

#### Salt - The myths and the facts







# Myth: Salting a road completely prevents the formation of ice

**FACT:** When salt mixes with water the mixture only freezes at a lower temperature, which helps to prevent ice or frost forming on the road as it would normally around 0 degrees centigrade. The higher the concentration of salt, the lower the temperature at which freezing will occur, until about -10° when salt ceases to be effective.

However, without traffic to crush and spread the salt, even if it is pre-mixed with water as brine, there may be many areas of road where ice will still form, so there is still a risk of some ice. Salt is more effective if it is spread and then driven over before ice begins to form.



## Myth: I've not seen a gritter on the network, so the roads haven't been gritted

FACT: We have 62 gritting vehicles and two mini gritters to cover 2,000 miles of main and other priority roads in Essex. It takes approximately three hours for one vehicle to treat its entire route.

The vehicles ideally start gritting three hours before the forecast says that the air or road surface temperature falls close to the freezing point. Gritting often starts between 1 and 3 in the early hours of the morning, so few people see them.

In the case of heavy snowfall, the gritting fleet may be on the road continuously. However it will still be three to four hours before they pass the same point twice as they will have to return to the depot to be refilled with salt.

When it's snowing heavily then our priority is to keep this "strategic network" open.

At these times, the gritting vehicles will be concentrated on the main roads and fitted with snowploughs, meaning estate roads

are unlikely to be treated due to the availability of resources.



### Myth: A gritter passed me but no salt was being spread

FACT: The current fleet of gritting vehicles are far more sophisticated than those of years gone by. No longer does salt spray in all directions covering the legs of any pedestrians, providing it is calibrated correctly.

The computer-controlled mechanism now dispenses the required amount of salt directly down on to the road. They can also 'throw' the salt to one side or the other to ensure the whole roadway is covered, even when the vehicle is driving down one side only.

However this is not always a myth as the vehicle may not have reached the starting point

of its treatment route, or may be returning empty to the depot at the end of its route or to refill. Where a vehicle is travelling to the start of their route or returning to the depot from the end of its route, the operatives have been asked to turn off their yellow beacons if it is safe to do so, to prevent confusion.

Each gritting vehicle has a GPS system which tracks its route, speed, whether it is spreading salt, and if so, the amount being spread. Checks can be made as to the date and time a vehicle was on a certain road and what it was doing. The system also alerts the contractor's Duty Manager should the vehicle deviate from its usual route.



#### Myth: You haven't refilled the salt bin in my village



**FACT:** Hopefully this is a myth, but with around 1,000 salt bins spread

across the county, there is always the chance one may be missed or we haven't got there yet. The salt in the bins is for use on public roads, pedestrian areas and footways only. It is not there to be used on private properties.

All bins that are the responsibility of Essex Highways are filled as part of our pre-season preparation. A second refill may occur but this will only happen following a prolonged and significant snow event and if resources allow. Bins are not stocked on an ad-hoc basis.

Throughout the winter our priority is to ensure the precautionary gritting network is secure. Only when this activity is completed can resources (men, equipment and salt) be deployed to other areas.

Where salt from the bins is seen to be being misused then this can be reported in confidence to the Council.

If it is seen being stolen, then this should be reported directly to the Police along with the make, model and registration number of any vehicle involved.









