



# Winter Service Quick Guide

Winter Service is provided between October and April, to ensure the safe passage along a highway is not endangered by snow or ice

# **Winter Service**

The main purpose of the winter service is to ensure that, as far as is reasonably practicable, safe passage along a highway is not endangered by snow or ice. This is a statutory duty set out in both the Highways Act 1980 and the Railways and Safety Transport Act 2003.

Our Winter Service Plan is based on National Guidance developed by the National Winter Service Research Group for which Suffolk County Council is a member of.

#### What we will do

The winter service is part of the overall highway maintenance service and therefore has a finite resource which is taken into consideration when defining what we do and when.

Roads are prioritised into two main categories - Priority 1 (P1) and Priority 2 (P2). These two categories cover approximately 50% of all roads in the county. The definitions of each category are set out below.

#### Priority 1 network (1,259 miles) - 36 routes

- All A and B roads.
- Roads to: 24 hour fire stations / Accident and Emergency Hospitals / main bus and rail stations at least to limit of public highway.
- All roads where the traffic flow exceeds 4000 vehicles a day.
- Locations at high risk from the occurrence of major civil emergencies where practicable.
- Consideration is given to roads with a traffic flow that falls between 4000 vehicles a day to 2000 vehicles a day where there are additional risk factors including but not exclusively:
  - 5 day a week bus services where practicable
  - extended gradients in excess of 5% (1:20) where practicable
  - high peak hour flows
  - automated railway level crossings on passenger lines where visibility is limited
  - access to main high schools, where practicable
  - centres of employment where large numbers of employees are bussed in, where practicable

#### Priority 2 network (843 miles) - 34 routes

- Other bus routes where the service level is 5 days a week in the school term, and a public service licensed vehicle is used where practicable.
- Cohesive network serving all main centres of population in the rural areas.
- All other routes carrying in excess of 2000v/day.
- Routes added at the Asset Manager (Winter and Soft Estate) discretion where the following are additional risk factors (subject to operational and access constraints):
  - high peak hour flows
  - access to other schools
  - gradients in excess of 5% (1:20)

# **Gritting Routes**

Our routes can be viewed on the <u>one.network</u> website.

Please click on the Data Layers/Driver Information and click on Winter Gritting Routes to turn this feature on.

# Forecasting

Suffolk Highways have specialist weather forecasts specifically tailored to our winter service needs.

The forecast takes information from several dedicated Suffolk County Council owned weather stations located across our County to provide a specific and tailored forecast for Suffolk.



Our seven trained "decision-makers" are on a weekly rota throughout the season and receive a range of information which helps them decide if we need to undertake a salting treatment such as what time these need to start, how much salt we need to spread and where. (We do not always treat the whole of Suffolk if the forecast tells us that, for example, only the roads in the western part of Suffolk require treatment.)

Unlike local or national forecasts which generally use air temperatures, we are interested in Road Surface Temperatures (RSTs).

Sub-zero RSTs can occur when air temperatures remain above freezing so we need to ensure that we undertake a salting treatment based on RSTs when there is a risk that any moisture on the road surface might freeze.

## Salting Treatments (Gritting)

P1 treatments are undertaken when there is a forecast risk of an ice or snow hazard forming on the road surface. These treatments will be completed a minimum of 1 hour before the formation of a forecast hazard and will take approximately 2.5 hours for us to complete.

P2 routes are for more sustained cold weather, where a forecast risk of ice or snow spans from 4.00am to after 9.00am period as a minimum, at two or more weather forecast sites in Suffolk. During severe weather events, P2 routes are subject to the needs of the P1 network.



#### How much salt do we use?

We measure the amount of salt we use for a salting treatment in grammes per square meter ( $g/m^2$ ), known as the spread rate.

Typically, when RSTs are forecast between Oc and -3c our gritters are set to deliver a spread rate of 8g/m2.This means that during a winter gritting season, Suffolk Highways will use over 130 tonnes of salt to deliver a treatment to the entire P1 network.

