AN EXCELLENT COUNCIL

ANNEXURE 12

Routine Maintenance Protocol

SHEFFIELD CITY COUNCIL

DEVELOPMENT, ENVIRONMENT & LEISURE DIRECTORATE

STREET MAINTENANCE POLICY STANDARDS AND STRATEGY STATEMENT

2008





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Facilities are available for this Statement to be communicated in different formats [eg large print or different languages].

FOREWORD

In summary the key objectives of this Policy, Standards & Strategy Statement are:

- To ensure regular reviews and continuous development of street maintenance policy and strategy consistent with the Council's priorities.
- To meet the needs of the community through a customer focused approach and by active engagement with Area Panels to help shape priorities and programmes.
- ◆ To ensure harmonisation and consistent application of street maintenance practices and standards, where this is consistent with customer expectations, but retaining reasonable variation consistent with local choices as far as practically possible.
- To ensure the adoption of an efficient and consistent approach to the collection, processing and recording of street maintenance inventory, condition and status information for the purpose of both local and national needs, assessment, management and performance monitoring.
- To ensure the adoption and regular review of a risk management regime in the determination of local, technical and operational standards.

1. INTRODUCTION

This Policy, Standards and Strategy Statement is a framework document to ensure a consistent and systematic approach to Street Maintenance but with sufficient flexibility to enable the local needs of customers to be met.

The core objectives of Street Maintenance are:

Network Safety

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

♦ Network Serviceability

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

♦ Network Sustainability

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

Street Maintenance is fundamentally about ensuring the street network is fit for its purpose, in particular the safe and convenient movement of people and goods.

However, the contribution of Street Maintenance to the achievement of the Council's corporate priorities extends far wider than transport. It is fundamental to the economic, social and environmental well being of the city.

The Policy, Standards and Strategy Statement seeks to support the Council's overall priorities and provide a tool to ensure the effective management of the street network to aid regeneration, social inclusion, community safety, health and the environment.

It is complemented by an annual Street Maintenance Plan, which translates policy and strategy into action for the year in question.

2. POLICY & STANDARDS

There are eight key service areas under the broad umbrella of Street Maintenance:

- ♦ Highway Maintenance
- ♦ Street Cleaning
- Public Toilets
- Environmental Maintenance
- ♦ Street Lighting Maintenance
- ♦ Signs & Signals Maintenance
- ♦ Bridge Management
- Winter Service and other Emergencies

On the following pages are policy statements describing the broad aims of each Service Area, what is proposed to achieve them, the standards set and the performance indicators used to measure compliance with the standards.

Underpinning these eight key service areas are a policy statement, performance indicators and set of standards in relation to Customer Services.

HIGHWAY MAINTENANCE

The broad aims of the Highway Maintenance Services are: -

To carry out such works of maintenance to highway drainage systems, footways, carriageways, markings and street furniture, to keep them safe and of sound structural integrity for the convenient movement of people and goods.

To ensure that these broad aims are achieved we will:

- Carry out safety inspections, at a minimum frequency of one year, on all carriageways and footpaths that are adopted highway, together with footpaths and interlinking footpaths, which were formerly maintained by Neighbourhoods.
- Carry out ad hoc inspections of cycleways that are remote from the main highway network following customer requests for service.
- Carry out systematic inspections and ad-hoc inspections following customer requests for service to identify highway maintenance works.
- Prioritise routine, reactive and emergency maintenance following these inspections in accordance with agreed criteria set out later in this document.
- Carry out systematic condition surveys to monitor the structural condition of footways and carriageways over time and for local identification and prioritisation of programmed maintenance treatments and schemes.
- Carry out regular skid resistance surveys on the Principal Road Network and the Non-Principal Classified Road network to identify locations for further detailed site investigation. A separate Skid Resistance Policy complements this document.
- ♦ Carry out maintenance works in a timely manner, while minimising inconvenience and delays to customers.
- Carry out inspections to monitor works carried out in the highway by Utilities and other authorised organisations in accordance with the New Roads & Street Works Act (NRWSA) (1991), the Traffic Management Act (TMA) (2004), and the associated Codes of Practice.
- ♦ If necessary, following detection of non-compliance under NRSWA, serve Improvement Notices on the Utilities with the express intention of protecting the asset value of the highway and ensuring its availability.
- Fully investigate and respond to all claims in accordance with the Woolf Reforms for personal injury suffered on the highway. All claimants will be treated equally and given help and guidance to complete a standard claim form, as only claims in writing or by electronic means will be considered.
- Take account of the Council's statement on Flood Protection and its Flood Management Strategy and Plan when carrying out drainage maintenance work.

HIGHWAY MAINTENANCE PERFORMANCE INDICATORS & STANDARDS

PERFORMANCE INDICATOR	STANDARD
Damage to roads & pavements made safe in 24 hours. Defined by defects greater that the following levels: footways 20mm in dangerous locations; carriageways [general] 40mm; carriageway/ pedestrian crossings 20mm.	99%
Condition of the Principal Roads expressed as a percentage requiring major maintenance (based on the results of a SCANNER survey) (NI 168, formerly BV223)	14.9% 2008/09* 14.8% 2009/10* 14.7% 2010/11*
Condition of Non Principal Classified Roads expressed as a percentage requiring major maintenance (based on the results of a SCANNER survey) (NI 169, formerly BV224a)	28%
Percentage of accessible gully pots, which are unblocked/flowing freely	93%

^{*} These are the agreed Local Area Agreement Targets.

STREET CLEANING

The broad aims of the Street Cleaning Services are: -

To carry out such works of street sweeping, and litter, fly posting and graffiti removal to deliver standards of Streetscene cleanliness in general compliance with the Code of Practice for Litter and Refuse.

To ensure that these broad aims are achieved we will: -

- Continue to implement effective strategies to sustain continuous improvement in cleanliness standards.
- Carry out street sweeping, graffiti and flyposting removal and litter picking on Major Gateways, City Centre and Principal Shopping Areas to keep them predominantly litter and graffiti free.
- Carry out street sweeping, graffiti and fly posting removal and litter picking on the remainder of the network to keep the Streetscene as clean as possible.
- Work in partnership with South Yorkshire Police, South Yorkshire Fire & Rescue, DVLA and their contractor, Veolia Environmental Services (United Kingdom) and Sheffield First for Safety to enable the rapid removal of abandoned vehicles throughout the City.
- Work in partnership with Community Groups and Schools to encourage clean-ups of specific areas of the Streetscene especially during Environment weeks but also provide facilities and encouragement all year round.
- Empty litterbins on a regular basis to keep them from overflowing.
- Provide a responsive service for the rapid removal of fly tipping.
- Carry out mechanical sweeping of carriageway channels to keep them predominately free from detritus to allow the efficient flow of surface water into gully pots and drainage systems.
- Provide relevant information to South Yorkshire Police and colleagues in Environment & Regulatory Services to permit appropriate enforcement measures and legal action to be taken against offenders.
- Work in partnership with local businesses to deliver the Graffiti Charter in which the Council, South Yorkshire Police and co-signatories to the Charter have pledged to remove graffiti from property in the City Centre Principal Shopping Areas and Major Gateways as soon as practicably possible.

STREET CLEANING PERFORMANCE INDICATORS & STANDARDS

PERFORMANCE INDICATOR	STANDARD
	14% 2008/09*
Percentage of relevant land and highways that is assessed as having unacceptable deposits of litter (NI195a, formerly BV199a)	13% 2009/10*
maving anadoptable deposite of litter (mireca, fermelly by reca)	12% 2010/11*
Percentage of relevant land and highways that is assessed as having unacceptable deposits of detritus (NI195b, formerly BV199a)	16%
Percentage of relevant land and highways that is assessed as having unacceptable levels of visible fly-posting (NI195d, formerly BV199c)	2%
Percentage of relevant land and highways that is assessed as	16% 2008/09*
having unacceptable levels of visible graffiti (NI195c, formerly	15% 2009/10*
BV199b)	14% 2010/11*
Percentage of Major Gateways that are of an unacceptable standard of cleanliness, measured in accordance with NI 195 methodology	13%
Percentage of Principal Shop sites that are of an unacceptable standard of cleanliness, measured in accordance with NI 195 methodology	8%
Percentage of litterbins that are not overflowing	97%
Average time to remove fly-tipping from highway land	1.2 days
Percentage of Abandoned Vehicles investigated within 48 hours of Notice	98%
Percentage of Abandoned Vehicles removed within 5 working days of Notice	96%
Percentage of racist & obscene graffiti removed from street furniture and structure within the maintainable highway within 24 hours of notification	100%

^{*} These are the agreed Local Area Agreement Targets

PUBLIC TOILETS

The broad aims of Public Toilet provision are: -

To provide or facilitate the provision of clean, safe, accessible and sustainable public toilets at key locations on the highway.

