

REPORT TO: Urban Renewal Policy and Performance Board

DATE: 17th June 2009

REPORTING OFFICER: Strategic Director Environment

SUBJECT: Winter Maintenance Performance

WARDS: All Wards

1.0 PURPOSE OF THE REPORT

1.1 This report reviews the measures put in place to deliver the duty to treat highways for snow and ice and in particular the delivery of the service in the 2008 /2009 gritting season.

2.0 RECOMMENDATION:

1. That the report be received.

3.0 BACKGROUND AND SUPPORTING INFORMATION

3.1 Introduction

3.1.1 Until the advent of the Railways and Transport Act 2003, Local Authorities in England and Wales did not have a legal duty to provide highway winter maintenance facilities.

3.1.2 Despite there being no legal duty, the Council in common with all other Highway Authorities, recognised its obligation to keep the borough's highways open in periods of severe weather. It must however, act in a responsible manner and only provide resources in line with the levels of budget available to it. The change in legislation brought that obligation into a more formal framework defined as "ensuring so far as is reasonably practicable that safe passage along a highway is not endangered by snow or ice".

3.1.3 Halton undertakes a winter service that makes use of the latest technology and developments and is effective in treating the network for snow and ice. The operational aspects of the service are set out in Halton's Winter Maintenance Plan and fully meet both these legislative demands and also the requirements and obligations of the Code of Practice for Highway Maintenance Management.

3.1.4 As part of a programme of improvement to service delivery a number of developments and innovations have been introduced since Local Government reorganisation passed the responsibility for the operation to Halton. These include improvements to the Winter Service fleet,

route optimization and GPS control which have formed part of a gradual development that has been undertaken within the existing budget resource. These are detailed in Appendix 1 to the report.

3.2 Halton's Winter Maintenance Plan

3.2.1 Operational procedures are set out in Halton's Winter Maintenance Plan, which details the scale of the Service and defines the operational procedures to be employed and the process by which the service is managed. The Plan is reviewed annually and revised to meet changing circumstances in both the logistics of the service delivery and the extent of the network that can reasonably be treated within the target treatment time and also within the available resources.

3.2.2 To meet the needs of the service a risk assessment of the entire network is carried out to confirm the need for treatment. The assessment ensures that treated routes are included only where they meet criteria established after discussion and consultation with stakeholders and from operational experience. Whilst the Plan is reviewed in its entirety on an annual basis the risk assessment procedure ensures that where necessary changes to the treatment area can be implemented to respond to changing conditions or network incidents.

3.2.3 The Winter Maintenance Plan details the procedures adopted when ice or snow is predicted and the priority attached to various categories of road. The plan is geared to treat essentially the classified road network, major distributor routes and bus routes within the target treatment time of four hours. Four main gritting routes are scheduled, predominantly centred upon:

- Runcorn Expressways
- Runcorn Area
- Widnes Area
- The Busway and Widnes Eastern Bypass

Additionally, a towed gritting vehicle treats streets that are difficult to access with the main fleet.

Gritting of most footbridges and many strategic footpaths that are remote from the road network is also carried out on a precautionary basis, when ice or snow is forecast. Gritting is carried out manually, by hand or using propelled salt spreaders. It is a very labour-intensive operation and places a high demand on both labour and financial resources to treat the lengths of paths currently scheduled. However, due to lower intensity of use, salt can persist for longer periods on footpaths than on carriageways and therefore, footway gritting is not therefore carried out as frequently as road gritting.