The spread rate we use can vary depending on several factors:

- $\cdot$  temperature of the road (more salt is needed when the road is colder);
- whether the road surface is wet or dry (wet roads require more salt in colder temperatures);
- $\cdot$  moisture content of the salt (greater than 4% we need to spread more);
- traffic levels (low volumes after midnight or congested traffic requires more salt to be spread);
- wind speed (more salt is needed when wind speeds are greater than 20mph);
- how well a gritter spreads salt (even and uniform spreading needs less salt);
- $\cdot$  how long the salt has to last (durations over 12 hours need more salt).



Over the last 10 years we have used an average of approximately 13,500 tonnes of salt treating both P1 and P2 routes throughout the winter season.

### How many gritters and drivers do Suffolk Highways have?

Suffolk Highways operate a range of gritters, ranging from those the size of transit vans to large bespoke gritters classed as heavy goods vehicles (HGV). In total, we have 36 gritters and 2 spares.

All of our gritters allow for the combined delivery of rock salt (salt crystals) and brine (salt dissolved in water). Salt is only effective in preventing the formation of ice when it is in solution. Using brine allows our treatments to be effective more quickly.

The majority of our gritters require drivers to have an HGV licence along with a requirement to have obtained a winter maintenance qualification to ensure competent and safe operation.

Winter service is a planned activity and is not classed as an emergency; therefore, we must deliver this activity within each driver's legal duty time as set out in the GB domestic drivers' hours rules, as illustrated below:

Maximum daily duty	11 hours in a 24-hour period
Maximum daily driving	10 hours in a 24-hour period (within the 11 duty hours)
Daily rest	Not specified under the GB domestic drivers' hours rules, however good practice states the use of the EU drivers' regulations requirement of a minimum continuous rest period of 9 hours
Weekly rest	Working time directive requires either 24 hours in 7 days or 48 hours in 14 days.

If any part of the daily duty falls between 00.00 and 04.00, duty time is limited to 10 hours.

Suffolk Highways predominately uses its directly employed operational workforce for the delivery of the winter service. As such, consideration is given to the impact that driving hours has on both the delivery of the winter service and normal daily duties (statutory functions including maintaining the highway in a safe condition such as pothole filling).

During the Core Winter Period, Suffolk Highways drivers, on the winter maintenance rota, are restricted to a 7.5 hour working day to undertake normal daily duties. This allows for an additional 3.5 hour for the preparation and delivery of a winter treatment, complying with the maximum daily duty time of 11 hours.

To deliver this service we aim to have 108 gritter drivers on our rota to enable resilience and rest periods across our workforce.



#### How we deal with snow?

Snow ploughing is carried out in severe snow conditions. We do this to keep the most important roads passable (this is normally confined to the busier A class roads)

To supplement our own resources, we call on farmers and contractors across the county to help with clearing snow and ice during the winter months on roads where we cannot plough. All our farmers and contractors sign up to a snow clearing contract.

## **Grit bins**

Grit bins are owned by parish/town/district councils. We currently have around 2100 approved grit bins located on the highway and it is Suffolk County Council who are responsible for the filling of these bins.

A pre-season refill is delivered on a countywide basis ahead of the core winter season. Ad-hoc refill requests can be made via our <u>online reporting tool</u>. After prolonged periods of low temperatures or snow events we may opt for a localised refill programme to remain efficient on the refilling of grit bins.



### What we don't do

Given the scale of financial and physical resources involved in delivering the winter service, it is not practicable to:

- $\cdot$  provide the service on all parts of the highway network;
- ensure roads, pavements and cycle routes are kept free of snow and ice at all times, even on treated parts of the highway network.

# For more information on this service

You can <u>Check which roads are gritted in Suffolk</u> on our website.

For daily gritting updates during the winter season, follow us on <u>Facebook</u> and <u>X</u>