

OPEN

Highways and Transport Committee

21/09/2023

Winter 2022/23 End of Season Review

Report of: Tom Moody, Director of Highways and Infrastructure

Report Reference No: HTC/05/23-24

Ward(s) Affected: All Wards

Purpose of Report

This report details the Council's Highway's Winter Service Operations during the 22/23 winter season and outlines the service for the winter of 23/24.

Executive Summary

- To accord with the Code of Practice "Well Managed Highway Infrastructure" (WMHI) and to comply with its duty as Highway Authority, it is important that the Council has an up to date Winter and Adverse Weather Policy, including a prioritised gritting network developed on clear, evidence-based criteria.
- The Council doesn't possess sufficient funds to treat every road in the Borough. Overall, the Council manages the entire network with less funding than is required to deliver the highest service levels across all the various highway assets and services (ie carriageways/bridges/street lighting/gritting etc). As such the Council must implement a risk based approach to the allocation of its highway budgets in order to ensure the Council is addressing its legal responsibilities; thus the greatest consideration is given to the areas that receive winter maintenance and the type that is deployed. This ensures that as far as is practicable, risks are managed whilst prudently managing the available budgets.
- In October 2021 the Council implemented new winter gritting routes, following a lengthy process of development and consultation.

The current winter service gritting routes can be found via the below link and are denoted via black and white lines.

https://maps.cheshireeast.gov.uk/ce/webmapping?&e=378220.01&n=364472.00&layers=TN_S_Gritting2021_LINE_CURRENT&s=250000.00&bm=oscolour

- This paper details conditions experienced over the winter of 2022/23, together with information gathered around the success and issues experienced during the season.
- For the 23/24 winter season, the only amendments that are proposed to the winter service routes are those which address changes to bus routes which are eligible for gritting. This may see a number of roads added or removed from the gritting routes as required.
- The paper also details a proposed process by which members can highlight any issues that may be addressed by introducing new criteria to the scoring matrix for the 24/25 season.

RECOMMENDATIONS

The Highways and Transport Committee is recommended to:

- 1. Note the findings of the 22-23 winter service paper.
- 2. Note the proposed process for highlighting issues that may lead to new criteria for the scoring matrix.

Background

The current winter gritting routes were introduced in October 2021. These operated for the 2021/22 winter season. Following the first annual review carried out in May and June 2022, a number of minor amendments were made to the routes.

Treatments

- 9 Table 1 below provides a summary of the precautionary treatments (gritting) undertaken during the 22/23 winter season which ran from 01/10/2022 to 30/04/2023.
- The Council undertake precautionary treatments after carrying out detailed weather forecasting that considers factors such as air temperature, dew point, humidity, precipitation, cloud cover and road surface temperature. These factors determine the time of gritting, the

- salt spread rates and if any second runs are required if conditions deteriorate, or if rain or snow occurs for example.
- The weather doesn't always behave as forecasted. Table 1 indicates in the last column the number of instances where the forecast temperature did not occur, even though all forecasting information pointed towards a gritting run being required. This situation is not desirable, due to the costs involved, but it can often be a very marginal call with the importance of road safety weighing heavily in the decision-making process.
- As can be seen in the summary of winter treatments table below, there have been at least 42 days on which road surface temperatures were forecast to fall below freezing and actually did, and hence gritting operations took place. This is broadly comparable to the 39 of the 21/22 season.

Domain	No of routes	No of treatments (gritting runs)	No of treatments days	Treatment days when frost/ice did not occur	
High East (Macc)	2	107	78	2	
East (Macc)	8	62	48	6	
South (Wardle)	7	62	48	6	

Table 1 – Treatment Summary

Town and Parish Agreements

- In the 22/23 season the Council undertook a level of top up gritting for a number of Town and Parish Councils, under the agreements this will continue until 30/4/25. These agreements see roads treated that are considered locally important by the Town and Parish Councils.
- 14 The Towns and Parish Councils who have entered into these agreements are:
 - Alderley Edge Parish Council
 - Bollington Town Council
 - Macclesfield Town Council
 - Wilmslow Town Council