To achieve these aims we will provide: -

- An increased number of facilities accessible to members of the public by the introduction of a Community Toilet Scheme.
- 24 hour service at key locations.
- Facilities accessible to all at the following locations:
 - City Centre Public Toilets Restricted Opening Town Hall, Surrey Street – Gents Town Hall, Cheney Row – Ladies Moorfoot
 - City Centre Superloos Open 24 Hours Angel Street Exchange Street The Moor
 - Suburban Public Toilets Open 24 Hours Fox House PH Car Park Low Bradfield
 - Suburban Superloos Open 24 Hours
 Birley Moor Road
 Darnall
 Deepcar
 Hillsborough
 - Suburban Superloos Restricted Opening Stocksbridge
 - Suburban Public Toilets Restricted Opening

Bolsterstone

Burngreave

Cowley Lane, Chapletown

Gleadless Townend

Halifax Road, Wadsley Bridge

Manor Top

Meadowhead

Rivelin Post Office (Closed at present, undergoing replacement)

Manchester Road, Stocksbridge

Woodseats

- Clean, safe and well maintained facilities at all locations.
- Easily found facilities with good signage at all locations.
- User information distributed through the Council's website and other media.
- Facilities that are not duplicated within the same area.
- Facilities suitable for the location.
- Sustainable provision.
- Reduce the carbon footprint of our facilities by the use of proximity switches for lighting, solar panels and water monitoring.
- Maximised provision through partnership.

There are no national performance indicators and standards in place at this time, as there is no statutory duty on Local Authorities to provide public toilets.

ENVIRONMENTAL MAINTENANCE

The broad aims of the Environmental Maintenance Service are:

To carry out such works of maintenance to highway verges, hedges, trees and planted areas to keep them safe, tidy and of a pleasant visual appearance.

To ensure that these broad aims are achieved we will:

- Cut urban-grassed areas in the highway to achieve the specified standard on page 13 between March and October and cut rural grass at least once per year.
- ♦ Carry out further cuts at specific locations, if necessary, for safety reasons e.g. to maintain sight lines at junctions.
- Carry out systematic inspections of highway trees and ad-hoc inspections following customer requests for service to ensure they are sound of structure and safe.
- Prioritise necessary tree maintenance following these inspections in accordance with agreed criteria set out later in this document.
- Carry out maintenance of planted areas, hedges and shrub beds to preserve the visual appearance of the streetscene, maintain sight lines and prevent encroachment.
- Work in partnership with local businesses to secure sponsorship to fund and provide floral features on roundabouts and verges.
- Work in partnership with local community groups and schools to plant spring bulbs in public spaces generally throughout the city.
- Carry out three weed sprays per year on all urban footways, pedestrian areas and around obstacles in highway verges.
- Work in partnership with businesses, community groups and schools to encourage participation in works of environmental improvement, in particular support entries where possible by villages and urban communities into In-Bloom competitions.
- Work, in particular with other public bodies, external organisations and other Council Services to deliver integrated streetscene and public open space management.
- Carry out all environmental operations with due regard to biodiversity in accordance with the Natural Environment & Rural Communities Act 2006: Section 40.

ENVIRONMENTAL MAINTENANCE PERFORMANCE INDICATORS & STANDARDS

PERFORMANCE INDICATOR	STANDARD
Percentage of inspected urban grass sites that comply with the specification	80% Between the height of 20mm and 100mm
Frequency of grass cutting in Rural Areas	Once per year
Frequency of Weed Spraying on Footways and Pedestrian Areas	3 times per year
Inspection of Highway Trees	Full survey in 2006 & 2007. Once every 5 years thereafter*
Percentage of overgrown hedges obscuring site lines cut back and made safe within 24 hours of request	95%
Percentage of trees removed for safety reasons replaced by a new tree in the same position if practically possible, and if not as near as possible in a suitable location.	100%

^{*} As part of the advance work to prepare an Outline Business Case for the Private Finance Initiative [PFI] Project a full inspection of all highway trees was started in Spring 2006 and completed by Autumn 2007. In future years the inspection frequency will be a minimum of once every 5 years or at a reduced frequency based on specialist arboricultural advice as recommended in the Code of Practice for Highway Maintenance.

STREET LIGHTING MAINTENANCE

The broad aims of the Street Lighting Maintenance Service are: -

Light the streets of Sheffield during the hours of darkness to reduce crime, allay the fear of crime, help community safety and improve road safety.

To ensure that these broad aims are fulfilled we will:

- Seek to ensure value for money in the supply of energy.
- ♦ Operate a 24-hour emergency attendance service to respond to all dangerous occurrences involving electrical equipment on the highway.
- Work with South Yorkshire Police and the Community Safety Unit to identify priority areas for the replacement/improvement of street lighting.
- Maintain a detailed inventory of all the Council's street lighting equipment on the highway to comply with the requirements of the Department for Transport and energy supply companies.
- ♦ Identify works of street lighting maintenance by carrying out routine inspections and analysis of residents' and other requests for service.
- Carry out routine inspections of the whole lighting network during the hours of darkness, varying from every 2 weeks in the winter to every 4 weeks in the summer and 18 times a year in total to identify outages and other street lighting defects.
- Programme and carry out repairs to identified faults, including full replacements of street lighting units in a timely manner, while minimising inconvenience and delays to customers.
- Replace all columns knocked down or severely damaged by vandalism and traffic incidents and seek to recover the cost wherever possible.
- When carrying out individual electrical repairs, on life expired equipment, convert the luminaires from low pressure sodium to high pressure sodium or white light sources to improve the quality of light emitted and light control
- Carry out electrical inspections of street lighting equipment to coincide with electrical repairs, and produce certification in accordance with BS7671.
- Ensure power supply faults are referred promptly to the relevant Distribution Network Operator (DNO) and ensure that they are meeting their service level agreement delivery targets.
- Carry out structural integrity and safety condition surveys by visual and nondestructive testing methods. Remove and, where funding allows, replace columns that are deemed to be life expired and are potentially at risk of collapse.

STREET LIGHTING MAINTENANCE PERFORMANCE INDICATORS & STANDARDS

PERFORMANCE INDICATOR	STANDARD
Percentage of street lights working as planned	97%
Average time to repair a reported street lighting fault (Local Authority)	3 Calendar days
Average time to repair a reported street lighting fault (Distribution Network Operator)	12 Calendar days

SIGNS AND SIGNALS MAINTENANCE

The broad aims of the signs and signals maintenance service are:-

To carry out such works of maintenance to traffic signs and signals to keep them safe and of sound structural integrity for the safe and convenient movement of vehicular traffic and pedestrians.

To ensure that these broad aims are fulfilled we will:

- Maintain a detailed inventory of all the Council's illuminated signs and traffic signals on the highway to comply with the requirements of the Department for Transport.
- Build up a detailed inventory of all non-illuminated traffic signs on the highway as resources allow complying with the requirements of the Department for Transport.
- Carry out routine inspections of all illuminated signs during the hours of darkness, varying from 2 weeks in the winter to 4 weeks in the summer and 18 times a year in total to identify outages and other sign defects.
- Programme and carry out repairs to identified faults in a timely manner following prioritisation, so as to minimise inconvenience and delays to customers as far as possible.
- Bulk lamp change all traffic signal installations once every twelve months. This
 also includes cyclical cleaning of traffic signal aspects.
- Replace all signs and signals which are vandalised or damaged in road traffic incidents, and seek to recover the cost wherever possible.
- ♦ Carry out electrical inspections of illuminated signs and traffic signals to coincide with electrical repairs, and produce certification in accordance with BS7671.
- Ensure power supply faults are referred promptly to the relevant Distribution Network Operator (DNO) and ensure that they are meeting their service level agreement delivery targets.
- Operate a 24-hour emergency attendance service to respond to all dangerous occurrences involving traffic signs and signals equipment on the highway.

SIGNS AND SIGNALS MAINTENANCE PERFORMANCE INDICATORS AND STANDARDS

PERFORMANCE INDICATOR	STANDARD
Percentage of traffic bollards in place on Principal roads	99%
Percentage of traffic bollards in place and lit on Principal roads	95%
Percentage of traffic bollards in place on all other roads	99%
Percentage of traffic bollards in place and lit on all other roads	87%
Percentage of illuminated signs on 'A' roads which are lit as planned	90%
Percentage of traffic signal lamps which are bulk changed once per year	100%
Average response time to repair traffic signal lamp faults	1 day

BRIDGE MANAGEMENT SERVICE

The broad aims of the Bridge Management Services are:

To inspect and maintain all highway structures including bridges, retaining walls, culverts, footbridges, subways, gantries and public right of way bridges to ensure their structural integrity for the safe passage of traffic and pedestrians.

