

# RoadMaster

Secure road safety and operational efficiency  
by making informed gritting decisions

During winter road maintenance, operations staff are under pressure to guarantee traffic safety, while maximizing operational efficiency. Treating roads too late can lead to accidents, traffic jams and potential fatalities. However, unnecessary treatment of roads can result in high costs and avoidable environmental damage. DTN developed RoadMaster to address these challenges.

## Benefits

RoadMaster helps Road Managers secure absolute winter safety. It does this by providing RWIS measurements, location-specific road weather forecasts, and precipitation-type radar data to support informed gritting decisions. With RoadMaster you can:

- **Secure road safety:** Make informed gritting decisions using hyperlocal data on road surface temperature, black ice, hoar frost, snowfall and freezing rain. Forecasts are monitored and improved by meteorologists 24/7 to ensure accuracy and quality. When in doubt, obtain personal advice from meteorologists with extensive road-specific experience.
- **Minimize gritting costs and environmental impact:** Use road-specific weather models drawing on 20+ years of road-forecasting experience to avoid unnecessary treatments and reduce environmental impact. These road weather forecasts also support decisions on optimal salting amounts and chemical types.
- **Improve gritting operations:** Eliminate liability costs by using archived road weather data to aid decision-making and as evidence to support historical gritting decisions. Reduce operating costs with improved estimates of long-term personnel needs, salting material stock and required equipment.
- **Improve information sharing and collaboration:** Share real-time gritting decision information with stakeholders. Exchange road condition forecasts and gritting information with neighbouring authorities to enable regional cooperation and collaboration.

## Users and key use cases

RoadMaster supports the Road Managers and road contractors working for municipalities, provinces or national highways who are responsible for gritting decisions.

- **Decide on gritting:** Understand when and where gritting action is needed, the type and amount of chemical to use, and whether snow ploughs are required.
- **Validate decisions:** Track and validate gritting decisions using historical data such as archived RWIS measurements and past action logs, alongside road weather forecasts.
- **Plan resources:** Use road weather forecasts to plan for personnel, chemicals and maintenance of equipment.

## Customers

Governments in countries like Canada, The Netherlands, United Kingdom and Germany put their trust in us. Contact us to learn more about how we help these organizations secure thousands of miles of safe roads in winter conditions.

## Features

RoadMaster is a web portal that shows past, present and forecasted road hazards in your maintenance area. Its dashboard features an overview of observations, forecasts, hazard warnings and your actions. The portal provides the following functionality:

**Road hazard dashboard** - Keep informed in one glance about hazard warnings for the lowest road temperatures, black ice, high precipitation amounts, hoar frost, snowfall, freezing rain and high wind gusts in your maintenance area up to 8 days ahead. In addition, forecasts specifically for bridges or cycle paths can be provided.

**Location details** - Drill down on locations for RWIS measurements, forecasts and camera images.

**Precipitation-type radar** - Improve short-term decisions based on real time and forecasted precipitation radar information, distinguishing between rain, hail, snow and freezing rain.

**Multi-layer-map** - Present RWIS data, camera images, satellite images, weather maps and precipitation radar on a full screen map, even combined in one map if you wish.

**Road weather forecast by email** - Receive daily email forecasts for your maintenance area.

**Route-based forecast** - Take decisions per gritting route based on high resolution road hazard forecasts for each route on an hour by hour basis.

**Action log** - Record, report and share real-time decisions about gritting actions with your stakeholders.

**Archive** - Use the time and data options to select reports on past activities and get full access to RWIS observations, forecasts, camera images and your action log decision information up to 22 years.

**Share information** - Collaborate with neighboring road authorities by exchanging road weather and decision information.

**Mobile app for iOS and Android** - Gain instant access to road weather information for your maintenance areas wherever you are.

**Road weather forecast data feed** - Integrate road weather forecasts into your own systems.

## RoadMaster also provides personalized expert advice:

**Hazard alerts** - Receive alerts from our forecasters about upcoming hazards.

**Forecaster consultation** - Get advice from weather experts with extensive road-specific experience.

## RoadMaster Unique Capabilities

RoadMaster builds on decades of experience in weather forecasting and winter road management. With RoadMaster, users get access to the following unique capabilities:

- **Road-specific weather models** - The DTN road-specific weather models draw on 20+ years of road-forecasting experience.

- **24/7 quality control** - Forecasts are monitored and improved by meteorologists 24/7 to ensure accuracy and quality.
- **Expert advice** - When in doubt, obtain personal advice from meteorologists with extensive road-specific experience.