

Winter weather survey 2019



REPORT OF THE WINTER WEATHER SURVEY 2019

INTRODUCTION

The Winter Weather Survey 2019 was conducted by the Local Government Association's Research and Information team between 2 October and 30 October 2019 to gather information about local authorities' plans and preparations in case of severe weather, to help the LGA's lobbying of central government and to highlight the scale of authorities' efforts.

The survey was sent to all 173 highways authorities in England and Wales. The response rate was 43 per cent as shown in the table below:

Type of authority	Number of respondents	Response rate
Type of authority	Number	Per cent
Counties	14	54%
London boroughs	16	48%
Metropolitan districts	16	44%
Unitaries	29	37%
Total	75	43%
Region		
East Midlands	7	78%
East of England	5	45%
London	16	48%
North East	4	33%
North West	12	52%
South East	7	37%
South West	5	33%
Wales	10	45%
West Midlands	4	29%
Yorkshire & Humber	5	33%
Total	75	43%

NOTES

1. Given the response rate of a half, the results should be taken to be broadly indicative, rather than fully representative, of the views of authorities as a whole. It should be borne in mind that response varied by type of authority and by region. Because of the actual number of respondents, results are not broken down by type of authority or region.
2. Further to note 1, not all users answered, or were required to answer, every question, so the response to individual questions varies. In each table, the 'Total' row indicates the total number of respondents to the question, but note that this includes those who answered 'don't know'.
3. The winter gritting season is taken to start on 1st October.
4. Caution should be exercised when comparing results with previous surveys as the sample of responding authorities changes from year to year.

SUMMARY

The main findings were as follows:

SALT STOCKS

- 93 per cent of respondent authorities were planning either to have more salt in stock for winter 2019/20 than they did for winter 2018/19 (8 per cent) or the same amount of salt in stock (85 per cent), generally because they were at the limit of storage capacity, already at recommended levels, or had stocked up according to assessed need.
- It is estimated that authorities aimed to have 1.5 million tonnes of salt in stock at October 2019. They had an estimated 1.5 million tonnes in stock at October 2018, ordered a further 0.6 million tonnes and used 0.8 million tonnes during winter 2018/19.

RESOURCES

- Respondents owned or leased, on average, ten full-sized gritters, one mini-gritter, and four pieces of other gritting equipment, including snow blowers, tractors and quad bikes.
- 89 per cent of respondents were planning to take action to reduce the risk of flooding on roads. Sixty per cent were planning to use gully-sucking lorries, 45 per cent were planning to use sandbags, 29 per cent were planning additional gully and drain inspections, and 25 per cent were planning to use pumps.

INNOVATIVE PRACTICE

- 75 per cent of respondents were planning to share resources with other councils or emergency services during winter 2019/20. Fifty-one per cent were planning to share salt, 31 per cent gritting machinery, 23 per cent staff, and 17 per cent gully-sucking lorries.
- 71 per cent of respondents were planning to use GPS to make the gritting process more efficient, 69 per cent were planning to equip street cleaners with salt, and 41 per cent were planning to use GPS on gully suckers.
- 71 per cent were planning to use community grit bins for the public, 49 per cent were planning to provide salt to other local groups, and 21 per cent were planning to use community flood wardens.

SURVEY FINDINGS

SALT STOCKS

More than four out of five respondent authorities (85 per cent) were aiming to have the same amount of salt in stock for the 2019/20 winter season as they had for the 2018/19 season (Table 1). More of the remainder were aiming to have more salt (8 per cent) than less salt (5 per cent).

Table 1: For the 2019/20 winter season, is your council aiming to have in stock more salt, less salt or the same amount of salt as last year's winter season?

	Number	Per cent
More salt	6	8%
Less salt	4	5%
The same amount of salt	63	85%
Don't know	1	1%
Total	74	100%

Table 2 summarises the reasons for respondents having more, less or the same amount of stock as the previous year. The main reasons given for having the same amount of salt in stock were already being at storage limits (49 per cent), at or above recommended levels (49 per cent of respondents in this category), or stock reflecting assessments of need (27 per cent).

Table 2: Please indicate the reason(s) for your council having more stock, less stock or the same amount of stock as last year's winter season

	Number	Per cent
More salt (base=6)		
To increase resilience	5	83%
More storage capacity	4	67%
Reduce need to re-stock later	1	17%
Other	1	17%
Less salt (base=4)		
Re-assessed need since last season	1	25%
Other	3	75%
Same amount of salt (base=63)		
At limit of storage capacity	31	49%
Already at or above recommended levels	31	49%
Stock reflects assessment of need for forthcoming season	17	27%
Other	2	3%

Authorities were asked to quantify salt stocks, and 56 did so (Table 3). The figures have been grossed to produce a national estimate by applying the ratio of salt stocks to total road length observed in respondents to all authorities. This was done for each type of authority and the results summed to produce national estimates (the same method as used in previous surveys). Changes from one year to the next can be affected by changes in the sample of authorities responding to the survey.