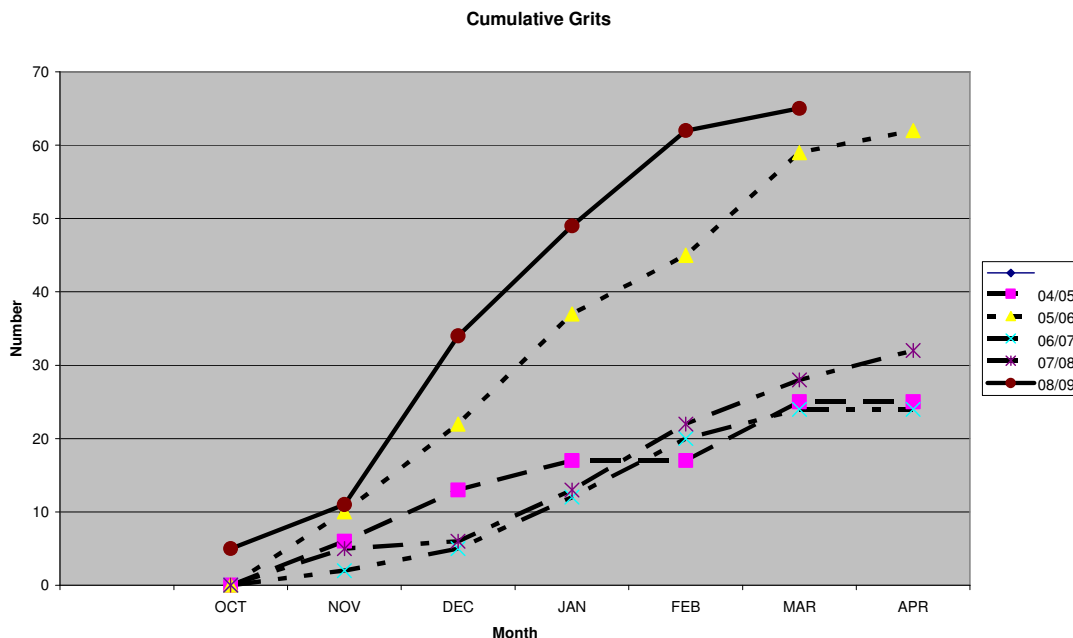
3.2.4 The Plan has provision for treatment for roads of lower category if severe winter conditions persist. These secondary routes include access to schools, sheltered accommodation, doctor's surgeries and

public buildings. Secondary routes are treated once the primary roads have been completed but these are done only should conditions persist. These routes have lesser but still demonstrable priority. Secondary route treatments are not automatic and require additional authorisation by supervisory staff for the Contractor to carry out this work.

3.2.5 The plan has been successful in keeping all the major vehicular routes through the Borough open at all times. The Highways Division estimates the number of occasions when salt will need to be applied to the highway network at no more than 35 occasions in a typical year.

3.3 2008/09 Winter Maintenance Season

3.3.1 Depending upon the information source used, the 2008/9 winter weather has proved to be the worst since 1991 and possibly even longer. In response to weather conditions, from October 2008 gritting was carried out on Halton's highway network on 65 occasions, spreading over 2000 tonnes of salt. This is more than double that normally expected during the winter season. The treatment included footbridges and strategic footpaths on 36 occasions and secondary routes on four occasions. Due to the severity of the conditions the Council has spent considerably in excess of its winter maintenance budget last year and this was only be achievable at the expense of other highway services that it is obliged to provide.



The above graph illustrates the number of grits undertaken this season in comparison with previous years.

3.3.2 The Council undertook gritting of all major roads listed in the plan every night between the 24th December and the 6th January and again between the 30th January and 2nd February, sometimes on more than

one occasion. Additional gritting was also completed in areas outside the primary and secondary gritting routes where specific additional needs had been identified. Despite the financial constraints, an additional programme of precautionary gritting within Runcorn and Widnes Town Centres was introduced due to the severity of the conditions.

- 3.3.3 The Council also maintains a stock of over 50 grit bins and these were kept filled throughout the worst of the severe icy conditions.

3.3.3 National Salt Stock Shortages

- 3.4.1 During the most severe part of the gritting season the Government was obliged to introduce urgent measures to control the availability of rock salt nationally. Halton was required to report its stock levels daily and to make available any surplus to assist neighboring Authorities when their stocks ran low. Due to its careful management of salt supplies, salt stocks and gritting operations, Halton was fortunate in that stocks were kept at optimum levels and Halton was able to provide assistance to several neighbouring authorities on several occasions.

- 3.4.2 Early in April, all highway authorities were invited to provide feedback to the government through a formal 'Salt Shortage Debriefing exercise'. Halton were able to contribute 'lessons learned' in relation to salt supplies from the recent winter season.

3.5 Halton and St Helens Primary Care Trust Funding

- 3.5.1 Resulting from the sharp increase in ice-related slipping injuries, The PCT has contributed £25,000 per annum over the next five years to extend gritting operations, targeted at pedestrian routes around schools and shopping areas.

- 3.5.2 This funding will enable the Council to undertake more extensive footway treatment around schools, in town and local centres and at public buildings. Work is underway to design hand-spreading routes at these locations. Additionally, extra mechanical salt spreaders have been purchased to enable the routes to be covered efficiently, although due to the number of locations and estimated time taken to complete this work, this scale of treatment will be limited to the more severe or prolonged periods of ice or snow

- 3.5.3 Over 30 requests for additional grit bins were received from businesses and members of the public during this year's severe weather period. The requested locations were risk-assessed on the basis of site topography (gradient, alignment etc.), pedestrian usage and location (proximity to schools, shops etc.) and we were able to provide bins from our small stock at a number of locations immediately. The PCT funding has allowed the purchase of more grit bins for deployment throughout the Borough where the location meets the risk assessment.

