Cabinet – 4 April 2012

Highway Maintenance Strategy 2012-2015

Portfolio: Councillor Tom Ansell, Transport & Environment

Service: Engineering & Transportation

Wards: All

Key decision: Yes

Forward plan: Yes

1. Summary of report

1.1 The report seeks cabinet approval of Walsall Council's Highway Maintenance Strategy 2012-15 ("the strategy").

1.2 Walsall's Highway Maintenance Strategy 2012-15 has been designed to direct and inform in detail service users and those involved in service delivery about the way in which Walsall Council intends to maintain its highway network over the next three years. It follows the previously approved Strategy for 2009-12 as approved by Cabinet in July 2009. Particular emphasis has been placed upon service delivery improvements and how strategic intentions will be realised through the asset management process. This approach is consistent with the principles underpinning the Vanguard method which is being applied during the system analysis of the whole Highway Maintenance function.

1.3 The Strategy forms an additional part of the Highway Asset Management Plan which is due for review and consideration by Cabinet during 2012/13 following the previous approval in November 2008.

1.4 The Strategy itself is extensive in detail and it is intended for the guidance of officers and as required, sets out detailed policies and procedures. The draft Strategy is available on the Council's Committee Management Information System (CMIS) web pages and hard copies have been made available in each of the political group rooms and to independent elected members. The draft programme of works has been produced and is attached as **Appendix A**.

2. Recommendations

2.1 That Cabinet approves Walsall Council's Highway Maintenance Strategy 2012-15.

2.2 That Cabinet approves the Provisional Highways Maintenance Works Programme 2012-15 contained in **Appendix A** and delegates authority to amend that programme to the Head of Engineering and Transportation in consultation with the Portfolio Holder for Transport to accommodate for varying demands over the life of the strategy.

2.3 That the Head of Engineering & Transportation be delegated to make minor amendments and editorial changes to the Strategy in the light of case law or legal advice, which might assist in managing the risk of litigation in relation to the statutory duty to maintain the highway, and following feedback from consultees.

3. Report detail

3.1 Walsall's highway network is the largest and most visible community asset for which the authority is responsible. It is in constant use by both the public and commerce and is fundamental to the economic, social and environmental vitality of the borough. In order to serve the needs of our highway users, it is crucial that the highway network is properly maintained and managed.

3.2 The highway authority is responsible for a road network of 532 miles (i.e. 856km) as well as footways, footpaths, public rights of way and cycle ways and associated highway infrastructure elements such as bridges, traffic signals, drainage systems, street lighting, road signs, etc. Walsall Council recognises the importance of the highway network and the vital service that these combined assets provide.

3.3 The Code of Practice for Highway Maintenance Management, 'Well Maintained Highways', recommends that highway authorities 'should ensure that policies, priorities and programmes are formally adopted by the authority and published. They should also be incorporated into the HAMP (Highway Asset Management Plan). The approval and adoption process should involve the authority's Executive and be explicit, transparent and inclusive'.

3.4 This Strategy is a direct replacement for its predecessor covering the period 2009-12 which provided the basis for a step change improvement in Walsall's highways maintenance service.

3.5 In summary, the Strategy provides information on Walsall's highway maintenance service including the purpose; scope; policy; customer service standards; service pledges; the legal framework; the highway network; inspections; condition assessments; performance monitoring and management; programming and priorities; winter service; public lighting; emergency planning; materials and treatments, and financial management. The Strategy also includes information relating to the partnership agreement for Highways Repair and Maintenance between Walsall and Tarmac National Contracting which commenced in May 2009. The contract which is in year 3 of its initial 4-year period is under review for a possible extension to the contract for a further 2 years and is covered elsewhere on this Cabinet agenda. The Strategy reproduces the performance management framework of the partnership arrangement.

3.6 This Strategy incorporates significant changes to legislation including the Traffic Management Act 2004, Construction (Design and Management) Regulations 2007 and amendments made during early 2009 to the national Code of Practice for Highway Maintenance Management, 'Well-maintained Highways'.

3.7 Of particular note in this new Strategy is the change to the policy of repairing a category of highway defects. This category which currently has a 24-hour response time for making a temporary repair will be changed to a response time of 5 working days to permit a permanent repair to be achieved. This will ensure a better and longer lasting repair for the benefit of the public. This does not affect the 24-hour emergency service whereby life and limb incidents will still be made safe in 1 hour. This proposal has been fully considered by the Council's Risk and Insurance team and its insurers.

3.8 Should feedback be received that requires a fundamental change to policy or strategic approach it will be necessary to bring the strategy back to Cabinet for further approval.

4. Council Priorities

4.1 The Corporate Plan identified that the Citizen's Panel ranked improving the condition of the borough's roads as their second highest priority. All road users depend on a good reliable service from our highway network to sustain economic and transportation needs and, support the buoyant economy that exists in Walsall. The Strategy reinforces the integrated framework for the delivery of highway maintenance across the borough's highway network. Through a strategic approach, it will identify the optimal allocation of approved resources in a way that takes a long term view, aimed at meeting the current and future needs of highway users.

4.2 The Strategy and 3-year programme, wherever possible, minimises any adverse environmental impact that provision of the service may have. Walsall recycles almost 100% of arisings from highways maintenance works by reusing the material as sub-base and has undertaken many trials of in-situ recycling to promote efficient use of aggregate and transport within the borough.

4.3 The HAMP has a section dedicated to 'Recycling and Sustainability' which has been produced in consultation with the Council's officer for climate change. It highlights the need to consider issues that affect the environment, such as noise pollution, light pollution, waste management and recycling of highway construction materials when designing, planning and undertaking maintenance activities. Environmental obligations dictate a greater need to focus in detail on local and national initiatives and policies that target sustainability issues. The Plan promotes the following priority areas whenever practical or economically viable:

a) Sustainability in the consumption and production of resources.
b) The effects of climate change and energy efficiency.
c) Natural resource protection and environmental impact.
d) Sustainable and maintainable community objectives.

4.4 The Sustainable Community Strategy promotes better use of our existing roads and supports investment in the road network.

4.5 The Strategy and HAMP positively encourages officers to consider environmental issues and provides signposts to environmental publications such as:

a) 'Securing the Future' Government strategy for sustainable development.
b) 'Sustainable Development Strategy and Action Plan for Civil Engineering' published by the Institute of Civil Engineers.
c) 'Sustainable Development Action Plan' released by the Highways Agency.
d) Walsall Council's 'Climate Change Strategy'.
e) Black Country Core Strategy.

4.6 A climate change risk assessment is being carried out across the full range of highway assets. This work is being conducted under the guidance of Walsall's Climate Change officer and the completed risk assessments shall be recorded in the appendices of the HAMP.

4.7 The Council's Working Smarter Programme is being implemented across a number of areas. There is a fundamental review of the whole highway maintenance function using the Vanguard method, the outcome of which will be taken forward over the forthcoming year. Service improvements in general and the implementation of the approach suggested by the strategy will help deliver the best highway network the Council can. This will assist all highway users.

5. Risk Management

5.1 The Code of Practice for Highway Maintenance, 'Well Maintained Highways', recommends how highway authorities should properly maintain their highway network. It is not mandatory, but is often used as a benchmark in any legal action arising from alleged failure to maintain the highway. Recognised good practice suggests that local highway authorities publish a Strategy, which sets out how policies, procedures and locally adopted standards may differ from the Codes of Practice. Exceptions are highlighted in the Strategy for this purpose.

5.2 The role of the highway authority carries with it significant responsibilities and consequently significant risks. If highways are not inspected according to predetermined regimes and kept in a reasonable state of repair, damages may be payable to third parties who allege they have suffered loss or injury as a consequence of failure to maintain. The Strategy has been produced in consultation with the Council's Risk and Insurance team. It notes that risk management practices across the country have significantly sharpened in response to what has become an increasingly litigious society, significant sums have been paid out by authorities for public liability claims, and the frequency of corporate manslaughter claims have become more common. A key objective of the Strategy is to integrate with the HAMP to co-ordinate and deliver a well-maintained highway network which is essential if the Council is to control and minimise risk.

5.3 The Strategy has a chapter dedicated to 'Performance Indicators, Comparison & Targets'. Performance is measured through a combination of National Indicators, Local Indicators, comparisons and targets, in line with Walsall's Corporate Integrated Planning and Performance Framework (CIPPF). There is a fundamental requirement for all authorities to secure continuous improvement in the way they exercise their functions and the CIPPF sets out how the Council's planning processes interlink, demonstrating how resources and services should be managed. The Council will continue to monitor the effectiveness of the strategy by monitoring public perception through the National Highway & Transportation Public Satisfaction Survey. Please see paragraph 11.4. It should also be noted that a fundamental review using the Vanguard Model is underway which could have a fundamental influence on how we monitor performance. By way of example, the Local Indicators currently in use derive from the previous Best Value Performance Indicators, but will evolve as an integral part of the ongoing Vanguard review.

5.4 The long term commitment for improvement of Walsall's highway maintenance service was re-affirmed with the signing of the partnership agreement for Highways Repair and Maintenance between Walsall and Tarmac National Contracting. This contract is currently being reviewed to consider options for extension of exiting arrangements or other and is considered by Cabinet elsewhere on this agenda. The Strategy reproduces the performance management framework of the partnership arrangement.

6. Financial implications

6.1 The Strategy and programme cannot be implemented in full unless there is adequate funding. The programme in **Appendix A** is therefore an indicative programme and will be modified and refined to suit the availability of funding and other considerations. The Council funds the highways maintenance service from both revenue and capital resources. In the current financial year (2012-13), the revenue budget to cover all aspects of the highways maintenance service is £4.45 million. There is also a capital allocation for highways totalling £4.6 million. £2.10 million of this derives from the Local Transport Plan (LTP) settlement figure for structural highway and bridge maintenance, which is issued as a capital grant by the Department of Transport via the Integrated Transport Authority (Centro), £1.30 million as an indicative allocation for Minor Highways Improvements, and £1.20 million from Council mainstream resources.

6.2 The revenue budget must cover routine and reactive maintenance needs, such as care of highway trees; safety repairs to footways; pot-hole filling; gully cleansing; winter service; street lighting; etc. It must also cover some scheduled maintenance such as footway and carriageway resurfacing. Capital funding is intended for works that prolong the life of the asset, such as reconstruction or deeper resurfacing of carriageways on the more strategic routes. There has been an additional capital budget allocation for 2012/13 of £100,000 to assist with maintenance and inspection of land remaining in Council ownership following the Large Scale Voluntary Transfer of housing land. This land does not form part of the statutory highway.

6.3 It is in the Council's best interest to maintain its roads to the best of its ability as the risk and scale of third party claims increases with the deterioration of our highway network. Equally, it is important to repair roads as soon as practicable because early intervention can often be cost effective, avoiding more expensive repairs later on.

7. Legal implications

7.1 The Council, in its capacity as highway authority, has a statutory duty under Section 41 of the Highways Act 1980 to maintain highways for which it has responsibility and to keep them available and safe for the passage of the travelling public. Failure to maintain may be grounds for civil action for damages, or, in extreme cases, prosecution of the Council or individual officers of the Council. Having a highways maintenance strategy and a 3-year programme of planned maintenance works, is not in itself a defence in any such action, but their implementation in full would greatly reduce the chances of any successful civil or criminal proceedings.

7.2 The Code of Practice for Highway Maintenance Management, 'Well Maintained Highways', recommends that strategy documents and asset management plans are prepared in a way that demonstrates a systematic and logical approach to the delivery of highway maintenance services.

8. Property implications

8.1 The Strategy as detailed is incorporated within the Highways Asset Management Plan and, as such, forms an integral part of the Council's Asset Management Plan.

8.2 There are no direct implications on any property of the Council but, as emphasised earlier the Strategy, should lead to an improved condition of the highway which minimises the risk of exposure to the Council for claims of damage to property.

9. Staffing implications

9.1 Responsibility for the Strategy and the progressive introduction of asset management practice will be driven from existing resources within the Highways Maintenance Group. Daily management and control of highway assets will remain the duty of those officers who have direct management responsibility for each of the highway asset categories listed in the Plan. As such, there are no direct staffing implications arising from this report.

10. Equality implications

10.1 The Strategy supports the Council's equal opportunities polices by providing a well managed transportation network that benefits all members of the community and improves accessibility, particularly for those with disabilities. The way the highway network is managed and maintained can have a significant bearing on improving social inclusion and this has been recognised in the Strategy and the 3-year programme. The Strategy document is offered upon request in a number of languages, large print, Braille and audio tape.

10.2 The continued implementation of strategic asset management principles will bring improvements to the way in which the Council manages the highway network. Improvements to the condition and management of our roads, footways, cycle ways, public rights of way and lighting can have a positive impact on crime prevention. By maintaining a pleasant, clean and well-maintained appearance, highway users will generally feel more safe and secure and be encouraged to make better use of the network facilities available to them.

11. Consultation

11.1 To reduce the environmental impact of the Strategy consultation exercise, only a limited number of paper copies of the document will be produced. The majority of consultation will be carried out electronically via e-mail and, through a specific Highway Maintenance Strategy 2012-15 web page on the Council's website. Feedback will be actively sought from Council officers, elected Members and our partners and acted upon as appropriate.

11.2 The list of partner organisations invited to participate in the consultation exercise includes:

Birmingham City Council, Wolverhampton City Council, Sandwell Council, Solihull Council, Coventry City Council, Dudley Council, Police, AA and RAC, Centro, Ambulance Service, Fire Service, Freight Transport Association, Black Country Chamber of Commerce, Chief Engineers and Planning Officers Group Core (CEPOG) Support Team, WHG, WATMOS, Area Managers, Walsall Disability Forum, Walsall Primary Care Trust, religious and significant minority interest groups.

11.3 Additionally, in order to achieve effective co-ordination, statutory undertakers (e.g. British Telecom, South Staffordshire Water) will all receive the 3-year programme with a view to reducing traffic congestion whilst schemes are carried out. Residents in streets affected by highways maintenance works are informed by letter of what to expect, prior to the works taking place. The Strategy also includes a continuous consultation process and specific stakeholder consultation to measure contractor key performance indicators during and after completion of major highways maintenance schemes.

11.4 Walsall participates in the National Highway & Transportation Public Satisfaction Survey concerning Engineering and Transportation functions across the services that Walsall deliver. The majority of UK local authorities take part where a sample of local residents are asked identical questions to help find areas of best practice to gauge public opinion on highways and transportation issues within each borough. The survey is conducted by Ipsos MORI and approximately 4,500 questionnaires are mailed out on an annual basis to randomly chosen people within the borough. The information that the Council receives will be used to inform and shape future service provision. The results for 2011/12 showed that overall satisfaction with Highway Maintenance rose from 50.8% to 52.4%. Amongst our 9 peer authorities Walsall was ranked 4th and were above the average Metropolitan authority score of 51.5%. The survey results are on the NHT web site at www.nhtsurvey.org.

Background papers

a) 'Framework for Highway Asset Management' - Published by the County Surveyors Society. April 2004

b) 'Maintaining a Vital Asset' - Published by the UK Roads Liaison Group. November 2005

c) 'Guidance Document for Highway Infrastructure Asset Valuation' - Published by the UK Roads Liaison Group. July 2005

d) 'Well Maintained Highways' - Code of Practice for Highway Maintenance Management. July 2005

e) 'Well Lit Highways' - Code of Practice for Highway Lighting. November 2004

f) 'Management of Highway Structures' - Code of Practice. September 2005

g) 'Highway winter maintenance a practical guide' - Institute of Civil Engineers. Published 2000

h) 'Guidance on the Requirements for the Production of Highways Asset Management Plans' - Transport Research Laboratory Limited. Prepublication V.2

i) 'West Midlands Local Transport Plan'. 2011-2016

j) 'Financial Reporting Standard 15' - Accounting Standards Board. February 1999

k) Review of Accounting, Management and Finance Mechanisms - Chartered Institute of Public Finance Accountants

l) Walsall Council 'Highway Asset Management Plan 2006-2011'

m) Walsall Council 'Climate Change Strategy and Action Plan 2008-2012'

n) Black Country Joint Core Strategy - Walsall Council, Dudley Council, Sandwell Council, Wolverhampton City Council

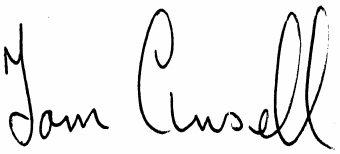
Author

Steve Pretty
Head of Engineering & Transportation
☎ 01922 652598
✉ prettys@walsall.gov.uk

Jamie Morris
Executive Director

26 March 2012

Councillor Tom Ansell
Portfolio Holder



26 March 2012

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
C	Ablewell Street	Walsall	St Matthews/ Paddock/Palfrey/Pleck	C'way and F'way Resurfacing	12/13	3321	1669	£200,499
U	All Saints Road	Darlaston	Darlaston/Bentley	Carriageway Resurfacing	12/13	1541		£34,673
U	Anchor Road	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	13/14	2921		£85,380
U	Ann Street	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	14/15	1363		£30,668
U	Bakewell Close	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	780		£17,550
U	Balls Street	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	12/13	252		£5,670
U	Balls Street	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Kerb & F'way Resurfacing	12/13		250	£18,840
U	Banks Street	Willenhall	Willenhall/Short Heath	C'way and F'way Resurfacing	12/13	1138	715	£51,924
U	Bar Walk	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Footway Resurfacing	12/13		72	£2,650
U	Beddows Road	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Footway Resurfacing	12/13		1165	£42,884
U	Bentley Lane	Bentley	Bloxwich/Blakenall/Birchills/ Leamore & St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	13/14	1639		£36,878
U	Bentley Road South	Darlaston	Darlaston/Bentley	Footway Resurfacing	14/15		708	£26,061
U	Berkley Close	Bentley	Darlaston/Bentley	Footway Resurfacing	13/14		762	£28,049
U	Bescot Crescent	Palfrey	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		2370	£87,240
B	Bilston Street (Rosehill)	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	14/15	2590		£58,275
U	Birches Rise	Willenhall	Willenhall/Short Heath	Footway Resurfacing	12/13		1285	£47,301
U	Birchills Street	Walsall	Bloxwich/Blakenall/Birchills/ Leamore & St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	12/13	2592		£58,320

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Birchtree Hollow	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	12/13	882		£19,845
U	Birmingham Road	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	12/13	5503		£128,660
U	Bloxwich Lane (Part)	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Footway Resurfacing	12/13		1800	£66,258
U	Bloxwich Lane (W'hampton Rd to Churchill Rd)	Leamore	Bloxwich/Blakenall/Birchills/ Leamore	Planned Patching	13/14	100		£4,389
B	Bloxwich Road (Forest Lane to Bus Depot)	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	6000		£135,000
U	Blue Lane East	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	1365		£30,713
U	Bosty Lane/Walsall Road Shop Access Road	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Resurface Parking Area	12/13	600		£12,300
U	Branton Hill Lane	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	13/14	1500		£35,070
U	Brineton Street	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		381	£14,025
U	Broad Meadow	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Footway Resurfacing	13/14		576	£2,102
U	Broad Meadow	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	12/13	1360		£30,600
U	Broad Way	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Kerb & F'way Resurfacing	13/14		968	£72,948
U	Broad Way	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Resurfacing	14/15	1936		£45,263
U	Broadstone Avenue	Leamore	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	4077		£95,320
A	Broadway North	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		900	£33,129
A	Broadway/Bescot Crescent Junction	Pleck	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	13/14	1710		£39,979
U	Bull Street	Darlaston	Darlaston/Bentley	Carriageway Resurfacing	12/13	2214		£49,815

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Cairn Drive	Bentley	Darlaston/Bentley	Carriageway Resurfacing	12/13	892		£20,070
U	Calder Avenue	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	12/13	776		£15,703
U	Caldmore Road	Caldmore	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		1800	£66,258
U	Calthorpe Close	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	14/15		648	£23,874
U	Calthorpe Road	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	13/14	1605		£37,524
U	Cannon Street	Willenhall	Willenhall/Short Heath	C'way and F'way Resurfacing	13/14	440	415	£29,425
U	Cedar Drive	Streetly	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	12/13	625		£14,063
U	Chapel Avenue	Brownhills	Brownhills/Pelsall/Rushall/ Shelfield	C'way and F'way Resurfacing	12/13	2160	580	£69,350
U	Chapel Green	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	12/13	767		£17,258
B	Chase Road	Brownhills	Brownhills/Pelsall/Rushall/ Shelfield	Footway Resurfacing	12/13		3170	£116,688
U	Chepstow Way	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Footway Resurfacing	12/13		5491	£202,124
A	Chester Road - Lazy Hill to no. 830	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	12/13	15840		£189,129
A	Chester Road North	Brownhills	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Resurfacing	12/13	1486		£30,463
U	Churchside Way	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Footway Resurfacing	12/13		513	£10,260
U	Circuit Close	Willenhall	Willenhall/Short Heath	C'way and F'way Resurfacing	12/13	1000	645	£46,242
U	Clement Street	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	12/13	495		£11,138
U	Coalpool Lane (From Harden Road to Ross Road)	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	4840		£108,900

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Coltham Road	Short Heath	Willenhall/Short Heath	Carriageway Planned Patching	13/14	50		£2,194
U	Commercial Road	Beechdale	Bloxwich/Blakenall/Birchills/ Leamore	C'way and F'way Resurfacing	12/13	3256	1360	£123,322
U	Coniston Road	Streetly	Aldridge/Streetly/Pheasey/ Walsall Wood	Footway Resurfacing	12/13		1539	£56,651
U	Cottle Close	Bentley	Darlaston/Bentley	Footway Resurfacing	13/14		170	£6,258
U	Crescent Road	Darlaston	Darlaston/Bentley	Carriageway Resurfacing	12/13	1548		£34,830
U	Cresswell Crescent	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	7957		£179,033
U	Cricket Close	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	13/14		612	£22,527
U	Cricket Close	Walsall	St Matthews/ Paddock/Palfey/Pleck	Carriageway Planned Patching	14/15	20		£877
U	Cromwell Close	Bentley	Darlaston/Bentley	Footway Resurfacing	13/14		200	£7,362
U	Croxstalls Place	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	C'way and F'way Resurfacing	12/13	361	139	£13,240
U	Croxtalls Avenue	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	C'way and F'way Resurfacing	12/13	840	656	£61,947
U	Croxtalls Close	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	571		£12,848
U	Daisy Bank Crescent	Walsall	Aldridge/Streetly/Pheasey/ Walsall Wood	C'way & F'way resurfacing	12/13	2400	1400	£105,534
U	Dale End	Darlaston	Darlaston/Bentley	Carriageway Resurfacing	12/13	400		£9,000
U	Dangerfield Lane	Darlaston	Darlaston/Bentley	Carriageway Resurfacing	12/13	5928		£133,380
U	Dartford Road	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Footway Resurfacing	12/13		947	£34,859
U	Dartmouth Avenue	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	5983		£134,618

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Darwin Road	Beechdale	Bloxwich/Blakenall/Birchills/ Leamore	C'way and F'way Resurfacing	12/13	2662	3120	£177,084
B	Daw End Lane	Rushall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Resurfacing	13/14	6167		£160,044
A	Day Street (Part)	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	C'way & F'way Resurfacing	12/13	983	120	£26,535
U	Dovedale Avenue	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Footway Resurfacing	13/14		643	£23,669
U	Drake Road	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	2066		£46,485
U	Dumblederry Lane	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	12/13	4000		£90,000
U	Dyson Close	Bentley	Darlaston/Bentley	Footway Resurfacing	13/14		210	£7,730
U	Elmore Row	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	1600		£36,000
U	Elmtree Road	Streetly	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Planned Patching	12/13	200		£8,778
U	Ely Road	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	13/14		1425	£52,454
A	Essington Road	Willenhall	Willenhall/Short Heath	Carriageway Planned Patching	12/13	200		£9,744
U	Falmouth Road	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	14/15	1300		£29,250
U	Far View	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Footway Resurfacing	12/13		655	£13,100
U	Faraday Road	Beechdale	Bloxwich/Blakenall/Birchills/ Leamore	Kerb & F'way Resurfacing	12/13		1890	£142,430
U	Farmbridge Close	Willenhall	Willenhall/Short Heath	Footway Resurfacing	12/13		680	£25,031
U	Fenchurch Close	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	13/14	1050		£23,625
B	Fibbersley	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	13/14	3880		£87,300