To achieve these aims we will:

- Carry out a general structural inspection of all structures (excluding retaining walls) at a maximum two yearly intervals.
- ♦ Carry out safety inspections on subways and highway footbridges at 3 monthly intervals in the City Centre and 6 monthly elsewhere in the City.
- Carry out ad hoc inspections of retaining walls following customer requests for service and non-routine inspections by Bridge Management staff.
- Carry out ad-hoc inspections following customer requests for service to identify maintenance works on all bridges and structures.
- Prioritise routine, reactive and emergency maintenance following these inspections.
- Assess structures where required in accordance with current national standards to determine the load carrying capacity.
- Manage structures assessed as being sub-standard in terms of load carrying capacity in accordance with the Design Manual for Road and Bridges.
- Maintain a computerised Bridge Management System for all highway structures in the City.
- Liaise with Utilities and developers to approve and co-ordinate all works affecting existing and proposed highway structures to minimise inconvenience to the general public and prevent damage.
- Co-ordinate the routing of abnormal loads on the highway network.
 - **NB** The national standards used as reference for inspections of highway structures are:

BD63/07 Inspection of Highway Structures
BD2/05 Technical Approval of Highway Structures
Inspection Manual for Highway Structures

BRIDGE MANAGEMENT PERFORMANCE INDICATORS AND STANDARDS

There are no national Performance Indicators (PI's) in place at this time.

A Bridge Condition Index system for determining bridge condition has been introduced by the County Surveyor's Society and will be used as a PI and for future Local Transport Plan [LTP] bids.

WINTER SERVICE & OTHER EMERGENCIES

The broad aims of the Winter Service are: -

To carry out such precautionary salting, and snow clearing, as far as reasonably possible, to keep the precautionary salting network free from ice and snow, permit the safe movement of vehicular traffic and pedestrians and minimise delays and accidents directly attributable to the adverse weather conditions.

To ensure that these broad aims are fulfilled we will:

- Prepare an annual Winter Service Operational Plan in accordance with national standards*.
- Categorise the precautionary salting network into primary and secondary routes and priority footway and cycleway routes in accordance with national standards.
- Pre-salt the primary network which consists of roads linking Cities together, routes of more than local significance, the main public transport corridors, roads linking important industrial establishments, hospitals, ambulance and fire stations within 3 hours of the decision to commence treatment.
- Pre-salt the secondary routes, which consist of those which form the main and secondary distribution routes, routes leading to schools, bus garages, important bus routes, important commuter routes, shopping centres, single access to villages and known trouble spots, before the build up of morning rush hour traffic, nominally before 7.30am.
- Precautionary salt the Priority Footway Network before the build up of heavy pedestrian flow, nominally before 7.30am.
- Treat roads not on the precautionary salting network and footways and pedestrian areas not on the City Centre route, after the event of snow and ice forming and when resources are available from higher priority winter maintenance activities.
- Maintain the existing network of boxes containing rock salt [salt bins] on the highway and increase the number by 50 each year based on need, determined in accordance with agreed criteria detailed in this Statement.

^{*} The national standard referred to is "Delivering Best Value in Highway Maintenance – Code of Practice for Maintenance Management".

In respect of other emergencies we will:

Provide a 24 hour emergency stand-by service to respond effectively to dangerous occurrences in the general street environment to deal with flooding, gale damage, emergency repairs and removal of debris and traffic management after road traffic accidents, to permit the safe movement of vehicular traffic and pedestrians and minimise delays.

WINTER SERVICE PERFORMANCE INDICATORS & STANDARDS

PERFORMANCE INDICATOR	STANDARD
Coverage Factor The precautionary salting network as a percentage of the total highway network	59%
Route Length Salted The average number of miles salted per route	25 – 30 Miles
Route Efficiency The miles salted as a percentage of the total route mileage	70% - 75%
Spread Rate The average weight of rock salt per square metre spread on the highway (precautionary salting when ice is predicted)	10-15 grams per sq. metre
The average weight of rock salt per square metre spread on the highway (precautionary salting in advance of predicted snow).	20-40 grams per sq. metre
Response Time (Primary Routes) The average time from the decision to commence treatment to completion of the route	< 3 hours
Response Time (Secondary Routes) The occasions when the routes were treated before 7.30am	All occasions

CUSTOMER SERVICES

In respect of customers, the broad aims for Street Maintenance services as a whole are to provide a customer focused service that is accessible, responsive, courteous and informative, based on regular consultation to determine customer needs.

To achieve these broad aims, we will:

- Provide a Contact Centre for customers to make requests for service and register complaints by telephone.
- Provide a Customer Bureau for customers to make requests for service and register complaints by fax, e-mail, letter and in person.
- Produce and distribute widely a Customer Charter, which clearly sets out what the customer can expect in terms of service delivery standards, services provided and how to gain access to register requests for service and complaints.
- Develop, produce and distribute a suite of Information Leaflets, which clearly set out what the customer can expect in terms of service delivery, services provided and how to gain access to register requests for service and complaints.
- Carry out regular consultations to identify user needs and views.
- Provide up to date information about the Street Maintenance Service on the Council's web site.
- Attend regularly at Area Panel and Safer Neighbourhood Team meetings to provide information but also to be available to answer questions and engage in dialogue to better deliver and develop street maintenance services at an area level and contribute to the Council's wider Successful Neighbourhoods priority.
- Work in accordance with the Council's Valuing Equality and Diversity Policy, including the following specific provisions:
 - Install drop crossings for people with disabilities and with prams, whenever we carry out maintenance work, which requires replacement of kerb radii at junctions and crossing points.
 - Adopt a customer friendly approach when signing and guarding all our roadworks, and work in accordance with current legislation and codes of practice whilst paying particular attention to the needs of people with disabilities, children, the elderly and people with prams/buggies.
 - Ensure that facilities are available to communicate any relevant information we produce in suitable formats e.g. large print or different languages.

CUSTOMER SERVICES PERFORMANCE INDICATORS & STANDARDS

PERFORMANCE INDICATOR	STANDARD
Percentage of e-mails acknowledged within 3 calendar days	100%
Percentage of letters acknowledged within 5 working days	100%
Percentage of letters and e-mails answered within 20 working days	97%
Percentage of telephone calls answered by the Contact Centre within 20 seconds	85%
Production and distribution of Customer Contact Cards and Customer Charter	5,000 copies annually
Production and distribution of a Winter Service leaflet	5,000 copies annually

3. STRATEGY

To ensure the broad aims of the Policy Statements for each of the key service areas under the umbrella of Street Maintenance are achieved, we will: -

IN GENERAL:

- Continue the development of the suite of computer based street maintenance management systems to sit at the heart of this Maintenance Strategy.
- ♦ Ensure that street maintenance activities are integrated and co-ordinated with highway improvements and other works that impact on the highway, to aid the achievement of the objectives of the Local Transport Plan, the Traffic Management Act, and wider corporate priorities.
- Develop a Highways Asset Management Plan, as described in Appendix 5, to ensure the management of the complete highway asset, including lighting, bridges and structures, is delivered as effectively as possible to maximise the value of the asset to both the City Council and wider community of Sheffield.
- ♦ Adopt a systematic approach to Street Maintenance in broad compliance with the relevant Codes of Practice for Highway Maintenance Management, Street Lighting, Bridge Management and Litter and Refuse.
- Plan, programme, procure and implement works of maintenance based on a position of maximum knowledge of the condition of the streets and views of the users.
- ♦ Comply with the requirements of the Traffic Management Act 2004, in respect of works noticing, to contribute to the effective management of traffic on the City's highway network and in preparation for the introduction of a formal Permit Scheme currently planned to be in 2009 subject to Department of Transport [DfT] approval.
- Work in line with the Council's guidelines on Risk Management and take into account financial, operational and reputational risks when developing Street Maintenance plans and programmes. We will do this by:
 - Keeping a register of key risks and update annually.
 - Keeping a register of procedures updated as part of the overall annual review of all Highway Authority related standard procedures.
- Employ the principles of Best Value to continually search for year on year improvements to ensure we provide quality services and value for money to all our customers.

- Continually explore all possible opportunities to maximise the resources invested in Street Maintenance, in particular developing the Highway Maintenance PFI project. This will enable the City's highway network to be brought up to a fair standard over an initial core investment period of 7 years and subsequently maintained in this condition for a further 18 years.
- Work to help the Council deliver its key corporate priorities:
 - a strong economy,
 - successful neighbourhoods,
 - inclusive healthy communities,
 - great place to grow up,
 - environmental excellence,
 - an outstanding council.

We will seek to support the achievement of those priorities by:

- identifying key areas of interaction between street maintenance and these priorities
- maximise as far as practically possible the contribution to each of them
- ensure that potential areas of conflict are resolved
- We will develop the ongoing partnership approach between Street Force and Development Services to ensure all works, which affect use of the highway, are planned, and managed holistically.
 - In terms of the Supertram route on the Highway:

Where Supertram runs on the highway, the Highway Authority and the tram operator have concurrent responsibility regarding maintenance.

In order to ensure that the highway and tram system are adequately maintained, both parties will work together in compliance with the agreed Memorandum of Understanding between Sheffield City Council and South Yorkshire Passenger Transport Executive [SYPTE].

In terms of the Quality Bus Corridors:

In 2003, the South Yorkshire Strategic Quality Partnership endorsed a series of minimum maintenance standards for implementation by the four South Yorkshire Districts and SYPTE on the Quality Bus Corridors (QBCs), as they become established. The standards, which are detailed in Appendix 4, are particularly important on the QBCs to:

- Ensure traveller safety.
- > Protect the quality appearance.
- Minimise passenger discomfort and wear and tear to vehicles.
- Maintain operational efficiency.

