

Getting to grips with gritting



How Donegal County Council has improved the communication and planning of gritting routes using an online survey app and a little ingenuity.

Driving conditions in Ireland have been particularly challenging over recent months with sub-zero temperatures, widespread ice and heavy snowfall. To help improve public safety on the roads, Donegal County Council has developed an innovative new system for sharing up-to-date maps of gritting routes with members of the public, so that they can make the best decisions about whether to travel, and if so, on which roads.

The new application is built on a geographic information system (GIS) from Esri, ArcGIS Online. Engineers in the council's gritting team use Esri's Survey123 App, to enter details about which routes are going to be gritted and at what time. Then the information from the form automatically updates an interactive map of the gritting routes, on the council's website, and highlights the routes that will be gritted in purple. At the same time, the form automatically generates a Tweet (in English and as Gaeilge) containing an image of the gritting routes and the times that gritting will occur.

Gritting Date
If Gritters are out tomorrow morning please select the correct date.

Gritting Call
What is the Gritting call for tonight?

Routes
Please select from options below. If ALL routes are to be gritted only tick the ALL option.

<input type="checkbox"/> 01	<input type="checkbox"/> 02	<input type="checkbox"/> 03	<input type="checkbox"/> 04	<input type="checkbox"/> 05
<input type="checkbox"/> 06	<input type="checkbox"/> 07	<input type="checkbox"/> 08	<input type="checkbox"/> 09	<input type="checkbox"/> 10
<input type="checkbox"/> 11	<input type="checkbox"/> 12	<input type="checkbox"/> 13	<input type="checkbox"/> 14	<input type="checkbox"/> 15
<input type="checkbox"/> 16	<input type="checkbox"/> 17	<input type="checkbox"/> 18	<input type="checkbox"/> 19	<input type="checkbox"/> LT
<input type="checkbox"/> BT	<input type="checkbox"/> ALL			

Gritting Time From
This is the time the gritters are to start from

AM or PM *

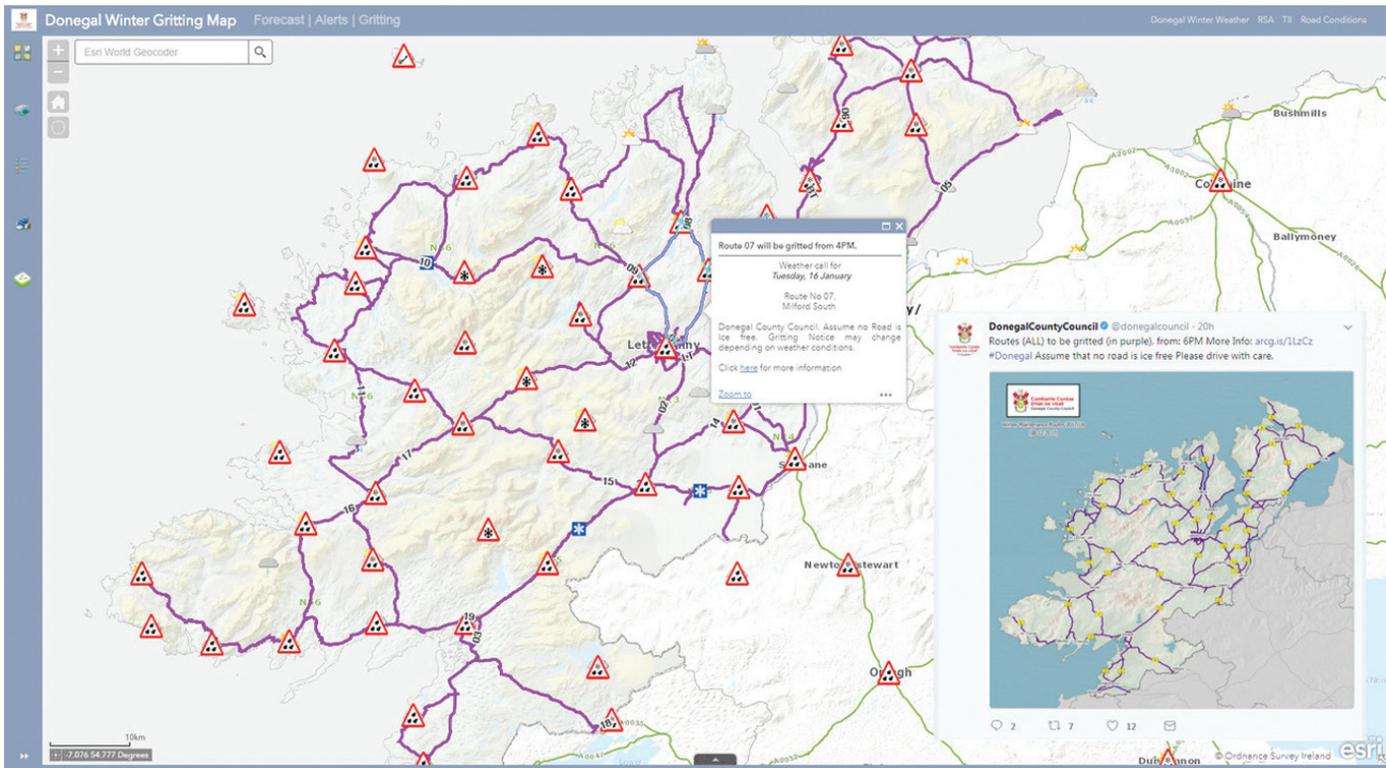
AM

PM

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Daragh McDonough, Information Systems Project Leader,
Donegal County Council

Through the use of this new approach, Donegal County Council has significantly improved the timeliness and value of its communications about gritting services. Members of the public, who subscribe to the council Twitter account, receive instant notifications about each day's gritting schedule and can use the embedded map image to see, at a glance, if the roads they plan to use will be salted. They don't need to know their winter route number, click on links or download data; all the information that they need to make the right decision about when and where to drive is instantly visible to them on their smartphones. Equally, members of the public can view the gritting routes map on the council's website and have confidence that it is completely up-to-date with that night's gritting schedule.



The use of Survey123 also helps Donegal County Council to plan its gritting services more effectively and improve the allocation of resources to reduce costs. Managers can use the app to look back in time, analyse the actual gritting schedule over a specific period and identify which roads require gritting most frequently. The council can then adjust the locations of salt and grit deposits to make sure they are closest to the actual point of need and ensure that time and money are not wasted on unnecessary journeys.

Finally, the new communication system for gritting is helping to improve the efficiency of council teams, as employees have a single, straight-forward workflow to use. Engineers no longer need to compose and check the text for Tweets, as the Tweets are generated automatically using the information from Survey123. Nor do they have to ensure that the gritting map on the council's website is correct, as this too is updated for them automatically.

"This has revolutionised the way we communicate," says Daragh McDonough, Information Systems Project Leader at Donegal County Council. "Not only are we providing better information to citizens more quickly; we are also operating more efficiently and gathering better data to help us improve our gritting services in the future."

For more information contact Esri Ireland at mapsmakesense@esri-ireland.ie