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Fishley Lane	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Footway Resurfacing	12/13		350	£12,884
U	Floyds Lane (King George Crescent to Park Road)	Rushall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Resurfacing	12/13	1247		£14,889
B	Foley Road West/Aldridge Road Island	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	13/14	864		£20,200
U	Fordbrook Lane	High Heath	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Resurfacing	13/14	4054		£118,498
U	Forest Lane	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	3675		£82,688
U	Forge Road	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Footway Resurfacing	12/13		320	£11,779
U	Frankburn Road	Streetly	Aldridge/Streetly/Pheasey/ Walsall Wood	Footway Resurfacing	12/13		1529	£56,282
U	Frederick Street	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	12/13	2000		£45,000
U	Freer Street	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	12/13	899		£20,228
U	Friezland Lane	Brownhills	Aldridge/Streetly/Pheasey/ Walsall Wood	C'way and F'way Resurfacing	13/14	4550	1338	£151,627
U	Froysell Street	Willenhall	Willenhall/Short Heath	C'way and F'way Resurfacing	13/14	731	429	£55,852
U	Fryers Close	Beechdale	Bloxwich/Blakenall/Birchills/ Leamore	C'way and F'way Resurfacing	12/13	1591	860	£67,455
U	Fryers Rd - Leamore Ln Jct	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Planned Patching	12/13	1958		£78,760
U	George Street	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	12/13	1500		£33,750
U	Gilpin Crescent	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	C'way and F'way Resurfacing	12/13	3250	2610	£169,199
U	Gloucester Road	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		475	£17,485
U	Goscote Lodge Crescent	Goscote	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	2660		£59,850

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Gower Street	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	12/13	678		£15,255
U	Grange Street	Delves	St Matthews/ Paddock/Palfrey/Pleck	Kerb & F'way resurfacing	14/15		612	£46,129
U	Green Lane	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Resurfacing	12/13	2085		£46,913
U	Green Way	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Footway Resurfacing	12/13		245	£4,900
U	Greenwood Road	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Footway Resurfacing	12/13		572	£11,440
U	Grosvenor Avenue	Streetly	Aldridge/Streetly/Pheasey/ Walsall Wood	Footway Resurfacing	14/15		620	£22,822
U	Hall Lane	Walsall Wood	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	13/14	4160		£85,290
U	Hall Street	Walsall	St Matthews /Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		424	£31,952
U	Hall Street	Walsall	St Matthews /Paddock/Palfrey/Pleck	Carriageway Resurfacing	13/14	689		£8,226
U	Hall Street	Darlaston	Darlaston/ Bentley	C'way and F'way Resurfacing	13/14	689	424	£40,178
U	Harden Road (Beeches Road to Goscote Lane)	Leamore	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	13/14	7527		£195,339
U	Hardwick Road	Streetly	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	12/13	4348		£97,830
U	Harley Close	Walsall Wood	Aldridge/Streetly/Pheasey/ Walsall Wood	Footway Resurfacing	12/13		277	£10,196
U	Harper Street	Willenhall	Willenhall/Short Heath	C'way and F'way Resurfacing	12/13	806	254	£32,528
U	Haskell Street	Delves	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	14/15		391	£14,393
U	Hawthorne Road	Delves	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		1711	£62,982
U	Hazelwood Road	Streetly	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	12/13	2300		£51,750

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Heather Road	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Footway Resurfacing	12/13		2200	£80,982
U	Heather Road	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	13/14	2860		£64,350
U	Herberts Park Road (Part)	Darlaston	Darlaston/Bentley	Footway Resurfacing	12/13		1272	£46,822
U	High Street	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	12/13	1519		£44,400
U	High Street	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	C'way and F'way Resurfacing	13/14	1871	832	£72,724
U	Highfield Road	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Resurfacing	12/13	2829		£63,653
U	Highfield Road North	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Footway planned patch	13/14		270	£13,271
U	Highfield Way	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Footway Resurfacing	12/13		396	£7,920
U	Hildicks Crescent	Goscote	Bloxwich/Blakenall/Birchills/ Leamore	Footway Resurfacing	12/13		2024	£74,503
U	Hilton Close	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Footway Resurfacing	12/13		1179	£43,399
U	Holford Avenue	Bescot	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		864	£31,804
U	Holly Lane	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Planned Patching	12/13	364		£15,974
U	Hospital Street	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	C'way and F'way Resurfacing	12/13	2855	1460	£117,981
U	Howdles Lane	Brownhills	Brownhills/Pelsall/Rushall/ Shelfield	C'way and F'way Resurfacing	12/13	1780	2497	£131,965
U	Ida Road	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	12/13	2345		£52,763
U	James Street	Willenhall	Willenhall/Short Heath	C'way and F'way Resurfacing	12/13	857	254	£28,633
U	Jane Lane Close	Bentley	Darlaston/Bentley	Footway Resurfacing	13/14		360	£13,252

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	John Street	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	1060		£23,850
U	Jubilee Close	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	1075		£24,188
U	King Street	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	12/13	479		£10,778
U	Knaves Castle Avenue	Brownhills	Brownhills/Pelsall/Rushall/ Shelfield	Footway Resurfacing	12/13		1397	£51,424
U	Knightsbridge Lane	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	12/13	915		£20,588
U	Lake Avenue	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		1400	£51,534
U	Lane Close	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		175	£6,442
U	Leighswood Grove	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	12/13	245		£5,513
U	Leighswood Road (Aldridge By-Pass Island)	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	12/13	1400		£56,315
A	Lichfield Road	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	6000		£135,000
A	Lichfield Road	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	13/14	1676		£67,425
B	Lichfield Road B4155	Brownhills	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Resurfacing	14/15	7142		£160,695
U	Lister Road	Beechdale	Bloxwich/Blakenall/Birchills/ Leamore	Footway Resurfacing	12/13		2611	£96,111
A	Little Aston Road - Northgate Island	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	14/15	458		£100,000
U	Little Hardwick Road	Streetly	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	12/13	10439		£234,878
U	Locket Close	Bentley	Darlaston/Bentley	Footway Resurfacing	13/14		280	£10,307
U	Long Acre Street	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Footway Resurfacing	13/14		839	£30,884

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Long Acre Street	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	13/14	1375		£30,938
U	Lord Street (Milton Street to Broadway)	Palfrey	St Matthews/ Paddock/Palfrey/Pleck	C'way and F'way Resurfacing	12/13	2338	1137	£94,458
U	Lothians Road	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Resurfacing	12/13	1863		£38,191
U	Lower Hall Lane	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	12/13	1113		£25,043
U	Magness Crescent	Willenhall	Willenhall/Short Heath	C'way and F'way Resurfacing	12/13	1579	1403	£87,172
U	Malkit Close	Bentley	Darlaston/Bentley	Footway Resurfacing	13/14		210	£7,730
U	Manor Close	Willenhall	Willenhall/Short Heath	Footway Resurfacing	12/13		388	£14,282
U	Manor Road (FW One Side)	Streetly	Aldridge/Streetly/Pheasey/ Walsall Wood	Footway Resurfacing (One Side)	13/14		1796	£66,111
U	Manor Road Precinct	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		540	£19,877
U	Marlow Street	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	13/14	1617		£36,383
U	Maybrook Road	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	12/13	5468		£175,960
U	Mayfield Road	Streetly	Aldridge/Streetly/Pheasey/ Walsall Wood	C'way and F'way Resurfacing	12/13	1008	776	£51,245
U	Meadow Street	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	12/13	992		£22,320
U	Middemore Lane West (Part)	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	C'way and F'way Resurfacing	12/13	6998	3888	£300,570
U	Miles Meadow Close	Willenhall	Willenhall/Short Heath	Footway Resurfacing	12/13		270	£9,939
U	Mill Street	Darlaston	Darlaston/Bentley	Footway Resurfacing	12/13		400	£14,724
U	Moat Street	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	14/15	1092		£25,530

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Moorland Road	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	990		£22,275
U	Mulberry Place	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	370		£8,325
U	New Road	Brownhills	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Resurfacing	12/13	1584		£35,640
U	New Street	Darlaston	Darlaston/Bentley	Carriageway Resurfacing	12/13	1013		£20,766
U	New Street	Rushall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Resurfacing	12/13	1178		£26,505
U	Newfield Close	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	14/15	2010		£45,225
U	Newlands Close	Willenhall	Willenhall/Short Heath	Footway Resurfacing	12/13		493	£18,147
B	Norton Road (Finger Post to Boundary)	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Resurfacing	13/14	4200		£50,148
U	Oakfield Drive	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Footway Resurfacing	13/14		132	£4,859
U	Occupation Road	Brownhills	Aldridge/Streetly/Pheasey/ Walsall Wood	C'way and F'way Resurfacing	12/13	1039	726	£50,102
U	Old Birchills	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Kerb & F'way Resurfacing	13/14		1608	£121,178
U	Old Birchills	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	14/15	3417		£109,959
U	Old Park Road	Darlaston	Darlaston/Bentley	C'way and F'way Resurfacing	12/13	4550	1338	£151,627
A	Old Pleck Road (Wellington Street to Ida Road)	Pleck	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Planned Patching	14/15	100		£4,389
U	Oxford Street	Pleck	St Matthews/ Paddock/Palfrey/Pleck	C'way and F'way Resurfacing	14/15	1500	688	£59,075
U	Paddock Lane	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	12/13	1562		£36,519
U	Park Road	Willenhall	Willenhall/Short Heath	Footway Resurfacing	12/13		388	£14,282

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Parkwood Close	Brownhills	Aldridge/Streetly/Pheasey/ Walsall Wood	C'way and F'way Resurfacing	12/13	4550	1338	£151,627
U	Peake Road	Brownhills	Aldridge/Streetly/Pheasey/ Walsall Wood	Footway Resurfacing	12/13		117	£4,307
U	Penkridge Street	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	14/15	819		£18,428
A	Pinfold Street (Darlaston Road to Mill St)	Darlaston	Darlaston/Bentley	Footway Resurfacing	12/13		1826	£67,215
A	Pinfold Street (Darlaston Road to Mill St)	Darlaston	Darlaston/Bentley	Carriageway Resurfacing	14/15	860		£19,350
U	Pinfold Street Extension	Darlaston	Darlaston/Bentley	Footway Resurfacing	12/13		497	£18,295
U	Pooles Lane	Short Heath	Willenhall/Short Heath	C'way and F'way Resurfacing	12/13	4307	3658	£231,559
U	Portland Road	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	12/13	3445		£77,513
U	Proffitt Street	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Planned Patching	13/14	546		£23,964
U	Queen Elizabeth Ave (part)	Bentley	Darlaston/Bentley	Carriageway Resurfacing	12/13	1250		£28,125
U	Queen Street	Wednesbury	Darlaston/Bentley	C'way and F'way Resurfacing	13/14	690	442	£31,795
U	Queens Road	Rushall	Brownhills/Pelsall/Rushall/ Shelfield	Footway Resurfacing	12/13		1880	£69,203
U	Quilter Close	Bentley	Darlaston/Bentley	Footway Resurfacing	13/14		218	£8,025
U	Raven Road	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Kerb & F'way Resurfacing	13/14		792	£73,249
U	Raven Road	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	14/15	1620		£37,875
U	Ravensdale Close	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		201	£7,399
U	Ravensdale Gardens	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		2000	£73,620

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Reedswood Gardens	Reedswood	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	13/14	240		£5,400
U	Regina Drive	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		985	£36,258
U	Remington Road	Beechdale	Bloxwich/Blakenall/Birchills/ Leamore	Footway Resurfacing	12/13		5184	£190,823
U	Reservoir Close	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		340	£12,515
U	Riley Street	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	12/13	885		£19,913
B	Rosehill	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	14/15	2800		£63,000
U	Rowan Road	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		1157	£42,589
U	Rubery Street	Darlaston	Darlaston/Bentley	C'way and F'way Resurfacing	12/13	773	358	£30,571
U	Rushall Manor Road	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		1702	£62,651
U	Rutland Street	Blakenall	Bloxwich/Blakenall/Birchills/ Leamore	Footway Resurfacing	12/13		1076	£39,608
U	Sandbank	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	1658		£37,305
U	Sanstone Road	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Footway Resurfacing	12/13		1197	£44,062
U	Sanstone Road	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	4359		£98,078
U	School Street	Shelfield	Brownhills/Pelsall/Rushall/ Shelfield	C'way and F'way Resurfacing	12/13	832	640	£42,278
U	School Street	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	13/14	1207		£24,759
U	Short Acre Street	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Footway Resurfacing	13/14		774	£28,491
U	Short Acre Street	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	14/15	1570		£35,325

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Short Street	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	12/13	735		£16,538
U	Shortlands Lane	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Footway Resurfacing	12/13		880	£32,393
U	Silver Birch Road	Streetly	Aldridge/Streetly/Pheasey/ Walsall Wood	Footway Resurfacing	12/13		466	£17,153
U	Sneyd Lane	Willenhall	Willenhall/Short Heath	Kerb & F'way resurfacing	12/13		2414	£181,919
U	Sneyd Lane Service Road (No 257 - 269)	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	C'way and F'way Resurfacing	12/13	400	144	£14,301
U	Spout Lane	Caldmore	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		632	£23,264
U	Spout Lane	Caldmore	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	13/14	1041		£23,423
U	Spring Lane	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	12/13	2282		£51,345
U	Springvale Street	Willenhall	Willenhall/Short Heath	C'way and F'way Resurfacing	12/13	824	483	£36,319
U	St Johns Road	Alumwell	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	13/14		1120	£41,227
U	St Johns Road	Alumwell	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	14/15	2364		£53,190
A	St Lawrence Way	Darlaston	Darlaston/Bentley	Carriageway Resurfacing	13/14	3036		£68,310
U	St Marks Road	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Footway Resurfacing	13/14		3255	£119,817
U	St Michael Street	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		200	£7,362
U	St Pauls Crescent	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	C'way and F'way Resurfacing	12/13	2655	1842	£127,542
U	St Peters Drive	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Footway Resurfacing	13/14		360	£13,252
U	Stadium Close	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	12/13	420		£9,450

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
B	Stafford Street (Town End to Littleton St West)	Walsall	St Matthews /Paddock/Palfrey/Pleck	Carriageway Resurfacing	14/15	1638		£33,579
U	Stanley Road	Darlaston	Darlaston/Bentley	Footway Resurfacing	12/13		2340	£86,135
U	Star Close	Bentley	Darlaston/Bentley	Footway Resurfacing	13/14		220	£8,098
U	Station Street	Darlaston	Darlaston/Bentley	Carriageway Resurfacing	12/13	7028		£158,130
U	Station Street	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Planned Patching	13/14	390		£17,117
U	Stepping Stone Close	Bentley	Darlaston/Bentley	Footway Resurfacing	13/14		170	£6,258
U	Stockton Close	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	14/15	2338		£34,894
U	Stowe Street	Leamore	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	838		£18,855
U	Stroud Avenue	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	13/14	2775		£62,438
B	Sutton Road (Broadway North to Wood End Road)	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	13/14		2237	£82,343
C	Sutton Road (Birmingham Road to Broadway North)	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	13/14		1126	£41,448
C	Sutton Road (Broadway North to Birmingham Road)	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	13/14	3943		£92,206
U	Talbot Close	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	13/14	1012		£22,770
U	Tantarra Street	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	12/13	878		£28,254
U	Tapton Close	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Footway Resurfacing	12/13		192	£7,068
U	Tasker Street	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	12/13	1808		£40,680
B	Temple Bar	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	12/13	1911		£42,998

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Thompson Close	Willenhall	Willenhall/Short Heath	Footway Resurfacing	12/13		725	£26,687
U	Thompson Street	Willenhall	Willenhall/Short Heath	C'way and F'way resurfacing	12/13	1617	100	£41,298
U	Tintern Way	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Footway Resurfacing	12/13		647	£23,816
U	Trees Road	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	14/15		748	£27,534
U	Union Street	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		632	£23,264
U	Upper Hall Lane	Walsall	St Matthews/ Paddock/Palfrey/Pleck	C'way and F'way Resurfacing	12/13	1311	576	£50,701
U	Victor Street	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		963	£35,448
U	Victoria Road	Darlaston	Darlaston/Bentley	Carriageway Resurfacing	12/13	2233		£45,776
U	Walsall Street	Darlaston	Darlaston/Bentley	Footway Resurfacing	12/13		585	£21,534
U	Ward Street	Willenhall	Willenhall/Short Heath	C'way and F'way Resurfacing	12/13	450	225	£27,081
U	Warewell Street	Walsall	St Matthews /Paddock/Palfrey/Pleck	Carriageway Resurfacing	12/13	467		£9,577
U	Watkins Road	Willenhall	Willenhall/Short Heath	C'way and F'way Resurfacing	13/14	1266	1040	£66,767
U	Waverley Avenue	Pheasey	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	13/14	1292		£30,206
U	Wedge Street	Walsall	St Matthews /Paddock/Palfrey/Pleck	Carriageway Resurfacing	12/13	248		£5,090
U	Well Lane (Part)	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	13/14	1560		£35,100
U	Wellfield Road	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Footway Resurfacing	13/14		918	£33,792
A	West Bromwich Road	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		1550	£57,056

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	West Bromwich St (Jct Sandwell St)	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	12/13	826		£18,585
U	West Way	Shelfield	Brownhills/Pelsall/Rushall/ Shelfield	F'way Resurfacing & Kerb Patch	12/13		2115	£77,853
U	Weston Crescent	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Resurfacing	12/13	2078		£46,755
U	Wharf Street	Walsall	St Matthews/ Paddock/Palfrey/Pleck	C'way and F'way Resurfacing	12/13	204	136	£14,839
U	Whitehall Road	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	12/13	1160		£26,100
U	Whitehouse Street	Walsall	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	13/14	1265		£28,463
U	Whittimere Street	Walsall	St Matthews/ Paddock/Palfrey/Pleck	C'way & F'way Resurfacing	12/13		788	£59,384
U	Williams Close	Willenhall	Willenhall/Short Heath	C'way and F'way Resurfacing	13/14	331	241	£16,319
U	Windermere Drive	Streetly	Aldridge/Streetly/Pheasey/ Walsall Wood	Footway Resurfacing	12/13		540	£19,877
U	Winterley Lane (Bosty Lane to Canal Bridge)	Rushall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Resurfacing	13/14	1620		£6,642
A	Wolverhampton Road	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Resurfacing	13/14	12731		£286,448
A	Wolverhampton Road (133-171)	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	12/13		117	£4,307
B	Wolverhampton Road West (Part)	Bentley	Darlaston/Bentley & Willenhall Short Heath	C'way and F'way Resurfacing	12/13	1470	1537	£89,752
B	Wolverhampton Road West (Junc 10 Approach)	Bentley	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Planned Patching	14/15	100		£4,389
U	Wolverhampton Street	Darlaston	Darlaston/Bentley	Carriageway Resurfacing	12/13	7500		£168,750
U	Wood End Road	Walsall	Aldridge/Streetly/Pheasey/ Walsall Wood	C'way & F'way Resurfacing	12/13	2700	1000	£36,870
U	Wood Lane	Willenhall	Willenhall/Short Heath	Carriageway Resurfacing	14/15	3850		£90,013

Walsall Council Provisional Highway Maintenance Programme 2012 - 2015

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Woodall Street	Bloxwich	Bloxwich/Blakenall/Birchills/ Leamore	Carriageway Resurfacing	12/13	900		£20,250
U	Woodlands Crescent	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Footway Resurfacing	13/14		630	£23,190
U	Woodside Close	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	14/15		954	£35,135
U	Woodside Road	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Resurfacing	13/14		720	£26,503
U	Woodside Road	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Resurfacing	14/15	1180		£27,588
U	Wyrley Close	Brownhills	Brownhills/Pelsall/Rushall/ Shelfield	Footway Resurfacing	12/13		221	£8,135

Note:
Additional schemes may need to be brought into programme depending on the rate of deterioration across the highway network. The rate of deterioration can be affected by many factors including severe winter weather and prolonged hot periods during the summer, other factors such as traffic diversions can impose undue traffic volumes and vehicle loadings on carriageways not designed for such use. It may also be necessary to delay schemes as a result of Statutory Undertakers activity or new developments that require service connections and sewer connections in the carriageway.

Walsall Council Provisional Preventative Highway Maintenance Programme 2012/13

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Aldridge Road Service Road (No 2 to No 86)	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Micro Asphalt	12/13	3550		£16,800
U	Balmoral Way	Leamore	Bloxwich/Blakenall/ Birchills/Leamore	Carriageway Surface Dressing	12/13	618		£2,630
U	Balmoral Way	Leamore	Bloxwich/Blakenall/ Birchills/Leamore	Footway Surface Dressing	12/13		430	£1,380
U	Belinda Close	Willenhall	Willenhall/Short Heath	Footway Slurry Seal	12/13		508	£1,870
U	Berkley Close	Bentley	Bentley/Darlaston	Carriageway Micro Asphalt	12/13	2251		£10,650
U	Booth Street	Bloxwich	Bloxwich/Blakenall/ Birchills/Leamore	Carriageway Micro Asphalt	12/13	2240		£10,600
U	Burgh Way	Leamore	Bloxwich/Blakenall/ Birchills/Leamore	Carriageway Surface Dressing	12/13	1206		£5,130
U	Burgh Way	Leamore	Bloxwich/Blakenall/ Birchills/Leamore	Footway Surface Dressing	12/13		770	£2,830
U	Chantry Avenue	Bloxwich	Bloxwich/Blakenall/ Birchills/Leamore	Carriageway Micro Asphalt	12/13	3610		£17,080
A	Chester Road (No 830 to Little Aston Road)	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Premium Surface Dressing	12/13	14540		£68,780
U	Cottle Close	Bentley	Bentley/Darlaston	Carriageway Micro Asphalt	12/13	374		£1,770
U	Cunningham Road	Bentley	Bentley/Darlaston	Carriageway Micro Asphalt	12/13	1296		£6,130
U	Deakin Avenue	Brownhills	Brownhills/Pelsall/Rushall/ Shelfield	Footway Surface Dressing	12/13		1658	£6,090
U	Deakin Avenue (No 54 to No 86)	Brownhills	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Surface Dressing	12/13	974		£4,610
U	Deakin Avenue (Watling Street to No 54)	Brownhills	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Micro Asphalt	12/13	1870		£8,850
U	Dyson Close	Bentley	Bentley/Darlaston	Carriageway Micro Asphalt	12/13	985		£4,710
U	Edinburgh Lane	Leamore	Bloxwich/Blakenall/ Birchills/Leamore	Carriageway Surface Dressing	12/13	280		£1,324
U	Edinburgh Lane	Leamore	Bloxwich/Blakenall/ Birchills/Leamore	Footway Surface Dressing	12/13		211	£780
U	Elm Road	Bloxwich	Bloxwich/Blakenall/ Birchills/Leamore	Carriageway Micro Asphalt	12/13	646		£3,055
U	Enderley Close	Bloxwich	Bloxwich/Blakenall/ Birchills/Leamore	Footway Slurry Seal	12/13		62	£230

Walsall Council Provisional Preventative Highway Maintenance Programme 2012/13

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Enderley Drive	Bloxwich	Bloxwich/Blakenall/ Birchills/Leamore	Footway Slurry Seal	12/13		2448	£8,990
U	Everest Road	Bentley	Bentley/Darlaston	Carriageway Micro Asphalt	12/13	617		£2,918
U	Four Crosses Road	Shelfield	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Micro Asphalt	12/13	1305		£6,174
U	Gaydon Road	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Micro Asphalt	12/13	1807		£8,548
U	Goscote Lane	Bloxwich	Bloxwich/Blakenall/ Birchills/Leamore	Masterlayer	12/13	15247		£121,980
U	Green Lane	Shelfield	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Premium Surface Dressing	12/13	5530		£26,160
U	Greenwood Road	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Micro Asphalt	12/13	7350		£34,765
U	Greenwood Road Surrounding Area	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Various Treatments	12/13	3214		£15,202
U	Highfield Road North	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Micro Asphalt	12/13	2350		£14,270
U	Hollemeadow Avenue	Bloxwich	Bloxwich/Blakenall/ Birchills/Leamore	Carriageway Micro Asphalt	12/13	2610		£12,350
U	Kenilworth Crescent	Leamore	Bloxwich/Blakenall/ Birchills/Leamore	Carriageway Surface Dressing	12/13	1323		£6,260
U	Kenilworth Crescent	Leamore	Bloxwich/Blakenall/ Birchills/Leamore	Footway Surface Dressing	12/13		438	£1,610
U	Kingsbury Close	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Slurry Seal	12/13		176	£650
U	Latimer Street	Willenhall	Willenhall/Short Heath	Carriageway Micro Asphalt	12/13	760		£3,600
U	Latimer Street	Willenhall	Willenhall/Short Heath	Footway Slurry Seal	12/13		440	£1,620
U	Leyland Croft	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Surface Dressing	12/13	390		£1,850
U	Leyland Croft	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Footway Surface Dressing	12/13		360	£1,330
U	Linley Wood Road	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Micro Asphalt	12/13	1695		£8,020
U	Lodge Road	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Masterlayer	12/13	3270		£26,160
U	Marlpool Drive	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Surface Dressing	12/13	1702		£8,050