 In terms of co-ordinating works of street maintenance at the boundary with adjacent authorities, we will work in accordance with Section 6 (Mutual Boundary Highway Arrangements) of the Council's approved Highway Authority procedures.

IN DETAIL:-

We will:

Databases & Management Systems

- Develop the Confirm software package in relation to Environmental (including trees), Highways, Street Cleaning and Bridge Management activities and the need to issue notices for works in compliance with the Traffic Management Act.
- Develop the Mayrise software package in relation to Street Lighting and Signs for inventory, work identification, issue and recording, budget management and handling customer requests for service by e-mail, telephone or in writing, and to issue notices for works in compliance with the Traffic Management Act.
- Develop the Confirm United Kingdom Pavement Management System [UKPMS] in relation to carriageway and footway condition monitoring and planned maintenance programmes, and fully integrate with the Highway Maintenance System for Carriageways and Footways.
- ♦ In conjunction with Development Services, develop the Symology software package in relation to New Roads and Street Works Act 1991 inspections and the Traffic Management Act.

Hierarchies & Inventories

Develop a series of logical hierarchies, to suit respective maintenance activities mindful of wider Council consideration, e.g. LTP, by classifying the streets into different categories so standards can be varied to suit the nature of the street and Area considerations. Appendix 1 refers.

Inspections

- Carry out systematic inspections and surveys for four key purposes: -
 - Network Safety
 - Network Serviceability
 - Network Sustainability
 - Joint Working with Area Panels and the Community

Appendix 2 refers

Condition, Standards & Investigatory Levels

- Define standards to meet the requirements of safety, serviceability and sustainability in respect of:
 - Condition of the fabric of the street infrastructure
 - Response times to inspections & customer concerns
 - Materials & treatments
 - Cleanliness and appearance of the streetscene

It is important to note that different parts of the street network will have different standards depending on priorities. Section 2 refers.

- Set standards in the form of investigatory levels for appropriate street maintenance activities: -
 - In respect of skid resistance, routine and ad-hoc testing will be carried out in accordance with the relevant standards in the Design Manual for Roads & Bridges to identify sites which require detailed investigations to determine follow-up actions and maintenance treatments.
 - In respect of structural maintenance, investigatory levels in the form of "System Intervention Levels" will automatically be contained with the United Kingdom Pavement Management System (UKPMS).

Budgets

- Allocate budgets, including capital funding from the Local Transport Plan (LTP), on an annual basis to street maintenance activities to achieve the standards detailed in Section 2 of this Policy, Standards & Strategy Document taking into account: user feedback, previous performance, available resources, and wider Council objectives and priorities.
- Develop systems to delegate financial accountability to ensure the consistent delivery of street maintenance standards and customer responsiveness.
- Give consideration to the special circumstances of the winter service and other weather related emergencies. In particular, there may be the need to use Corporate reserves to deal with adverse winters and extended periods of bad weather, the frequency of which is expected to increase.

Prioritisation

 Prioritise, select and deliver planned maintenance schemes and routine, reactive and emergency maintenance, in accordance with the approved criteria detailed in Appendix 3 of this Policy, Standards & Strategy Document.

Design, Materials & Environment

- Select treatments and design maintenance works in accordance with the current national design standards and adopt the principles of whole life costing, taking into account the special needs of conservation areas, strategically important sites and the Council's Environmental Policy.
- Aim to minimise the use of natural resources by design and the use of recycled materials, to carry out the works in a way that is non obtrusive to the community and to ensure that the end product of Streetscene maintenance contributes to the character and environment of areas within the city.
- Undertake material testing through our in-house services of South Yorkshire Laboratory, a United Kingdom Accreditation Service [UKAS] Quality Assured Accredited Sampling and Testing Service. The testing will consist of verification of suppliers' sources and manufacturing plants as well as day-to-day sampling and testing of material deliveries to sites and depots in accordance with the South Yorkshire Specification for Materials.

Procurement & Service Delivery

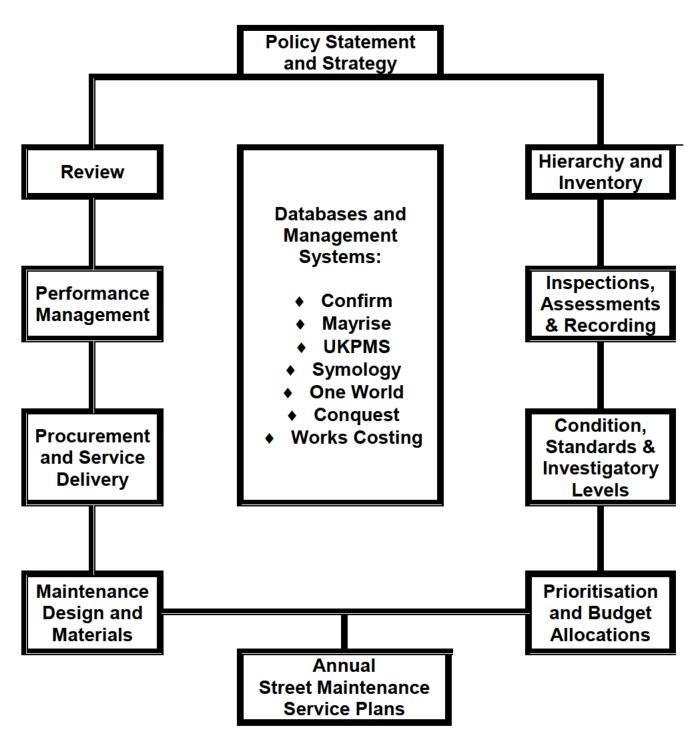
- ♦ Ensure that the service delivery standards, detailed in Section 2, and the key indicators and targets communicated to the public are included in Street Force Customer Charter. The Charter makes a public promise to residents of Sheffield in terms of the standards of Street Maintenance they can expect and how to make contact with the Council to make a request for service.
- Use Street Force, the in-house Operator, as the first choice for carrying out all Street Maintenance and new work in the highway. However mindful of its own general workload/workforce profile, expertise and competitiveness in certain types of activities, some work will be procured through the private sector in line with Standing Orders and other Council procurement guidelines.
- Actively engage with Area Panels and work collaboratively with Area Coordinators to ensure that Street Maintenance services are compatible with and supportive of Area Plans.
- Ensure work funded from the Working Neighbourhoods Fund, Local Action Plans and the Street Maintenance Revenue Budget is delivered in a joined up way at local level.
- ♦ Identify local needs by regularly 'walking the patch' with Area Co-ordinators, Local Elected Members and Community Representatives.

Performance Management

- Monitor performance on the following aspects of the Street Maintenance Service on a regular basis: -
 - service delivery standards [monthly]

- condition of the asset [annually]
- budget management [monthly]
- value for money [annually]
- programme completion [monthly & scheme/activity specific]
- customer views [annually]
- employee opinion surveys [annually]
- street maintenance policy, standards & strategy statement [annually]
- street maintenance plan [annually]

TABLE 1STREET MAINTENANCE STRATEGY



MAINTENANCE HIERARCHIES

APPENDIX 1

The following table shows different aspects of parts of the streetscene ranked in order of priority. For example, in respect of Winter Maintenance, Primary Precautionary Salting Network is given priority over the Secondary Network; in respect of Street Cleaning, the heavily used pedestrian areas are given priority over the remainder of the network and so on.

CARRIAGEWAY SURFACES Parkway Supertram route (on carriageway) Quality Bus Corridors on 'A' Roads Principal Roads Other quality bus corridors Local Roads [classified non principal] Local Roads [unclassified rural & estate roads]	FOOTWAY SURFACES Heavily used priority footways Other heavily used Footways Footways adjacent to strategic network Footways adjacent to non strategic network Remote Footways	TRAFFIC BOLLARDS → The 'A' Road Network → Other Roads	TRAFFIC SIGNS → Mandatory Signs → Regulatory Signs → Informatory Signs TRAFFIC SIGNALS → All locations are treated equally with consistent outage levels and response times achieved in all areas of the City
ROAD MARKINGS	GRASS CUTTING	TREES, HEDGES, WEEDKILLING & VERGE REPAIRS	ROUTINE REACTIVE & EMERGENCY STREET LIGHTING
 ➤ Stop Lines ➤ Give Way Lines ➤ Pelican & Zebra Crossings ➤ Centre Lines/Studs ➤ Parking Restriction Lines ➤ Other Lines 	 Major Gateways Urban Other Roads Urban Major Gateways Rural Other Roads Rural 	→ All roads are treated equally as work is prioritised based on safety related criteria, which is consistently applied in all areas of the city	All roads are treated equally with consistent outage levels & response times achieved in all areas of the city
DRAINAGE WATERCOURSES & GRILLAGES	WINTER SERVICES	GRAFFITI REMOVAL	STREET CLEANING FOOTWAYS & PEDESTRIAN AREAS
All roads are treated equally with prioritisation based on safety related criteria, which are consistently applied in all areas of the city	 Primary Precautionary Salting Network Secondary Precautionary Salting Network Priority Footway salting Network to incorporate existing City Centre priority network. Other Roads (on request) 	 Major Gateways City Centre Principal Shopping Areas Other Roads, Footways & Pedestrian Areas 	 City Centre Principal Shopping Areas Major Gateways District & Local Shopping Areas Other Footways

STREET CLEANING CARRIAGEWAY CHANNEL

- → City Centre
- Major Gateways
 ■
- Local Roads further sub divided into: -
- classified non principal roads
- unclassified estate roads
- unclassified rural roads

LITTER COLLECTION

- ➤ City Centre
- Major Gateways
 ■
- Principal Shopping Areas
- District & Local Shopping Areas
- Other Carriageways, footways & verges

GULLIES

- Blockages causing flooding of major highway route or building(s)
- Blockages causing flooding of other highways or property
- ➤ All other gully locations treated equally

BRIDGES & HIGHWAY STRUCTURES

- ▶ Principal roads
- ➤ All other roads are treated equally with prioritisation based on safety related criteria which is consistently applied to all areas of the City.