Annual Operational Review

- As part of the annual review of the Council's Adverse Weather Plan, at the end of each winter season an operational review of the winter service is undertaken in order to identify operational issues that have occurred through the winter season.
- This review includes assessment of the accuracy of forecasts, fleet performance, staffing issues, driver feedback regarding the practicality of operating the routes and other wider issues.
- 17 This year's review concluded:
 - That the forecast accuracy and level of service provided by the forecaster was good.
 - There were occasional issues with vehicle breakdowns and the lack of availability of some parts. This resulted in front-line gritters being off the road for longer than expected. It was therefore necessary to use the spare vehicles more than previous years, but all treatments were completed within the required time.
 - In previous years, shift arrangements and rotas varied across the two depots. For the 2022/23 season, these were standardised, reducing the overall number of drivers needed and providing resilience as required.
 - There were a number of roads where occasional difficulties were encountered gritting due to parked vehicles.
- 18 The roads that experienced issues with parked cars were:
 - Stanley Road, Knutsford
 - Bexton Road, Knutsford
 - King Street, Knutsford
 - High Street, Mow Cop
 - Brocklehurst Avenue, Macclesfield
 - Redway, Bollington
- These roads will continue to be on the treatment routes and as part of the Council's highway winter communications plan, contact will be made with the residents on these streets requesting their co-operation. It should be noted that due to the difficulties parked vehicles can cause, treatment may not always be possible; however every effort is made in these circumstances to deliver the service.
- This review forms part of a wider review which is undertaken annually to understand any issues that have occurred on the network or changes in the network that may require amendments to the treatment routes.

Service Requests and Correspondence

- A total of 582 service requests relating to winter service have been received from members of the public, town and parish councils, ward members and the police between 1st May 2022 and 31st April 2023. This correspondence has been received via the council's website, email and phone calls to the contact centre.
- A broad analysis has been undertaken of the 582 service requests that have been received, 244 relate to grit bins (largely the replenishment of salt), 8 were from the police. 94 were from the general public and related to a few roads removed from the treated network.
- There are a small number of locations which have generated multiple enquiries. Comments regarding these roads are generally that as they are no longer gritted, they have become icy and dangerous, with some reports of road traffic collisions and vehicles leaving the road. These are:
 - Chelford Road, Prestbury
 - Scott Road, Prestbury
 - Childs Lane, Smallwood
 - Warmingham Lane, Middlewich
 - Bollin Grove, Prestbury
 - Bond Street, Macclesfield
 - Bradwell Road, Sandbach
 - Church Hill, Knutsford
- As a result of the issue at Church Hill, the council is exploring options with regards to the way Church Hill is used. Until this is implemented the Council will apply temporary road closures when icy conditions are forecast.

Incidents

- Information regarding Incidents on the network has been gathered from a number from a number of sources:
 - Police Stats 19 Data
 - Contact with the Police
 - Fire Service incident responses
 - Anecdotal evidence from newspapers and contact centre reports.
- 26 Stats 19 Data is police data on road accidents and is a standardised national format. The Stats 19 Data records injury and fatal accidents only. The Council receive regular updates on this data. An analysis of

the official Stats 19 Data shows that between 01/10/2022 and 30/04/2023 25 injury collisions occurred on the highway network where road conditions were described as frost, snow or ice in the Stats 19 reports, further details can be found in Appendix 1. The 25 Stats 19 accidents occurred on both the treated and untreated network, 3 of these are recorded to have occurred on a road that were removed from the treated network, these occurred on:

- 8/12/22 Love Lane, Betchton
- 16/12/22 The Hollow, Odd Rode
- 8/12/22 Coronation Road Congleton
- Of the 25 injury accidents where the road conditions were described as frost, snow or ice, there was one which was a fatality. This occurred in Heron Crescent, Crewe. Heron Crescent doesn't form part of the treated network and never has done.
- Cheshire Fire and Rescue have responded that they don't hold any records of the road conditions when they respond to incidents; however, an analysis of their incident responses shows that they did not attend to any incidents on roads removed from the treated network when icing conditions may have occurred.
- The Council received 26 reports of incidents on the network over the 22/23 season; of the 26, 9 related to roads removed from the winter treatment network. Further details can be found in Appendix 2
- Appendix 3 of this report details accident correlation data across the 21/22 season and the 22/23 season. This combines Police, Fire, Stats 19 and anecdotal Stats 19 Data to detail emerging patterns.
- As a result of emerging issues in the 21/22 season Coole Lane was reinstated and VMS signage were place on Warmingham Lane and Groby Road with A boards placed on Long Lane Wettenhall and Childs Lane Smallwood.
- This year anecdotal evidence suggests issues have occurred on Warmingham Lane and as such it is proposed to place further road signage on this route warning that the road is untreated.
- After analysing the winter season of 22/23 it is only proposed to amend the gritting routes to accommodate changes to bus routes which are eligible for gritting. This may see a number of roads added or removed from the gritting routes as required.