Walsall Council Provisional Preventative Highway Maintenance Programme 2012/13

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Marlpool Drive	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Footway Surface Dressing	12/13		713	£2,620
U	Meadow Road	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Micro Asphalt	12/13	1888		£8,930
U	Mellish Drive	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Slurry Seal	12/13		580	£2,130
U	Montgomery Road	Bentley	Bentley/Darlaston	Carriageway Micro Asphalt	12/13	1638		£7,750
U	Nottingham New Road	Leamore	Bloxwich/Blakenall/ Birchills/Leamore	Carriageway Surface Dressing	12/13	395		£1,680
U	Oak Crescent	Bloxwich	Bloxwich/Blakenall/ Birchills/Leamore	Carriageway Micro Asphalt	12/13	1525		£7,220
U	Oakenhayes Crescent	Brownhills	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Micro Asphalt	12/13	754		£3,570
U	Oakenhayes Crescent	Brownhills	Brownhills/Pelsall/Rushall/ Shelfield	Footway Surface Dressing	12/13		518	£1,910
U	Oakenhayes Drive	Brownhills	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Micro Asphalt	12/13	603		£2,860
U	Oakenhayes Drive	Brownhills	Brownhills/Pelsall/Rushall/ Shelfield	Footway Surface Dressing	12/13		410	£1,510
U	Paradise Lane	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Surface Dressing	12/13	1422		£6,730
U	Park Lime Drive	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Slurry Seal	12/13		155	£570
U	Pasture View	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Surface Dressing	12/13	527		£2,500
U	Pasture View	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Footway Surface Dressing	12/13		189	£700
U	Perch Road	Leamore	Bloxwich/Blakenall/ Birchills/Leamore	Carriageway Surface Dressing	12/13	696		£3,300
U	Perch Road	Leamore	Bloxwich/Blakenall/ Birchills/Leamore	Footway Surface Dressing	12/13		483	£1,780
U	Pike Road	Leamore	Bloxwich/Blakenall/ Birchills/Leamore	Carriageway Surface Dressing	12/13	328		£1,560
U	Pike Road	Leamore	Bloxwich/Blakenall/ Birchills/Leamore	Footway Surface Dressing	12/13		228	£840
U	Poplar Ave (Cul De Sacs Off)	Bentley	Bentley/Darlaston	Carriageway Micro Asphalt	12/13	2945		£13,943
U	Quayside Drive	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Premium Surface Dressing	12/13	1672		£7,910

Walsall Council Provisional Preventative Highway Maintenance Programme 2012/13

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Queen Elizabeth Avenue	Bentley	Bentley/Darlaston	Carriageway Micro Asphalt	12/13	3060		£14,474
U	Quilter Close	Bentley	Bentley/Darlaston	Carriageway Micro Asphalt	12/13	443		£2,100
U	Red Brook Road	Leamore	Bloxwich/Blakenall/ Birchills/Leamore	Carriageway Surface Dressing	12/13	590		£2,790
U	Red Brook Road	Leamore	Bloxwich/Blakenall/ Birchills/Leamore	Footway Surface Dressing	12/13		400	£1,470
U	Red River Road	Leamore	Bloxwich/Blakenall/ Birchills/Leamore	Carriageway Surface Dressing	12/13	1575		£7,450
U	Red River Road	Leamore	Bloxwich/Blakenall/ Birchills/Leamore	Footway Surface Dressing	12/13		770	£2,830
U	Rushall Close	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Slurry Seal	12/13		847	£3,110
U	Rushall Manor Close	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Slurry Seal	12/13		330	£1,220
U	Silvers Close	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Micro Asphalt	12/13	220		£1,040
U	Stencills Drive	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Slurry Seal	12/13		486	£1,790
U	Stencills Road	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Slurry Seal	12/13		1576	£5,790
U	Stephenson Avenue (Reedswood Way to Bloxwich Lane)	Beechdale	Bloxwich/Blakenall/ Birchills/Leamore	Carriageway Micro Asphalt	12/13	14000		£66,220
U	Sunnyside	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Micro Asphalt	12/13	770		£3,650
U	Sunnyside	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Footway Surface Dressing	12/13		558	£2,050
U	Temple Square	Willenhall	Willenhall/Short Heath	Carriageway Micro Asphalt	12/13	388		£1,850
U	Tetley Avenue	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Footway Slurry Seal	12/13		410	£1,510
U	Thompson Close	Willenhall	Willenhall/Short Heath	Carriageway Micro Asphalt	12/13	979		£4,633
U	Thorne Road	Willenhall	Willenhall/Short Heath	Carriageway Micro Asphalt	12/13	3375		£15,970
U	Valleyside	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Surface Dressing	12/13	1098		£5,200
U	Wakes Close	Willenhall	Willenhall/Short Heath	Carriageway Surface Dressing	12/13	375		£1,780

Walsall Council Provisional Preventative Highway Maintenance Programme 2012/13

Road Class	Street Name	District	Area Partnership	Description of Works	Proposed Year	Carriageway Area m²	Footway Area m²	Estimated Cost (£)
U	Wakes Close	Willenhall	Willenhall/Short Heath	Footway Slurry Seal	12/13		264	£970
U	Wallows Lane Service Road (No 162 to No 124)	Walsall	St Matthews/ Paddock/Palfrey/Pleck	Carriageway Micro Asphalt	12/13	2801		£13,251
U	Walsall Wood Road (Cul de Sacs off)	Aldridge	Aldridge/Streetly/Pheasey/ Walsall Wood	Carriageway Micro Asphalt	12/13	6238		£29,505
U	Wavell Road	Bentley	Bentley/Darlaston	Carriageway Micro Asphalt	12/13	964		£4,560
U	Whitehorse Road	Brownhills	Brownhills/Pelsall/Rushall/ Shelfield	Masterlayer	12/13	3756		£30,050
U	Wilners View	Pelsall	Brownhills/Pelsall/Rushall/ Shelfield	Carriageway Micro Asphalt	12/13	270		£1,280
U	Wrexham Avenue	Bentley	Bentley/Darlaston	Carriageway Micro Asphalt	12/13	2586		£12,080

Walsall Council

Walsall Council
Highway Maintenance Strategy 2012-15

Walsall Council
Highway Maintenance Strategy 2012-15

Contents

Page

Foreword

An efficient, well maintained highway network is an essential part of a healthy prosperous community. Not only does it allow us to travel safely and comfortably around our neighbourhood but it supports economic development, business growth and regeneration.

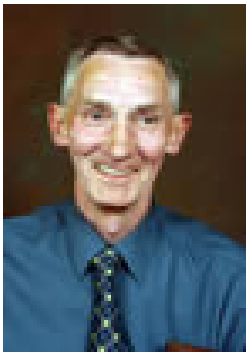
Be it walking, cycling, using public transport or accessing businesses, everybody will at some point rely on what is our most valuable asset.

This Highway Maintenance Strategy 20012-15 (strategy) is a direct replacement for the previous documents which saw a step change improvement in Walsall's highways maintenance service delivery. I am proud to be able to report that during the previous strategy period (09-12) Walsall successfully delivered many of its strategic aims investing in the order of £15million for planned maintenance schemes alone, resurfacing more than 46 miles (74km) of carriageways and 35 miles (57km) of footways. This in turn saw improvements in National Performance Indicators and most significantly a real improvement for road users in the borough.

During this period Walsall has been developing its Highway Asset Management Plan (HAMP). This has seen a new approach to managing the council's highway network. This strategy should be seen as the operational element which will further embed the principles of asset management and forge strong links with Walsall Council's goals, objectives, policies and aspirations. Effective management of this major asset contributes greatly to Walsall's Sustainable Community Strategy and our aim to provide accessible and sustainable places for business.

Now more than ever we have to make sure that our scarce resources are used as wisely as possible. The Council is embarking on a programme of smarter working which has been embraced in the Engineering and Transportation service. Following a LEAN review in Roadworks Management in 2011 we have fundamentally changed the way potholes are repaired, delivering substantial cashable savings to the Council and a better service to the residents and businesses' of Walsall. This process is ongoing so that we can continue to evolve and improve what we do across the rest of the service.

Our strategy provides a reference point for those seeking detailed information on certain aspects of our maintenance policies and procedures, as well as being a resource for officers involved in procurement, provision or administration of the highway maintenance service. It highlights the areas where we have introduced new initiatives; revisions to policy, enhanced service provision and possibly more importantly targets further areas for continual improvement with our private and public sector partners in this key service area.



Councillor Tom Ansell
Portfolio Holder for Transport and Environment

1: Introduction

1.1 Executive Summary

An efficient and well maintained Highway Network is one of the most important community assets. It supports economic growth and prosperity, helps keep people safe during their travels and contributes to the sense of pride in our neighbourhoods.

This strategy is important because it has been designed to direct and inform in detail service users and those involved in service delivery about the way in which Walsall Council intends to maintain its highway network over the next three years. Particular emphasis has been placed upon service delivery improvements and how strategic intentions will be realised through the asset management process.

This strategy should be read in conjunction with, or at least reference to, several other important publications such as current legislation, Walsall's Highway Asset Management Plan (HAMP) of which it forms a part and the national code of practice which is called Well-maintained Highways – Code of Practice for Highways Maintenance Management (the Code).

Walsall's HAMP provides an integrated framework for the delivery of highway maintenance services across the borough's road network and optimises resources for the management of the highway infrastructure.

The objective of the Highway Asset Management Plan is to change how we deliver highway services in a way that makes the process more intelligence led and customer responsive. An intelligence led approach will ultimately bring greater value for money and help achieve key council goals that can be found in strategies such as our Sustainable Community Strategy and Climate Change Strategy and Action Plan

The strategy indentifies the way in which this intelligence is utilised to deliver all highway services with specific emphasis upon maintenance. In line with all other highway authorities in the UK, our aim is to provide a service that, so far as possible and within financial constraints, meets the general objectives and requirements of the national code of practice.

It is therefore essential that the strategy makes regular reference to both the HAMP and the Code.

1.2 Glossary of Terms

Terms

The following terms are used in this strategy:

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

Asset valuation
The calculation of the current monetary value of an authority's assets. It excludes therefore any consideration of the value to the community in terms of the economic and social benefits of providing a means for people to travel in order to work, socialise and live.

Carriageway
A way constituting or comprised in a highway over which the public have a right of way for the passage of vehicles.

Footway
Part of a highway also comprising a carriageway that is set aside for the exclusive use of pedestrians often referred to as the pavement but see below (American – sidewalk).

Footpath
A highway over which the public have a right of way on foot only, not being a footway (as in a footpath across a field).

Levels of service
A statement setting out the performance of the asset in terms customers can readily understand. Levels of service typically cover condition, availability, capacity, amenity, safety, environmental impact and social equity. They cover the condition of the asset and non-condition related demand aspirations, i.e. a representation of how the asset is performing in terms of both delivering a service to customers and maintaining its physical integrity at an appropriate level.

Pavement
A paved surface and the layers below the paved surface of a highway or any part of a highway or any hardened surface intended for the passage of any category of traffic. Thus one can have a footway pavement or a carriageway pavement.

Prudential Code
A system of capital finance introduced in April 2004 that enables a local authority to borrow money for investment in infrastructure at its own discretion, subject to that authority complying with the recommendations of the CIPFA (Chartered Institute of Public Finance and Accountancy) Prudential Code.

Risk management
The formal assessment of risks with the potential to affect delivery of the service via a process of identification, assessment, ranking and control planning.

Service options
Options available for an asset or groups of asset in terms of alternative levels of service.

1.3 Abbreviations

The following abbreviations are used in this strategy:

AM	Asset Management
AMP	Asset Management Plan
AV	Asset Valuation
AP	Area Partnership
BVPI's	Best Value Performance Indicators
CAA	Comprehensive Area Assessment
CAMP	Corporate Asset Management Plan
CEN	Community Empowerment Network
CEPOG	Chief Engineers and Planning Officers Group
CIPFA	Chartered Institute of Public Finance and Accountancy
CIPPF	Corporate Integrated Planning & Performance Framework
CMT	Corporate Management Team
CPA	Comprehensive Performance Assessment
CRM	Customer Relations Management
CSS	County Surveyors Society
CSCS	Construction Skills Certification Scheme
CVI	Coarse Visual Inspection
DDA	Disability Discrimination Act
DfT	Department for Transport
DVI	Detailed Visual Inspection
FNS	Footway Network Survey
E.Gov	Electronic Government
GIS	Geographical Information Systems
GRC	Gross Replacement Cost
HAMP	Highway Asset Management Plan
HAUC	Highway Authorities and Utilities Committee
HIMG	Highway Infrastructure Managers Group
HMA	Highway Maintainability Audit
HMMS	Highways Maintenance Management systems
HMS	Highway Maintenance Strategy
IIMM	International Infrastructure Management Manual
KPI	Key Performance Indicators
KSI	Killed and Seriously Injured
ICT	Information Communications Technology
ITS	Intelligent Transport Systems
LoS	Level of Service
LPI	Local Performance Indicator
LTP	Local Transport Plan
NI	National Indicator
NRMCS	National Road Maintenance Condition Survey
NRSWA	New Roads and Street Works Act
TAG	Local Authority Technical Advisors Group
TRL	Transport Research Laboratory
RIEP	Regional Improvement and Efficiency Partnership
SCANNER	Surface Condition Assessment of the National Network of Roads
SCRIM	Sideways-force Coefficient Routine Investigation Machine
SMT	Service Measurement Tool
UKPMS	United Kingdom Pavement Management System
WGA	Whole of Government Accounts

1.4 Setting the strategy and Code in context

The Strategy recognises that the suggested recommendations within the Code are not mandatory requirements for highway authorities and that authorities may wish, in light of local circumstances to adopt policies, procedures and standards differing from those suggested in the Code.

This strategy identifies these differences and also the reasoning behind the decision for them in each case.

Figure 1 represents diagrammatically how the Code sits within the hierarchy of guidance for highways maintenance strategy and policy within the UK.

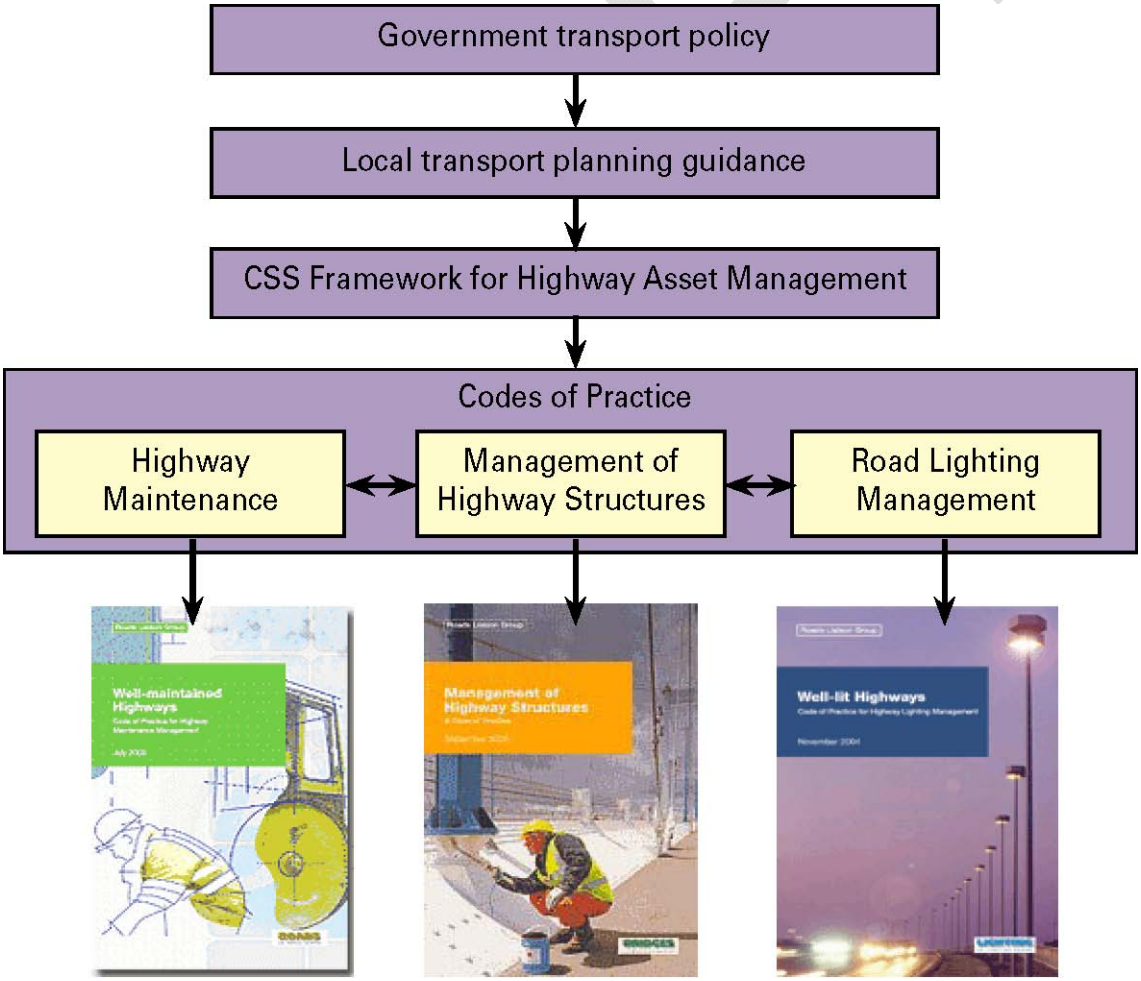


Figure 2 represents diagrammatically the entire highway asset management process (reproduced from IIMM)

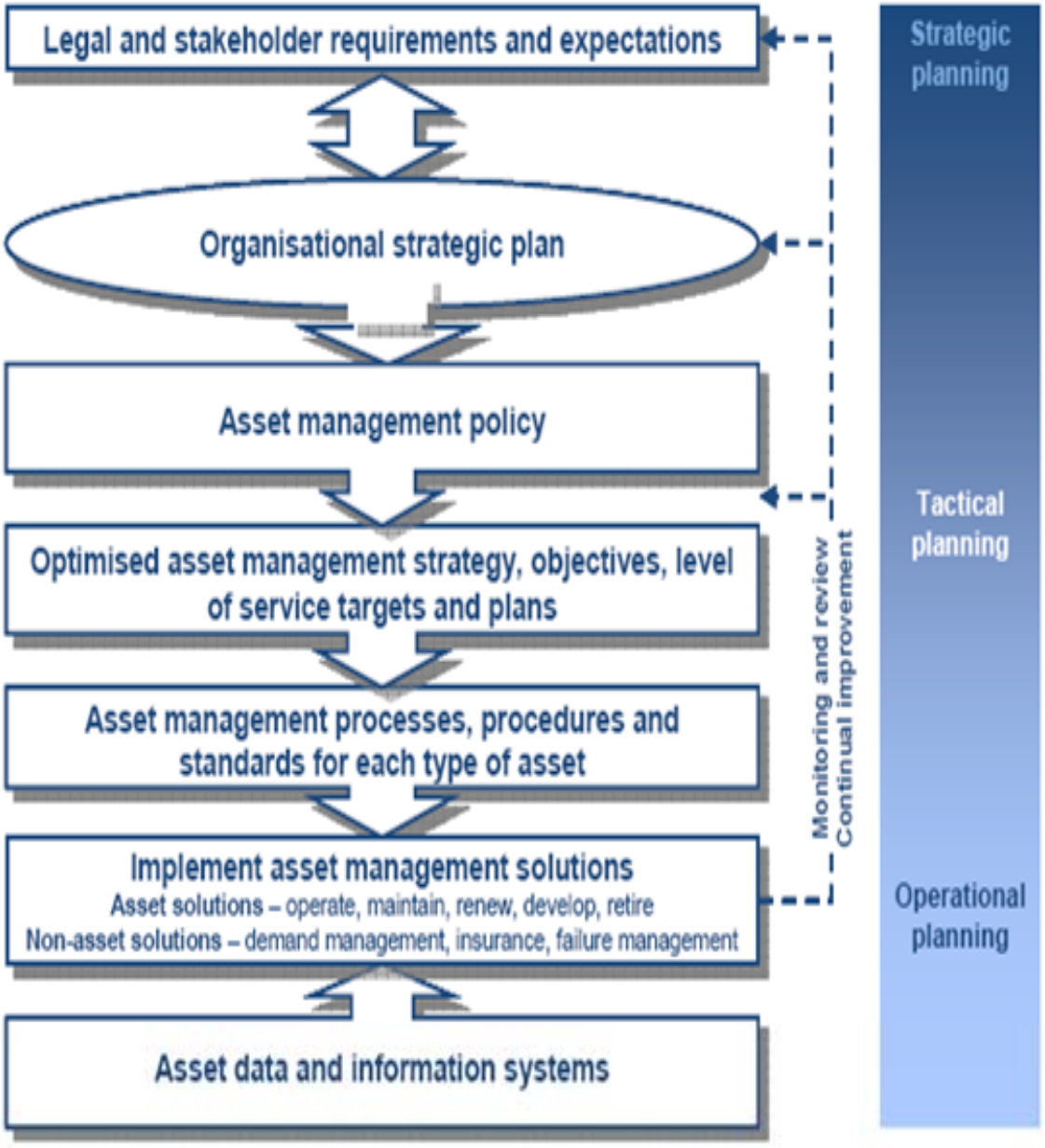


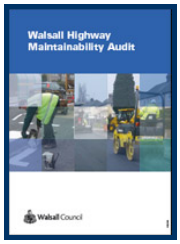
Figure 3 represents diagrammatically how Walsall's strategy sits both locally and corporately within Walsall Council

Regional

Corporate

Strategic

Tactical (examples)



1.5 Purpose of highway maintenance

The Code states that:

"The main purpose of highway maintenance is to maintain the highway network for the safe and convenient movement of people and goods. The core objectives of highway maintenance are to deliver a safe, serviceable and sustainable network, taking into account the need to contribute to the wider objectives of asset management, integrated transport, corporate policy and continuous improvement."

The policies and strategies in this document are aimed at managing the highway network in such a way as to maximise its contribution to the corporate plan and deliver our priorities. They will also contribute to the requirements of the West Midlands Local Transport Plan and ensure that Walsall Council meets all statutory and legal requirements as a highway authority.

Walsall Core objectives

Network Safety

- Complying with statutory obligations
- Meeting users' needs for safety

Network Serviceability

- Ensuring availability
- Achieving integrity
- Maintaining reliability
- Enhancing condition

Network Sustainability

- Minimising cost over time
- Maximising value to the community
- Maximising environmental contribution

Customer Service

- Informing and advising customers of the services provided
- Consulting customers to inform future strategy and introduce levels of service
- Making the service accessible to all

1.6 Scope of highway maintenance

Highway maintenance is a wide ranging service which includes the following activities:

- **Reactive maintenance** responding to safety inspections, complaints or emergencies
- **Routine maintenance** providing works or services to a regular consistent schedule generally for cleaning and landscape maintenance
- **Programmed maintenance** providing larger schemes primarily resurfacing, reconditioning or reconstruction to a planned schedule
- **Regulatory maintenance** inspecting and regulating the activities of others with much of this work being undertaken by the Traffic Manager under the statutory duty for network management
- **Winter service** providing salting and clearance of snow and ice
- **Emergency Response** providing a planned emergency response for adverse weather conditions and other emergencies

1.7 Related activities

There are a number of related functions which are not specifically dealt with in detail in this strategy, but which may on occasions affect or be affected by highway maintenance activity. They also have the potential for value to be added in Walsall through joint working, co-operation and co-ordination. These functions include:

- Asset management
- Network management, including utility company activities
- Highway development control
- Street cleansing, including integrated street management
- Public transport providers
- Town centre management, including use of public space
- Maintenance of surface water drainage systems

In Walsall through regular co-ordination meetings and the positive reinforcement of collaborative and partnership working all activities on the highway are carefully planned and programmed to maximise value for money and minimise disruption to road users.