INSPECTIONS

APPENDIX 2

SAFETY

Safety Inspections are designed to identify all defects likely to create danger or serious inconvenience to users of the network, or the wider community. Such defects include those that will require urgent attention (within 24 hours) as well as situations where longer response times would be acceptable.

The table below shows the current system adopted in Sheffield.

INSPECTION/SURVEY ACTIVITIES IN	ISPECTION/SURVEY FREQUENCY		
ROADS [General Inspection]			
Sheffield Parkway	Monthly		
'A' Roads	6 Monthly		
Strategic Network	6 Monthly		
Non-Strategic	Annually		
ROADS [Skid Resistance Testing]			
Classified network ('A', 'B' and 'C' roads)	2 Year Cycle		
All other roads	Ad-hoc responsive testing @ accident black spots		
FOOTWAYS			
Heavily used priority footways in the City Centre	Part 1 Month; part 3 months		
Heavily used footways in other Main Shopping	6 Months		
Areas	6 Months		
Footways adjacent to Strategic Network	12 Months		
Footways adjacent to Non Strategic Network	12 months		
Linking footways not adjacent to carriageways			
CYCLEWAYS			
Those which are an integral part of the road network	Same frequency as adjacent carriageway		
Those which are remote from the main highway network	Ad hoc inspections in response to customer requests for service		

STREET LIGHTING, ILLUMINATED SIGNS AND TRAFFIC SIGNALS		
Scouting of illumination of street lights, signs & bollards	Winter every 2 weeks) 18 surveys Summer every 4 weeks) annually	
	An electrical safety assessment is carried out in conjunction with every electrical fault repair.	
Traffic Signals	All sites are inspected every 12 months for electrical safety i.e. earth loop impedance & visual checks.	
	All significant sites have automatic lamp monitoring; other sites rely on ad-hoc reports from Police, residents & staff	
TREES		
Inspection of highway trees	5 yearly	
BRIDGES AND OTHER HIGHWAY STRUCTURES		
Safety inspections in subways and footways		
City Centre	3 monthly	
All other areas within the City	6 monthly	
All other structures covered by general inspections		
(see Serviceability Inspections) in terms of		
structural safety and highway inspections in terms		
of carriageway and footway safety.		

SERVICEABILITY

Service Inspections are more detailed specific inspections of particular highway elements to ensure that they meet the requirements of serviceability (i.e. fitness for purpose). The current practice in Sheffield is based on a combination of routine inspections in conjunction with safety inspections, audits of improvement scheme sites to identify necessary complementary maintenance & ad-hoc inspections as a result of requests for service.

INSPECTION/SURVEY ACTIVITIES	INSPECTION/SURVEY FREQUENCY
SHEFFIELD PARKWAY	
Driven safety inspection carried out using discrete road closures, to identify following defects for prioritisation for repair: Carriageway cracking, fretting & deformation Road markings & studs Embankments Safety fences & barriers Overgrown signs & streetlights	Biannually
Detailed walked survey carried out using discrete road closures, to identify following defects for prioritisation for repair: > Carriageway cracking, fretting & deformation > Road markings & studs > Embankments > Safety fences & barriers > Overgrown signs & streetlights > Bridges & structures	Annually – Undertaken in conjunction with the driven safety inspection
Inspection of tensioning bolts on safety fencing	2 Yearly

INSPECTION/SURVEY ACTIVITIES	INSPECTION/SURVEY FREQUENCY
SHEFFIELD PARKWAY	
 Inspection & testing of safety fencing (mounting height & structural integrity) Inspection of french drains Review of signing & roadmarkings Clean filter media in french drains 	5 Yearly

Further details of the Parkway Serviceability Inspection regime are included in Appendix 6 of this document.

INSPECTION/SURVEY ACTIVITIES	INSPECTION/SURVEY FREQUENCY
STREET MAINTENANCE GENERAL	
Carriageways, Footways & Cycleways	Surveys are undertaken in conjunction with safety inspections and on proposed improvements & programmed maintenance renewal sites
Grillages to culverted watercourses under the Highway	Monthly inspections and cleaning where necessary are carried out to watercourse grillages at locations that are susceptible to blockages, which could lead to flooding.
Gullies	Gullies are targeted to be emptied annually, however, known trouble spots are emptied more frequently on a three monthly cycle.
Embankments & Cutting	Known trouble spots are inspected following inclement weather.
Landscaped Areas & Trees	Any root growth problems on carriageways & footways will be identified when those parts of the network are being inspected.
Fences & Barriers	Surveys are carried out in conjunction with safety inspections, as a result of requests for service & in conjunction with improvement schemes.
Traffic Signs & Bollards	No formal system of inspection to check condition of non-illuminated traffic signs. Ad hoc inspections to check condition of signs reported to be in poor condition.
	A formal system of inspection will be developed in conjunction with a full traffic sign inventory collection (with reference to the requirements of TD 25/01 – Inspection & Maintenance of Traffic Signs on Motorway & All Purpose Trunk Roads).
	Illuminated signs are included in the cyclical Street Lighting scouting operation.
	Bollards on 'A' Roads inspected monthly to check: Illumination Condition of bollard
	Bollards on remainder of network inspected every 3 months to check:
	➤ Illumination➤ Condition of bollard
Road Markings & Studs	Surveys are carried out in conjunction with safety inspections.

INSPECTION/SURVEY ACTIVITIES	INSPECTION/SURVEY FREQUENCY
STREET MAINTENANCE GENERAL	
Zebra Crossings	Scouting for illumination in conjunction with street lighting night-time inspections. Electrical test carried out in conjunction with major electrical fault repairs. Ad hoc inspections to check condition of Belisha beacons & poles.
Street Lighting	Scouting for illumination at night (including illuminated signs and bollards)
	Winter - every 2 weeks) 18 surveys Summer - every 4 weeks) per year
Traffic Signals	All sites are fully inspected every 12 months in conjunction with safety inspection.
Bridges and Other Structures	Drainage systems in subways are cleared and jetted at 6 monthly intervals.
	General inspections on highway structures at a maximum 2 yearly intervals to determine elements in need of preventative and routine maintenance.
	NB Retaining walls are inspected on an ad hoc basis and in response to customer requests for service.

SUSTAINABILITY

Sustainability is primarily about the long term structural integrity of the highway network and in this context, structural condition surveys are primarily intended to identify deficiencies in the highway fabric which, if untreated, are likely to adversely affect network asset value. They may also have implications for serviceability or safety in the short term.

Structural condition surveys are necessary to a certain extent to satisfy the requirements of Best Value Performance Indicators.

INSPECTION/SURVEY ACTIVITIES

INSPECTION/SURVEY FREQUENCY

STRUCTURAL CONDITION SURVEYS - ROADS

Principal Roads

SCANNER survey for NI168 (formerly BV223)

UKPMS walked coarse visual inspections (CVI)

Deflectograph Surveys

Falling weight deflectometer surveys

Skid resistance testing (SCRIM)

Road construction surveys (road cores)

Road construction data (GPR-ground penetrating radar)

Non-Principal roads

SCANNER surveys for NI169 (formerly BV224a)

UKPMS walked coarse visual inspections (CVI)

National Road Maintenance Condition Survey

[NRMCS] (100 metre sample sites)

Skid resistance testing (SCRIM)

Skid resistance testing on selected high risk sites

Road construction surveys (road cores)

Road construction data (GPR-ground penetrating

radar)

Footways

Walked coarse visual inspection (CVI) surveys on all categories of footways carried out in conjunction with the roads survey.