Future Developments

- The Council is keen to further develop its winter service and over the next twelve months will be investigating the feasibility of route-based forecasting which will give much more accurate forecasts for each gritting route. This will mean timelier treatments of specific routes and reduced wastage giving financial and environmental benefits. In addition, the service is exploring gaining network wide traffic data to help inform the winter service network and wider network management activities moving forwards.
- A high level analysis has been undertaken regarding the amendment of the threshold which sees roads included for treatment in the winter service routes. Currently roads have to Score 1 (100) to be included in the winter service routes. The below table summarises the details of should consideration be given to reducing the threshold in future years.

	Estimated	
Threshold	Additional KM	Cost
(0.75)75	32.5	£130,000
(0.5)50	55	£170,000
Treatment to all primary		
schools	35.5	£142,000

Table 2 – Additional Treatment Costs

- It should be noted that the above is indicative and may see roads never previously treated included in the winter service routes together with roads that cannot be physically treated. Under previous arrangements the Council didn't treat to all primary schools.
- When considering amendments in future years it should be noted that the provision of additional treatment would likely have to be funded through the reduction of other key revenue activities such a drainage works and grass cutting etc.

Consultation and Engagement

Ahead of the 24/25 winter season it is proposed to undertake an engagement exercise where members can identify criteria that should be considered for inclusion in the risk assessment. Members who wish to participate will be asked to engage with the service in the spring of 2024.

Winter Communication Plan

- A Winter Service Communication Plan is currently being developed in readiness for the 2023/24 season. This will help to familiarise road users with the winter treatment network and will include the following:
 - Highways Newsletter edition in October to include an article specifically on winter maintenance and links to guidance documents.
 - Social media posts in advance of and during the winter season providing guidance to drivers.
 - Update webpage to make this succinct and specific to the current gritting routes.
 - Regular updates via Gov Delivery on treatments during the winter season and any forthcoming periods of inclement weather.

Reasons for Recommendations

The Code of Practice WMHI recommends that 'All aspects of the Winter Service Plan, including service delivery arrangements, should be reviewed annually in consultation with key stakeholders to take account of changing circumstances.' As such the Council has undertaken an end of season review to evaluate any changes that are required for the 23/24 season. An annual operational review will be undertaken at the end of each winter season.

Other Options Considered

- The Council could choose not to undertake an end of season review; however, this would not align with the principles of Well Managed Highway Infrastructure and the Council's adopted Winter Gritting Policy.
- It is not considered that there are any other options other than those set out within this report.

Option	Impact	Risk
Not to have	Lower quality less	Service doesn't
undertaken the end	informed service	comply with WMHI
of season review		

Implications and Comments

Monitoring Officer/Legal

- The statutory basis for winter service in England and Wales is Section 41 of the Highways Act 1980 (as amended). Section 41(1) states:
 - "(1) The authority who are for the time being the highway authority for a highway maintainable at the public expense are under a duty to maintain the highway.
 - (1) (A) In particular, a highway authority is under a duty to ensure, so far as is reasonably practicable, that safe passage along a highway is not endangered by snow or ice."
- 44 This duty is not absolute given its qualification of "reasonably practicable". What is "reasonably practicable" has not been defined in statute. "Reasonably practicable", as traditionally interpreted, is a narrower term than "physically possible" and implies that a computation must be made in which the quantum of risk is placed in one scale and the sacrifice, whether in money, time or trouble, involved in the measure necessary to avert the risk is placed in the other; and that, if it be shown that there is a gross disproportion between them, the risk being insignificant in relation to the sacrifice, the person upon whom the duty is laid discharges the burden of proving that compliance was not reasonably practicable. Caselaw has also determined that Local Authorities should not take an overly restrictive approach to this test, especially during extreme and unforeseen weather events. In addition, the Traffic Management Act 2004 placed a network management duty on all local traffic authorities in England. It requires Authorities to do all that is reasonably practicable to manage the network effectively to keep traffic moving. In meeting the duty, Authorities should establish contingency plans for dealing promptly and effectively with unplanned events, such as unforeseen weather conditions, as far as is reasonably practicable.
- The Winter and Adverse Weather Policy along with the Adverse Weather Plan and Winter Risk Assessment Methodology and Scoring Matrix determine which roads will form the Winter Treated Network. The Council are under a general duty to keep these documents under review. In accordance with the Winter and Adverse Weather Policy "consideration will be given to addressing winter conditions on areas of the public highway which are not included on the treated network".
- The Winter and Adverse Weather Policy also states "...the Council will work in partnership with the Town and Parish Councils, and supply

- chain partners to arrange for snow clearance work on local roads and in town centre areas".
- Section 150 of the Highways Act 1980 puts a separate duty on the highway authority to clear snow from the highway, but only if it is causing an obstruction.