2: Customer Service

2.1 Customer categories

Our customers are our citizens, visitors or anyone using the highway network, whether for business or pleasure.

Walsall's highway service customers have been defined in the following 12 primary categories:

1. **Pedestrians**
2. **Cyclists**
3. **Motorists**
4. **Motor cyclists**
5. **Bus operators**
6. **Bus passengers**
7. **Freight vehicle drivers and freight haulage operators**
8. **Taxi drivers and users**
9. **People with disabilities**
10. **Residents and landowners with property adjoining the highway**
11. **Equestrians**
12. **Emergency services**

Highways policy caters for the particular needs of each category of user. Maintenance policy and strategy caters for all established or predicted patterns of use and does not seek to influence them.

2.2 User and community consultation

The way we consult customers, highway users, communities and providers falls into the following categories:

2.2.1 Informing

- Details of all roadworks in or affecting the borough are on our web site

- Major schemes have information signs erected on site and where appropriate public meetings are held for residents
- Officers will make personal visits where necessary to households or businesses affected
- Press releases are issued for all major works
- Local media is informed and officers provide interviews as required
- Strategy and policy is produced in clear formats both online and in print for those without computer access. These are available upon request in other languages, large print, Braille and audio tape
- Every home or business directly affected by major maintenance works is informed by letter. The letter has details of the works, any diversions and clear directions on who to contact.
- Customer Service Standards are issued routinely

2.2.2 Consultation

At the centre of our approach are the six Walsall Area Partnerships, each covering a number of electoral wards. Their purpose is to resolve the issues of most concern to communities by bringing delivery agencies, such as the police, the Council, NHS Walsall and Walsall Housing Group together with local people, to properly understand the problem and then take appropriate action.
Each area partnership has the following key objectives:

- To involve and consult with local residents, businesses and partner organisations to agree an Area Community Plan for their area, which will inform local priority planning.
- To manage and monitor their Area Community Plan and to publish achievements
- To increase local community involvement in their area and to involve local people in improving the environment in which they live, work and play.

Elected members are at the centre of Area Partnerships and act as leaders in their communities and challenge the partners to make the way they operate more effective and efficient so that we all work smarter.

2.2.3 Participation and Empowerment

- In working with Area Partnerships the partner organisations agree to tasks they will undertake and are subsequently responsible for delivering them. Local people are also involved in developing solutions and work with the support of the delivery agencies. Area Partnerships work by asking people about their issues, listening to what they say, taking action and checking that this solves the problem.
- For major improvement schemes the views of stakeholders are actively sought prior to implementation
- Road safety and traffic schemes are mainly subject to consultation by pre-paid postage questionnaire and online through the website although exhibitions are sometimes used

2.3 Service Standards

Putting the customer at the heart of what we do

Service Standards have been established as part of the consultation, risk and asset management processes.

When you contact Walsall Council, we will endeavour to ensure you receive friendly, reliable and excellent customer care. Our standards apply to everyone working for us. This includes all staff and elected members, and all services we provide or that are provided for us.

All our Service Standards can be found on our website at:

www.walsall.gov.uk/index/council_and_democracy/servicestandards.htm

Central to our Service Standards are eight Customer Care Values.

We will:

1. Manage your request promptly

2. Provide good quality services

3. Be helpful, fair, honest, professional, courteous and consistent

4. Provide the relevant information that you need

5. Take ownership of your query

6. Be realistic in what we say we can or can't do

7. Treat your personal information as confidential and keep it secure

8. Listen to your comments - and learn from them

Customers can contact the Council by various means including:

In person at First Stop Shop, Civic Centre, Darwall Street, Walsall WS1 1DG

First Stop Shop Opening Hours

Day	Opening hours
Monday	8.45am – 5.15pm
Tuesday	8.45am – 5.15pm
Wednesday	9.30am – 5.15pm
Thursday	8.45am – 5.15pm
Friday	8.45am – 4.45pm
Saturday	Closed
Sunday	Closed

By phone Contact Centre 01922 653344 or 01922 650000 out of office hours

Online www.walsall.gov.uk

Library information points

Libraries staff have a wealth of information at their fingertips and can assist in offering customers access to Council services.

2.4 Service pledges

Chapter 4 of the Highway Asset Management Plan describes in detail the ethos behind levels of service and the mechanisms by which they will be established.

Levels of service are systematically being reviewed as part of the asset management process around a long-term lifecycle approach to discourage short-term objectives.

Seven service pledges have been established as follows:

1. All road and footway surfaces will be kept safe and serviceable having regard to established patterns of use

We will repair or make safe any dangerous defects in the highway (for example pot-holes, broken paving) within either 1hr, 24 hr, or 5 working days of it being reported to us or of coming to our attention through our own inspections.

We will operate a nationally recognised system for assessing the condition of every road in the borough at set intervals and prioritise our major repair works according to the results.

2. Winter Service – precautionary salting and snow clearing will operate between 1 November and 31 March each year

A Winter Service Operational Plan is published and distributed each year. The Winter Service Operational Plan 2011/12 can be found on our website at:

http://cms.walsall.gov.uk/index/transport_and_streets/highway_maintenance/winter_service.htm

The full winter service operates from the November to March the following year. A limited response to bad weather is also available in October and April.

3. Street lighting will be provided and maintained

Any street light or illuminated traffic sign reported to our private sector partner, Amey Infrastructure Services, as not working will be back in light within five working days unless the fault is in the electricity supply.

Any dangerous defect involving a knocked-down street light, illuminated traffic sign or potentially exposed live wires, will be attended to on site within one hour of the incident being reported. It will be made safe and repair work started.

4. We will attend emergencies

If requested to do so by the emergency services, any occurrence or accident that renders the highway unusable or unsafe will be attended to on site within an hour either by ourselves or our private sector partners Tarmac or Amey Infrastructure Services as appropriate.

5. We will manage roadworks

Walsall Council will use its powers to the full extent allowed under the New Roads and Street Works Act and Traffic Management Act to regulate, control and co-ordinate utilities' street works in order to minimise inconvenience to customers.

6. We will keep highways clean and attractive

Walsall Council aims to meet its obligations for litter removal under the Environmental Protection Act. Litter will be removed at varying intervals depending on how much and how quickly litter accumulates at particular locations.

Highway verges will be mown and trees and shrubs pruned or cut back as necessary to maintain a predetermined minimum standard. It will also ensure that growth does not unduly inconvenience or endanger road users.

Gully cleansing and street cleansing will take place at varying intervals in order to give a reasonable standard of cleanliness and ensure that storm water is drained off the highway in a reasonably short time.

An enhanced service standard will be provided for Walsall town centre and will be known as 'The Gold Standard'.

7. We will respond to customer complaints and comments

Your comments, compliments and complaints are important to us. We are committed to providing the best possible service to our customers.

We will investigate all complaints. Customers will receive an acknowledgement within five working days and a full response within fifteen working days.

3: Legal Framework

3.1 Duty of care

Most highway maintenance activity is based upon statutory powers and duties contained in legislation and precedents developed over time, as a result of claims and legal proceedings. The most important aspects of these statutory powers and duties are summarised in this chapter and developed in more detail, where appropriate, in subsequent chapters.

In recent years the issue of risk management in assessing the implications of investment decisions for asset management purposes and in determining appropriate responses to highway deficiencies has become increasingly important.

It is therefore essential that everyone involved in highway maintenance at Walsall Council, including elected members, has a clear understanding of their powers and duties, and the procedures used to manage and mitigate risk.

The Highways Act 1980 sets out Walsall's main duties as a highway authority and Section 41 imposes a specific duty to maintain highways maintainable at public expense.

Even in the absence of specific duties and powers, Walsall Council has a general duty of care to users and the community to maintain the highway in a condition fit for its purpose.

3.2 Highway definition

A highway is a way over which the public at large has the right to pass and re-pass along as many times as they wish without let or hindrance and without charge. A highway is, by definition, public.

3.3 Risk management

The management of highway maintenance, including establishing regimes for inspection, setting standards for condition, determining priorities and programmes for effective asset management, and procuring the service should all be undertaken against a clear and comprehensive understanding and assessment of the risk and consequences involved.

Walsall employs a corporate risk management process with risk assessments of all key policies, processes and operations based upon a risk register. This is included in the HAMP Chapter 7 in more detail and is referenced in subsequent chapters of this strategy.

3.4 Health and safety

The Health and Safety at Work Act 1974, together with the Construction, Design and Management Regulations 2007 set a requirement for highway, traffic and street authorities to carry out work in a safe manner and establish robust arrangements for the management of construction works.

In Walsall everyone involved in the planning, management and delivery of highway maintenance services will receive training and regular updating, as necessary, to meet the health and safety requirements of the service.

As part of sound Health and Safety Management, Engineering and Transportation produce and maintain a series of Local Arrangements which set out how we comply with the corporate Service Management Standards.

3.5 Management systems and records

The accuracy and quality of information and records are crucial to the effective management of the service and to the defence of claims against the Council for alleged failure to maintain.

3.6 Powers and duties

In addition to a general duty of care, there are a number of specific pieces of legislation which provide the basis for powers and duties relating to highway maintenance.

These include the following:

- Highways Act 1980
- Traffic Management Act 2004
- New Roads & Street Works Act 1991
- Transport Act 2000
- Road Traffic Regulation Act 1984
- Traffic Signs Regulations & General Directions 2002
- Railways and Transport Safety Act 2003
- Local Authorities (Transport Charges) Regulations 1998
- Countryside and Rights of Way Act 2000
- Environmental Protection Act 1990
- Noxious Weeds Act 1993
- Health and Safety at Work Act 1974
- Management of Health and Safety at Work Regulations 1999
- Construction (Design & Management) Regulations 2007
- Local Government Act 2003
- The Clean Neighbourhoods and Environment Act 2005
- Disability Discrimination Act 2010
- Equalities Act 2010

The most strategically significant legislation is summarised below:

Highways Act 1980

The Highways Act 1980 sets out the main duties of highway authorities in England and Wales. Section 41 imposes a duty to maintain highways maintainable at public expense, and almost all claims against the Council relating to highway functions arise from the alleged breach of this section.

The Act identifies all powers that highway authorities can exercise to undertake activities on or within the highway such as improvements, drainage, acquiring land, authorising skips, scaffolds etc.

Section 58 provides for a defence against litigation relating to alleged failure to maintain on grounds that the Council has taken such care as in all the circumstances was reasonably required to secure that the part of the highway in question was not dangerous to traffic.

Traffic Management Act 2004

The Traffic Management Act was introduced in 2004 to tackle congestion and disruption on the road network. The Act places a duty on local traffic authorities to ensure the expeditious movement of traffic on their road network and those networks of surrounding authorities. The Act gives authorities additional tools to better implement parking policies, moving traffic enforcement and the co-ordination of street works. The Act states that local traffic authorities shall make appropriate arrangements for performing their network management duty. These arrangements must include provision for the appointment of a traffic manager.

The Act introduced a number of provisions:

- Highways Agency Traffic Officers
- local authority duty for network management
- permits for work on the highway
- increased control of utility works
- increased civil enforcement of traffic offences

The most important feature of the Act is Section 16(1) which established a new duty for local traffic authorities ‘to manage their road network with a view to achieving, so far as may be reasonably practicable having regard to their other obligations, policies’ and the following objectives:

- securing the expeditious movement of traffic on the authority’s road network

- facilitating the expeditious movement of traffic on road networks for which another authority is the traffic authority’

Section 31 of the Act specifically states that the term 'traffic' includes pedestrians, so the duty requires the authority to consider all road users.

The Traffic Management Act 2004 has also strengthened the regulatory regime with regard to works of utilities and others within the highway including permit schemes, new conditions, and fixed penalty notices. The Act changes significantly the provisions of the New Roads and Street Works Act 1991, but much of the guidance remains valid.

Maintenance and management of Public Rights of Way

Walsall Council has a duty under the Wildlife and Countryside Act 1981 and the Highways Act 1980 to maintain and keep the definitive map and statement of Public Rights of Way (PROW) and to ensure that ways are adequately signposted, maintained and free from obstruction.

The Countryside and Rights of Way Act 2000 (Section 60) introduced a new duty for authorities to prepare Rights of Way Improvement Plans. The Walsall Borough Rights of Way Improvement Plan outlines the local importance of the public rights of way network in the borough, along with opportunities for improvements. It aims to provide an action plan which outlines weaknesses or problems in the current provision and provides a robust programme of improvements to be undertaken and can be found on our website at:

http://www.walsall.gov.uk/rights_of_way_improvement_plan.pdf

4: Network Inventory & Hierarchy

4.1 Walsall's highway network

The total road length maintained by Walsall is approximately 525 miles (841km), of which 43 miles are classified principal A roads, 25 miles are classified non-principal B roads, and seven miles are classified non-principal C roads.

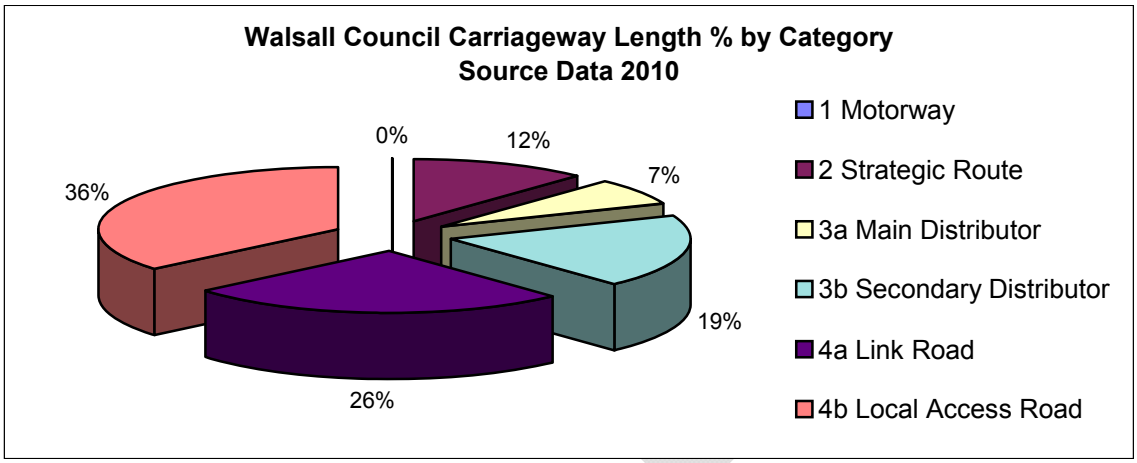


Figure 4 shows carriageway lengths by network category
The road length totals used here are based on the measured length held on the UKPMS database.

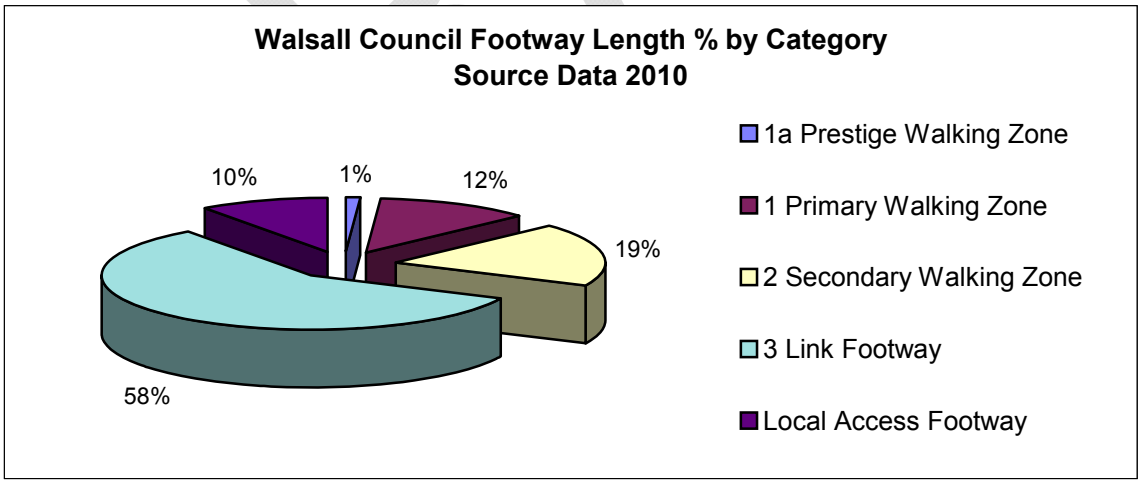


Figure 5 shows footway lengths by network category
The above footway lengths are taken from the UKPMS database and have been measured as a road length and not as an individual footway length.

4.2 Inventory data

Creating and keeping an up-to-date and accurate inventory of Walsall Council's highway network is an essential pre-requisite for Walsall's highway maintenance strategy and asset management plan. Walsall does not rely upon a single computerised Highways Maintenance Management System (HMMS) but has an integrated suite of specialist applications, models and databases which all form component parts of the Walsall HMMS.

Walsall's highway asset inventory is the foundation upon which its asset management processes are built. The key objective is to make high quality inventory and condition data readily available so that a consistent management approach is achieved on an informed basis to optimise resource allocation.

The ability to analyse inventory data in combination with condition data, and cross reference this with other information such as skidding resistance or accident records is crucial for targeting high risk sites. The output provides important information upon which priorities and critical decisions can be based. It is then possible to consolidate the use of more advanced asset management processes such as optimisation and risk management, which rely on the existence of comprehensive, accurate and up-to-date asset inventories.

4.3 Data review

Confirmation of the quality, reliability and completeness of existing asset data sets is essential. The level of confidence in any data has to be established before embarking on the implementation of any asset management processes. A review of current inventory practices has established the specific data held for Walsall's highway assets and the review of this data has determined:

- Where the data is recorded
- The level of detail that is captured
- The format of data capture, hard copy or electronic
- How the data is validated

The level of information recorded against each asset group has been assessed to determine that it is meaningful and has specific regard for the use and purpose of the data. Typical uses include:

- To provide information on the condition of the asset
- To enable a long term programme to be established
- To capture faults or damage in a way that can be analysed
- To report on relevant performance indicators
- To assist in the management of contractual arrangements
- To enable the value of the asset to be calculated

4.4 Asset groups

Highway asset types and category have been collectively determined from joint working between the West Midlands authorities. This has been achieved through a series of workshops guided by external consultants having extensive experience in highway asset management. There has also been reference to CSS and CIPFA guidance documents. The asset categories and their component elements are shown below.

Level 1 : ASSET TYPE	Level 2 : ASSET GROUP	UNIT OF MEASURE	Level 3 : VALUATION COMPONENTS
Carriageway	Flexible pavements Flexible composite pavements Rigid concrete pavements Rigid composite pavements	area m2	Includes for all categories: pavement construction layers other paved surfaces, central reservation, roundabout, lay-by, traffic island, earthworks, retaining walls <1.35m, traffic calming, kerbing, markings and road studs, highway drainage, boundary fences, hard strip, verges.
Footways & cycletracks (attached to the road or segregated)	Footways Pedestrian areas Footpaths Cycle tracks	area m2	Includes for all categories: construction layers and other surface types, eg block paving.
Structures	Bridges and subways (span>1.5m) Culverts (span > 0.9m) Retaining walls (height > 1.35m) Signs gantries, cantilever signs Tunnels (encl length > 150m) Structural earthworks Lighting columns (height > 20m)	deck area m2 internal surface area m2 retained area m2 span length m length m length m	Includes for all categories: the entire structure. Small water carrying structures are considered as highway drainage.
Highway lighting	Lighting columns (height < 20m) Wall mounted lighting units Heritage columns Illuminated bollards Illuminated traffic signs	number	The entire item including: column and foundations brackets, luminaires control gear, internal wiring, cabling within ownership.
Street furniture	Transport Highway Street scene	number	Seating, litter bins, bollards, marker posts, street nameplates, traffic signs, safety fences, Pedestrian barriers, grit bins, weather stations
Traffic management systems	Traffic signals Pedestrian signals Zebra crossings In – station Information systems Safety cameras	number number number number number number	different types different types different types complete installation variable message signs
Land	Freehold land Rights land	area - hectares	Features on land not taken into account in valuation

Table 1 Asset categories and their component elements

4.5 Current data management practices

For certain asset groups such as carriageways and street lighting the current data management processes are considered to be good. But in contrast there are categories such as highway drainage where limited data exists. We have prioritised these areas for the collection of asset inventory data.

There are a number of instances where good practice exists. It has to be acknowledged that a consistent data management regime does not comprehensively exist throughout the council. In such instances there are no quality standards in place for the completeness and reliability of all data sets and no formal data validation process or documented procedures exist.

The low level of confidence surrounding certain asset groups means that the use of information needs to be tempered with the knowledge that its use can bring about misleading results. The ability to undertake better analysis of needs and consequently plan works in a more proactive manner is currently constrained by the inconsistent quality and completeness of asset data.

4.6 Proposed data management practices

It is generally accepted that to collect every piece of asset data is neither practical nor financially sensible. The review of Walsall's current data inventories provided a gap analysis that enabled us to target the collection of the more critical items of data. A prioritised programme of data collection is being implemented and is producing higher levels of confidence in those data sets identified as either mandatory or having a high level of importance. The data collection exercises will provide a base set of reliable asset data upon which initial need projections can be based.

To ensure that the maintenance of data is kept in manageable proportions, data managers are being assigned with responsibility for the completeness, integrity and availability of specific elements of major data sets. It is vitally important that before any inventory system is introduced, the mechanism by which it is managed and updated on a day-to-day basis is in place with fail-safe processes that will prevent such systems being neglected in the event of staff changes or departmental restructures.

The inventory management procedures for each asset group will typically include the following:

- Named data managers
- Procedures for updating the asset inventory
- Procedures for inventory verification and validation

4.7 Walsall's network hierarchy

The Code describes the hierarchy of carriageways as follows:

Roads

1 Motorway: Limited access motorway regulations apply. Routes for fast-moving long distance traffic. Fully grade separated and restrictions on use.

2 Strategic Route: Trunk and some Principal 'A' roads between primary destinations. Routes for fast-moving long distance traffic with little frontage access or pedestrian traffic. Speed limits are usually in excess of 40 mph and there are few junctions. Pedestrian crossings are either segregated or controlled and parked vehicles are generally prohibited.

3a Main Distributor: Major Urban Network and Inter–Primary Links. Short-medium distance traffic. Routes between Strategic Routes and linking urban centres to the strategic network with limited frontage access. In urban areas speed limits are usually 40 mph or less, parking is restricted at peak times and there are positive measures for pedestrian safety.

3b Secondary Distributor: Classified Roads (B and C class) and unclassified urban bus routes carrying local traffic with frontage access and frequent junctions. In rural areas these roads link the larger villages and HGV generators to the Strategic and Main Distributor Network. In built up areas these roads have 30mph speed limits and very high levels of pedestrian activity with some crossing facilities including zebra crossings. On-street parking is generally unrestricted except for safety reasons.

4a Link Road: Roads linking between the Main and Secondary Distributor Network with frontage access and frequent junctions. In rural areas these roads link the smaller villages to the distributor roads. They are of varying widths and not always capable of carrying two way traffic. In urban areas they are residential or industrial inter–connecting roads with 30 mph speed limits, random pedestrian movements and unrestricted parking.

4b Local Access: Roads serving limited numbers of properties carrying only access traffic. In rural areas these roads serve small settlements and provide access to individual properties and land. They are often only single lane width and unsuitable for HGV's. In urban areas they are often residential loop roads or cul-de-sacs.

Walsall's carriageways have been categorised in accordance with the Code descriptions and this information is held within Walsall's UKPMS database. This hierarchy is continuously and routinely updated and reviewed during condition

surveys by independent highway survey consultants whilst carrying out Coarse Visual Inspections (CVIs) or Detailed Visual Inspections (DVIs).

Footways

The Code recommends five categories for footways:

1a Prestige Walking Zones: Very busy areas of towns and cities with high public space and streetscene contribution.

1 Primary Walking Zones: Busy urban shopping and business areas and main pedestrian routes.

2 Secondary Walking Routes: Medium usage routes through local areas feeding into primary routes, local shopping centres etc.