3.5.4 All Halton's schools and nurseries have been asked whether they want to have a supply of salt provided for use within school premises during the next winter season. This supply of salt together with storage bins is being provided from the PCT funding.

4.0 POLICY IMPLICATIONS

4.1 Legislation makes it a duty to provide a properly planned and resourced service. The Winter Service Plan is reviewed and revised

5.0 OTHER IMPLICATIONS

5.1 Children and Young People in Halton

Winter Maintenance operations affected all service users alike. There are no specific issues applicable to children and young people. The PCT funding will specifically target schools and walking to school.

5.2 Employment, Learning and Skills in Halton

Access to areas of employment ensures that business can function at all times. Winter maintenance is vital in ensuring that business and places of learning are not restricted by the conditions

5.3 A Safer Halton

The action by the PCT in supporting gritting operations illustrates the considerable risk to the public from icy surfaces. Whilst the Council cannot undertake to protect all road users from risk the procedures and measures in place demonstrate how careful planning can minimize risk.

5.4 Halton's Urban Renewal

There are no specific implications for Urban Renewal.

5.5 Sustainability

The use of more efficient plant and materials has reduced wastage and limited the levels of pollution inherent in this operation. Extended gritting treatment of footways during the winter season will promote walked journeys and reduce reliance upon motor vehicles.

5.6 Legal Implications

The development and application of the Winter Maintenance Plan ensures that Halton continues to meet its legal obligations under the Act.

5.8 Social Inclusion

Winter Maintenance operations affect all service users. Enhanced gritting of footways will benefit particularly those with limited access to motor vehicles.

5.9 Crime and Disorder

There are no specific implications

6.0 RISK ANALYSIS

6.1 Failure to meet our legal obligations would expose the Council to considerable financial risk from litigation.

6.2 This operation ensures as far as practicable, the safety of the public and reduces potential damage to infrastructure and property.

7.0 EQUALITY AND DIVERSITY ISSUES

There are no equality and diversity implications.

8.0 LIST OF BACKGROUND PAPERS UNDER SECTION 100D OF THE LOCAL GOVERNMENT ACT 1972

Well Maintained Highways - The Code of Practice for Highway Maintenance Management 2005

Halton Borough Council Highway Maintenance Strategy Document, 1998

Halton Borough Council Winter Maintenance Plan 2008-2009

Highways Act 1980

Railways and Transport Act 2003

Place of Inspection: Rutland House

Contact Officer: C Dutton

WINTER SERVICE DELIVERY

- **Route optimisation and Thermal Mapping** – this is a process of assessing the relative temperatures of the network to ensure that treatment takes place to those locations most prone to frost and ice.
- **Weather forecasting** – Using a system of sensors embedded in the road surface and instruments mounted at the roadside data can be collected in real time of conditions within Halton. The system is supplied and installed by Vaisala a specialist company who collect and process the data before supplying it to the weather forecasting bureau. The information allows for site specific forecast to be prepared giving detailed guidance on the probable short term conditions in Halton. Call out staff have direct access to forecasters and can discuss the situation before making the decision whether to mobilise the gritting crews.
- **Salt storage** – The Council have provided purpose built storage bays for salt. These have been completed at Picow Farm in Runcorn and the provision of purpose built bays at Lower House Lane Depot, Widnes are under discussion.
- **Upgrading of the fleet** – All five gritting vehicles are now purpose built, large capacity modern units with all necessary fittings and attachments to meet the requirements of the service. The main fleet vehicles are leased and the reserve vehicle owned by the Council. To allow access to certain areas that are unsuitable for the standard gritting vehicles a further towed unit has been obtained which although having limited capacity, is able to deal with the less accessible routes.
- **GPS monitoring and control** – Initially GPS monitoring was introduced to enable confirmation that the requirements of the plan were being met. This was particularly necessary to counter public liability claims. The system has now been extended to enable automatic control of salt spread and width without the need for active driver involvement. The system makes for the most economic use of salt, minimising wastage whilst ensuring cover of the entire road surface.
- **Salt Treatment** – Salt used on Halton's roads is treated with a coating derived from the production of molasses. The coated salt has much improved flow characteristics and thus can be more effectively spread with less effort and loss. Savings in the quantity of salt used for the equivalent effect on snow and ice has been noticeable. The treated salt also has lowered corrosion properties making it safer to spread on bridges and other steel structures and less damaging to the gritting plant.