Section 151 Officer/Finance

- Of the circa £10.562m annual highway revenue budget, the department makes provision to spend circa £1.838m on winter maintenance, this equates to around 17% of the highway revenue budget. Amongst other activities, the highway revenue budget is typically spent on pothole repair, grass cutting, gully emptying and road marking renewals. Any increase in winter service costs through increasing the network size or extended period of winter weather that haven't been budgeted for, have to be managed within the existing highways revenue budgets by reducing activities in other areas.
- For the 23/24 winter season, the increase cost or reduction of costs of adding/reducing additional milage to the winter treatment routes, as a result of bus route changes will be managed through existing highways revenue budgets by adjusting the amount of work undertaken in other highway revenue areas. As with most activities that the highway department undertakes, winter service utilises staff, plant, materials and fuel and as such this area of the service is exposed to inflationary pressure. Any inflationary pressure experienced in the department and within this particular activity will have to be considered and activities prioritised to try and remain within existing budgets.

Policy

The recommendations in this report align with industry guidance and see the Winter and Adverse Weather Policy and Plan kept up to date.

An open and enabling organisation	A council which empowers and cares about people	A thriving and sustainable place
Ensure that there is		Reduce impact on
transparency in all aspects of council decision making	Work together with	the environment
of council decision making	residents and partners to support people and	A transport network
Support a sustainable	communities to be	that is safe and
financial future for the council, through service development, improvement and transformation	strong and resilient	promotes active travel

Equality, Diversity and Inclusion

This report sets out the results of an annual review of the winter gritting routes, a process which aligns with the recommendations of Well Managed Highway Infrastructure and as such the Winter & Adverse Weather Policy 2020 approved by Cabinet (report of 04/02/2020(105)). There are no changes to the adopted policy itself and as such the associated Equality Impact Assessment undertaken at the time of approval remains valid.

Human Resources

52 There are no human resource implications of the paper.

Risk Management

The recommendations of this paper help the council to address its statutory duties under the Highways Act 1980 and also follow the best practice identified by the industry guidance document Well Managed Highway Infrastructure (2016).

Rural Communities

54 There are no rural communities impacts of this paper.

Children and Young People including Cared for Children, care leavers and Children with special educational needs and disabilities (SEND)

There are no Children and Young People/Cared for Children implications of this report.

Public Health

There are public health implications of this report.

Climate Change

The delivery of winter service activities has an impact on the Councils Carbon footprint. The potential implementation of route based forecasting in the future may see this reduce.

Access to Information						
Contact Officer:	Matthew Davenhill, Contract Asset Manager					
	Matthew.davenhill@cheshireeast.gov.uk					
	01260 371026					
Appendices:	Appendix 1 - Stats 19 Accidents with road conditions of Ice/frost/snow					
	Appendix 2 - Contact Centre Reports on Treatment Days					
	Appendix 3 – Accident Correlation Summary on Treatment Days					
Background Papers:	N/A					

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Appendix 1 - Stats 19 Accidents with road conditions of Ice/frost/snow