3 Link Footways: Linking local access footways through urban areas and busy rural footways.

4 Local Access Footways: Footways associated with low usage, short estate roads to the main routes and cul-de-sacs.

Walsall's footways have been categorised in accordance with the Code descriptions and this information is held within Walsall's United Kingdom Pavement Management System (UKPMS) database.

Cycle routes

The Code suggests that cycle routes are categorised **A, B or C**, according to the following:

A Cycle lane forming part of the carriageway, commonly 1.5 metre wide strip adjacent to nearside kerb. Cycle gaps at road closure point with exception for cycle access.

B Cycle track, a route for cyclists not contiguous with the public footway or carriageway. Shared cycle/pedestrian paths, either segregated by a white line or other physical segregation or unsegregated.

C Cycle trails, leisure routes through open spaces. These may not always be the responsibility of the highway authority.

Engineering and Transportation Services' Transportation & Forward Planning Group publish a map of designated cycle routes. The current map can be found on our website at:

www.walsall.gov.uk/cycle_map.jpg

Walsall Cycling Strategy published in April 2003 can also be found on our website at:

http://cms.walsall.gov.uk/index/transport_and_streets/cycling.htm

At Walsall we have developed our own categorisation system for cycle routes based primarily on location and use which is an exception to the Code. They are shown as such on the map in the following manner:

A National Cycle Route
B Cycle lane and safer route to school
C On Road Cycle lane
D Cycle route on canal towpaths

Public Rights of Way (PROW)

During 2009 the Council surveyed its Public Rights of Way assets to create a spatially defined network that could be managed through GIS. The data collected includes section lengths and surface types together with an inventory of street furniture and features such as fences and hedgerows. This data is further backed up with condition data and photographic images. Condition can be mapped out thematically which allows officers to better target funding priorities with regard to the maintenance of surfaces, hedges, fences and street furniture.

This new system is further complemented with an electronic document management system that holds data specific to each Right of Way. The data is readily accessible via hyperlinks that are set up in GIS and has proved to be a more efficient way of storing and managing data.

The GIS system enables PROW officers to deal with enquiries promptly since both the mapping and data is readily at hand. Future plans include making some of this data available across the Council and to ultimately make it available externally via the Council's web site.

Public Rights of Way are categorised as Definitive and Non Definitive, with Definitive being specifically recorded on the Definitive Map & Statement and Non Definitive being taken from a range of other historical sources.

5.0 Inspections, Assessment & Recording

5.1 Importance of inspection, assessment and recording regime

The establishment of an effective regime of inspection, assessment and recording is a crucial component of highway maintenance. The regime, including frequency of inspection, defects to be recorded and responses should be defined following an assessment of the risks associated with the potential circumstances of the network condition.

The inspection, assessment and recording provide the basic information to address the key objectives of Walsall's highway maintenance strategy which are:

- Network safety
- Network serviceability
- Network sustainability

5.2 Categories of inspection

5.2.1 Safety inspections

They are carried out by our own Roadworks Management Group highways inspectors and have been developed in conjunction with risk assessment including third party liability claims and conform to the Code of Practice for Highway Maintenance Management.

The purpose of safety inspections is to identify all defects that are likely to create danger or serious inconvenience to users of the network. Such defects include those that will require urgent attention as well as those where locations and sizes are such that longer periods of response would be acceptable. The risk of danger is assessed on site and the defect identified as a Category 1 or 2, with an appropriate priority response.

General safety inspections will include carriageway and footway running surfaces, kerbs and verges. They will also include footpaths, road markings, non-illuminated bollards, safety fencing, benches, planters, walls and miscellaneous items of street furniture not subject to regular condition or routine service inspections.

Walsall currently undertakes safety inspections to meet with **Table 2**, Safety Inspection Frequency, (Code of Practice for Highway Maintenance Management). Walsall currently undertakes three levels of inspection for the network, with the 6 town centre locations, strategic routes, main distributor and secondary distributor routes inspected monthly and all other locations inspected

either quarterly or annually. This was changed and implemented following a LEAN process improvement review and reorganisation during April 2011.

The district centre area maps are included in **Figures 6 to 11** for Aldridge, Bloxwich, Brownhills, Darlaston, Walsall and Willenhall.

The Code defines defects in two categories, which correspond with those adopted in England by the Highways Agency (HA) in respect of motorways and trunk roads.

- **Category 1** – Those that require prompt attention because they represent an immediate or imminent hazard or because there is a risk of short-term structural deterioration
- **Category 2** – All other defects

Walked Safety Inspections distinguish between these two categories and based upon a risk assessment, see **Table 3**, will determine the nature and speed of response.

Table 2 - Safety Inspection frequencies

Feature	Code Description	Code Category	Code Frequency	Walsall Description	Walsall Category	Walsall Frequency 2005	Walsall Frequency 1 June 2007 onwards
Roads	Strategic Route	2	1 month	As Code	2	Dependent upon associated footway category or if no footway then Code frequency is used	Town Centre areas as Figures 9 to 14 1 month All other 6 months
	Main Distributor	3(a)	1 month	As Code	3(a)		
	Secondary Distributor	3(b)	1 month	As Code	3(b)		
	Link Road	4(a)	3 months	As Code	4(a)		
	Local Access	4(b)	1 year	As Code	4(b)		
Footways	Prestige Area	1(a)	1 month	As Code	1(a)	1 week	Town Centre areas as Figures 9 to 14 1 month All other 6 months
	Primary Walking Route	1	1 month	As Code	1	1 month	
	Secondary Walking Route	2	3 months	As Code	2	3 months	
	Link Footway	3	6 months	As Code	3	6 months	
	Local Access Footway	4	1 year	As Code	4	1 year	

Cycle Routes	Part of carriageway	A	As for roads	National Cycle Route	1	6 months where Walsall has maintenance responsibility or as for the roads it is associated with	Town Centre areas as Figures 6 to 11 1 month All other As previous
	Remote from carriageway	B	6 months	Cycle lane and safer routes to school	2	Ad hoc as dictated by complaint or enquiry	
	Cycle Trails	C	1 year	On road cycle lane	3	As for roads associated with	
				Cycle route on canal towpaths	4	British Waterways responsibility	British Waterways responsibility

Figure 6 Aldridge District Centre

Figure 7 Bloxwich District Centre

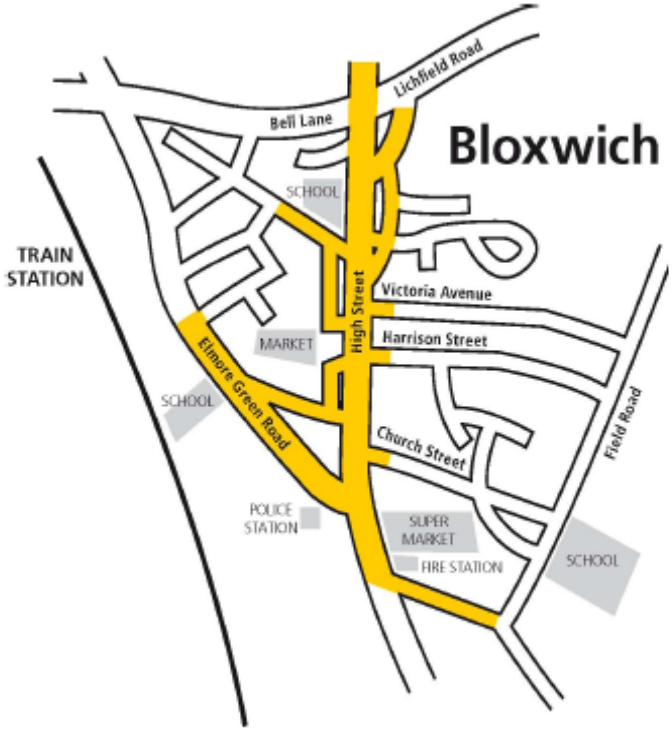


Figure 8 Brownhills District Centre

Figure 9 Darlaston District Centre

Figure 10 Walsall Town Centre

Figure 11 Willenhall District Centre

Walsall has four levels of response to defects identified based upon individual risk assessment and the category type.

The levels of response are as follows:

- **Category 1 High Risk - Within 1 hour, where there is danger to life or limb**
- **Category 1 High Risk - Within 24 hours, temporary repair within traffic sensitive areas i.e. major junctions**
- **Category 2 Medium Risk – Within 5 working days – defect criteria meets with intervention level**
- **Category 2 Low Risk – 6 month - programmed works**

Typically Category 1 high risk defects may be corrected or made safe within 1 hour or 24 hours of the inspection, if reasonably practicable. In this context, making safe may constitute displaying warning notices, coning off or fencing off to protect the public from the defect.

Where appropriate and subject to financial restraint, the target is for permanent repairs to be carried out within a 6 month period.

Whether any deficiencies should be dealt with as Category 1 will also depend upon:

- The depth, surface area, or other extent of the defect

- The location of the defect relative to highway features such as junctions and bends

- The location of the defect relative to the positioning of users, especially vulnerable users, such as in traffic lanes or wheel tracks

- The nature and extent of interaction with other defects

- Forecast weather conditions, especially the potential for freezing of surface water

Category 2 medium and low risk defects should, if possible and safe to do so, be repaired within planned programmes of work, with priority depending on the degree of deficiency, traffic and site characteristics. These priorities should be considered, together with access requirements, other works upon the road network, traffic levels, and the need to minimise traffic management, in compiling the programmes of work.

The Walked Safety Inspection Manual (the manual) provides detailed guidance to inspectors. The manual provides all necessary information required to undertake walked safety inspections and how to carry out associated risk assessments, the way each type of defect should be recorded, intervention levels and also recommends the typical action that should be taken in each case. Each inspector has received comprehensive training as part of their Employee Performance Appraisal programme.

Walsall's policy is that pothole depths of greater than 40mm in carriageways or 20mm in footways and cycleways are considered to require particularly careful consideration.

We have recently introduced hand held devices which allow inspectors to record inspections and order remedial work whilst on site. This process was developed as part of the LEAN process carried out and is designed specifically to increase efficiency.

Exception to the Code:

The Code provides the following suggested items for inspection when carrying out safety inspections:

- Debris, spillage or contamination on running surfaces or hard shoulders
- Displaced road studs lying on running surface
- Overhead wires damaged or unstable
- Damaged and exposed electrical wiring
- Embankments and cuttings apparently unstable
- Trees with loose branches or apparently unstable
- Signs, signals or lighting damaged, defective, missing or unstable

- Road markings and studs missing, misleading or badly worn
- Signs, signals or lighting dirty or obscured
- Sight-lines obscured by trees, unauthorised signs and other obstructions
- Safety fencing, parapet fencing, handrail and other barriers missing or defective
- Abrupt level differences in the running surface
- Potholes, cracks or gaps in the running surface
- Crowning, depression and rutting in the running surface
- Edge deterioration of the running surface
- Kerbing, edging or channel defects
- Rocking or otherwise unstable footpath or cycle route surfaces
- Apparently slippery running surface
- Ironwork (gully lids, manholes etc) broken or missing
- Gullies, drains or grips blocked or defective
- Standing water, water discharging onto or overflowing across the running surface

The council is concerned over the potential for legal action brought by road users in respect of carriageway pot-holes, damaged footway surfaces, broken kerbs and the like. These deficiencies are therefore recorded as a matter of course. Some of the other defects of the type listed above are only recorded in extreme and obvious cases. The manual clearly identifies the items which are to be inspected, assessed and what intervention levels they are to be assessed against.

i. No defects identified
ii. Minor areas of patching required up to 1m²
iii. Minor patching required less than 20% of the surface area
iv. Minor patching required greater than 20% of the surface area
v. Requires resurfacing of whole surface area

The Manual also details how the risk management process is applied to inspections and **Table 3** shows the risk matrix and response adopted by Walsall Council.

Service inspections

These mainly comprise of detailed inspections tailored to particular highway elements to ensure that they meet with the requirements for serviceability. This includes inspections for regulatory purposes including New Roads and Street Works Act 1991 (NRSWA) and are intended to maintain network availability and reliability. These inspections are carried out by the Roadworks Management Group highway inspectors.

Under section 72 of NRSWA the street authority is empowered to carry out investigatory works to check on whether or not an undertaker has complied with the duties placed on it in respect of reinstatement of the street.

Two distinct inspection procedures are specifically provided for in the Act:-

Sample Inspections: This will involve inspections of a structured random sample of various stages of excavation and reinstatement, and after reinstatement

Defect Inspections: A procedure for dealing with individual reinstatements which do not comply with the reinstatement specification. This will normally allow for joint inspection by the street authority and undertaker before remedial action is taken

5.2.2 Inspections relating to street lighting

We have night time patrols to detect defects and test street lighting apparatus and the like. These specialist safety inspections are covered by Walsall Council's Private Finance Initiative contract with Amey LG Ltd. Please see Chapter 9 on Public Lighting.

Table 3 Walked Safety Inspection Risk Matrix & Response

Probability ↓ → Impact	Very Low (1)	Low (2)	Medium (3)	High (4)
Negligible (1)	1	2	3	4
Low (2)	2	4	6	8
Noticeable (3)	3	6	9	12
High (4)	4	8	12	16

Category 2 Low Risk Response	Category 2 Medium Risk	Category 2 High Risk	Category 1
1-3 No immediate action	4-6 Within 6 Months	8-12 Within 24 Hours Temporary or 5 days permanent	16 Within 1 Hour

5.2.3 Inspections relating to structures

Bridge inspection frequencies: Basic bridge inspections are carried out on an approximate two year cycle although some structures require more frequent inspections depending on accessibility, construction or condition.

In addition, and where appropriate a Principal Inspection is undertaken on all major structures at six-year intervals. Additional Special Inspections are also undertaken as needed following crash damage or flooding.

Inspections are carried out by qualified technicians or engineers as appropriate. A Principal Inspection is one that requires close inspection of all parts of a structure, which often means lane closures, and the use of special access equipment.

5.2.4 Inspections relating to skidding resistance

Since 2005 Walsall, along with other West Midlands councils, uses Grip Tester to measure skidding resistance of roads. The survey is currently jointly procured for the West Midlands by Dudley Metropolitan Borough Council.

The frequency of inspection in Walsall is annually and the coverage is the principal road network (A roads) only.

The data generated is plotted geographically in conjunction with accident statistics to inform Walsall's resurfacing programme. The Skid Prioritisation System (SPS) as it has become known was developed by Walsall in partnership with the West Midlands and Marsh Associates and has received national recognition from Ordnance Survey.

5.2.5 Service inspections

These are more detailed discretionary inspections of particular highway elements to ensure they meet the requirements for serviceability usually defined in a highway authority HAMP. Walsall is currently reviewing levels of service as part of the asset management process and greater detail can be found in the HAMP at:

http://cms.walsall.gov.uk/index/transport_and_streets/highway_maintenance/highway_asset_management.htm

Chapter 4 Levels of Service provides information on Walsall Council's proposed Level of Service Framework and identifies current methods for measuring performance. When Levels of Service have been identified it is proposed that a more extensive service inspection regime will be established in due course.
The key requirements affecting the development of levels of service are:

- Legislative requirements
- Walsall Council's mission, policy and objectives
- Customer expectations
- Best practice guidelines
- Affordability
- Availability of resources

A number of service inspections are carried out by suitably qualified staff.

They come under the following categories:

a. Utilities' openings and reinstatements governed by the New Roads and Street Works Act. If the utilities were to fail to comply with the Codes of Practice relating to the Act there would be a detrimental effect to safety, serviceability and sustainability. The Roadworks Management Group is responsible for ensuring the utilities comply with all requirements.

b. Carriageways, footways and cycle routes – carried out in response to customer queries or reports from Roadworks Management Group that standards of reliability, quality, comfort or ease of use of the network are not being maintained at specific locations. In severe cases consideration will be given to bringing forward major maintenance works to deal with the problem where temporary or reactive repairs are impossible or impracticable. In respect of each service inspection in this category an Engineering Programme Inspection (EPI) is completed and proposed action documented. This is the responsibility of the Highways Maintenance Group in Engineering and Transportation.

Exception to the Code

It is accepted that there are currently insufficient resources to deal with certain service inspections on a regular basis other than in the above two categories. Although it is possible to react to incidents or complaints with appropriate action, the Code makes recommendations for frequency and detail of service inspections for the following elements:

i. Highway drainage systems
ii. Embankments and cuttings
iii. Landscaped areas and trees
iv. Safety fencing and barriers
v. Traffic signs and bollards
vi. Road markings and studs – should be undertaken annually, preferably in the Autumn
vii. Traffic signals, pedestrian and cycle crossings
viii. Service inspections for network integrity

5.2.6 Structural condition surveys

The main purpose of these surveys is to collect data so we can effectively prioritise planned maintenance work. It is essential to build up a comprehensive picture of the condition of the asset. Priorities, timing and appropriate treatments can then be selected by using UKPMS to give optimum results in terms of maintenance costs against preservation of asset value.

Surveys are organised by the Highways Maintenance Group.

The methods employed at a network level are:

- Coarse Visual Surveys (CVIs) and Detailed Visual Inspections (DVIs) are undertaken by independent highway survey consultants on behalf of Walsall under a joint contract involving the other West Midlands councils. In all cases measurements and analysis are carried out to the national rules and parameters for UKPMS. Walsall Council's policy is to use MARCHpms (Yotta DCL) software for this purpose. This system is accredited for UKPMS systems. These surveys are also used to produce Local Indicators (LI) information.

- Skidding resistance - Skidding inspections are carried out using the Grip Tester method. The survey has been procured by Dudley MBC on behalf of Walsall and the other West Midlands councils. The survey uses a machine that provides a continuous record of resistance to skidding on wet roads. The data collected is used to produce a geographic report identifying sections of road below the required standard. The skidding resistance on carriageways is dependent on the physical features. This survey system commenced in 2005 and has been carried out annually on the principal road network. Results from Grip Tester surveys are used in combination with results from other surveys to determine remedial works on the highway. Hence, short lengths of sub standard skid resistance along an otherwise adequate road may remain untreated until that road requires significant repair/reinstatement.

- Comprehensive machine surveys – SCANNER (Surface Condition Assessment of the National Network of Roads) using specialised machinery. These surveys are also used to produce NIs for the classified network.

The coverage of condition surveys varies year on year but **Table 4** indicates the survey coverage planned for 2012.

Walsall also employs site specific or project level investigation using:

- Falling Weight Deflectometer (FWD) which is a non-destructive testing device that is used to complete structural testing for pavement rehabilitation projects, research, and pavement structure failure detection.

It is used for conventional and deep strength flexible, composite and rigid pavement structures. The FWD is a device capable of applying dynamic loads to the pavement surface, similar in magnitude and duration to that of a single heavy moving wheel load. The deflection data collected is then used to determine pavement design.

- Ground Penetrating Radar (GPR) which provides a non-intrusive and non-destructive method of surveying the construction layers of road pavements and service apparatus locations.

Table 4 Planned Condition Survey Coverage 2012

Coverage→ Survey Type↓	Principal Roads	B Roads	C Roads	Unclassified
SCANNER	50%	50%	100%	0%
FNS	Site specific	Site specific	Site specific	Site specific
DVI	Site specific	Site specific	Site specific	Site specific
CVI	0%	0%	0%	25%
GPR	Site specific	Site specific	Site specific	Site specific
Grip Tester	100%	0%	0%	0%

SCANNER Survey Vehicle

Quality and reliability of data

All surveys must be carried out in accordance with current guidance documentation, including, but not limited to, UKPMS Visual Survey Manual and the relevant sections of the Design Manual for Roads and Bridges and Transportation. Machine-based surveys must be carried out using accredited machines.

6.0 Condition Standards & Investigatory Levels

6.1 Introduction

Standards for the management of all the elements that contribute to the highway maintenance service are developed through risk assessment and take into consideration user needs in order to meet the core requirements of safety, service and sustainability. They define the nature and extent of works that should be undertaken in particular circumstances of maintenance need and the priority level assigned to each response.

It is acknowledged that our limited financial resources mean that we cannot always achieve this level of service. Officers must therefore treat the following as guidance rather than absolute standards to be achieved in all circumstances.

As indicated in Chapter 1 each aspect of the maintenance regime in Walsall is founded on the core objects of:

Network safety

- Complying with statutory obligations
- Meeting users' needs for safety

Network serviceability

- Ensuring availability
- Achieving integrity
- Maintaining reliability
- Enhancing condition

Network sustainability

- Minimising cost over time
- Maximising value to the community
- Maximising environmental contribution

Customer service

- Informing and advising customers of the services provided
- Consulting customers to inform future strategy and introduce levels of service
- Making the service accessible to all

6.2 Types of standard or investigation level

The highway maintenance regime incorporates the following standards:

- Operational
- Management of programming and priorities
- Materials and treatments
- Management of procurement and service delivery
- Management of finance

The last four of these are developed individually in greater depth in subsequent chapters.

The Code recommends that standards are adopted for the following areas or elements:

a) Carriageways
b) Footways
c) Public Rights of Way
d) Cycle routes
e) Highway drainage systems
f) Embankments and cutting
g) Landscaped areas and trees
h) Fences and barriers
i) Traffic signs and bollards
j) Road markings and studs
k) Traffic signals, pedestrian and cycle crossings
l) Regulatory functions
m) User and community response
n) Co-ordination of standards

Table 5 Elements contribution to each core objective

Note: All items will contribute to customer service

Core Objective→ Inventory Item↓	Network Safety	Network Serviceability	Network Sustainability
Carriageways	Nature, extent and location of surface and edge defect and surface skidding resistance.	Nature and extent of surface defects and ride quality of the surface.	Surface noise attenuation characteristics. Nature and extent of surface defects and carriageway deflection.
Footways	Nature, extent and location of surface, kerb and edging defects.	Nature and extent of surface defects. Extent of encroachment and weed growth. The slipperiness and quality of the surface. Integrity of the network.	Convenience and ease of use. Nature, extent and location of surface defects. Extent of damage by over-running and parking.
PROWs	Nature, extent and location of surface, kerb and edging defects.	Nature and extent of surface defects. Extent of encroachment and weed growth. The slipperiness and quality of the surface. Integrity of the network.	Convenience and ease of use. Nature, extent and location of surface defects. Extent of damage by over-running and parking.
Cycle routes	Nature, extent and location of surface, kerb and edging defects.	Nature and extent of surface defects. Extent of encroachment and weed growth. The slipperiness and quality of the surface. Integrity of the network.	Convenience and ease of use. Nature, extent and location of surface defects. Extent of damage by over-running and parking.

Table 5 Elements contribution to each core objective (Continued)

Note: All items will contribute to customer service

Core Objective→ Inventory Item↓	Network Safety	Network Serviceability	Network Sustainability
Highway drainage systems	Accumulation of water on carriageways, footways and cycle routes.	Accumulation of water on carriageways, footways and cycle routes.	Polluted effluent from clearing of highway drainage should not be directed into watercourses. Authorities have a duty to prevent nuisance from adjoining landowners by flooding and are required to work with others in the wider community to minimise the risk of flooding. Inadequate drainage of the highway structure will reduce effective life and increase maintenance liability.
Embankments and cutting	Risk of loose material falling to injure users or damage facility.	Risk of damage or service interruption.	Damage or loss of habitat. Interruption or pollution of watercourse. Extent of damage and reduced life.

Table 5 Elements contribution to each core objective (Continued)

Note: All items will contribute to customer service

Core Objective→ Inventory Item↓	Network Safety	Network Serviceability	Network Sustainability
Landscaped areas and trees	Obstruction to user visibility and legibility of traffic signs. Falling branches from trees. Leaf fall from trees causing slippery surfaces. Root growth affecting surface regulatory.	Potential for service interruption. Quality of user experience.	Landscape conservation. Mitigation of climate change effects. Support of habitat and biodiversity. Problems of root growth for surface, structure and highway drainage.
Fences and barriers	Integrity and location of safety fencing for vehicles and pedestrians.	Risk of livestock disrupting traffic.	Appearance and condition of traffic.
Traffic signs and bollards	Identification of risk to users. Separation of potential traffic conflicts.	Contributes to ease of use and network integrity.	Support of sustainable transport mode. Contribution to local economy. Heavy traffic routing can optimise maintenance.
Road markings and studs	Route delineation in darkness and poor weather. Potential for damage and injury if loose.	Ease of use in darkness and bad weather.	Support of sustainable transport mode. Edge delineation to reduce edge damage. Movement of wheel tracking to reduce localised damage.