50% network in both directions per year

33.3% of the network per year

90km survey coverage for 2008/09

3-4 sites per year

100% 'A' road network per year

100 No per year (max)

50km per year

(4 year programme until 2010/11)

50% of the 'B' and 'C' roads in both directions per year

33.3% of the network per year

51 sites per year

50% 'B' & 'C' road network per year

50km per year

35 No per year (max)

20% of Primary & Secondary routes per year

33.3% of the network per year

INSPECTION/SURVEY ACTIVITIES	INSPECTION/SURVEY FREQUENCY	
STRUCTURAL CONDITION SURVEYS – STREET LIGHTING COLUMNS		
Coarse Visual Inspections	Frequency to coincide with electrical repairs & testing. Additional visual inspections are carried out on a bi annual basis in conjunction with inventory audits.	
Structural condition surveys on identified high risk column types using non-destructive testing methods	Frequency and scope will be on a needs basis following coarse visual inspections carried out in conjunction with electrical testing and/or inventory collection/review.	

NB A full base inventory of street lighting equipment was collected in 2002/03. This inventory has been continually updated and particular attention has been given to collection/audit of information in 2005. An additional audit of the information was completed in 2007. Additional cyclical audits will continue to be carried out as necessary to support the Highways PFI project.

STRUCTURAL CONDITION SURVEYS - BRIDGES AND OTHER STRUCTURES

The inspections described for Safety and Serviceability identify any major structural problems to be addressed.

JOINT WORKING WITH AREA PANELS AND THE COMMUNITY

We will carry out regular joint inspections with Area Co-ordinators, Community Groups and Local Councillors to identify and address, subject to priorities, general environmental/street cleaning hotspots.

PRIORITISATION

APPENDIX 3

PART A - PROGRAMMED

PRINCIPAL ROAD NETWORK PROGRAMMED MAINTENANCE

Initially, maintenance schemes are categorised according to the maintenance treatment appropriate in each case. The treatments are:

- ♦ Safety treatments used where skid resistance is poor, ride quality is unacceptable or the section of road is becoming difficult to maintain due to the proliferation of dangerous defects. This may involve surface renewals/dressings or reconstruction depending on the nature of the defects and the structural condition as determined by Deflectograph or Falling Weight Deflectometer survey.
- ♦ Surface treatments used where the surface characteristics of the road are deteriorating e.g. chipping loss, fatting up, and minor fretting.
- Wearing Course treatments used where structural defects, wheel track cracking and rutting are present and the underlying structural condition as determined by Deflectograph is good.
- Structural treatments used where structural defects, wheel track cracking and rutting are present and the underlying structural condition as determined by Deflectograph or Falling Weight Deflectometer is poor.

For any given budget level, the highest priority is given to safety treatments followed by surface then wearing course treatments. This ensures that, once safety issues have been dealt with, the more cost effective treatments in terms of whole life costing are carried out first. Where practical, sites requiring expensive structural treatments are delayed as long as possible, in effect until they fall into the safety treatment category.

However, there are a large number of sites requiring treatments and, in view of this, a realistic threshold is set in terms of defect level and then the sites in a particular treatment category (listed above) which are in a worse condition than this threshold are prioritised in accordance with the following rating system:

Prioritisation Criteria	<u>Points</u>
Level of traffic usage (based on NRSWA categories) Level of pedestrian usage of site	1, 2, 3 or 4 0, 1, 2 or 3
Extent to which ride quality will be improved	0-3
Extent to which scheme will complement an integrated transport scheme	U-1
Max score	11 points

Any schemes which qualify for treatment within the next 3 years and which complement other Council priorities (e.g. Quality Bus Corridors) are to be carried out at the same time as the main Council project, resources permitting.

LOCAL ROAD NETWORK PROGRAMMED MAINTENANCE

Initially, any sites, which require treatment for essential safety reasons e.g. sub-standard skid resistance, will be included in a programme for an appropriate remedial treatment. Once such essential safety issues have been addressed, an appropriate budget will be allocated for each of the following local road/footway maintenance treatments, and potential schemes will be prioritised using the stated criteria:-

1. <u>Carriageway reconstruction/strengthening</u>

Sites with major deterioration above 25% (by area) but where the amount of structural patching would make thin surfacing not cost effective are considered for this programme.

Prioritisation Criteria	<u>Points</u>
Extent to which ride quality (driven) will be improved Traffic usage Is the site on a bus route? Extent to which scheme will complement an integrated transport scheme	0-4 $0-6$ $0-2$ $0-1$
Max score	13

2. <u>Carriageway thin surfacing</u>

All sites excluding those covered by (3) below with major deterioration above 25% (by area) are considered for this programme.

Prioritisation Criteria	<u>Points</u>
Extent to which ride quality (driven) will be improved Traffic usage Is the site on a bus route? Extent to which scheme will complement an integrated transport scheme	0-4 0-6 0-2 0-1
Max score	13

3. <u>Carriageway thin surfacing (minor roads with high levels of major deterioration)</u> *Minor non-strategic roads and cul-de-sacs with major deterioration above 60% (by area) are considered for this programme.*

Prioritisation Criteria	<u>Points</u>
Extent to which ride quality (driven) will be improved Is it impractical to patch the site? Are there a high number of defects approaching intervention level? Extent to which scheme will complement an integrated transport scheme	0-4 0-1 0-2 0-1
Max score	8

4. Footway Renewal

All sites with major deterioration above 30% (by surface area) are considered for this programme.

Prioritisation Criteria	<u>Points</u>
Extent by which the quality of the surface will be improved for pedestrians	0 – 4
Level of pedestrian usage	0 - 6
Is the site on a bus route?	0 - 2
Extent to which scheme will complement an integrated transport scheme	0 – 1
Max score	13

5. Surface dressing (carriageways) or Slurry Seal (footways)

These are very cost effective treatments, which can be used to arrest deterioration and restore skid resistance. Selection of sites to be included in the programme would be based upon technical considerations, as only certain sites will be suitable for this treatment to be applied.

Any schemes in a three year programme list, for any of the above treatment types, which complement other Council priorities (e.g. Quality Bus Corridors), are to be carried out at the same time as the main Council project, resources permitting.

STREET LIGHTING PROGRAMMED MAINTENANCE

On a programmed structural highway maintenance scheme, if at least 30% of the existing lighting columns have less than five years' residual life, the street lighting will be replaced out of the street lighting programmed maintenance budget in conjunction with the highway scheme works, subject to funding being available.

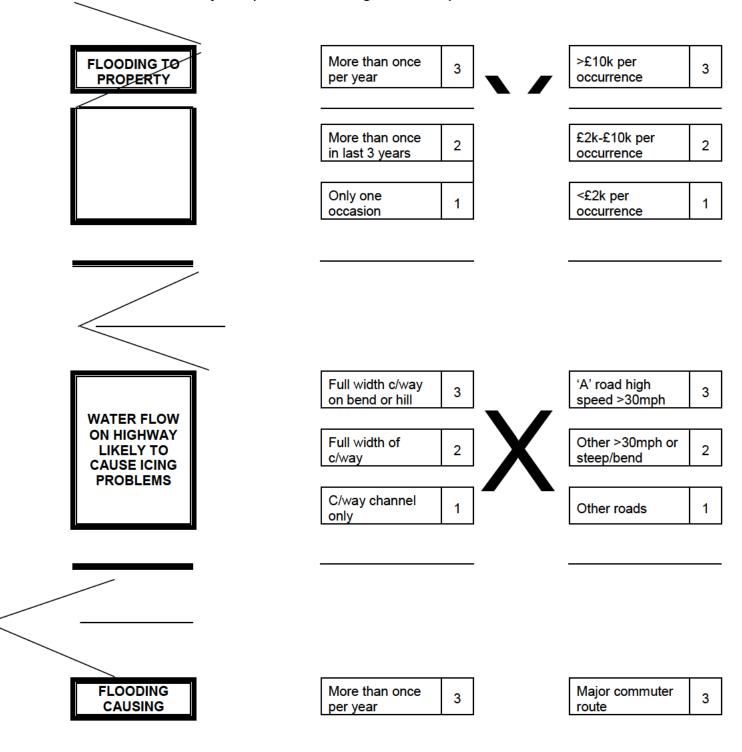
After this first call on resources the remaining street lighting programmed maintenance budget in any one financial year will then be used to fund a programme of lighting renewal schemes. To establish this programme, all sites suggested by members of the public, Councillors, Area Panels, police etc undergo a two-stage prioritisation process.

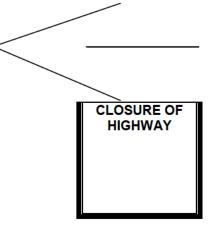
The existing lighting columns on a site are first checked for structural condition. Where at least 30% of the columns have less than five year's residual life, the site then qualifies for the second prioritisation stage, and is rated using the following criteria:

Prioritisation Criteria	<u>Points</u>
Quality of existing lighting	0-5
Estimated pedestrian usage	0-4
Location (e.g. outside care homes, proximity to school, links to other Council initiatives etc)	0-4
Night crime statistics	0-4
Extent to which scheme will complement an integrated transport scheme	0-1
Extent to which scheme will complement an anti social behaviour initiative	0-1
Max score	19

DRAINAGE PROGRAMMED MAINTENANCE

A prioritisation system has been developed for local drainage improvement schemes at known flooding hot spots. Schemes are ranked based on the severity of risk in terms of flooding to property, water flowing on the highway and flooding causing road closures in line with the following table. The highest score achieved for <u>any</u> of the risk types (maximum 9) will form the basis of the initial ranking of schemes. Highest-ranking schemes are included in the annual programme subject to budget. Schemes which have the same score are then further prioritised by applying and additional point depending on whether or not they complement an integrated transport scheme.





