – Asset Management

Table L1: Improvement Action Plan.

Module Improvement Issue	Improvement leave	Immunicana at A ation	Doggoogibility	Time	
	improvement issue	Improvement Action	Responsibility	2022/23	Onward
Modules A to L	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.	Walsall has a small asset management team, sustained consultancy engagement & collaboration with regional partners is necessary to ensure improvements are maintained.	Highway Group Manager		√
Module C	Consolidate links with TfWM through the development of a central data repository.	Regional action to collaborate around data collection and analysis, including the Key Route Network (KRN).	Highway Group Manager		√
Module D	Small gaps remain in data for bridge management, due to limited resources available to Walsall's structures team.	Continue in the longer term to develop a structured programme of bridge inspections to refresh data in the AMX system.	Highway Group Manager		✓
Module G	Cross boundary/regional collaboration for resilience planning and safety inspections remains on-going to mitigate risk.	Regional collaboration continues to be developed, including TfWM	Highway Group Manager		√