Table 5 Elements contribution to each core objective (Continued)

Note: All items will contribute to customer service

Core Objective→ Inventory Item↓	Network Safety	Network Serviceability	Network Sustainability
Traffic signals, pedestrian and cycle crossings	Separation of potential traffic conflicts. Key safety contributor for vulnerable road users.	Contributes to ease of use, efficiency and network integrity.	Support for sustainable transport modes and local economy.
Regulatory functions	Risk to users and adjoining property.	Minimising and signing of obstruction.	Inconvenience to disabled people. Structural damage from parked heavy vehicles.
User and community response	Will not directly contribute to core objectives of safety, serviceability and sustainability but may indirectly have a significant effect in that complaints and enquires if reacted to promptly will ensure issues are resolved quickly. User and community satisfaction is measured at a national, network and scheme level and access to services is as accessible as possible through e-mail, in person, by phone or by letter. Consultation and engagement in the policy development process is actively encouraged.		
Co-ordination of standards	Regard is given to standards of adjoining authorities so that where practicable, delivery of consistent services is ensuring. Particular emphasis is placed upon co-ordination of winter services within the conurbation of the West Midlands.		

6.3 Investigatory levels

6.3.1 Carriageways

Carriageway condition surveys

Carriageway condition surveys are carried out in a manner that identifies defectiveness under the following headings:

Carriageway minor deterioration

The problems of potholing, fine crazing, permeable surfaces, fretting or signs of fretting, loss of chippings and fatting up of existing surfaces will normally result in the application of appropriate surface treatments to extend the life of the road.

Carriageway major deterioration

Cracking, coarse crazing, loss of aggregate, serious permeability or rutting is beyond the scope of preventative maintenance processes and can only be dealt with by using structural maintenance techniques to reconstruct the carriageway.

Loss of skid resistance

Warning levels that dictate poor skidding resistance are taken from HD28/04 (DMRB). Grip Tester surveys are carried out annually on the Principal Road Network.

Edge deterioration

This can occur in various forms and if left unattended can accelerate the onset of more serious structural problems. Various severities and suggested treatments occur.

Wheel track rutting

This can either be plastic deformation of the road surface or an indication of structural failure. Further engineering investigation is normally required.

Adverse camber

Specific solutions cannot always be provided to deal with problems of adverse camber but for general guidance, action will only be taken in severe cases where safety is being prejudiced. In these instances it may be necessary to shape and reprofile the problematic section of road.

6.3.2 Carriageway condition standards

This section describes the standards or intervention levels embedded in UKPMS or defined local intervention levels, together with the type of treatment that would be indicated following survey. It is widely acknowledged that the development of local rules and parameters for use in UKPMS is an incredibly onerous and lengthy process. Walsall has concluded that having invested in and contributed to a number of research projects with other local authorities and private sector partners for example TRL, AECOM that even developing local rule sets for deterioration modelling purposes is in the short term likely to present significant technical difficulties and therefore probably insignificant cost benefit. It is for this reason that local rule sets have not been established in Walsall and no plans are currently in place to develop any.

Carriageway minor deterioration

This comprises rutting, potholes, fine crazing, permeable surfaces, fretting, loss of chippings, occurring on up to 20% of whole area. Subject to engineering judgement the required treatment on principal roads is shown in **Table 6**.

Table 6 Rutting Intervention Levels for Principal Roads

Rut Depth	Rural	Urban
< 10mm	Surface dress	Plane and inlay, resurface
10 -15mm	Thin surface overlay	Plane and inlay, resurface
>20mm	Overlay or plane and inlay	Plane and inlay, resurface

Surface dressing on principal roads should only employ premium binders with high quality chippings.

Carriageways with rutting greater than 20mm deep should not be surface dressed but should be investigated to determine whether the rutting is being caused by deep-seated structural failure.

For unclassified roads with minimal maintenance requirements no carriageway repair or resurfacing will take place unless the condition is considered dangerous. For other carriageways, failed patches and reinstatements and other areas of visible deterioration, which will eventually form potholes, should be considered for patching, subject to the availability of resources.

Where there is damage such as cracking, crazing, deformation and potholes exceeding 25% on B roads and 40% on C and U/C roads of the total carriageway area resurfacing will be considered.

Loss of skidding resistance

Warning levels of skidding resistance, below which investigation is required, are taken from the revised HD28/04. Grip Tester surveys are carried out annually on the principal road network. Where investigation has revealed a need for surface treatment the use of road signs is considered, this is to indicate to motorists that the road surface is slippery, road signs will only be erected where resurfacing or surface treatment cannot be carried out within 12 months.

Non-principal roads will be maintained to the highest standard possible within budget limits and thus there are no specified intervention levels.

Surface treatment should follow the recommendations above. High pressure water jetting should be considered as a low cost short-term treatment. Safepave, ULM, Stone Mastic Asphalt, Kielypave and Ralumac are examples of appropriate micro asphalt overlays.

Edge deterioration

The following may be picked up as part of a safety inspection but will be rectified as resources permit:

Edge over run 75mm or deeper that is in excess of 150mm wide and more than 3m in length on principal roads or 150mm on non-principal. Where this becomes a persistent problem on bends, consideration should be given to kerbing or localised widening.

Edge deterioration and over-running of the severity shown in **Table 7** should be treated by haunch construction or kerbing. This work will normally be funded following the submission of a scheme for assessment.

Re-kerbing will be considered if kerbs immediately adjacent to a footway where reconstruction is to be carried out fall below specified warning levels. Minor re-kerbing to isolated sections may be carried out within routine maintenance or full re-kerbing as part of carriageway schemes.

Other than loss of upstand, deterioration takes the form of broken, badly aligned, badly tilted, generally disintegrated kerbs and sunken channel blocks. Of these it is only necessary to consider intervention where loss of upstand is adjacent to footways. Other faults are dealt with as isolated instances where a danger to the public is apparent or incorporated with other works to the carriageway or footway.

Table 7 Edge Deterioration and Severity Categorisation for B & C Roads

Severity	Description	B Roads	C Roads
1	Cracking, fretting or potholing of the edge of the carriageway which needs patching but with no over running of the verge	50% length	75% length
2	Severe over-riding causing rutting to the verge with deterioration to the edge of the carriageway in the vicinity of the edge with or without over riding of the verge	35% length	50% length
3	Serious deformation or cracking carriageway in the vicinity of the edge of the carriageway with or without over-riding of the verge in a box	25% length	35% length

On principal roads investigations should be carried out under the following conditions. Lengths of urban kerbing showing upstands shown in **Table 8.**

Table 8 Investigatory Levels for Kerb Upstands on Principal Roads

Kerb Upstand	% of total length
0mm	30%
0-30mm	60%
30-70mm	100%
>70mm	No action

On non-principal roads replacement of kerbs to new upstands should only take place after assessment for funding when kerbs have broken or disintegrated or lost their upstand over a large proportion of the section under consideration.

The following tolerances are recommended for ironwork set in carriageways:

Manhole covers and boxes in the carriageway should be installed to a tolerance of +/- 5mm to the surrounding level. Gulley frames and gratings should be installed level or not exceeding 10mm lower than the surrounding carriageway. When boxes, frames and covers are found to be greater than 20mm lower than the surrounding carriageway they will be reset within the categorisation stated within this strategy.

6.4 Footway condition

Footway standards are based on values embedded in UKPMS System Intervention Levels.

Isolated repairs of category one defects will be carried out within 1 or 24 hours of being reported – any ridge or upstand in the footway greater than 20mm by reason of a pot-hole, uneven flags and the like will come under the definition of such a repair. Roadworks Management highway inspectors will exercise discretion in the case of lesser defects in high-risk areas, for instance in busy shopping streets, close to sheltered accommodation etc.

Dropped kerbs with a minimal upstand (<6mm) and tactile paving will be provided in conjunction with planned footway maintenance to help wheelchair users,

people with pushchairs and people who are blind or partially sighted. Tactile paving will also be provided at all zebra or signal controlled crossing points.

6.5 Public Rights of Way condition

Currently there are no nationally recognised condition standards for public rights of way and UKPMS does not include any defect codes or intervention levels for this part of the network. It is for this reason that Walsall created a condition survey for public rights of way which is logged and stored in GIS. The project was completed in 2009 allowing condition surveys similar in type to the recently introduced Footway Network Survey to be carried out across the Public Rights of Way network.

The entire network has been surveyed and it is intended to resurvey the network at similar intervals to the unclassified road network over a four year cycle.

Informal inspections are also undertaken on a reactive basis for all definitive and adopted footpaths by public rights of way officers. There is currently no structured programme for these inspections; they tend to be undertaken when interest arises, for example, following requests for improvement or during investigation of issues. Typically, issues such as obstructions by overhanging vegetation, up-growth or boundary fences encroaching onto public rights of way, uneven surfaces and pot holes, muddy surfaces or floods and litter or fly tipping are investigated in this manner.

Walsall intends to maintain public rights of way where practicable to the same standard as footways but since many are not surfaced, then repairs must be made in suitable materials, such as crushed brick, graded stone and the like.

6.6 Cycle routes condition

Cycle routes are maintained to the same standard as Class 2 footways (busy urban areas). However, where cycle routes are created within carriageways particular standards exist:

i) Where carriageway cycle lanes are established particular attention is needed to ensure drainage gullies, valve covers, inspection chambers etc do not pose hazards to cyclists and that the road surface is in good repair.

ii) Carriageway cycle lanes necessitate the use of additional traffic signs and road markings, and coloured surfaces where appropriate.

iii) Programmes of resurfacing and carriageway reconstruction will consider the needs of cyclists and help make the existing highway network ‘cycle friendly’, supporting both the National Cycling Strategy and the Walsall Cycle Strategy.

On a cycle lane marked out along an existing carriageway any pothole of 20mm depth or greater will be reinstated within 1 or 24 hours. Road gulley gratings should be of the flat type and laid within 10mm of the road surface. Where other types of gratings exist they will be replaced during required maintenance or ancillary work.

When designing new cycle lanes, due regard to the road surface condition is taken and if the existing carriageway is poor, while the rest of the road is good, inlaying the cycleway with asphalt will be considered as part of the scheme. A check will be made on the position and condition of any ironwork within the cycle lane.

The surface of a cycle route is crucial to its acceptability by cyclists. New surfaces should give a good ride quality, being smooth and free from bumps and depressions. Where it is possible for a paving machine and delivery lorries to gain access to a cycle route (e.g. alongside the carriageway) hot laid asphalt can be used between edging strips. Where this is not possible textured and smooth bituminous material will be used.

Dropped kerbs across a cycle route should be flush (<6mm high) with the carriageway or access particularly where cyclists will cross them obliquely.

Drainage should prevent the ponding of water or the accumulation of grit or silt on the cycle route. However, this is often impossible to achieve where a converted footway runs through a wide verge at a lower level than the carriageway with little longitudinal fall.

It is the responsibility of the adjacent landowner to trim hedges from the edge of the cycle route once each year. Where the natural hedge line is within half a metre of the edge of the carriageway a second trim will be required and this cut can be allocated from the Grounds Maintenance budget. Arrangements are made for the contractor to sweep the cycle route after these operations (this is particularly important for thorn hedges) to a maximum of two sweeps.

Headroom along cycle routes beneath signs and branches should be at least 2.7m.

6.7 Highway drainage systems condition

Highway drainage responsibilities fall into three main categories:

- Culverts under roads where there is a need to inspect for structural damage and blockages. Culverts and manholes should be inspected every two years and cleaned when required.
- Grips and ditches, which may be obstructed by the growth of vegetation or damaged by traffic and animals. Grips and Walsall Council ditches should be cleared of vegetation and dug out when required.

- Piped drainage, which includes a wide variety of conduits and filter drains, these may be susceptible to siltation or blockage. Piped drainage soakaways and associated systems should be inspected and cleared when required but at not less than 10 year intervals.

Piped drainage systems

These are checked and flushed if necessary during gully maintenance.

Gullies catchpits and interceptors

The only reason for emptying gullies is to remove detritus to ensure the continued efficient functioning of the gully and its connection. The frequency of emptying depends upon the location, the presence of dirty industries, the degree of tree cover, level of rainfall and the frequency of sweeping. Emptying of gullies is therefore arranged on a cyclical basis, dependent upon location and the subsequent danger to road users of flooding should the gully become blocked.

Piped grips

Check and flush if necessary during cyclic maintenance of gullies etc.

Safe Working Practices

All operations will comply with relevant codes of practice and HSE regulations.

Open grips

Re-cut cyclically not more frequently than once per year.

Ditches

Clean out by machine not less frequently than once every five years.

Filter drains

Should be checked at five-year intervals. Flushing, replacement of filter media, porous/slotted/perforated pipe as necessary to enable the drain to perform its function.

Culverts

Nothing specific where it is not a highway structure. If maintained by Walsall Council see above.

Ancillary items

Maintenance of pumps. For example the Leamore Lane pumping chamber shall be carried out in accordance with manufacturer's recommendations.

Flooding

Where flooding occurs, causing hazardous conditions, the appropriate warning signs are placed in position as quickly as possible. The cause of the flooding is ascertained and given prompt attention, in order to restore the highway to a reasonable condition. Where it is determined that the flooding is attributable to inadequate infrastructure, given the nature of the weather conditions under which it occurred, the necessary action to permanently relieve the problem shall be the subject of a prompt report and a proposal for action. If the cause is attributable to the actions of a third party, the matter is taken up with them at the earliest opportunity.

6.8 Embankments and cuttings condition

It is recognised that where geotechnical investigations have to be undertaken and remedial works designed, it may not be possible to carry out effective permanent repairs until these are complete.

6.9 Sweeping and cleaning general

Sweeping and cleaning is carried out under the provisions of the Environmental Protection Act 1990: Code of Practice on Litter and Refuse.

Debris encountered by inspectors and other maintenance personnel in traffic lanes and on footways and which constitutes an immediate hazard shall be removed as soon as practicable.

6.10 Landscaped areas and trees condition

Expert advice from landscape managers should be sought to achieve the correct balance between safety, amenity, nature conservation and value for money. They will confirm when additional specialist advice is required. Where landscape management plans exist they should be used to inform maintenance requirements as part of route management strategies. Where environmental databases exist they should be consulted before any work is carried out.

Named species and habitats are protected under UK and EC legislation and all highway works must comply. Where designated sites lie within or adjacent to the highway boundary, the soft estate should be maintained on the advice of English Nature or local wildlife trusts.

Legislation requires that Natural England is informed where important habitats and species may be affected, such as the removal of trees used as bat roosts. This should be done well in advance of the work to allow for seasonal factors.

Grassed areas and scrub

Vegetation must not restrict visibility at junctions, access points and bends. Sight lines and minimum stopping distances must be kept clear and signs, lights, and marker posts must not be obstructed. Visibility cuts may be required in accordance with appropriate technical directives.

Overhanging vegetation must not obstruct users of the highway or personnel carrying out inspections or surveys. One or two cuts per year in the form of a swathe cut may be sufficient to maintain verges for safety but amenity and nature conservation requirements must also be considered. Edging (siding) may be required on a cyclical basis.

Standards of maintenance should reflect the surrounding landscape. Highway verges that have developed botanical interest and nature conservation value, whether by design or through the development of the existing verge over time, should be managed to conserve and enhance the nature conservation value. Weeds can cause problems if they spread prolifically and control methods may include the use of herbicides. The Control of Pesticides Regulations 1986 (as amended 1997) governs the use of pesticides and requires that persons specifying and applying pesticides hold the appropriate certification.

Walsall Council is committed to taking a proactive approach to controlling injurious weeds, which are covered by the Weeds Act 1959 amended by the Ragwort Control Act 2003, and the Wildlife and Countryside Act 1981. Where injurious weeds on highway land are a nuisance to adjacent landowners, it is advisable to work with the adjacent landowner to ensure that weed control measures are undertaken simultaneously to avoid recontamination across the highway boundary.

Table 9 Grass cutting frequencies

Activity	Frequency
Visibility Cuts	1 or 2 cuts per year
Swathe Cuts	1 or 2 cuts per year
Grassed Areas	As advised by Landscape Manager (including weed control)
Injurious Weeds	One treatment per year or advised by LM

Horticultural maintenance is undertaken to maintain safety; to prevent obstruction of sight lines and traffic signs; to inhibit the growth of injurious weeds (in accordance with the Weeds Act 1959); to maintain a tidy appearance and to

prevent encroachment onto the carriageways. In the case of trees adjoining roads to prevent them becoming a danger to road users.

Grass cutting on rural roads

This falls into two categories:

i) Embankment and cutting slopes and verges except visibility areas should not normally be cut.

ii) On all other roads' visibility areas and to provide a pedestrian refuge, the first swathe from the edge of the carriageway should always be kept cut. Frequency of mowing will depend on the rate of growth but will normally be twice per year. Areas of highway grass that incorporate access to ducts, drainage systems etc should be cut at least once in three years in order to maintain accessibility to these systems. Other areas of highway grass should also be cut every three years unless a positive decision is taken to allow it to vegetate.

Grass cutting on urban roads

In urban areas there is a clear highway need, as distinct from any local amenity consideration, for grass to be kept shorter than about 100mm. If grass is allowed to grow longer than this it becomes necessary to remove cuttings. Furthermore long grass can conceal debris, which can become a safety problem if left unattended. Normally between five and eight cuts a year is required to achieve these standards, although there will be a need for considerable local variation.

Siding and verge maintenance

i. In rural areas only the minimum amount of siding should be carried out on carriageways e.g. when needed before surface dressing and renewal of edge markings, since in most cases traffic keeps the carriageway clear. Siding is not normally required in urban areas since most roads have upstanding kerbs.

ii. On footways and cycle routes siding should be carried out as required to preserve the width of the footway.

iii. Verge maintenance should be carried out in urban areas when found to be necessary.

Chemical Sprays

It may be necessary to use chemical sprays to eliminate weeds and control growth around posts carrying signs, along guardrails, on the edges of kerbs and on footways. These may also be used to control the growth of grass on the strip adjoining the edge of the carriageway and on central reservations. The use should be the minimum compatible with the required results.

Where total weed killers are required for paved areas they should be used annually for effective results. Noxious weeds should be dealt with on an ad hoc basis. All weed spraying should be carried out in accordance with the Control of Pesticides Regulations 1986. Only approved pesticides may be used, these are chemicals listed in the 'Blue Book' entitled 'Pesticides Approved under the Control of Pesticides Regulation 1986 (ISBN Code 0 11 242 782 0). This book and comprehensive advice can now be viewed electronically on a separate Health and Safety Executive website dedicated to pesticides at **www.pesticides.gov.uk**.

Areas with noxious (injurious) weeds should have one cut to be arranged where necessary or chemical treatment as recommended by DEFRA. The weeds concerned are:

Ragwort
Broad-leaved dock
Curled dock
Creeping thistle
Spear thistle
Giant Hogweed

Hedges, trees and planted areas, wetlands and special ecological areas

Walsall Council as a highway authority is currently exempt from, but acts in the spirit of, the Hedgerow Regulations 1997, and where hedgerows are affected by our work they should be protected. Where a hedgerow or part has to be removed it should be replaced and those that would qualify as 'important' under the Regulations should be replaced as essential mitigation.

Table 10 Contacts for advice related to landscaped areas and trees

Activity	Responsible advising officer or point of contact
Pest Control	Landscape Manager (LM)
Hedges, Trees etc	As advised by LM or arboriculturalist
Wetlands	As advised by ecologist
Special ecological	As advised by ecologist

Where it is the responsibility of the highway authority, trimming of seasonal growth should be carried out once a year on rural roads. Where there are special requirements in visibility areas or across central reserves, cutting should be

undertaken when required. Owners of private hedges should be requested to adopt similar standards.

Shrubberies which are the responsibility of Walsall Council should be maintained until established and thereafter pruned for visibility only or where necessary.

6.11 Fences and barriers condition

6.11.1 Safety fencing

Inspection and testing of safety barriers with respect to mounting height, surface protective treatment and structural conditions will take place if road traffic accident damage is suspected and otherwise when required.

The tensioning bolts in steel-tensioned safety fences are checked and reset to correct torque as required. Damaged sections of safety fences and barriers are treated as Category 1 defects unless damage is clearly superficial with no loss of integrity to the fence/barrier. Permanent repairs are carried out as soon as possible.

Sections of safety fence that are found to be mounted at heights outside the limits specified or for which structural integrity is not in doubt, should be treated as Category 2 defects.

6.11.2 Pedestrian guard rails

Pedestrian fences and guard rails are used primarily in urban areas at busy road junctions and sections of roads both to protect the public and to get them to use pedestrian crossings as opposed to crossing busy roads at potentially unsuitable points. If damaged they need to be made safe and permanently repaired as soon as possible.

The objective is to maintain them in a sufficiently sound structural condition to serve their function and not be dangerous to road users or pedestrians.

i) Condition: Make safe within 24 hours and effect permanent repair as soon as possible
ii) Painting: When required

6.11.3 Fences, walls and environmental barriers

These must be kept safe for road users. Individual complaints are investigated by Roadworks Management highway inspectors and acted upon as appropriate.

6.12 Traffic signs and bollards condition

6.12.1 Illuminated signs and bollards

As part of the Public Lighting PFI contract maintenance of electrical components is carried out by Amey LG Ltd.

i) Optical inspection and cleaning including sign supports every two years
ii) Lamp changing at regular intervals to coincide with internal inspections and cleaning
iii) External cleaning at least annually or when required.
iv) Replacement and repair when damaged. Should be made safe within one hour and permanent repairs should be made as soon as possible for important warning and regulatory signs.
v) Painting of supports and frames when required but not exceeding 10 years interval.

6.12.2 Non-illuminated signs and bollards

i) Cleaning of non-illuminated signs will be at least annually or when required (Amey LG Ltd.)
ii) Replacement and repair when damaged should be attended to within 24 hours. The speed of permanent repair will depend on the degree of danger. Important warning and regulatory signs should be replaced as soon as possible
iii) Painting of supports and frames when required but not exceeding 10 years intervals
iv) Bollards will generally be cleaned once per year. However at certain locations in particular at traffic calming sites and roundabouts there will be a need for further cleaning during the winter months
v) Repairs to illuminated signs to be completed within two weeks of notification by client staff
vi) Electricity supply faults to be repaired by electricity company within 25 days unless notified as urgent
vi) Electricity supply faults to be repaired by electricity company within 25 days unless notified as urgent
vii) Emergency work attendance on site to make safe within one hour of notification of defect
viii) The sign face of chevrons, Stop and Give Way signs to be replaced or repaired within seven days

6.13 Road markings and studs condition

6.13.1 Road markings

Many road markings are used to give effect to regulatory provisions and it is important that their legal status is not affected by excessive wear or damage.

All markings existing before resurfacing or surface dressing will be reviewed and replaced as soon as reasonably practicable after the completion of work, usually within one week, weather permitting. If it is not possible to restore immediately in permanent materials, temporary markings should be used at sites where their absence is likely to give rise to dangerous conditions.

Road markings on classified roads (A, B & C roads) and at known accident sites should be renewed when more than approximately 30% of their area is worn away. Lesser standards can be adopted on other routes.

The objective is to keep all traffic signs and lines legible and visible as far as possible at all times in relation to the road use and traffic speeds.

6.13.2 Road studs

Displaced road studs lying on the carriageway, or lay-bys and loose studs if judged to be a hazard shall be removed immediately if reasonably practicable.

The replacement of defective or missing studs associated with road markings shall be carried out when there is greater than 25% loss on straight or large radius curves, or greater than 10% loss on bends. Replacement shall be completed within three months of the appropriate defect threshold being exceeded or within 24 hours if the road studs are required to maintain the legality of prohibitory road markings.

Road studs, which are either missing or have become defective should be replaced individually or by a bulk change depending on the individual highway circumstances. The aim should be for a minimum 90% of the studs to be reflective prior to the winter period.

Studs are mandatory for double white line systems.

The Road Safety Group is currently reviewing its specific tactical policies in relation to a number of areas. The current insentive is to avoid the installation of studs and remove them from a road scene wherever possible. This is because they are notoriously difficult to maintain. In addition the Council has undertaken trials with different lining systems such as “weatherline” which purports to be more reflective and harder wearing. This has been laid on the Black Country Route, Beacon Road, The Keyway and Norton Road. Its performance will be reviewed over the next few years.