More than once in last 3 years	2
Only one	1

occasion

Urban through route	2
Other urban/rural	

or footway

TREE RENEWAL PROGRAMMED MAINTENANCE

The following prioritisation criteria will be used to determine which trees should be replaced as part of an annual renewal programme:

Prioritisation Criteria	<u>Points</u>
Condition of existing tree History of property/footway damage	0 – 9 0 – 6
Ability to attract complementary funding	0 – 3
Extent to which scheme will complement an integrated transport scheme	0 – 1
Max score	19

COMPLEMENTARY MAINTENANCE

In certain circumstances a specific carriageway, footway, street lighting, drainage or tree replacement programmed maintenance scheme could be justified on the grounds that it complemented a Council project and not to carry it out would significantly detract from the overall quality and finished appearance of the project in question. In such cases, the scheme will be carried out in conjunction with the Council project provided sufficient funds are available at the time.

Part B – Routine & Reactive

The Council has over 35,000 highway trees to maintain and it is Council Policy to retain healthy trees wherever possible. Maintenance work has to be prioritised as shown below in order to ensure that trees are safe and do not cause a hazard to the public.

High Priority

Urgent or routine maintenance work will be carried out in the following circumstances:

- Uprooting fallen trees.
- Structurally unsound trees.
- Broken hanging or fallen branches.
- Trees proven to be implicated in insurance claims.
- Dead, dying or diseased trees.
- Trees obscuring traffic signs or signals.
- Low branches obstructing the highway or footpath.
- Tree obscuring sight lines on the highway.
- Branches touching properties.

If the problem is causing an immediate danger, work will be carried out as a priority, otherwise work will be programmed to be carried out as soon as possible.

Low Priority

Work of a non-urgent nature, listed below, will be carried out if budget is available after any known urgent and routine maintenance, listed above has been dealt with.

- Obscured private CCTV cameras.
- Obscured streetlights.
- TV satellite disk reception.

Currently, there is a backlog of urgent safety and routine work, which is taking priority.

No Work Proposed

Work cannot be carried out at the present time in the following circumstances:

- Branches overhanging property.
- Trees that are considered to be too large.
- Leaf fall/fruit fall.
- Blossom fall or sap.
- Trees blocking light or causing shade.

Part C - Winter Service & Other Emergency Services

Winter Service Routing

The Primary and Secondary Precautionary Salting Routes will be determined in accordance with Delivering Best Value in Highway Maintenance – Code of Practice for Maintenance Management.

Winter Service Salt Boxes

Each year requests for new salt bins are prioritised, against the 50 allocated, using the following criteria:

Criteria for provision of salt bins:

- On roads included on the Precautionary Salting Network:
 - a) Salt bins are not normally provided, except at locations where, in times of snow, queuing traffic may encounter problems, e.g. steep slopes leading to junctions, traffic signals and roundabouts.
- ii) On roads not included on Precautionary Salting routes, bins may be provided at:
 - Roads with steep gradients, bad bends, drainage problems, exposed sites and difficult junctions;
 - b) Locations used extensively by the elderly, infirm or very young.
 - c) Rural roads providing access to isolated properties.

Those unsuccessful requests are included in future years prioritisation exercises.

Salt bins are not provided or maintained free of charge to unadopted highways. However they can be provided on receipt of an order.

Other Emergencies

- Including: Dangerous incidents of flooding, dangerous traffic signs, street lighting column knockdowns, displaced manhole covers, melting of road surfaces in hot weather, dangerous potholes and unsafe trees.
- Standby and call-out rotas have been designed to ensure rapid response to these emergencies can be achieved 24 hours a day 365 days a year.

APPENDIX 4

SOUTH YORKSHIRE QUALITY BUS CORRIDOR MINIMUM STANDARDS (Agreed April 2003)

ACTIVITY	SPECIFICATION
Street Lighting	Average outage level between 2 and 3%. Rectification of faulty lamp within 8 days on average (where electricity supplier not involved).
Drainage	On average between 1 and 2 inspections/gully cleans per year. Also in response to complaints.
Signs and lines	Action taken on receipt of complaint and as a result of routine inspections.
Illuminated signs	Average outage between 2 and 10%
Footways	Safety inspections undertaken between monthly and 6 monthly. Defects greater than 20mm repaired within 24 hours of report from public.
Carriageways	Safety inspections undertaken between monthly and 6 monthly. Defects greater than 40mm repaired within 24 hours of report from public. Resurfacing frequency on average every 30 years.
Traffic signals	Response time for outages within 3 hours
Street sweeping	Every 2 weeks (if necessary)
Footway sweeping	Frequency varies according to specific location in order to deal with hot spots
Verge cutting	80% between the height of 20mm and 100mm
Winter maintenance	Routes gritted within 3 hours of decision to grit
Statutory Undertakers' activities	Routes classified as traffic sensitive
* Shelters:	Remove immediately upon notification Weekly Installed on all new shelters 48 hours of notification 4 hours during working hours 2 hours during normal working hours Repairs – 48 hours of notification
* Printed information	Updating – 7 days prior to new timetable

* SYPTE maintenance responsibility

APPENDIX 5

INTRODUCTION TO THE HIGHWAY ASSET MANAGEMENT PLAN

Purpose of the Highway Asset Management Plan

This is the first Highway Asset Management Plan (HAMP) for Sheffield City Council's highway network. The concept of highway asset management is relatively new to local authorities in the UK and is being promoted by the government through the Department for Transport (DfT) and through the following documents:

- Framework for Highway Asset Management (County Surveyors' Society [CSS: 2004]
- Guidance on the Requirements for the Production of Highways Asset Management Plans and a Simple Valuation Methodology as set out in the Transport Research Laboratory [TRL] report of 2005, reference number PPR/INN/036/5.

Sheffield has decided to adopt the philosophy detailed in the above documents in developing its first Plan. The plan is aimed at delivering improved management of the highway assets and taking the services provided forward. This and future plans will detail the challenges and goals necessary to achieve this.

The HAMP will be the primary document through which the Council will detail the standards and priorities it will apply to maintaining Sheffield's highway network for all its users, whether they are pedestrians, cyclists, users of public transport or motorists. The HAMP will cover the key elements of roads and footways, road bridges and street lighting ensuring that all users have access to a safe, useable and sustainable network.

Sheffield City Council is one of four authorities within South Yorkshire that as a group have decided to adopt asset management and produce plans that will not only have a similar format but also cover similar highway asset types. Although the South Yorkshire authorities are working together on asset management and have a joint Local Transport Plan (LTP), each has its own specific priorities in respect of managing and maintaining the network; therefore the process of producing the plans will be carried out independently.

Sheffield's network of roads for which it has responsibility consists of approximately:

- 418km of Primary Roads A Roads and promoted Class B & C roads and bus routes
- 351km of Secondary Roads Remainder of the Class B and C roads.
- 286km of Link Roads Unclassified roads, linking the above road types.
- 888km of Local Access Roads Roads serving a limited number of properties.

There are also over 3500km of footways and footpaths, and more than 370 bridges and structures which have to be maintained.

The motorways (M1) and the trunk roads (A616 Stocksbridge By-pass and A631 Tinsley Viaduct Lower Deck) that are within Sheffield's boundary are not included in this plan as they are the responsibility of the Highways Agency (HA).

The highway infrastructure is one of the most valuable publicly owned assets for which

the City Council has responsibility. It has, however, not received the level of funding and attention necessary to maintain it at its optimal state of repair and operation for its users. The HAMP will set out an approach by which consideration can be given to all parts of the asset and their relative priorities in delivering a coherent highway management service. The Plan will provide both informative and operational data to be used by officers in Development, Environment and Leisure (DEL), and others involved in the delivery of the highway functions. It will also be available to Sheffield's Council Members, other services, our customers and users, as required.

Key Drivers for the Plan

One of the main drivers behind asset management is the performance-based approach to setting Levels of Service, which takes in to account the concerns of our users or customers with regard to improving the quality of the street scene, maintaining access for all, as well as contributing to community safety and other key priorities. The Council aims to provide an environment that creates a general feeling of wellbeing for all users both day and night. To achieve this we will need to ensure that good practices are employed and that value for money in service provision is achieved.

The DfT has informed all local authorities that they should be producing Transport Asset Management Plans (TAMP) as part of the LTP2 process. The TAMP will look at broader transport related issues and will also include South Yorkshire Passenger Transport Executive's (SYPTE's) highway related assets and priorities. The TAMP will show the relationship between the various programmes and priorities of the main stakeholders and how the LTP2's targets and objectives will be achieved. The quality of the TAMP will also feed in to DfT's assessment of the LTP and hence future funding streams. The DfT also view the provision of a HAMP as being necessary in providing information on how effectively Shefffield spends its Relative Needs Formula (RNF) allocation, and how it will consider and compare its needs for road maintenance spending against the demands of other services.