Road on the Treated Network

06/12/2022 - A49 Whitchurch Road

17/01/2023 - A49 Whitchurch Road

19/01/2023 - A49 Whitchurch Road

10/12/2022 - A556 Chester Road, Plumley

20/1/2023 - Sandbach Road South, Alsager

19/1/2023 – Salters Lane Lower Withington

9/12/2022 - Wilmslow Road Alderley Edge

9/3/2023 - Church Street, Mow Cop

12/12/2022 - Bonis Hall Lane Prestbury

14/12/2022 - Westminster Road Macclesfield

16/12/2022 - Rainow Road, Macclesfield

6/12/2022 - Shrigley Road South

17/12/2022 - Macclesfield Road, Kettleshulme

Roads on the untreated Network

7/12/2022 - Clive Way Middlewich

21/1/2023 - Heron Crescent Crewe

15/12/22 - Tatton Street

8/12/2022 - B5081 Middlewich Road

11/12/2022- Bagmere Lane/Brereton Heath Lane, Brereton Heath

19/1/2023 - Davey Lane Alderley Edge

8/12/2022 - Wilmslow Park South Wilmslow

9/3/2023 – Higher Lane Bollington

Roads Removed from the Treated Network

8/12/2022 - Love Lane, Betchton

16/12/2022 The Hollow, Odd Rode

18/1/2023 - Coronation Road

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Appendix 2 - Contact Centre Reports on Treatment Days

Reports of Issues on Roads, other than those previously removed Roads Included on Treatment Routes

9/12/2022 – accident Tabley Hill Lane, Tabley

13/12/2022 – accident on motorway bridge, Swineyard Lane, Tabley

16/01/2023 – report of several accidents, Castle Hill, Prestbury

19/01/2023 – multiple accidents, Buxton New Road, Wildboardough

19/01/2023 - accident, Coole Lane, Newhall

19/01/2023 - report of several accidents, Wrexham Road, Bulkeley

Reports of issues on Roads Not Treated

9/12/2022 - accident Swineyard Lane, Tabley

17/12/2022 – accident, Dean Way, Bollington

17/12/2022 - accident, Hazelhurst Drive, Bollington

18/01/2023 - report of several accidents, South Park Drive, Poynton

18/01/2023 - report of several accidents, Redshank Drive, Macclesfield

18/01/2023 – accident, Bollin Grove, Prestbury

19/01/2023 - report of 2 accidents, Alsager Road, Hassall

19/01/2023 - report of 2 accidents, Holehouse Lane, Adlington

19/01/2023 - reports of several accidents, Anglesey Drive, Poynton

19/01/2023 – accident, Wards Lane, Bradwall

Reports of Issues on Roads Removed

9/12/2022 – several reports of accidents on Scott Road, Prestbury

12/12/2022 – reports of several accidents, Chantry Road, Disley

12/12/2022 – report of several accidents, Long Lane, Spurstow

18/01/2023 – report of multiple accidents, Pinewood Road, Wilmslow

18/01/2023 – reports of accidents, Chelford Road, Prestbury

18/01/2023 – report of accident, Scott Road, Prestbury

18/01/2023 - report of several accidents, Moss Lane, Alderley Edge

19/01/2023 – report of 3 accidents, Warmingham Lane, Middlewich

23/01/2023 - reports of accidents, Manor Park South, Knutsford

Appendix 3

<u>Appendix 3 – Accident Correlation Summary on Treatment Days</u>

Notes: 1+ indicates where the contact specified accidents but didn't give an exact figure. Police, Fire, Public and stats 19 indicates the source of the report.

	21/22 Season							22/23 Season						
														Total
Incident date	28/11/2021	29/11/2021	02/12/2021	03/12/2021	07/01/2022	13/01/2022	08/12/2022	09/12/2022	12/12/2022	16/12/2022	18/01/2023	19/01/2023	23/01/2023	
Road Name														
Long Lane Wettenhall	Fire	Public 2No												1 <u>poss</u> 2
Long Lane														
Spurstow				Public					Public 1+					2+
Church Lane														
Oddrode		Public												1
Coole Lane														
(reintroduced		public	Stats 19		Police/Fire	Fire						Public		5
22/23)		, , , , , , , , , , , , , , , , , , ,												
Grobe Road			Police x2											2
Warmingham												Public		
Lane					Police/Fire							Report 3		4
Marthall Lane			Public									·		1
Twinnies Road		Public												1
Winsford Road														
Cholmondestone			Public											1
Childs Lane						Deline								-
Sandbach						Police								1
Congleton Road						Destable								-
Smallwood						Public								1
Scott Road								Public 1+			Public			2.
Prestbury								Public 1+			Public			2+
Chantry Road									Public 1+					1+
Prestbury									Public 1+					14
Pinewood Road											Public 1+			1+
Wilmslow											Fublic 11			1.
Chelford Road											Public 1+			1+
Prestbury											. Jone 1.			
Manor Park													Public 1+	1+
South Knutsford														
Love Lane							Stats 19							1
Betchton							3,000							
The Hollow Odd										Stats 19				1
Rode														
Coronation Road							Stats 19							1