6.14 Traffic signals, pedestrian and cycle crossings condition

Bulk changes of lamps in signals and push-button units shall be carried out as required. Lamps in regulatory signs associated with traffic signals shall be changed at intervals appropriate to the type of lamp and mode of operation of the sign.

Whilst most signals are now microchip controlled where there are electro-mechanical parts of controllers they will be adjusted or replaced at intervals of one year or in accordance with manufacturers' instructions if shorter.

Signal lenses, regulatory signs shall be cleaned at intervals of one year.

Defects in operation of traffic signals shall be treated as Category 1.

Permanent repairs of Category 2 defects in traffic signals shall be carried out within six weeks. The objective is to keep the signals in correct operation at all times.

Standards for pedestrian crossings are the same as traffic signals except for the flashing mechanism, which should be replaced immediately failure is notified.

This work is currently undertaken by our signals maintenance contractor.

6.15 Regulatory functions

This is primarily covered by introduction of the statutory duties in the Traffic Management Act 2004 which will include the following:

- Highway Register
- Management of utilities - NRSWA (HAUC) codes are enforced
- Public Rights of Way
- Construction of vehicular crossings
- Encroachment onto verge
- Large stones placed on verges
- Temporary short term closures

6.16 User and community response

Customer service is covered in-depth in Chapter 2.

It should be noted that standards for user and community response can indirectly contribute to both safety and serviceability by ensuring that service requests and complaints are dealt with promptly and result in direct service action.

Standards are considered at three levels:

- Satisfaction with arrangements for engagement in the policy development process
- Satisfaction with the delivery of the highway maintenance service
- Our response to user and community contact by phone, mail and e-mail

6.17 Co-ordination of standards

Consistency and co-ordination of standards is applied wherever practicable by regular contact with neighbouring authorities through ad hoc and regular meetings of CEPOG, HIMG, HAUC and the like.

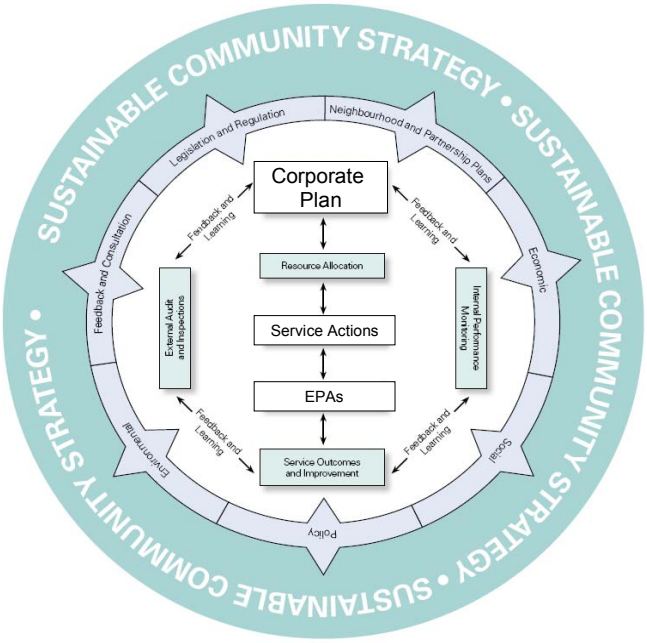
6.18 Condition standards for street lighting and structures

Street lighting condition standards are embedded in the PFI contract.

7.0 Performance Management

7.1 Introduction to Performance Management in Walsall

Walsall Council measures its performance to establish how well we are doing and identify opportunities for improvement. The strategy and structures in place for managing performance are detailed in the Walsall Performance Framework (WPF). Previously referred to as the Corporate Integrated Planning and Performance Framework (CIPPF).



Our Corporate Performance Management Unit (CPMU) works closely with services to instigate and help facilitate delivery of the WPF so that all performance framework elements are in place and working well in order to secure improved outcomes for residents.

The starting point for delivering good services is ensuring a clear understanding of our borough, its communities and the challenges that need to be faced. Hence the starting point is the Sustainable Community Strategy (SCS) which sets out the broad objectives and vision for Walsall to 2021; it is informed by intelligence. The SCS will be refreshed during 2012 following a review of the Borough's key strategic assessments. Robust channels of communication and information sharing are established within each directorate ensuring that all aspects of performance management and improvement are intrinsic to the council's culture and its everyday activity.

The Council's Cabinet is responsible for the majority of decisions on council services. Each cabinet member has political responsibility for a portfolio of services.

The Council also has scrutiny and performance panels charged with overseeing the work of the directorate. Walsall Project Approach (WPA) ensures that projects are managed, monitored and therefore successfully delivered.

The council's Performance Information Management System (PIMS) acts as a data hub for key performance information across Walsall Partnership and tracks delivery of key targets and service delivery outcomes.

Walsall's performance framework is covered in some detail in other areas of the HAMP and sets out how the various planning processes interlink and demonstrates how services and resources are managed. It sets out the minimum "must do" within which the council will operate and is underpinned by functional frameworks such as the HAMP that provide further guidance and protocols. A key aspect of this framework represents the way in which overall strategy is determined and objectives and resources are allocated and translated into detailed targets and actions.

This framework is intended to ensure performance management and continuous Improvement are embedded within the Walsall Council culture.

7.2 Performance Monitoring

Walsall's highway maintenance services use key business processes and customer intelligence to monitor the performance of its service. It especially reflects the focus on delivering better outcomes against key priorities for local residents.

7.2.1 Freedom to Lead

The Government has dismantled a number of its previous statutory frameworks for assessing and inspecting councils in favour of a new 'freedom to lead' approach to local government sector self-regulation and improvement. The principles of which include the need to only inspect services where necessary, otherwise to encourage self assessment and peer challenge, and notably to encourage community empowerment through transparent performance information and making councils more accountable to their local communities rather than central government.

The government has reduced the number of central targets on councils, and has hence limited to a Single Data List (SDL) the need to provide information to central government. This reflects the Government's transparency, decentralisation and localism agendas. The main objectives of the SDL are:

- To be a clear, definitive list of data that Government needs from local authorities
- To help reduce data burdens on local authorities
- To be open for scrutiny, challenge and regular review

Furthermore, the Government states that the list will:

- Help government reduce the number of datasets required by first cataloguing them
- Facilitate transparency by making it easier for the public to access data about their areas.

See link to view the SDL list:

http://www.communities.gov.uk/localgovernment/decentralisation/tacklingburdens/singledatalist/

The SDL contains two data collections relating to road conditions they are;

Road condition data, consisting of;

- Principal roads where maintenance should be considered (see guidance below)
- Non-principal classified roads where maintenance should be considered (guidance below)
- Skidding resistance surveys
- Carriageway work done survey

See links for further details;

http://www2.dft.gov.uk/pgr/statistics/datatablespublications/roads/condition/index.html

http://assets.dft.gov.uk/statistics/series/roadconditions/roadconditionsguide.pdf

Road Lengths Survey

- Local authority estimate of road lengths

see link for further details;

http://www2.dft.gov.uk/pgr/statistics/datatablespublications/roads/road-lengths/index.html

The Skid resistance survey and the Carriageway work done survey are newly created performance measures. Walsall is currently working towards the creation of data sets relating to skidding resistance and carriageway works done alongside,the Local Authority estimate of road lengths survey, through its UKPMS and GIS computer software packages.

7.3 Principal Roads where maintenance should be considered

This measures the proportion of principal roads where structural maintenance should be considered. This is a significant indicator of the state of the highways asset.

Definition

NI 168 is an updated version of the former best value performance indicator BVPI 223; previously BVPI 96. The indicator measures the percentage of the local authority's A-road network where maintenance should be considered.

The performance indicator is derived from a survey of the surface condition of the authority's classified carriageway network, using survey vehicles that are accredited as conforming to the SCANNER (Surface Condition Assessment for the National Network of Roads) specification and processing software that is accredited as conforming to the UKPMS (UK Pavement Management System) standards.

Results are reported for either (a) 100% of the network surveyed in one direction; or (b) 50% of the network surveyed in both directions. Roads not surveyed in the previous year must be surveyed in the current year.

All road surface types should be included and surveys should physically cover the required network lengths; grossed-up figures from shorter surveys are not permitted.

Formula

The indicator is the length of carriageway identified as having a condition index greater than or equal to 100, as a percentage of the total length surveyed.

$(x/y) \times 100$

where
x = length of carriageway surveyed identified as having a condition indicator greater than or equal to 100;
y = total length of principal roads surveyed.
Results are calculated automatically by the UKPMS software.

NI 168 Good performance

Good performance is typified by a low percentage. A reduction in levels represents improvement. In 2009/10 a value less than 4% represented top quartile position, with values of 5% or more in the bottom quartile. By comparison in 2009/10, Walsall's performance was 6% of the principal road network where maintenance needs to be considered.

7.4 Non-principal classified roads where maintenance should be considered

This measures the proportion of B and C-class roads where structural maintenance should be considered. This is a significant indicator of the state of the highways asset.

Definition

NI 169 is an updated version of the former best value performance indicator BVPI 224a; previously BVPI 97a. The indicator measures the percentage of the local authority's B-road and C-road network where maintenance should be considered.

The performance indicator is derived from a survey of the surface condition of the highway authority's classified carriageway network, using survey vehicles that are accredited as conforming to the SCANNER (Surface Condition Assessment for the National Network of Roads) specification and processing software that is accredited as conforming to the UKPMS (UK Pavement Management System) standards.

Results reported annually are a combination of (a) 100% of the B-class nerwork surveyed in both directions; and (b) 100% of the C-class network surveyed In one direction. For any given length of road, data from either the current financial year or the previous financial year should be used.

Authorities should aim to cover the required network lengths; where it is not physically possible to survey all parts of the network, grossed up figures from shorter surveys (at least 90% of the total B-road requirement and 80% of the C-road requirement) is permitted.

Formula

The indicator is the length of classified non-principal carriageway identified as having a condition indicator greater than or equal to 100, as a percentage of the total length surveyed.

$(x/y) \times 100$

where

x = length of non-principal classified carriageway surveyed identified as having a condition indicator greater than or equal to 100;

y = total length of non-principal classified roads surveyed.

Results are calculated automatically by the UKPMS software.

NI 169 Good performance

Good performance is typified by a low percentage. A reduction in levels represents improvement.

In 2009/10 a value less than 5% represented top quartile position, with values of 7% or more in the bottom quartile. By comparison in 2009/10 NI 169 for Walsall was 4% on the classified non principal road network where maintenance needed to be considered.

7.5 Complaints monitoring

We monitor customer complaints through robust mechanisms which includes the Council's Tell Us System, Mayrise database and a directorate Correspondence Tracking System (CTS). This information is utilised in the programming and prioritisation of highways works and forms an integral part of Walsall's nationally recognised Analytic Hierarchy Process (AHP). Details of AHP can be found in Chapter 8 Programming & Priorities.

7.6 Equalities monitoring

An integral part of all performance management in Walsall is the monitoring of equalities. We have undertaken Equalities Impact Assessments (EIA) within various Groups as part of our equalities responsibilities. We regularly access customer intelligence to see if particular equalities issues are presented and we take this into account in our decision making.

7.7 Local Performance Indicators (LPIs)

In addition to monitoring the key strategic measures, Walsall monitors four Local Performance Indicators (LPIs) which relate to the highways maintenance service as follows:

LPI 1: The use of **Third Party damage claims** has been established to measure the effectiveness of risk control in highway maintenance. By recording and monitoring and thematically mapping the number of third party claims for damages arising from alleged defects in the highway each year. It is considered to be a crude yet effective measure of how well we are repairing pot holes etc before accidents occur. The national trend for such claims is moving sharply upwards. However, a long-term view should be taken on such an indicator, as there will be random and seasonal variations.

LPI 2: The percentage of programmed schemes subject to maintainability audit. For 2010-11 this was 100%.

LPI 224b: Percentage of the unclassified road network where structural maintenance should be considered.

Walsall has continued to collect the data required to calculate the previous Best Value Performance Indicator BVPI 224b - The condition of Unclassified roads. Whilst this was discontinued as a national indicator with the introduction of National Indicator Set (NIS) in 2008 it is still reported at West Midlands level as part of the Local Transport Plan. LPI 224b gives an indication of the proportion of unclassified roads that may require structural maintenance.

Definition

Based on a visual survey of a proportion of the unclassified road network (minimum 25% per year) using either a UKPMS Coarse Visual Inspection Survey (CVI) or a more detailed equivalent visual inspection survey (DVI). Visual surveys must be carried out in accordance with the UKPMS Visual Survey Manual, Version 1.0. Detailed Visual Inspection (DVI) surveys may also be used, if carried out in accordance with the current UKPMS Rules and Parameters. Concrete or part-covered roads should be included in the visual survey for LPI 224b.

Where CVI and DVI results are combined, CVI data must not be mixed with unconverted DVI data. If DVI surveys are to be used as the basis for the survey, they should be converted to a 'CVI-equivalent' survey using Version 2.0 or later of the UKPMS HMDIF Conversion Software, and processed as a CVI survey.

Formula

Data is processed in accordance with a fully accredited UKPMS system, configured using UKPMS Rules and Parameters, using variable length processing.

Good performance

Good performance is typified by a low percentage. A reduction in levels represents improvement.

In 2010/11 for BVPI BVPI 224b for Walsall was 15%. Quartile position for this indicator is no longer recorded at national levels.

LPI 187: Percentage of the category 1, 1a and 2 footway network where structural maintenance should be considered

Walsall has continued to collect the data required to calculate the previous BVPI 187 Condition of High Amenity Footways. Whilst this was discontinued as a national indicator with the introduction of NIS in 2008 it is still reported at West Midlands level as part of the Local Transport Plan.

Definition

Footway categories are defined in the Code. This indicator was based on the collection and analysis of Detailed Visual Inspection (DVI) measurements. It was designed to provide the percentage length of the footway network with a Footway Condition Index greater than a defined threshold value of 20.0.

It was based on a 50 per cent survey of Category 1, 1a and 2 footways each year, so that the complete Category 1, 1a and 2 network was covered every two years. Highway Authorities were required to Identify those UKPMS sections with Category 1, 1a or 2 footways, and select one half, randomly, by number rather than section length (i.e. if there are 200 sections, select 100). The remaining half of the sections were then included in the following year.

Formula

Walsall measured the percentage length of the footway Category 1, 1a and 2 network with a Footway Condition Index greater than or equal to a threshold value of 20.0, calculated using the Variable Length Merge method set out within UKPMS through the Rules and Parameters.

These rules cover different footway types and the defects associated with the type of footway (e.g. bituminous, flags) on different footway categories (hierarchies).

Good performance

Good performance is typified by a low percentage. A reduction in levels represents improvement.

In 2010/11 for BVPI 187 for Walsall was 28%. Quartile position for this indicator is no longer recorded at national levels.

7.8 Contract Key Performance Indicators

Through the Highway Repair and Maintenance Contract between Walsall and Tarmac we have established an initial framework of Key Performance Indicators (KPIs) against which Tarmac's performance is to be measured. In addition, specific measures have been developed during the LEAN review in Roadworks Management. These are used to monitor Tarmac's performance in relation to specific issues.

The contract KPIs are regularly reviewed and changed to reflect the needs of the service.

Table 11 Examples of KPI Definitions, Measurement, Targets

KPI No.	KPI	Base Line	Target	Apr-11	May-11	Jun-11	Jul-11	Aug-11
1	% 1 hour responses	85.5	95.0	72.2	100.0	98.5	88.9	90.2
2	% 24 hour responses	85.5	95.0	61.1	17.8	36.4	46.7	94.7
3	% Planing Works & Resurfacing completed as per programme	76.5	85.0	100.0	50.0	80.0	100.0	100.0
4	% Winter Maintenance calls completed within 4 hours	99.0	100.0	100.0	100.0	100.0	100.0	100.0
7	Operatives trained to NVQ2	85.0	90.0	90.6	90.6	90.6	90.6	90.6

Alternative Proposals for Performance Management

Tarmac have been encouraged to put forward proposals which they consider could contribute to improvement in economy, efficiency and effectiveness having due regard to the service to be provided and the KPIs set out in the framework. It is hoped that this will prove to be an area for continuous improvement during the contract period.

7.9 Highways Maintenance Customer Feedback Survey Exercises.

The council continues to place great emphasis on listening to its customers. Walsall fully welcomes customer feedback for all planned and reactive maintenance schemes in partnership with Tarmac.

The planned maintenance process pays particular regard to public perception relating to six key areas:

- **Provision of information**
- **Quality of workmanship**
- **Minimising disruption**
- **Tarmac workforce and staff onsite**
- **Walsall Council staff**
- **Overall satisfaction**

Our current procedures on site were developed following a sustained program of operational analysis surveys which ran from 2008 for a teo year period until 2010. This exercise focused on six mandatory quality question areas

supplemented with some additional voluntary questions in relation to equal opportunities to help monitor the effectiveness of policy and services. These responses were collected and recorded so that we could test the response of different sectors of our community. The final section of these questionnaires allowed customers to make their own personal comments about services received, which have contributed to our current project management processes employed for scheme delivery.

The 2008 surveys were limited to a total of 1,500 survey questionnaires delivered to residents where works were being carried out prior to commencement. Results showed from the 1,500 questionnaires issued, 186 were returned. This indicated a return rate of 12.4%. We were understandably proud of the fact that of those who returned questionnaires that 97.85% were either very satisfied or satisfied overall with the completed works.

A joint customer satisfaction survey has been developed with Tarmac for use at future areas of work and will continue to be modified and applied where appropriate. A further extensive period of monitoring will be undertaken when resources permit.

7.10 Annual National Highways and Transport Network Public Satisfaction Survey

In 2009 Walsall voluntarily joined the annual national highways and transport network public satisfaction survey. The scheme is a standardised survey in which residents of around 77 local authorities across the UK are asked identical questions to help find areas of best practice.

More than 4,000 randomly selected Walsall residents are sent questionnaires annually. The survey is independently organized by IPSOS MORI and results are published on the internet at http://nhtsurvey.econtrack.co.uk.

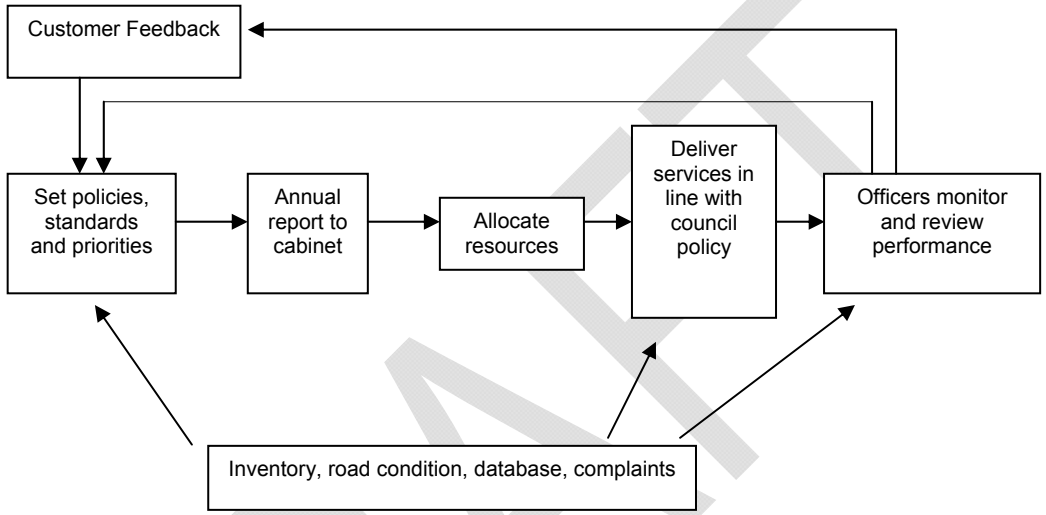
We intend to use the feedback we receive to benchmark against other authorities and seek best practice elsewhere so that we can continuously improve the services we provide.

The results for 2011/12 showed that overall satisfaction with Highway Maintenance rose from 50.8% in 2010 to 52.4%. Amongst our 9 peer authorities Walsall was ranked 4th and were above the average Metropolitan authority score of 51.5%. The survey results are on the NHT web site at www.nhtsurvey.org.

7.11 Monitoring Review and Reporting

Performance information gathered against service delivery is a key component of Walsall's HAMP, it assists with monitoring and measuring the effectiveness of resource allocation and aids budget setting and decision making. The process will be subject to annual review in the light of performance data and user feedback.

Figure 13: The review and reporting process



8.0 Programming & Priorities

8.1 Introduction

Developing and implementing effective systems for programming and prioritising highway maintenance activity is a key requirement for the delivery of a user focused highway service.

Priorities can be allocated at three different levels:

Strategic level

- between corporate priorities and objectives
- between service areas of the authority

Transport level

- between Local Transport Plan objectives and targets
- between National Indicators and targets
- between maintenance, network management and other local transport services;

Maintenance level

- between the core objectives (customer service, safety, serviceability and sustainability)
- between maintenance service type
- between maintenance service category

This strategy focuses on maintenance level programmes and priorities as the strategic level and transport level are outside the remit of this document.

Priorities and annual programmes of work are established to determine those locations that are likely to give the best economic return for the investment in any appropriate maintenance treatment.

8.2 Data Inputs

Data from the following sources is used to determine maintenance programmes.

8.2.1 Condition Surveys

Principal road network

Walsall will undertake the following condition surveys:

- SCANNER
- Grip Tester

- DVI

And has useful historic data including

- SCANNER
- DVI
- CVI
- Ground Radar
- Cores/Construction data including as built drawings

Non principal road network

Walsall will undertake the following condition surveys:

- DVI

And has useful historic data including

- CVI
- DVI
- Ground Radar
- Cores/Construction data including as built drawings

8.2.2 Complaints history and walked safety inspections

Complaints history held within the Council's Tell Us System, Myrise database and a directorate correspondence tracking system in addition to locations identified by highways inspectors are used to identify locations and target further Engineering Programme Inspections (EPIs). Any defects found directly feed into works programme considerations.

8.2.3 Third party insurance claims

Claims are plotted geographically to identify any patterns or hot spots. Any clusters of claims are investigated to ascertain if a response is required to mitigate/address the causes for the claims.

8.2.4 Enquiries and complaints from elected members, Area Partnerships and stakeholders

Enquiries are always assessed, the results are then fed into the overall needs of the network. EPIs also take place if complaints or petitions are received relating to specific locations and priorities may be re-assessed in light of new information.

8.3 Type of response

Priorities and, where possible, programmes are established in respect of each of the following:

- Reactive maintenance – attending to Category 1 and some higher level Category 2 defects and other safety matters arising from inspections and user information;
- Routine maintenance – (like mowing or gully emptying) – providing defined standards of serviceability, including attending some lower level Category 2 defects;
- Programmed maintenance – providing co-ordinated programmed sustainable schemes and projects to meet the serviceability requirements of the network;
- Regulation – regulating occupation, interference or obstruction of the network (mostly refers to NRSWA function, but also skip permits);
- Winter service – providing defined standards of salting and clearance of ice and snow;
- Weather and other emergencies – planning for emergency response.

8.3.1 Priorities for reactive maintenance

Reactive maintenance involves rectifying Category 1 and higher level Category 2 defects and other matters requiring urgent attention. These arise either from inspections or user requests in accordance with the specified standards of response. Although all such matters will by definition have a degree of urgency, some may have potentially even more serious consequences and priorities will usually be determined exclusively on the basis of risk assessment.

The only other consideration is whether to:

- Sign and make safe
- Provide initial temporary repair
- Provide permanent repair

The option selected, together with relevant follow up, will largely be determined by operational practicalities and also whether the site is already part of a programme for more comprehensive treatment, in which case a temporary repair may be an appropriate course of action.

8.3.2 Priorities for routine maintenance

Routine maintenance provides defined standards of network serviceability, maximises availability, reliability, integrity and quality. The priorities and programmes will be determined largely, but not exclusively, from the outcome of EPIs together with items from safety inspections not requiring urgent attention and user requests.

Priorities and frequencies for routine maintenance operations are determined by local consultation, risk control, safety and serviceability considerations.

8.3.3 Priorities for programmed maintenance

Preliminary priorities for highway structural maintenance are initially established using the output of technical and economic prioritisation processing from MARCHpms. The preferred model will have the objective of minimising cost over time.