The Council's HAMP is therefore a necessary contributor to producing the TAMP. It is also a key driver in identifying and obtaining the data required to support the asset valuation process that will feed in to the Whole Government Accounts (WGA). It is anticipated that this will be a requirement for 2009.

In anticipation of this, in 2006, a preliminary estimate of the value of Sheffield's highway assets was made based on the cost if they were to be provided as new. This included roads, footways, structures, street lighting and signals. The resultant estimated value exceeded £2 billion.

Asset Management Planning

Sheffield's approach to asset management planning is based on both the County Surveyors Society (CSS) and Transport Research Laboratory (TRL) documentation. The CSS's 'Framework for Highway Asset Management (2004)' provides the following definition of asset management:

"Asset management is a strategic approach that 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."

Most local authorities involved in producing HAMPs have adopted this principle, which focuses on the long-term management of the asset to allocate resources. To achieve this, it is necessary to determine the needs and expectations of our users, to help define our Levels of Service, against which we can be monitored.

The Levels of Service will be used to identify the most cost effective way of closing the gaps in performance by considering the economic benefits across all asset types based on sound engineering principles and the timeliness of addressing alternative improvements and investment strategies. This trade-off between Levels of Service and costs will actually demonstrate the 'best value' use of funding.

The management and maintenance of the highway asset is not only fundamental to transportation but impacts upon the economic, social and environmental well being of the communities it serves. Increases in the expectations of the public and the accountability of local government, has seen a shift in how local authorities look to preserve the network to benefit the community.

These main elements in this themed approach to asset management are defined by the CSS as:

Strategic Approach:	A systematic process that takes a long-term view.
Whole of Life:	The whole-life/life-cycle of an asset is considered.
Optimisation:	Maximising benefits by balancing competing demands
Resource Allocation:	Allocation of resources based on assessed needs.
Customer Focus:	Explicit consideration of customer expectations.

Extract from CSS 'Framework for Highway Asset Management' – Section 1.1.2.

The improvement in the Levels of Service we provide will be driven by an Improvement Action Plan, which will prioritise the individual needs of the service for a 3-year period. The HAMP will be used to prioritise and review the progress of the improvements on an annual basis to ensure that the identified benefits are being delivered.

The introduction of highway asset management and the need take a whole asset view of the network will not only require the integration of systems, procedures and data, it will also be necessary to introduce new processes and rework existing procedures to ensure the following is delivered:

- A service-wide (holistic) view of the asset, covering all the assets (roads, footways, street lighting, verges and trees, etc.).
- An asset register comprising accurate and complete inventory data at a level capable of determining a value for the assets.
- A programme of condition assessments and surveys that will allow the depreciation of the asset to be determined as a result of deterioration and consumption. This information will also feed in to performance monitoring.
- Performance monitoring is undertaken against the Levels of Service and its associated targets and improvement plan.
- An integrated system of reporting and monitoring.
- Option appraisal when considering expenditure and investment decisions.
- Assess the impact of all future decisions in order to determine their effects on the whole life costs of the asset and its funding requirements.
- Long term programmes, integrating works from across all asset types, funding streams and initiatives.
- Consultation with all users (customer and stakeholders) and their involvement in the setting of standards and priorities.

The above are all deliverable, as part of the HAMP, however in order to gain these benefits it will be necessary to prioritise the changes so as to minimise the impact on our current systems, data collection, business processes and the organisation.

Integration with Other Directives

The HAMP will help Sheffield demonstrate that *Effective Asset Management* can be delivered as required for LTP2. The HAMP also aligns with Sheffield City Council's Best Value Performance Plan (BVPP) vision:

- To be among the best performing Councils, providing the best quality services in the country.
- To work in active partnership with the community to create a successful Sheffield with a good quality of life for all residents.

The service deliverables from the HAMP will also contribute to Sheffield First Agreement (SFA), aimed at joining up the delivery of local public services across the city, in particular the themes or blocks dealing with 'Successful Neighbourhoods' and 'Economic Development and Enterprise'.

Producing Sheffield's first HAMP is one of the key projects in Street Force's current Service Plan and in future the asset management planning process will contribute to the development of DEL's Service Plan. This will ensure that that the Service Levels not only reflect the aspirations of our customers but also support Sheffield Council's Corporate Plan – 2007/10 and assist in the delivery of its goals:

- A Strong Economy building on the economic success Sheffield has enjoyed over the last decade, we now need to make a transformational change in the city's economy to ensure that it is able to meet the challenges of the twenty-first century global economy.
- Successful Neighbourhoods ensuring that every Sheffield neighbourhood is a successful neighbourhood and closing the gap between the most deprived areas and the city average. Tackling crime and anti-social behaviour effectively is a key component.
- Inclusive, Healthy Communities making Sheffield a healthier, more cohesive and more tolerant city.
- Great Place to Grow Up ensuring that Sheffield is a great place to grow up where children and young people can grow up in safety and have every opportunity to realise their full potential.
- **Environmental Excellence** ensuring that Sheffield is a clean, green and environmentally attractive city, playing a lead role in reducing Sheffield's carbon emissions and combating climate change.
- An Outstanding Council in our management and service performance, a thoroughly customer-focused organisation, providing excellent value for money.

APPENDIX 6

SHEFFIELD PARKWAY - SERVICEABILITY INSPECTION SCHEDULE

Monthly

SAFETY INSPECTION

A driven survey from a slow moving vehicle.

Defects to be recorded and made safe immediately are:

- **Potholes**
- Damaged crash barriers Damaged / ineligible
- signs
- Defective iron-work
- Missing cylinders (in cross over points)
- Potentially hazardous
- Stop lines and give-way markings with >30% missing

An ad-hoc wet weather inspection, also from a slow moving vehicle Defects to be recorded and rectified immediately are:

- Blocked gullies/channels which cause water to stand on the carriageway surface
- **Surcharging Manholes** which cause water to run onto the carriageway surface

(Other non-hazardous drainage defects are to be recorded and used to prepare a schedule of works. This will then be used to formulate the routine maintenance activities, which will be carried out on a sixmonthly basis)

A street lighting outage survey is also undertaken and the results used to formulate a routine maintenance programme for the six-monthly works

Six- Monthly

ROUTINE MAINTENANCE

To be undertaken using discrete road closures.

- SAFETY INSPECTION
- Gully cleaning Street cleaning
- Street lighting repairs
- Soft landscape maintenance (cut minimum 1st swaithe from carriageway edge)
- Flush and prove manholes, catchpits

Yearly

SERVICABILITY INSPECTION

A detailed walked survey done using discrete road closures. Defects to be recorded and prioritised for repair are:

- SAFETY INSPECTION
- Carriageway cracking, fretting and deformation Road Markings and studs
- Embankments
- Safety fences and barriers
- Overgrown signs and street lights
- **Bridges and structures**

In addition to the serviceability inspection carry out ROUTINE
MAINTENANCE

2 Yearly

EXTENDED SERVICABILITY INSPECTION

- SERVICABILITY INSPECTION
- Inspection of tensioning bolts on safety fencing

5 Yearly

SERVICABILITY REVIEW

- EXTENDED SERVICABILTY
- INSPECTION Inspection and testing of safety fencing (mounting height and structural integrity)
- Inspection of French drains
- Review of signing and road markings
- Clean filter media in French drains

APPENDIX 7

COMPLEMENTARY PLANS AND DOCUMENTS

Key complementary plans which guide the content of this Policy, Standards and Strategy Statement to ensure strategic policy integration within the Council's corporate priorities are:

- ♦ Corporate Plan
- Best Value Performance Plan
- ♦ Local Transport Plan

The Key complementary Plans to ensure this Policy, Standards and Strategy Statement is delivered are:

- ♦ Street Maintenance Plan
- ♦ Street Force Service Plan
- ♦ Street Force Risk Register
- Development Services Service Plan
- Development Services Risk Register

The Street Force Service Plan is underpinned by the following subsidiary Action Plans:

- Health and Safety
- ♦ Environment
- Equalities
- Customer Focused Services
- Information Communication Technology
- Communications and Consultation
- Asset Management (Property) and Depot Improvements
- ♦ Workforce

Key complementary Procedures, which guide operational practices in line with the Policy, Standards and Strategy Statement, are:

- Winter Maintenance Operational Procedures
- Dealing with Flooding on the Highway
- Dealing with Gale Damage
- Highway Maintenance Safety Inspection Procedures Manual (in preparation)
- Skid Resistance Policy & Procedure Document

Other key documents: -

- South Yorkshire Specification for Materials
- Street Force Customer Charter
- Graffiti Charter
- Caring Contractor Scheme
- Supertram Code of Practice for work adjacent to Overhead Line [OHL] working on or near the Supertram System