It is estimated that local authorities in England and Wales had 1.5 million tonnes of salt in stock at 1st October 2018, ordered a further 0.6 million tonnes, used 0.8 million tonnes during the 2018/19 winter season, and aimed to have 1.5 million tonnes in stock at 1st October 2019.

Table 3: Please state the amount of salt your council:		
Salt (tonnes)	Respondents only	Grossed estimate
Had in stock at the start of the last winter gritting season (1 st Oct 2018)	0.4 million	1.5 million
Ordered after the start of the last winter gritting season	0.2 million	0.6 million
Used across the whole of the last winter gritting season (2018/19)	0.2 million	0.8 million
Aims to have in stock at the start of this winter season (1 st Oct 2019)	0.5 million	1.5 million

Base: 56 authorities

RESOURCES

A total of between 29 and 62 respondents provided information about gritting equipment (Table 4). Across all this group, councils or their contractors owned or leased a total of 1,004 full-sized gritters (median of ten per council), 90 mini-gritters (one), and 213 other pieces of gritting equipment (four). The latter included snow blowers, tractors, ploughs, quad bikes, footway spreaders, and hand gritters.

Table 4: How many of the following types of gritting machinery does your council/maintenance contractor currently own or lease?		
	Total	Average (median)
Full-sized gritters	1,004	10
Mini-gritters	90	1
Other equipment/machinery	213	4

Base: 62/54/29 authorities

Around nine out of ten respondents (89 per cent) were planning to take action to reduce the risk of flooding on local roads (Table 5), most commonly using gully-sucking lorries (60 per cent), using sandbags or similar to contain floodwater (45 per cent), additional gully and drain inspections (29 per cent), or using pumps (25 per cent). Other measures added by respondents included early warning systems, leaf clearance, and ditch inspections.

Table 5: Which, if any, of the following is your council planning in order to reduce the risk of flooding on local roads over the winter season?		
	Number	Per cent
Use of gully-sucking lorries	45	60%
Use of sandbags (or similar) to keep floodwater off roads	34	45%
Additional gully and drain inspections	22	29%
Use of pumps	19	25%
Measures to reduce landslips	2	3%
Other	10	13%
None	8	11%
Don't know	6	8%
Total	75	100%

INNOVATIVE PRACTICE

Three-quarters of respondents (75 per cent) were planning to share resources with other councils and emergency services over the 2019/20 winter weather season (Table 6), most often salt stocks (51 per cent), gritting machinery (31 per cent) or staff (23 per cent).

Table 6: Which, if any, of the following resources is your council planning to share with other councils and emergency services, if necessary, during this year's winter weather season?

	Number	Per cent
Salt stocks	38	51%
Gritting machinery	23	31%
Staff	17	23%
Gully-sucking lorries	13	17%
Pumps	8	11%
None of the above	19	25%
Don't know	8	11%
Total	75	100%

All but four of the 86 respondents were planning to implement at least one of the listed measures for the 2018/19 winter season, to be delivered both within the council or by local groups (Table 7).

Looking at measures within the council, just under three-quarters (71 per cent) were planning to use GPS technology on gritters, 69 per cent were planning to equip street cleaners with salt, and 41 per cent were planning to use GPS on gully suckers. One in four (24 per cent) intended to use a variety of treatments on pavements other than salt, most commonly brine.

Turning to measures within the local community, a little under three-quarters of respondents (71 per cent) were planning to use community 'grit bins', 49 per cent were planning to provide other local groups with salt or equipment, and 21 per cent were planning to use community flood wardens.

Table 7: Which of the following measures, if any, does your council plan to implement for this year's winter weather season?

	Number	Per cent
Within the council		
Using GPS technology on gritters to manage gritting process	53	71%
Equipping street cleaners, or other staff, with salt to spread on pavements	52	69%
Using GPS technology on gully suckers to manage gully-cleaning process	31	41%
Using means other than salt to treat pavements (eg liquid de-icer)	18	24%
Within the local community		
Using community 'grit bins' for members of the public to help themselves to salt	53	71%
Providing salt or equipment to other organisations and other persons, such as parish councils, community groups and snow wardens	37	49%
Using community flood wardens	16	21%
Total	75	100%

Respondents were invited to write-in details of any other innovative practices, investments, trials or approaches for dealing with winter weather. A total of thirteen did so, and while no major themes emerged, a few are quoted below:

We have installed hydromaster sensors in some of our high risk areas and the monitors send messages to us when water levels start to rise.

Installation of additional weather stations to monitor conditions and improve weather forecasting for road conditions.

Trialling the use of winter temperature sensors to improve current weather forecasting/predictions for when roads are likely to freeze, to make smarter decisions in deploying the winter service.



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