Initial highway structural maintenance priorities, obtained automatically from data processing, are reviewed and adjusted where necessary to take account of any planned programme of works by the utilities, more detailed technical information and local circumstances, and defined modified economic priorities. Modified economic priorities are developed into individual schemes based upon maximising added value to the wider transport and corporate objectives of the authority, together with relevant technical considerations.

The developed structural maintenance schemes are assembled into programmes of work in co–ordination with other highway maintenance and improvement programmes and integrated transport schemes on related parts of the network. This maximises added value to the network and minimises disruption to users and the community.

All programmed highway maintenance work should realise its potential to add community value at minimum cost, for example incorporating dropped kerbs to assist disabled people and modifying unclear signing or road markings.

Programmes for major highway structural maintenance are drawn up over a three year period. This is reviewed annually for all classes of road and priorities may be amended depending on specific circumstances. For example some roads may deteriorate at an accelerated rate due to weather conditions or abnormal wear.

Walsall considers that detailed programmes of work in excess of a three year period are unreliable. However, in terms of asset management Walsall acknowledges the need to develop deterioration models and life cycle plans which may ultimately require longer works programmes.

Consultation is undertaken with the utilities, adjoining authorities, other agencies, public transport operators and the local community, preferably on the combined works programme for maintenance and improvement as part of the LTP process, but in any event on the maintenance programme.

Walsall Council also has to consider the priorities of those providing funding. For example, Capital grant is received via the Integrated Transport Authority in the form of Local Transport Plan. This is provided for work on the classified network.

8.4 Engineering Programme Inspection (EPI)

An EPI is the means by which the Highways Maintenance Group assesses and inspects sites for consideration for future highways maintenance programmes.

Each site is inspected and a number of digital photographs are taken. An inspection form is completed and the data is recorded spatially on GIS with hyperlinks to the completed EPI form. If dangerous defects are observed then these will be forwarded immediately to Roadworks Management Group to arrange for priority repair/attention.

Recommendations for future treatments and provisional programmes are entered on the form. Inspectors also include suggestions for further investigation if appropriate. A suggested year of treatment is recorded which enables data analysis to be carried out on a network level through the use of GIS.

The GIS system enables data relating to cost, treatment, timing etc to be recorded in a manner that can be readily accessed when dealing with enquiries.

There are however very good reasons why an EPI is only a guide and the reasons below are usually why schemes don't get carried out when we would like or indeed when they are most needed:

a) Finance – both amount in total and amount available for each treatment type
b) Statutory undertakers clearances
c) Traffic management and available network capacity
d) Variable rate of deterioration of other roads
e) Weather dependent windows of opportunity which can be missed, for example for preventative treatments

8.5 Highways Maintenance Works Programme 2012/15

The Highways Maintenance Works Programme 2012/15 has been developed taking on board the issues discussed in this document. It is available as a separate document on the Council's web site. The areas identified and estimated costs are indicatively based upon information available during March 2012. The exact scheme details may therefore be subject to variation in terms of treatment employed and final cost.

It should be remembered that priorities over the forthcoming years may vary due to issues such as the availability of resources, differing rates of deterioration, lack of network access etc. It may also be necessary to introduce schemes not initially identified. In order to accommodate this, the Head of Engineering and Transportation shall, at the beginning of each year, agree the priorities for that year with the Portfolio Holder for Transport and Environment.

In terms of preventative maintenance it is inappropriate to plan in excess of one year in advance due to the reasons given above. The programme therefore only identifies the first year's preventative maintenance objectives.

The list of schemes included in the programme has been identified on the basis of need. It is highly unlikely that resources will be available to carry out all work contained and it should therefore be recognised that not all of these will be carried out within the life of the strategy.

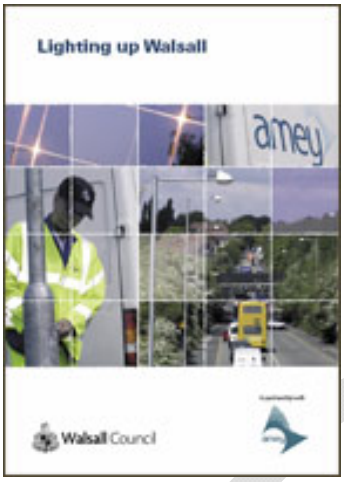
9.0 Public Lighting

9.1 Private Finance Initiative

The Council is working in partnership with Walsall Public Lighting who sub contract to Amey LG Ltd to maintain the street lighting assets in the borough. Starting from April 2002 the Private Finance Initiative (PFI) contract is scheduled to last for 26 years. The council monitors the project to ensure that the service is delivered as set out in the contract.

The street lighting strategy can be viewed on our website at:

http://cms.walsall.gov.uk/index/transport_and_streets/highway_maintenance/street_lighting.htm



9.2 What does the street lighting PFI service provide for the public?

The service provides:

- Removal of the ageing stock
- Improving road safety
- Reduction of fear of crime
- Regular maintenance of the street lighting
- Periodic lamp change and cleaning

All the street lighting columns are numbered and display a free phone number to report when the street lights are not working or in the event of an emergency.

9.3 What can I expect from the service?

We will ensure that:

- All the street lights are maintained as necessary
- The street lights are cleaned on a regular basis
- Regular electrical and structural inspections are carried out on all the street lights
- Faults that are reported are attended to as quickly as possible to provide little disruption to the service.
- Fly posting and graffiti are removed within 24 hours of the receipt of information.

As part of the agreement Amey LG Ltd also undertake all works orders for traffic sign and illuminated apparatus maintenance on Walsall's highway network. This work is collaboratively managed with the PFI and the Highway Repair and Maintenance Contract works carried out by Tarmac.

9.4 Invest to Save Initiative

As part of national trials it has been identified that there is potential economic benefit in investing in low energy technology. £250,000 has been identified for the prevision of LED lighting which have been shown to use less electricity, have a longer lifespan and require less maintenance. This project will be initiated during 2012/13.

10.0 Bridges & Highway Structures

10.1 Information about Walsall's bridges and other highway structures

Walsall Council is responsible for 121 road bridges and culverts, of which 92 were included in the assessment and strengthening programme, with the remainder having been reconstructed within the last ten years.

In accordance with the Highways Act 1980 and recommendations set out in the Design Manual for Roads & Bridges Walsall undertakes principal bridge inspections every six years and general inspections every two years, reactive inspections are carried out following reports of distress or damage.

There are also 61 bridges in the ownership of Network Rail, British Rail Property Board and British Waterways, all of which must satisfy the requirements of the Transport Act 2000.

The current forward works programme is based largely upon the findings from its structural inspections, but has also been influenced in recent years by the elevated national emphasis for the Primary Route Network and reduced levels of capital funding.

Walsall's programme for assessment which was completed in 2001/2002 included those bridges in the ownership of the Statutory Transport Undertakers, and of the eight bridges which now require strengthening all but one are in the ownership of the Statutory Transport Undertakers, mainly Network Rail.

11.0 Winter Service

11.1 Winter Service Operational Plan

A Winter Service Operational Plan is revised before the start of each winter season and published separately.

Walsall's Winter Service Operational Plan 2011/12 can be found on our website at:

http://cms.walsall.gov.uk/index/transport_and_streets/highway_maintenance/winter_service.htm

The Winter Service Operational Plan is reviewed and updated each year and requires cabinet approval each Autumn.

11.2 Summary of Walsall's Winter Service

Winter service is snow and ice clearance, or the precautionary spreading of salt on highways to prevent ice from forming. As a caring council we wish to reduce the impact bad weather has on residents and users of the borough's highways by achieiving the following aims:

- Minimise the loss of life and injury to highway users, including pedestrians, and preventing damage to vehicles and other property.
- Keep the highway free from obstruction and thereby avoid unnecessary hinderance to travel.

11.2.1 Grit boxes

Grit boxes are filled up prior to the winter period. They are continually filled as/when needed.

All the boxes are located where we have steep gradients or difficult junctions within the borough. The locations are agreed annually by cabinet as are the gritting routes. The boxes are for the sole use of local residents in that particular street. The grit can be used on the highway or pavement (not on drives).

11.3 What can I expect from winter service?

The full winter service operates from 1 November to 31 March the following year. A limited response to bad weather is also available in October and April.

The total length of roads in the borough is approximately 532 miles (856km) of which 218 miles (351km) are salted; this is equivalent to 41% of the roads in the borough.

Footways and minor roads are not routinely treated, but snow and ice removal is undertaken if possible where normal council duties are prevented, such as road repairs or grounds maintenance.

11.4 How does it work?

We receive weather forecasts from the MeteoGroup UK Road Cast service, which uses data from road sensors throughout the West Midlands. The decision to spread salt on roads depends on a number of factors, not just air temperature. We follow the procedure recommended in the Code of Practice for Maintenance Management – Well-maintained Highways.

- View the winter service operational planWinter Service Plan 2011-12 (PDF 261KB)

11.5 What do you expect from me?

- Remember rules 203-206 in the Highway Code about driving in icy and snowy weather; they help to ensure your safety and that of other road users and pedestrians
- Please ensure that your vehicle is serviced for the winter with enough anti-freeze, tyres with the right depth of tread, and effective windscreen wipers and washers
- In bad weather listen to local traffic and weather reports before your journey, and then consider if your journey is essential
- In poor conditions keep your speed down, use dipped headlights, look out for vulnerable road users such as pedestrians and cyclists and leave plenty of room in front of you – up to ten times the normal distance may be required if you have to stop
- Be aware that a road may not be treated along its whole length and that treatment does not guarantee that the road is free of ice and snow

12.0 Emergency Planning

12.1 Emergency Planning Information

It is expected that the response to major emergencies on the highway will initially be co-ordinated by the emergency services.

For attendance at road traffic accidents, spillages, localised flooding, water main bursts, etc an emergency response is provided by Tarmac as part of the Highways Repairs and Maintenance Contract on 01922 650000.

In the event of damage to illuminated street furniture, Amey Infrastucture Services our PFI partner provide an emergency response service – contact number 0800 3891732.

24 hour, 365 day services in both cases.

For major emergencies, the response will be co-ordinated as per Walsall Council Emergency Plan which can be found on our website by the link below.

http://cms.walsall.gov.uk/index/policing_and_public_safety/emergencyplanning.htm

13.0 Sustainable Highway Maintenance

13.1 Sustainable Highway Maintenance

Chapter 10 of Walsall's HAMP Recycling and sustainability provides significant detail about Walsall's Sustainable Community Strategy, existing practices and our recycling and sustainability options appraisal.

We have also carried out a Climate Change Risk Assessment and Action Plan for key highway assets which forms part of Walsall Council's Climate Change Strategy and Action Plan 2008-2012 which can be viewed on our website on the link below:

http://www.walsall.gov.uk/microsoft_word_-_walsall_climate_change_strategy_and_action_plan_final.pdf

This chapter of the strategy therefore focuses on areas not covered elsewhere in the HAMP in relation to materials, treatments and maintenance design.

13.2 Materials and Treatment

All materials and treatments are selected and specified with reference to the Design Manual for Roads and Bridges and the relevant British or European Standards. However materials and treatments employed should also take into account the requirement to ensure that schemes are sustainable and are designed with maintenance in mind.

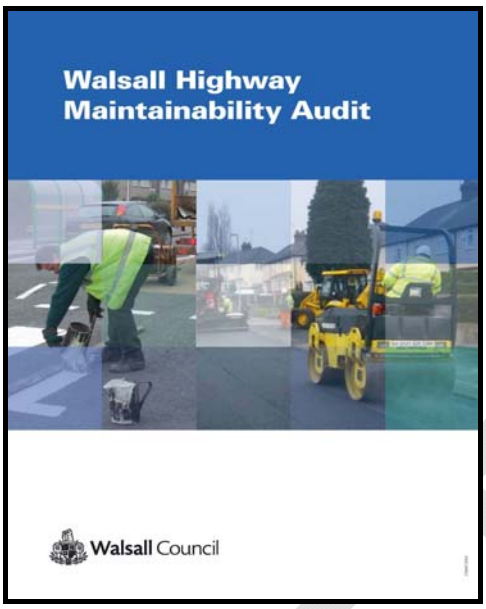
To ensure that there is a level of consistency and that these requirements are met Walsall has introduced a Highway Maintainability Audit as recommended by the Code.

13.3 Walsall's Highway Maintainability Audit (WHMA)

The Walsall Highway Maintainability Audit (WHMA) ensures our commitment to carefully consider the future maintenance and sustainability of any changes made to the highway network.

The WHMA can be viewed on our website on the following link:

www.walsall.gov.uk/highways_audit.pdf



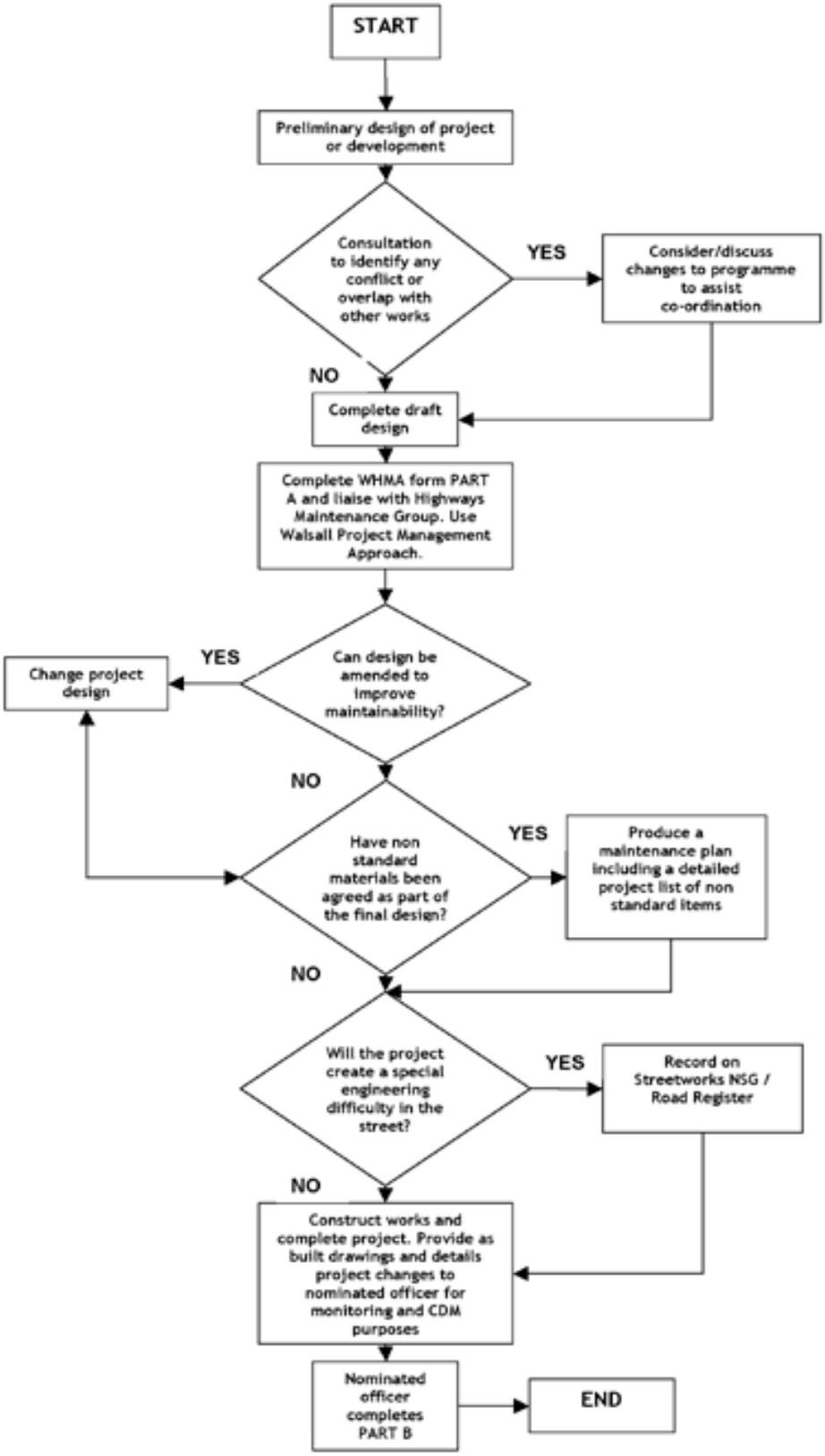
The purpose of the WHMA is to co-ordinate the design of all proposed highway materials and to ensure as far as reasonably practicable that future maintenance implications are considered at the earliest stage of any highway project. It is essential that the designer's freedom for innovation is protected. It is hoped that the WHMA will provide the opportunity for all parties to contribute their experience and expertise. **Figure 12** shows a flowchart of the process.

Main Objectives

To encourage designers and officers to;

- Select materials which are durable and functional.
- Select materials that are from a sustainable, ethical source which can be easily matched, replaced and maintained.
- Work closely together.
- Reduce street furniture and unnecessary clutter.
- Improve/maintain safety of the travelling public.

Figure 12 Designing with maintenance in mind and monitoring flowchart



Key deliverables

The WHMA will be monitored over time to establish whether it has been successful.

It is hoped that the key deliverables will be;

- Reduced remedial works (and therefore congestion).
- Less routine maintenance and better knowledge for future planned maintenance operations.
- Better surfaces to walk, cycle and drive on.
- Reduced waiting times for repairs which are sometimes due to suppliers' delivery times. By identifying items of this nature it is possible to either carry stock items or use alternative materials and products.

14.0 Procurement and Service Delivery

14.1 Introduction

Following an extensive options appraisal carried out by Walsall and leading procurement consultants Knowles (now known as Hill International) the number of term maintenance contracts service level agreements has reduced from 13 to 6, which are:

- Public Lighting PFI Project Contract (Amey Infrastructure Services)
- Highways Repair and Maintenance Contract (Tarmac)
- Grounds Maintenance SLA (Street Pride)
- Street Cleansing SLA (Street Pride)
- Waste Management SLA (Street Pride)
- Refuse Collection and Associated Service SLA (Street Pride)

Their report recommended that fundamental rather than incremental change was desirable to improve service delivery and efficiency. Based on this outcome, the short term proposal was to enter into a partnership with an external service provider for a four-year period with an option to extend for a further four years via an extension for two plus another two years. The longer term recommendation from the report was to explore the benefits of a Highways Maintenance PFI arrangement.

Since the Public Lighting PFI is covered in some detail in Chapter 9 this chapter will focus on the fundament changes to service provision which have resulted from the Highways Repair and Maintenance Contract.

14.2 Highways Repair and Maintenance Contract

14.2.1 Contract Terms

The Highways Repair and Maintenance Contract (HRMC) between Walsall and Tarmac commenced on 1 May 2009 and will initially be for 4 years until March 2013 with potential further extensions from 2013 to 2015 and 2015 to 2017 being subject to the satisfactory performance of the contract. At the time of writing this strategy the Council is considering the options for extending the contract or re-tendering in 2013.

HRMC is an NEC (New Engineering Contract) Version 3 Term Service Contract.

The contract was awarded following competitive tender and based on an evaluation based upon a scoring criteria of 40% for cost elements and 60% for

quality elements. This ensured that the priority was the quality of the service provided.

14.2.2 Contract Scope

HRMC covers 15 service areas as follows:

1. Structural repair of footways and carriageways
2. Minor highway improvements
3. Reactive highway repairs
4. Highway drainage works
5. Cleaning of highway drains and gullies
6. Public rights of way
7. Road markings
8. Traffic signs (in collaboration with Amey Infrastructure Services)
9. Pedestrian direction signs
10. Street nameplates
11. Winter Service
12. Domestic vehicular crossings
13. Design work
14. Anti-skid surfaces
15. 24 hour emergency call out provision

14.3 Fundamental change

The implementation of HRMCS has seen the outsourcing of the former Highways Street Pride 'in house' service to the private sector.

46 employees have transferred from Walsall Council to Tarmac under TUPE.

A new depot has been provided at Apex Road, Brownhills. The contract builds on what was an existing and successful six-year relationship between Tarmac and Walsall Council.

14.4 Improving Services

14.4.1 Reactive maintenance – pothole repairs

Through the LEAN review process in Roadworks Management considerable work has been undertaken in collaboration with Tarmac to improve and streamline this aspect of the contract. Leading up to this work it was estimated that 84% of pothole repairs required a return visit. By examining working practices and the type and nature of materials being used we now ensure that permanent pothole repairs are (excepting emergency situations) undertaken reducing the return rate to zero. Experiments have been ongoing in the delivery of larger scale patching works where the number and proximity of

potholes/damage makes it economically viable to repair one large area rather than lots of smaller ones.

In addition work has been ongoing in policy changes involving the response time to non-emergency potholes. Moving from 24 hours to five working days will give us opportunity to plan the work strategically and increase value from our contractors.

14.4.2 Cashable and non-cashable savings

The Lean review mentioned previously identified cashable and non-cashable savings of circa £400K together with continuous improvement in service delivery and better standards of workmanship.

14.4.3 Asset inventory collection

The new gully cleansing vehicle, introduced in 2011, is equipped with data capture equipment. This will not only allow performance to be managed more efficiently but will also have the benefit of being able to collect inventory data about Walsall's highway drainage system.

The position and condition of gullies will be mapped on a GIS and routinely updated each time each a gully receives attention.

This is seen as a significant cost saving and a sustainable way of managing this area of the highway asset inventory.

Due to the high number of gully cover thefts a composite gully is being trialled the results of which could see the Council changing to their use as opposed to metal covers.

15.0 Financial Management

15.1 Introduction

The council operates a policy-led budget approach, the purpose of which is to challenge existing funding, service provision and strategic resource allocation to enable decisions on realignment of budgets to drive improvement, reflect changing policy, and identify possible savings and income opportunities. This approach is intended to identify the low(er) priority areas in the council's budget, and support decisions to stop investing in those services. This will provide a basis for realigning funding to higher priority/new areas and/or to employ resources in a different way.

There is a regular, established process for renewal and redirection of the council's resources. This enables the council to demonstrate best value in the allocation of its resources, whilst also being an intrinsic element of:

- the achievement of the council's vision 2012
- the service planning process
- medium term financial planning

The allocation of capital resources is also tied to the achievement of the council's priorities and there is an increasing emphasis not only on analysing the revenue implications of capital investment, but also on ensuring what the most appropriate source of funding i.e. capital or revenue, should be and assessing the implications for the medium to longer term financial planning framework.

15.2 Highways Capital Resources 2012-15

The estimate of capital expenditure for highways maintenance services is detailed in **Table 12**.

Table 12 Highways Maintenance Capital Resources

CAPITAL BUDGET HEADING	20012/13	2013/14	2014/15
Council Capital	**£1.2M**	**£1.2M**	**£1.2M**
From LTP Maintenance Block (not including bridge maintenance)	**To be confirmed**	**To be confirmed**	**To be confirmed**
TOTAL EXPENDITURE BUDGET	**To be confirmed**	**To be confirmed**	**To be confirmed**

15.3 Highways Revenue Resources 2009-12

The estimate of revenue expenditure for highways maintenance services is detailed in **Table 13**. These estimates were derived from the budget approach highlighted above.

Table 13 Highways Maintenance Revenue Resources

REVENUE BUDGET HEADING	2012/13	2013/14	2014/15
PLANNED MAINTENANCE			
Traffic Signs Maintenance	£161,983	£161,983	£161,983
Condition Surveys	£50,595	£50,595	£50,595
Road Marking	£81,112	£81,112	£81,112
Structural Highways Maintenance	£1,228,407	£1,228,407	£1,228,407
De-trunking	£105,781	£105,781	£105,781
TOTAL PLANNED	**£1,627,878**	**£1,627,878**	**£1,627,878**
REACTIVE MAINTENANCE			
Reactive Highways Maintenance	£1,694,325	£1,694,325	£1,694,325
Highway Drainage	£129,863	£129,863	£129,863
Winter Service	£294,588	£294,588	£294,588
Street nameplates	£20,648	£20,648	£20,648
Safety Fencing	£30,695	£30,695	£30,695
Streams and Brookes	£10,000	£10,000	£10,000
Preliminarys	£1,012,438	£1,012,438	£1,012,438
TOTAL REACTIVE	**£3,192,557**	**£3,192,557**	**£3,192,557**
TOTAL EXPENDITURE BUDGET	**£4,820,435**	**£4,820,435**	**£4,820,435**
Note that figures do not include income or receivable or recharges and are works budgets only. (Future years figures may also vary due to identified savings)			